THE DVGW

Tradition and Future

For more than 160 years, the DVGW has been synonymous with technical safety and innovation in the gas and water industry. With its expertise and versatile range of services, the association supports and promotes the further development and future viability of the industries – both at a national and international level.

DVGW

Association, institutes, affiliated companies

Version: 09/2022

Deutscher Verein des Gas- und Wasserfaches e.V.

DVGW

www.dvgw.de

The DVGW competence network
Quality, safety, innovation

Imprint

Publisher
DVGW Deutscher Verein des Gas- und Wasserfaches e.V.
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Concept, text, and design
EKS Die Agentur | Energie Kommunikation Services GmbH, Berlin
Internet: www.eks-agentur.de

Print
Humburg Media GmbH, Berlin

Photos
Roland Horn (DGPh), Berlin, www.rolandhorn.de;
Except for: page 2 Tatjana Kurda; page 8 Mathias Kolta/
Mosaik Management GmbH, Dortmund; page 9 Nicolas Det/DVGW;
page 10 istockphoto.com/sturti; page 12 istockphoto.com/Obradovic;
page 14 DVGW

Carbon neutral
Print product
ClimatePartner.com/10033-2209-1002

Shaping the future

DVGW Board of Directors:
Prof. Dr. Gerald Linke
(Chairman of the
Board of Directors)
and **Dr. Wolf Merkel**

Dear readers,

in Germany, the **DVGW Deutscher Verein des Gas und Wasserfaches (German Technical and Scientific Association for Gas and Water)** is the competence network for all questions related to the supply with gas and drinking water – as recognised standardisation body for the industry, as the centre for technical and scientific know-how and as initiator and promoter of research projects and innovations.

The DVGW is contact for economy, science, and politics. In cooperation with other national and international associations, the DVGW helps shape the future of the German and European energy and water supply: On the one hand, it is time for a change in substance and a move towards climate-neutral gases such as hydrogen. On the other hand, it is important to ensure a safe and sustainable drinking water supply even in times of climate change. These overarching goals define the DVGW work program in the debate regarding the regulatory framework in research, standardisation, certification, and vocational training as well as in press and public relations work.

The crucial basis of these activities is formed by more than 280 technical committees with a total number of over 3,000 expert volunteers, not to mention the 9 regional and 62 local groups and the DVGW's own research institutes and subsidiaries. A wide range of offerings and services in the fields of research, standardisation, certification, occupational health and safety, vocational training as well as the dedicated promotion of young talent emphasise the competence of the DVGW.

This brochure is intended as an opportunity to get to know us more closely and to find out more about the DVGW competence network.

A network is only as strong as the links it forms to the outside which lead to its continued growth and ongoing branching. We would therefore be pleased if we have provided ideas and inspirations for joint projects and activities with this brochure.

Prof. Dr. Gerald Linke **Dr. Wolf Merkel**

OUR ORGANISATIONAL STRUCTURE

Combined forces

THE ASSOCIATION

General Meeting

Executive Committee

Research Advisory Boards Water/Gas
Education Advisory Board
Financial Committee

Board of Directors (Chairman) Energy Department	**Board of Directors Water Department**
TSM Centre	IT Coordination	Digital products
Gas technologies and energy systems	Water supply
Technology and innovation management	Members and services
Regulatory policy, press and public relations work	Vocational training
Finances/organisation	Personnel and law

9 regional groups | **62** local groups | **280** specialist committees

THE INSTITUTES

- DVGW-Technologiezentrum Wasser (TZW)
- DVGW Research centre at the TUHH
- DVGW Research centre at the EBI

Institutes

- Gastechnologisches Institut DBI GTI gGmbH
- IWW Rheinisch-Westfälisches Institut für Wasserforschung gGmbH
- Gas- und Wärme-Institut Essen e. V. (GWI)

THE AFFILIATED COMPANIES

- DVGW Service & Consult GmbH (100 %)
- DVGW Kongress GmbH (100 %)
- DBI GUT GmbH (100 %)
- DBI GTI gGmbH (100 % GUT)
- wvgw mbH (40,5 %)
- EKS GmbH (100 % wvgw)
- DVGW CERT GmbH (100 %)
- IWW gGmbH (85 %)
- Explicatis GmbH (20 %)

Affiliated companies

Our range of services

COMPETENT, INNOVATIVE, COOPERATIVE – DEDICATED TO THE COMMON GOOD

THE DVGW: FACTS AND FIGURES

Established 1859 in Frankfurt/Main

14,000 members,
including more than 2,000 utilities,
1,500 companies from the gas and water industry,
300 institutions and authorities,
10,000 individual members

More than 800 employees
in the DVGW Group

Headquarters: Bonn;
representative offices in Berlin and Brussels

9 regional groups and 62 local groups

9 DVGW-owned research locations
for gas and water

8 subsidiaries and affiliated companies

Young talent cooperations with 50
universities and colleges

Worldwide cooperation
with organisations in 24 countries

STANDARDISATION

Forging the best practice for the future

The DVGW standards are a visible expression of technical self-regulation in Germany: Specialists from the gas and water industry shape the standards themselves and the legislative organs make specific reference to the DVGW set of rules. The rules are compiled in the 280 specialist committees of the DVGW which are upheld by five steering committees. More than 3,000 expert members take an active part in these specialist committees.

Facts and figures

- 3,000 expert volunteers
- 800 standards, guidelines, and test specifications
- 700 DIN standards

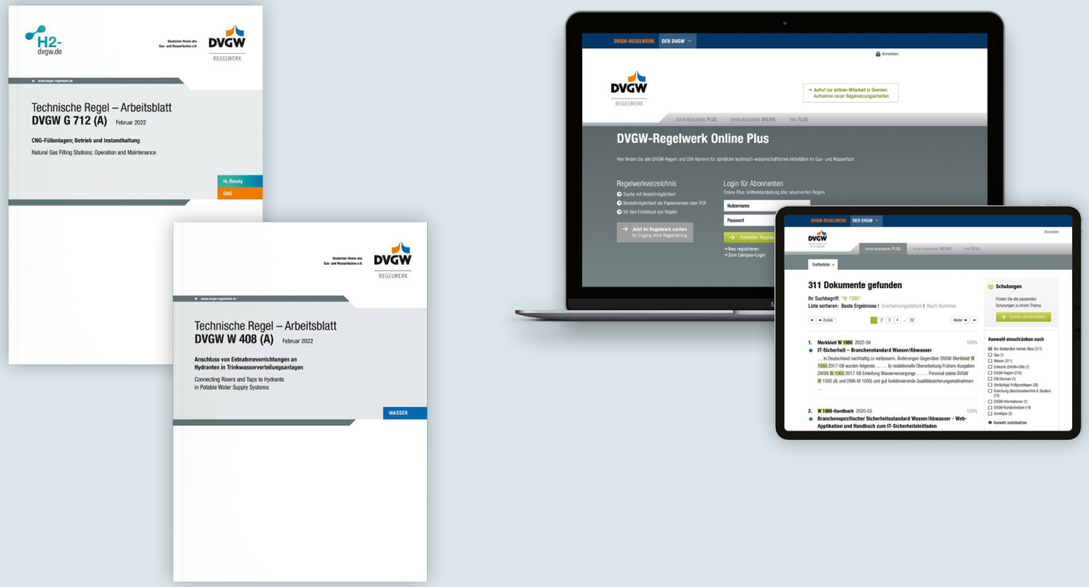
Current topics of DVGW specialist activities

Gas:

- Decarbonisation of the power supply
- Security of supply
- Energy efficiency
- Power-to-gas/hydrogen
- Smart grids
- LNG/SNG/biogas
- IT security

Wasser:

- Water resource management
- Drinking water protection
- Asset management and benchmarking
- Digitisation and IT security
- Adaptation to climate change
- Risk management



The DVGW is a non-profit organisation that operates independently and impartially. Right from the start, the specialist community is involved in the standardisation process and is provided the opportunity of voicing objections and making proposals in the course of a transparent procedure

The DVGW drafts the binding rules for products and work processes in the gas and water industry based on current findings in science and practice. Thus, technology trends can be secured and developed in a sustainable manner. The DVGW set of technical rules for the gas industry is at present undergoing a successive adaptation to the energy carrier hydrogen. The main objective is the promotion of safety, hygiene, and innovations for the protection of environment and consumers.

This principle ensures that companies are applying »best practice« solutions, and simultaneously guarantees compliance with legal requirements. The national pooling of specialist competence establishes the basis for work at a European and international level. In the standardisation bodies of DIN, CEN, and ISO, the DVGW significantly contributes towards the composition of European and global standards.

For more than 160 years, the DVGW has been setting standards in this manner. The DVGW set of rules provides the foundation for everyone working in the gas and water sectors.

DVGW Standards Online Plus

- Modern, clear layout
- User-optimised search functions
- Integrated standards archive
- Optimised for mobile devices such as tablets and smartphones
- Additional information relating to individual standards: for instance relevant DVGW training courses, revision status, contacts, specialist information

www.mein-regelwerk.de

www.dvgw-regelwerk.de

www.wvgw.de

RESEARCH AND DEVELOPMENT

Innovation through networks

As initiator, promoter and coordinator of research and development projects in a regional and national context and in the scope of pan-European research cooperations, the DVGW expedites innovations. The research facilities of the DVGW combine scientific expertise and partnerships with universities with practical work in the energy and water sector. The individual institutes complement each other in their expertise and constitute a comprehensive network. In addition, the responsibility for the management of ERIG, a research network of leading European research organisations in the field of gas innovations and the H_2 competence group of the German energy sector, also rests with the DVGW.

➔ **The energy transition** calls for the development of future-oriented concepts for the energy carrier gas, while taking into consideration climate and environmental policy objectives, but also systemic, economic and safety goals. Through its research in the field of energy and the Innovation Program Hydrogen, the DVGW sets the course for the energy system of the future.

➔ **Water research** covers the entire water circuit, bears in mind the demographic and climate change, and develops economically sustainable solutions. The goal of water research and the Future Program Water is to permanently secure the high level of quality and sustainability of the German water supply.

➔ **www.dvgw.de/themen/forschung** ➔ **www.erig.eu**

Current research topics

Gas:

- Efficient hydrogen generation processes (electrolysis, pyrolysis, reformation)
- Enhancement of the H_2 readiness of the gas infrastructure (gas storage reservoirs, transmission pipelines, distribution networks)
- Innovative gas applications for mobility, combined heat and power generation, heat market, industry
- Systemic questions (overall energy system modelling, gas quality)

Water:

- Risk-based ground water management / water-polluting substances
- Water quality in distribution and domestic drinking water installation
- Innovative technologies for water treatment
- Intelligent and multifunctional infrastructure systems
- Management (key performance indicators, water safety plan)
- Adaptation to the consequences of climate change

Facts and figures

- 5 Research locations water
- 4 Research locations gas
- Currently 65 ongoing research projects

TESTING AND CERTIFICATION

Securing safety, hygiene, and quality standards

Technical innovations are only of benefit if they can be employed in a meaningful manner in practical work. The well-proven conformity assessment of the DVGW CERT GmbH sets standards in quality and safety based on the DVGW set of rules and other recognised technical rules and test specifications within the valid regulation framework. A customised adaptation to industry requirements and an efficient interlocking of the individual processes is promoted at the same time. As an accredited certification body, the DVGW CERT GmbH meets the requirements of international standards and is the notified conformity assessment body for various European ordinances and directives.

Accredited test laboratories of the DVGW Institute offer testing services for products in the gas and water sector in the form of type testing, supplementary tests, and surveillance tests. Moreover, the DVGW CERT GmbH cooperates with more than 40 DVGW-CERT-recognised test laboratories from the gas technology, electrical engineering, mechanical engineering, material testing, plastics, drinking water and hygiene sectors regarding the certification of products from the gas and water sector.

DVGW-certified, qualified specialist companies as service providers in the energy and water supply and DVGW experts in the gas supply make another important contribution towards safety in the energy and water supply. For the relevant certification procedures for specialist companies and experts, the DVGW CERT GmbH also offers an accredited conformity assessment.

Neutrality, quality, and reliability take top priority when it comes to accredited testing and certification.

STRENGTHENING CONFIDENCE OF ACTION

Vocational training and qualification

The DVGW vocational training features a variety of offers for upskilling and qualification for professional promotion. Promoting the individual professional career plays a significant role in securing specialist and executive personnel and makes an important contribution towards recruiting young talent for the energy and water sector. The educational opportunities are subdivided into four areas:

- Preparatory courses for a master's degree
- Master's course (network technology and network operation)
- Technical qualification with and without certificate
- Non-technical subjects (for instance enhancement of personal, social, and methodical competences)

New insights gained in standardisation, research and certification are continuously incorporated into the various educational components. Complementary to this, the DVGW training schedule supports HR managers in the development of training schedules for technical specialist and executive personnel in compliance with the standards.

Events are held throughout Germany as presence, online and in-house events by qualified instructors and lecturers with practical work experience. Both the cooperation with universities, training centres and other partners as well as the engagement in the work of specialist committees and human resource development guarantee a wide exchange, knowledge transfer and networking within the industry.

Facts and figures (per year)

- 1,500 events
- 3,000 participants
- 300 different topics

www.dvgw-veranstaltungen.de

TECHNICAL INFORMATION AND TRANSFER OF KNOWLEDGE

Leading edge through information

The DVGW bundles the technical expertise in the gas and water sector, edits and processes it and makes it available to the various target groups. This information transfer takes place through various channels and media.

www.dvgw.de is the central online platform of the DVGW and offers a wide variety of topical information. In addition, the website pools the many special services offered by the entire DVGW competence network.

The personal exchange of views on technology and trends is essential for the DVGW and its members and a practice that has been introduced and upheld for decades. Highlights of the year are the annual trade fairs, conferences, and conventions, for instance
www.gat-wat.de

With pragmatic technical articles and a comprehensive information section, the specialist journal »DVGW energie | wasser-praxis« (ewp) reports on current technical developments and innovations in the energy and water sectors. With a monthly distribution of more than 14,500 copies, ewp is the specialist journal with the highest circulation in the German gas and water industry.

Further products and information material, for instance technical books, information brochures and databases and the versatile events offered by the research institutes, subsidiaries and the regional and local groups complement the information and communication portfolio.

www.dvgw.de

www.wvgw.de

www.dvgw-kongress.de

TSM – INVESTMENT INTO A SAFE FUTURE

Setting up legally compliant and efficient companies

Against the background of the current supply situation, climate change, energy transition and digitisation, the tasks and challenges faced by the public utility industry are becoming increasingly more complex. This is associated with increased requirements on all company officials who bear the responsibility for a safe, efficient, and unimpeded process. It is evident that in future, clearly less specialist staff will be available to meet these challenges.

The Technical Safety Management of the DVGW (TSM) is a self-assessment tool that comprises the legally compliant review and enhancement of organisational structures, responsibilities, authorities, and processes within a utility. This tool has been developed from practical experience for practical use and can be applied to any type of corporate organisation. The DVGW-TSM confirmation documents compliance with the requirements of technical self-management and thus of technical safety.

Utilities are subject to the same requirements and obligations. However, depending on size and constellation, these can be implemented in different manners. In the course of a review, assessment interviews turn into »peer-to-peer« technical discussions among colleagues.

The DVGW Service & Consult GmbH offers targeted consulting services and documentation structures for the TSM.

The DVGW-TSM is continuously adapted to current developments/ changes in legislation and supplemented with new lines of business, for instance hydrogen.

www.dvgw-tsm.de **www.dvgw-sc.de**

OCCUPATIONAL SAFETY AND HEALTH PROTECTION

Prevention as strategy

There is a growing consciousness in Europe that a safe and healthy work environment is prerequisite for a company's economic success because effective occupational safety and health protection prevents employee absences. Apart from that, occupational safety – when understood as management task and control instrument – has a positive effect on corporate processes such as environmental, quality and personnel management.

The DVGW also supports employers in the utility industry and in waste management who bear the legal responsibility for the health and safety of their employees when it comes to matters of industrial safety and health protection. In particular for accident prevention in the gas and water industry, the DVGW offers services and software support specifically designed with small and medium-sized companies in mind.

The portfolio comprises

- Primary support in safety and company-specific matters
- Site inspections
- Support with the implementation of occupational safety instructions
- In-house training on occupational safety topics for instance working on live parts, securing work places alongside roads, etc.
- Provision of occupational health and safety software to support the control of operations and documentation obligations within the company

www.dvgw-sc.de

IT SERVICES

Securely operating in the network

At the same time as companies in the energy and water industry are faced with a growing flood of data and increasingly complex tasks, requirements on the security in information technology are also intensifying.

We provide advice to companies regarding the implementation and maintenance of the industry-specific safety standard Water and Wastewater (B3S) and the information security standard ISO 27701.

The IT services of the DVGW are tailored to the specific needs of the utility industry. This enables companies to access coding systems for their market communication – for instance on market regions, virtual trading points or network interconnection points.

www.dvgw-sc.de

Consulting in matters relating to information security

The DVGW S&C GmbH service portfolio offers consulting in matters relating to information security and its implementation based on the industry-specific safety standards Water/Wastewater (in short: B3S WA) and DIN EN ISO IEC 27001. In particular the implementation of B3S WA supports small and medium-sized companies in increasing the security of their system environment and in drawing up and operating an ISMS (Information Security System). In addition, the DVGW S&C GmbH supports power and gas utilities in setting up and implementing an ISMS in compliance with the mandatory requirements of the IT security catalogue according to §11 clause 1a/1b EnWG

Allocation of DVGW code numbers

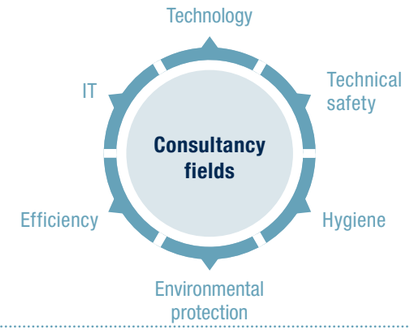
For data management in the context of network operation, companies active in the German gas market can apply for designations and code numbers. These are used to ensure the security of supply and delivery and reliable billing.

TECHNICAL AND ORGANISATIONAL CONSULTING

Customised thanks to industry knowledge

As the DVGW has gained an in-depth knowledge of the gas and water utilities and their specific issues and characteristics, technical consulting offers can be customised to their precise demands.

The research and hands-on experience available through the pool of experts ensures that up-to-date know-how and extensive practical experience is brought to bear in all matters pertaining to the gas and water industry. In this respect, the consulting activities of the DVGW also contribute to the high quality and innovative capacity of the gas and water supply in Germany.



H_2 readiness

The H_2 readiness database is the centralised platform that permits a fast and convenient check of the hydrogen suitability of products, components and materials employed in the gas infrastructure. The database is an essential feature of reliable and future-oriented network planning while taking into consideration the transformation task to be accomplished.

Risk management

Risk management in the drinking water supply is an instrument that is used for systematically dealing with risks to prevent potential impairments of the security of supply. In the amended version of the EC Drinking Water Directive, the significance of the security of supply has been considerably strengthened.

www.dvgw-sc.de

www.iww-online.de

www.dvgw-ebi.de

www.dbi-gut.de

www.tzw.de

PROMOTION OF YOUNG TALENT

Establishing new networks

Training young people for occupations in the gas and water industry is of particular importance to the DVGW. Within the scope of their training, the basis is laid both for their personal and professional development and for the future viability of the companies. For this reason, the DVGW accompanies and supports junior employees in these industries in many ways.

Apart from the classical vocational training, the idea is in particular to spark young people's interest in the challenging tasks and activities of the gas and water industry and to motivate them to become involved in the versatile fields of activity. As far as the companies of the energy and water industry are concerned, the DVGW would like to sensitise, inform, and support regarding the topics of securing and promoting young talent, in particular under the aspect of the imminent lack of specialists.

In promoting young talent, the DVGW also pursues the objective of establishing new networks among trainees, students, (university) instructors and companies who in turn will then become part of the DVGW competence network. This is how we strengthen our innovative capacity and constantly renew ourselves from within.

www.dvgw.de/nachwuchssicherung

www.berufswelten-energie-wasser.de

Systematic promotion of young talent

- Establishment of DVGW university groups to network students and companies
- DVGW Young Professional Program to assist young employees / graduates / students with their career entry
- Commitment to an excellent level of education of foremen, technicians and engineers
- DVGW Student Award for presenting outstanding final theses in the gas and water sector
- Invitation to collaborate in the DVGW committees
- Exemption from fees for foremen during their training and reduced membership fees for students
- The portal to the professional world: Training & career in the energy and water industry

MEMBERSHIP AND VOLUNTEERING

Actively engaged in the DVGW

The member companies and institutions as well as the personal members together make up the competence network of the DVGW and actively engage in co-shaping the further development of association and industries.

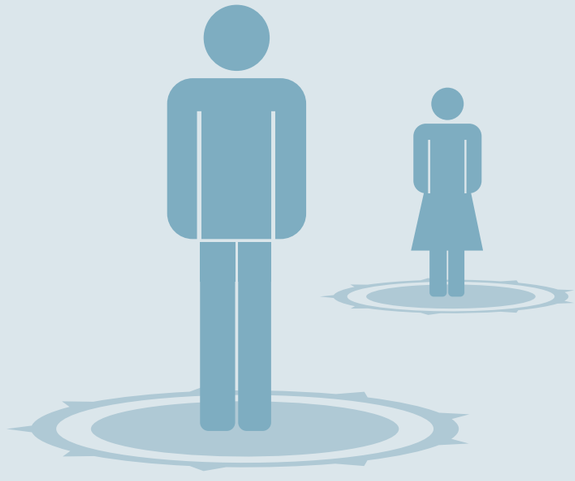
In their local group, DVGW members meet up with other engineers, foremen, technicians, and executives as well as students and representatives of other disciplines that are close to the industry. In their group, they have the opportunity to obtain first-hand know-how and technical information and to benefit from an exchange of experience within a circle of recognised experts.

The specialist committees of the DVGW provide a framework for the evaluation and advancement of new trends – for instance innovative processes in drinking water treatment, new materials in the gas and water supply, network strategies for operators of energy and water networks or the latest developments in the field of climate-neutral gases. Actively participating in the drafting of rules or international standardisation results in a practical knowledge lead for both employees and company

www.dvgw.de/mitgliedwerden

Good reasons to become a member of the DVGW – as company, institution or as an individual

- Access to the leading technology network of the German gas and water industry
- Topical and comprehensive information from the gas and water sector and from research and science at all times
- A lead in knowledge vis-à-vis competitors by making use of the wealth of experience available from the comprehensive range of specialist events
- Active participation in the further development of the gas and water industry
- Taking advantage of technical support for technical-scientific questions
- New impulses through cooperation with national and international partners
- Representation of technical interests in national and international political and economic committees



300
institutions and authorities

1,500
companies from the gas and water industry

10,000
individual members

2,100
utilities

14,000
members

DVGW COMPETENCE NETWORK

Our organisational units

DVGW
DVGW Deutscher Verein des Gas- und Wasserfaches e. V., Bonn
Headquarters: Bonn
Offices: Berlin und Brüssel
www.dvgw.de

DVGW regional groups
DVGW regional group Baden-Württemberg, Stuttgart
www.dvgw-bw.de

DVGW regional group Bavaria, Munich
www.dvgw-bayern.de

DVGW regional group Berlin/Brandenburg, Berlin
www.dvgw-bb.de

DVGW regional group Hessen, Mainz
www.dvgw-hessen.de

DVGW regional group Central Germany, Dresden
www.dvgw-mitteldeutschland.de

DVGW regional group North, Hamburg
www.dvgw-nord.de

DVGW regional group North Rhine-Westphalia, Bonn
www.dvgw-nrw.de

DVGW regional group Rhineland-Palatinate, Mainz
www.dvgw-rlp.de

DVGW regional group Saarland, Saarbrücken
www.dvgw-saar.de

DVGW research facilities
DVGW-Forschungsstelle am Engler-Bunte-Institut, Karlsruhe
www.dvgw-ebi.de

DVGW-Technologiezentrum Wasser (TZW), Karlsruhe,
Branch office in Dresden
www.tzw.de

DVGW-Forschungsstelle TUHH – Branch office of the TZW
at the Hamburg University of Technology, Hamburg
www.tuhh.de

DBI Gas- und Umwelttechnik GmbH, Leipzig
www.dbi-gut.de

DBI Gastechnologisches Institut gGmbH Freiberg, Freiberg
www.dbi-gti.de

Gas- und Wärme-Institut Essen e. V., Essen
www.gwi-essen.de

IWW Rheinisch-Westfälisches Institut für
Wasserforschung gGmbH, Mülheim a. d. Ruhr
www.iww-online.de

Service organisations
DVGW CERT GmbH: DVGW Cert GmbH, Bonn
www.dvgw-cert.com

DVGW S&C GmbH: DVGW Service & Consult GmbH, Bonn
www.dvgw-sc.de

wvgw mbH: wvgw Wirtschafts- und Verlagsgesellschaft
Gas und Wasser mbH, Bonn
www.wvgw.de

Kongress GmbH: DVGW Kongress GmbH
www.dvgw-kongress.de

EKS GmbH: EKS Die Agentur I
Energie Kommunikation Services GmbH, Berlin
www.eks-agentur.de

Explicatis GmbH: Explicatis GmbH, Köln
www.explicatis.com

YOUR DVGW NETWORK

Versatile, competent, future-oriented

Political specifications from Berlin and Brussels increasingly influence the energy and water industry – from a technical, strategic, and economic point of view.

The DVGW, with all its areas of responsibility, offers and services supports you in coping with the challenges resulting from this in the future.