

# The DVGW competence network

## Quality, safety, innovation



## Shaping the future

### Dear readers,

in Germany, "DVGW – Deutscher Verein des Gas- und Wasserfaches e. V." is the competence network for all questions related to gas and water supply – as a recognized standardization body for the gas and water industry, a centre for technical and scientific know-how in the gas and water sectors and an initiator and promoter of research projects and innovations.

In cooperation with other national and international associations and institutions, DVGW is the point of contact for industry, higher education and politicians. The association helps shape the future of the German and European energy and water supply industry.

Key elements in this competence network include the more than 280 technical committees with a total of over 2,600 expert volunteers, nine regional and 63 local offices and a number of subsidiaries and research institutes. The competence of DVGW is underscored by a wide range of services in the fields of research, standardization, certification, health and safety and vocational training.

This brochure is intended to introduce you to DVGW and to tell you more about the competence network. We would be very pleased if this initial contact gave rise to joint activities.

Prof. Dr. Gerald Linke



Prof. Dr. Gerald Linke  
Chairman of the  
Board of Directors

## Our service portfolio

CONFIDENT, INNOVATIVE AND COOPERATIVE – DEDICATED TO THE COMMON GOOD



## DVGW: FACTS AND FIGURES

Established in 1859 in Frankfurt/Main

9 regional groups and 63 local groups

14,000 members, including 2,000 utilities, 1,400 companies in the gas and water sectors, 250 institutions and authorities and over 10,000 individual members

9 DVGW research facilities for gas and water

8 subsidiaries and affiliates

400 employees

Cooperation with 50 universities

Headquarters in Bonn and representative offices in Berlin, Brussels and Sarajevo

Worldwide cooperation with organizations in 18 countries





## STANDARDIZATION

# Developing the best practice of the future

**DVGW has been setting standards for more than 150 years. DVGW standards provide a foundation for everyone working in the gas and water sectors.**

On the basis of the most up-to-date scientific and practical knowledge, DVGW defines binding rules for products and work processes in the gas and water industry. The DVGW standards build on technical trends in a future-oriented way. The main objective is to promote safety, hygiene and innovation – for the benefit of the environment and consumers.

DVGW is a not-for-profit organization that operates independently and impartially. Industry specialists are involved in standardization right from the outset and are able to state reservations or make suggestions in a transparent process.

### DVGW Online Plus:

- Clear, modern layout
- Fast search functions
- Optimized for mobile devices such as tablets and smart phones
- Integrated DVGW standards archive
- Information linked to each standard: relevant DVGW courses and seminars, revision status, contacts, specialist information

### Current topics of DVGW specialist activities:

#### Gas:

- Security of supply
- Energy efficiency
- Power to gas
- Smart grids
- LNG/SNG/Biogas
- IT security

#### Water:

- Water resources management
- Drinking water protection
- Strategic asset management
- Benchmarking
- Energy efficiency in plants and networks
- Innovative water treatment



The DVGW standards are a clear manifestation of technical self-regulation in Germany. Specialists from the gas and water industry shape the standards themselves and German law specifically refers to these documents.

This principle indicates on the one hand “best practice” solutions, on the other hand it supports the compliance with legal requirements.

The pooling of specialist competence at the national level lays the foundation for international cooperation within Europe and beyond. Within the standardization bodies DIN, CEN and ISO, DVGW plays a key role in shaping European and international standards.

### Facts and figures:

- 2,600 expert volunteers
- 600 codes of practice currently valid
- 800 gas network operators and water suppliers with audited TSM systems



The work of 280 other specialist committees with more than 2,600 expert members is coordinated by five steering committees.

[www.dvgw-regelwerk.de](http://www.dvgw-regelwerk.de)





## RESEARCH AND DEVELOPMENT

### Innovation through a network

The six research institutes of DVGW engage in scientific cooperation with universities, utilities, manufacturers and authorities. These institutes and associated laboratories develop solutions and concepts for all the technical challenges faced by the gas and water sectors.

The research work coordinated by DVGW includes both regional projects and pan-European cooperation arrangements. DVGW's research work is the basis for the technological development in the gas and water industry. It fosters standardization and technical recommendations. In addition, R&D ensures the scientific quality for official statements of DVGW. These activities bear witness to the benefits of the interdisciplinary competence network.

#### Facts and figures:

- 5 water research institutes
- 4 gas research institutes
- 110 research projects currently in progress in cooperation between DVGW institutes and universities

#### Gas innovation campaign:

- 🌐 [www.dvgw-innovation.de](http://www.dvgw-innovation.de)

#### "Fostering innovation and finding efficient solutions" – current research topics:

##### Gas:

- Energy storage concepts/Power to gas
- Biogas/gas quality
- Convergence of power and gas grids
- Gas in the energy system and energy efficiency
- Gas appliance innovations and combined heat and power

##### Water:

- Risk-based approaches for drinking water resources
- Water quality in distribution and domestic installation systems
- Innovative technologies for water treatment
- Smart, multifunctional infrastructure systems
- Emerging pollutants



## TESTING AND CERTIFICATION

### Ensuring safety, hygiene and quality standards

Technical innovations can only be beneficial if they actually work in practice. The tried and tested DVGW certification system ensures proven quality and safety on the basis of the DVGW standards and other recognized technical standards and test specifications. The services are tailor-made to meet the requirements of the industry and to ensure efficient meshing of the various processes.

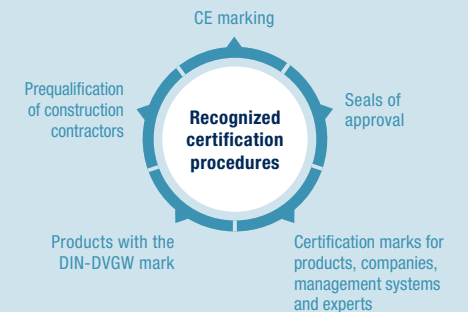
In the product testing field, DVGW has testing facilities of its own for materials, components and products related to gas and water. In addition it cooperates with more than 40 DVGW-recognized testing laboratories in the field of gas technology, electrical engineering, mechanical engineering, material testing, plastics, drinking water and hygiene.

Impartiality, quality and reliability are the top priorities in certification work. The services offered by DVGW in this area are available to all companies in the gas and water sectors in Germany and other countries.

- 🌐 [www.dvgw-cert.com](http://www.dvgw-cert.com)

#### Facts and figures:

- 7,400 products certified in accordance with DVGW standards, EN standards and EC directives
- 1,500 certified pipeline and plant construction contractors
- 170 certified experts
- 220 certified quality, environmental, energy, and health and safety management systems
- 500 construction contractors prequalified
- Various testing facilities



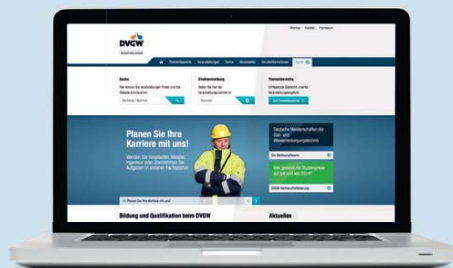


## VOCATIONAL TRAINING AND QUALIFICATIONS

### Laying the foundations for professional confidence

DVGW's vocational training system includes a comprehensive range of initial and advanced vocational training courses. The instructors and speakers all have practical experience in the relevant fields. Knowledge gained through standardization, research projects and certification work is included directly in the individual training modules.

Seminars and courses are provided in three main areas: advanced technical training, interdisciplinary training and qualification for new tasks. The range of courses available is continually adapted to reflect changes in companies and has a modular configuration ensuring considerable flexibility.



[www.dvgw-veranstaltungen.de](http://www.dvgw-veranstaltungen.de)

The events are held by 10 regional centres throughout Germany. The DVGW training organization also co-operates with universities throughout Germany and is involved in the development of new master's degree courses in subjects such as network technology and network operation.

#### Facts and figures (per year):

- 1,600 events
- 30,000 participants
- 300 topics

#### Selected topics:

- Basic principles of water and energy supply
- Production and treatment
- Plants
- Gas and water networks
- Domestic services and installations
- Occupational health and safety
- Innovation and research, renewable energies
- Additional qualifications for master craftsmen
- Master's degrees in network technology and network operation



## INFORMATION AND KNOW-HOW TRANSFER

### Gaining an edge through information

**DVGW pools specialist expertise for the gas and water industry, processes this expertise and makes it available to the various target groups. The association uses a number of different channels and media for the presentation of this information.**

[www.dvgw.de](http://www.dvgw.de) is the central internet platform, providing a wide variety of up-to-date information. It also presents the many special services offered by the entire competence network.

Personal exchanges of views on technology and trends are a top priority for DVGW, which is why the association organizes specialist exhibitions, conventions and conferences. The highlights of the conference year are the gas and water industry conferences (gat and wat), which are key events in the German gas and water sectors.

The specialist journal "DVGW energie | wasser praxis" (ewp) presents practically oriented articles focusing on current technical developments and innovations in the gas and water sectors. With a monthly circulation in excess of 15,000 copies, ewp is the most widely distributed specialist journal in the German gas and water industry.

The DVGW information communication portfolio is supplemented by other products and information materials such as specialist publications, information brochures and databases as well as the wide variety of events held by research institutes and affiliated companies as well as DVGW regional local offices.



[www.dvgw.de](http://www.dvgw.de)

[www.vwgw.de](http://www.vwgw.de)





## SAFETY AND QUALITY MANAGEMENT SERVICES

### Endorsement for quality, safety and health

Companies face growing responsibilities. As a result of the steadily increasing economic pressure on the gas and water sectors, there is a risk that skills may be lost, especially in technical fields. In the gas and water industry, well-structured technical safety management (TSM) and quality management (QM) systems can help to resolve these issues. DVGW supports all companies in the introduction of such management systems.

In Europe, there is a growing awareness that a safe and healthy working environment is a basic prerequisite for business success. In order to ensure occupational health and safety in the energy and water supply industries, DVGW offers services focusing on accident prevention especially for small and medium-sized companies.

#### TSM certificates (Sector-specific):

- 400 gas
- 400 water
- 300 power
- 30 wastewater

The TSM system is steadily being extended to new sectors including biogas or natural gas in industrial systems.

#### The DVGW health and safety portfolio includes:

- Inspection of plants and equipment
- Support for the implementation of employee briefing requirements
- In-house training on health and safety topics such as working on live components, load securing or the handling of hazardous materials

As these services are integrated in the DVGW portfolio, member companies can rely on high-quality support in line with the specific needs of their sectors.



## IT SERVICES

### Profound security in IT processes

**The requirements faced by IT processes are steadily growing in line with larger and larger data volumes and the increasingly complex tasks faced by energy and water companies.**

The IT services offered by DVGW are tailor-made to meet the special requirements of the gas and water sectors. Companies can call upon coding systems for market communications with respect to market areas, virtual trading points and network interconnection points.

To support gas and water companies, DVGW also offers system reviews of IT security concepts, optimization schemes and, where appropriate, assistance for the efficient introduction of new systems.

📍 [www.dvgw-sc.de](http://www.dvgw-sc.de)

#### Electronic data interchange

For digital communication and data interchange in the gas industry, DVGW has developed message types in cooperation with partners from the industry. These message types are used, for example, for the management of gas transport or balancing groups.

#### 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 help in ensuring security of supplies and reliable invoicing.



## TECHNICAL CONSULTANCY

### Tailor-made services based on knowledge of the industry

As DVGW is thoroughly familiar with the specific issues and features of gas and water companies, the technical consultancy services offered are precisely tailored to meet the needs of these customers. DVGW's pool of experts with theoretical and practical backgrounds ensures that DVGW can provide up-to-date knowledge and compre-

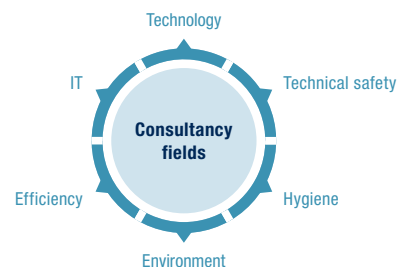
hensive practical experience in all matters connected with the gas and water sectors. Through its consultancy activities, DVGW therefore contributes to the high quality and innovative power of gas and water supplies in Germany.

#### BEROS program

Software for investment optimisation of pipeline systems

#### SMIT – Security management IT

SMIT offers a systematic software-based approach, especially for small and medium sized suppliers for the inspection of an ISMS (information security system) in accordance with ISO/IEC 27001.



## RESEARCH AND DEVELOPMENT – REGIONAL CLUSTERS



## We have a broad service portfolio.

The needs and demands of the gas and water sectors have grown dramatically over the past few years – in technical, strategic and economic terms.

All the fields of activities and service areas of DVGW are practically oriented for the benefit of the gas and water industry and are designed to support companies in mastering the challenges of the future.



## With more than 150 years of experience in technology and information, DVGW is a unique organization in the gas and water industry.

The association fosters and motivates the continued development of the gas and water sectors with its range of services. As an interdisciplinary competence network, DVGW is uniquely well-positioned to master the many and varied European and global challenges faced by its members over the decades to come.



Association, institutes and affiliated companies



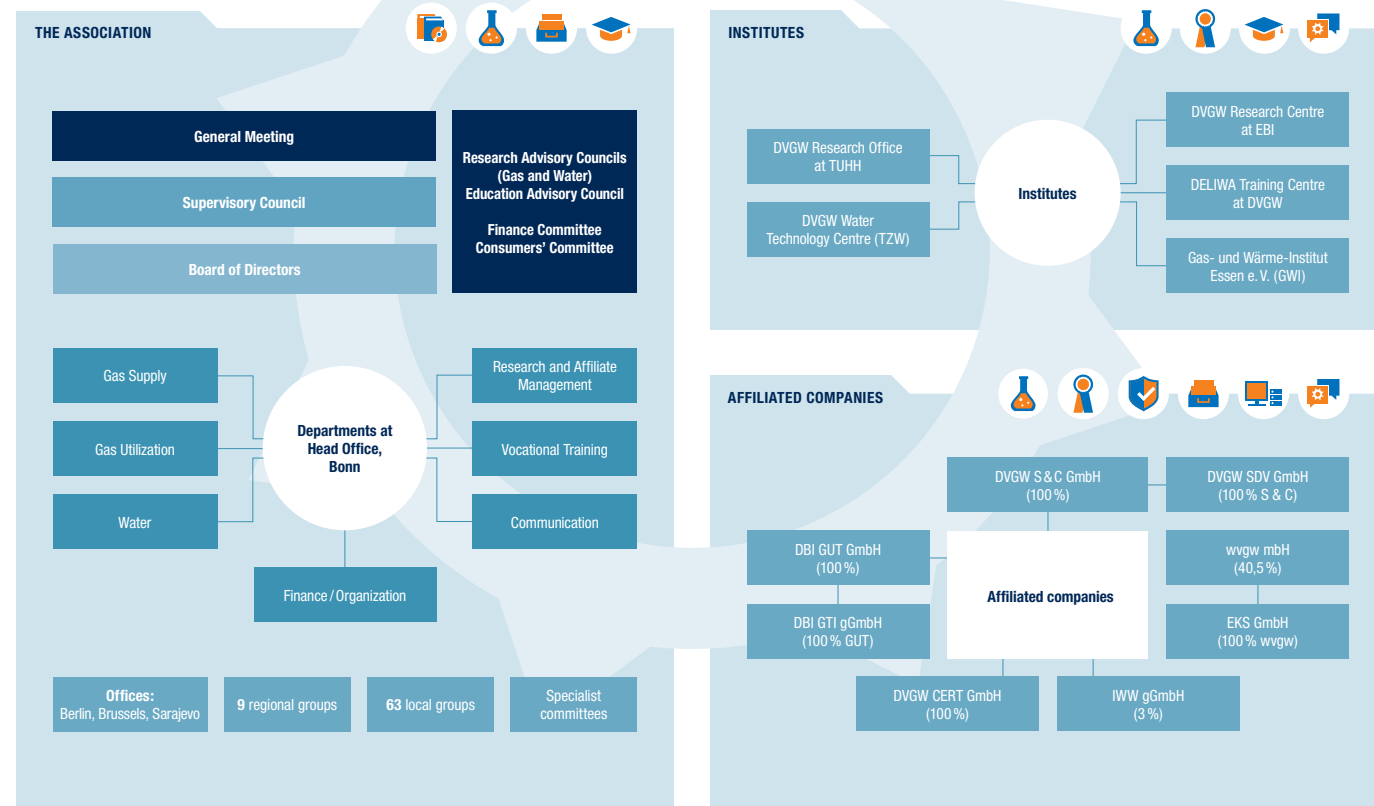
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## Association, institutes and affiliated companies



## Editorial Information

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