



DKE Commitment 2030

A guide and pioneer on the path to the
All-Electric Society

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An aerial photograph showing numerous icebergs of various sizes and shapes floating in a deep blue ocean. The icebergs are white and grey, with some showing signs of melting and cracking. The water is a vibrant, deep blue, and the overall scene is a stark contrast between the white ice and the dark water.

**„The difference between 2 and 4
degrees is human civilization.
It is as simple as that.“**

Prof. Dr. Dr. h.c. Hans Joachim Schellnhuber, CBE
Director Emeritus of the Potsdam Institute of Climate Impact Research

The global community is facing major challenges

With the fight against climate change, humanity is currently facing unprecedented existential challenges.

The global community in all countries must therefore act quickly, decisively, purposefully and collectively. Technology, especially electrical engineering and information technology, plays a crucial role in overcoming these global challenges.

Electrotechnical standardization is contributing to the solution

The stakeholders of the DKE – in particular the German electrical industry, the electrical trade, professional associations, the public and politicians – are working flat out to achieve the fastest possible and most comprehensive energy transition with the aim of a **sustainable** energy supply. Electrotechnical standardization plays a central role in enabling the various industries worldwide to make their contributions.

Infrastructure



Power-to-X



Mobility



Energy



Buildings



Industry





Germany is facing the biggest transformation in its post-war history.

Every fossil fuel energy generator, almost every industrial plant, most motorized vehicles, and almost every boiler will have to be replaced by 2045 – in most cases with entirely different technology.

This is a national transformation project of historic scope.

BCG Expert Report for the BDI, "Climate Pathways 2.0", 2021

Our vision is the **All-Electric Society**

The DKE has declared the concept of the **All-Electric Society** – the scientifically-based vision of a carbon-neutral and sustainably developing world whose energy needs are met entirely by renewable electricity – to be its guiding principle for the future.

One basic condition for implementing this vision is the comprehensive electrification, digitalization and automation of all sectors of our economy and society (industry, buildings, mobility, infrastructure, energy) and the **networking and integration** that comes with this. In addition to efficient energy distribution, this comprehensive idea of sector coupling will also form the basis for the digitalization and networking of many other industrial and social processes.

As part of this, the DKE sees itself as a pioneer and driving force and aims to consistently align its actions with these goals and develop and implement new processes, technologies and products for this purpose. In doing so, it will also ensure that users participate with new products and technologies.

This is why the DKE is fully committed to the goals of the All-Electric Society. As one of the major stakeholders of the global standardization organization International Electrotechnical Commission (IEC), it also promotes the international ambition of actively contributing to the shaping of an efficient, safe and sustainable world through electrotechnical standardization.



DKE Commitment 2030

The DKE German Commission for Electrical, Electronic and Information Technologies is committed to pursuing the following guidelines and goals in the interests of the future of our society, in close consultation with its stakeholders from industry, the public, associations and politics:

I. We are creating the architectural framework for the All-Electric Society

We are establishing a cross-stakeholder dialogue and coordination platform for the standardization of the All-Electric Society.

Sector coupling is the scientifically recognized basic technical concept of the All-Electric Society. In the future, electrical and information technology solutions will have to be assessed according to whether they contribute to this concept. This requires the DKE as an independent platform. Only with this can the overall view be guaranteed and the course set in a meaningful way.

We will use the neutrality of the DKE to institutionally anchor a cross-organizational dialogue platform for the All-Electric Society. All market participants, manufacturers, consumers, associations and national standard developing organizations, including all relevant forums and consortia, will be integrated with the aim of coordinated standardization processes.

We see ourselves as a driver for harmonizing individual solutions into a fully integrated overall system of sector coupling.

Achieving the climate protection targets of the Paris Agreement particularly requires speed and communication. Across sector and domain boundaries, the goal must be to harmonize individual solutions in such a way that they lead to an integrated overall system of full energy and data sector coupling.

The DKE considers it its mission to organize and moderate harmonization and integration as best as possible and to support implementation.

We standardize digitalization with all available means, in order to provide the best possible support for the energy transition.

The DKE takes a leading role in the standardization of digitalization topics such as artificial intelligence or semantic interoperability in order to make the best possible use of their enormous potential for the All-Electric Society.

If the energy transition is to succeed, the harmonization and consolidation of different digitalization approaches is crucial, especially internationally.

Digitalization in the energy sector and in the context of coupling with all other sectors is thus becoming a clearly focused core topic of electrotechnical standardization.



II. The DKE drives forward the networking of interest groups worldwide for the standardization of a sustainable energy system

We promote and enrich the political, economic and social discourse on the All-Electric Society.

As part of the enormous transformation process on the path to the All-Electric Society, it is important to bring together and network stakeholders from politics, industry, trade, science and society so that a constructive dialogue about the concepts, solutions and opportunities arising from them can be established. Only if as many people as possible understand the urgency of the issue and how much work and, at the same time, how promising the necessary transformation will be, will there be a chance to implement the changes in the short time available. Only in this way will it be possible to leverage the enormous potential that lies in this development.

Here, the DKE sees itself as a central knowledge platform in the role of communicator to create the basis for informed, prudent and quick decisions.

We actively use our role as a driving force to inform, motivate and guide all stakeholders to the All-Electric Society.

Cross-sector collaboration within the DKE generates valuable knowledge that comes from individual sectors working together. Knowledge of this quality is probably not bundled in any other place.

We therefore see it as the DKE's task to share this knowledge in order to achieve the necessary speed of transformation. In the future, sharing will also mean communicating more and more. This means proactively pointing out new developments and making them available to as many stakeholders as possible, as quickly as possible.

This understanding of our role will be particularly reflected in the work of our technical committees, in the international management bodies, and also in new services.

We are intensifying coordination with European partner organizations, as well as the international standardization process (IEC standards), wherever this is possible and makes sense.

As a national standards organization, we also see it as our mission to harmonize technical standardization internationally. Where there are international standards they will enable growth, equity and, with the All-Electric Society, a liveable future.

To achieve the climate targets, international consensus must be reached. Germany will be influential in shaping this if our pioneering role in technical matters is maintained or even further expanded.

That is why, in close coordination with DIN, we will take the German position on climate protection and climate adaptation to the respective European and international bodies at CEN and CENELEC as well as ISO and IEC, in order to ensure a coherent set of standards, avoid duplication of work, and strengthen the competitiveness and innovative strength of the German economy.

III. The DKE creates the organizational framework and proactively exploits the opportunities of digitalization

We are consistently aligning the DKE with the strategic goals for achieving the future image of the All-Electric Society.

As a national standards organization for electrical engineering and information technology, we are already organized in such a way that we reflect all relevant sectors of the generation, distribution and consumption of electricity in our structure.

But implementing the All-Electric Society will require more. It will be crucial to view the sectors as an overall system and to support a common language for exchanging energy and data between the sectors, and worldwide too. This is the only way to make the best possible use of renewable energy.

For the DKE, this means an increased focus on interdisciplinary and international cooperation and opening up all departmental boundaries.

We are developing in an agile manner, driving the digitalization of the DKE and thus gaining speed.

The time for transformation is short and the tasks are highly complex. To stay within the necessary timeframe, the DKE must achieve faster electrotechnical standardization, and do so with a rapidly growing number of standardization topics.

In addition to the personnel growth required for this, work on optimizing structures and processes is of paramount importance if we are to achieve our goals.

In the coming years, we will therefore make even more intensive use of all the opportunities for process optimization and the digitalization of our work. This will allow us to combine the diversity of topics into an integrated overall picture of a future worth living.

We are creating digital standards (SMART Standards) and conformity assessment services to make standards simpler, faster, more up-to-date and even safer.

The DKE will expand its portfolio of services and products in collaboration with DIN as part of technology platforms and digitalization initiatives to include innovative forms such as digital standards (SMART Standards) and conformity assessment services in order to enable users to implement sector coupling in a timely and value-adding manner as quickly as possible.

This task requires fundamental work, but the efforts will be worthwhile. Digital standards will enable machines and processes to always be operated according to current specifications in the future. This will allow technical findings to be brought into broad implementation much more quickly.

This evolutionary leap will also be clearly noticeable in the quality of implementation, as there will be fewer errors as well as increased safety and productivity.

The DKE German Commission for Electrical, Electronic and Information Technologies in close consultation with its stakeholders, is committed to implementing this commitment and is developing and publishing an action plan and measurement framework describing specific measures and initiatives as well as a reporting mechanism to track progress.

Due to the long-term nature of the All-Electric Society's vision and the simultaneous dynamics of technical and political development, the contents of the commitment will be reviewed every five years and adjusted as necessary.

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