

Interviews for World Standards Day:**‘Better to define 80 per cent than to analyse everything down to the last detail’**

- **In this interview, Burkhard Holder – Managing Director of VDE Renewables – explains why hydrogen and cyber security are key to climate protection; how standards can help to prevent nasty surprises; and what a new front-runner standard for hydrogen refuelling points is all about.**
- **This interview is part of a series of interviews concerning climate protection and standardisation conducted jointly by the DKE, DIN and VDI to celebrate World Standards Day 2022.**

Today is World Standards Day, which has the theme ‘A shared vision for a better world’. If we want to create a more sustainable future, international collaboration is essential. Which technologies are vital to the advancement of climate protection?

In my opinion, hydrogen is right at the top of the list because it is a highly promising storage medium, which means that it can be utilised in a manner that is completely decoupled from production in terms of time and space. In the context of sector coupling, this will have a positive impact on the energy sector as a whole as well as on grid stability and supply security.

The issue of cyber security for energy plants is also very much in the spotlight right now. Together with the [German Association for Critical Infrastructure Protection \(BSKI\)](#), the VDE has increasingly drawn attention in recent weeks to the growing potential threats. We have been working closely together for some time because we also factor in current developments and potential hazards when assessing the risks to industry, investors and insurance companies. Recent discussions with the BSKI and security authorities point to a further increase in criminal attacks on energy facilities, so there is an urgent need to adapt to the ever-changing situation.

How do we cultivate greater public trust in renewable energies and in new technologies allowing us to further leverage the potential of renewable energies?

I'd first like to say that it's about not only trust but also transparency. When I know that a company is observing current norms and standards and that this is confirmed by an external authority, then I'm not likely to encounter any nasty surprises when I come to use a product. This creates trust, and for this we need global standards in a global economy. In the world of electrical technology, they signify an international consensus, which is important especially with new technologies. But it takes time to arrive at this consensus. In the field of renewable technologies, however, development is advancing apace.

Everyone's talking about hydrogen right now. What role do standards play in the market launch of new technological concepts in this area?

Especially regarding new technologies and markets that are in the process of developing and whose commercialisation is still in the early stages, it is important to support development with standards. Against this background, all rule-making organisations - including DKE, DIN and [DVGW](#) - will support this process by creating a standardisation roadmap and further developing standards with expertise from industry and business. The focus at [VDE Renewables](#) is on projects that are almost ready to enter the commercialisation phase. Until standards have been defined, we employ 'pre-standards', compliance with which companies can have confirmed by us as a neutral body. These are formulated in collaboration with industry, investors and insurers, taking into account the existing body of standards relating to electrical and functional safety as well as installation quality, monitoring and maintenance concepts. Another key requirement is that the current state of the art is taken into account. These pre-standards can then later be used as a starting point for new or revised standards that ensure that new criteria can be applied on a broad scale.

A good example of this concerns the processes involved in the running of a hydrogen refuelling point, because this requires maximum precision and a zero-error culture to prevent safety issues. We have developed a VDE corporate standard for this in collaboration with various companies. Basically, when it comes to pre-standards, you don't have to spend a lot of time weighing up all the different framework conditions and analysing everything right down to the last detail. It's better to define 80 per cent of the most important criteria that can reflect the latest state of the art and, if necessary, go above and beyond the scope of existing standards.

Let's talk about the financing and insurability of new business cases. Can standards play a role here too?

When it comes to the bankability of new business cases and whether these can be ensured, existing standards are vital because they reflect the current, agreed state of the art. These are, however, just one element and work best in harmony with others. One example here is the extent to which second-life batteries can be insured. A process is needed here through which a decision is made regarding whether a battery from an electric vehicle or elsewhere can be reused. If it cannot be reused, the battery is sent for recycling. If it can, we need clear criteria regarding insurability in order to cultivate market confidence – after all, insurance companies, too, are keen to ensure that their risks and damage sums remain predictable. The interaction of established and globally applicable standards and our quick, application-specific pre-standards creates the basis for this.

About the person: Burkhard Holder is an expert in renewable energies and has held managerial positions in various establishments including the Fraunhofer Institute for Solar Energy Systems, International Solar Energy Society (ISES) and Solar Energy Research Institute of Singapore (SERIS).

World Standards Day 2022: interviews on climate protection and standardization

On 14 October, the international standardisation organisations and their national members celebrate [World Standards Day](#) to highlight the importance of standards. World Standards Day 2022 has the theme 'A shared vision for a better world' and focuses on how standardisation can help to achieve the Sustainable Development Goals – and in particular those relating to climate protection, which is our primary focus here. In a series of interviews with fascinating people from the worlds of business, academia and politics, the three regulators [DIN](#), [DKE](#) and [VDI](#) are together seeking to use World Standards Day as an opportunity to highlight the challenges faced by industry and society in the fight against climate change. Together with our interviewees, we discuss not only the challenges they face in their specific fields of interest but also the opportunities afforded by the green transformation and examine potential solutions (e.g. standards).

About DKE

The DKE German Commission for Electrical, Electronic & Information Technologies of DIN and VDE as a joint organization of VDE and DIN (DKE) is the national platform for about 9000 experts from industry, science and public administration to elaborate standards and safety specifications for electrical engineering, electronics and information technology. Standards support global trade and, among other things, the safety, interoperability and functionality of products and systems. As a competence centre for electrotechnical standardization, the DKE

represents the interests of German industry in European (CENELEC, ETSI) and international standardization organizations (IEC). In addition, the DKE provides comprehensive services in the field of standardization and VDE specifications.

For more information, visit www.dke.de

About VDE:

VDE, one of the largest technology organizations in Europe, has been regarded as a synonym for innovation and technological progress for more than 125 years. VDE is the only organization in the world that combines science, standardization, testing, certification, and application consulting under one umbrella. The VDE mark has been synonymous with the highest safety standards and consumer protection for more than 100 years.

Our passion is the advancement of technology, the next generation of engineers and technologists, and lifelong learning and career development “on the job”. Within the VDE network more than 2,000 employees at over 60 locations worldwide, more than 100,000 honorary experts, and around 1,500 companies are dedicated to ensuring a future worth living: networked, digital, electrical. Shaping the e-dialistic future.

The VDE (VDE Association for Electrical, Electronic & Information Technologies) is headquartered in Frankfurt am Main. For more information, visit www.vde.com

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