



marcogaz

TECHNICAL ASSOCIATION OF THE EUROPEAN NATURAL GAS INDUSTRY

ACTIVITY REPORT
2012-2013

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■ Message from the President

In the last two years, energy issues were extensively discussed at European level. The preparation of the Energy Roadmap 2050 and more recently the Green Paper "A 2030 Framework for Climate and Energy Policies" gave MARCOGAZ the opportunity to demonstrate that developing the use of natural gas (and biomethane) is essential to reach the EU goals of economic competitiveness, low carbon economy and security of supply.

MARCOGAZ with other Gas Associations involved in the GasNaturally Initiative has greatly contributed to the debate and promoted natural gas especially as an ideal partner for supporting intermittent renewable energies and a key driving force for achieving the EU CO₂ emissions targets.

Today the role of gas in the future is recognised but sometimes only as a transition fuel to a decarbonised economy. In addition, the potential of biogas or biomethane is too often not taken into account such as in the Renewable Energy Communication by the European Commission in June 2012. This demonstrates the challenges which we in the Gas Industry have yet to meet.

In this framework, keeping gas transmission, distribution and installations to the excellent current safety level is fundamental, developing end use efficient technologies for end users and demonstrating the very low CO₂ footprint of gas activities through adapted technical regulations and common high level standards is a necessity.

MARCOGAZ, created in 1968 for technical harmonisation purposes, has developed over the years a good reputation with official bodies in the European Union and other influential partners. It has contributed to a huge amount of specifications and standards and has encouraged R&D efforts which led to significant technical improvements by facilitating their introduction in standards and regulations like high resistance steels, polyethylene networks, condensing boilers, micro-cogeneration, gas heat pumps etc.

The increase of the number of MARCOGAZ Members in recent years (we have today 27 Members from 22 Countries) shows the dynamism of our Organisation and an increasing interest in Europe for common work on technical gas regulations and standards which is very encouraging.



In recent years, MARCOGAZ has in particular taken the lead on two technical subjects, first the gas quality harmonisation, the last development being the Pilot Project aiming at assessing the solutions to reach a common gas quality specification within 5 EU Countries, a major issue regarding the interoperability of gas networks, and secondly on the discussions on smart meters and smart grids by chairing the Smart Metering Coordination Group of CEN/CENELEC/ETSI.

I am pleased to present the 2012-2013 activity report detailing the MARCOGAZ activities in the fields of Infrastructure, Utilisation and Sustainability. I would like to take this opportunity to thank all Standing Committees, Working Groups, the MARCOGAZ Secretariat team for their excellent work and Carlos Villalonga the immediate past President I have the honour to succeed.

Marc FLORETTE
President

■ Message from the Secretary General

The importance of the technical work carried out by MARCOGAZ for its Members is widely recognised at European and International level by Official Bodies and other Industry Organisations.

The challenges faced by natural gas in Europe in the last 2 years have increased the necessity to demonstrate that gas infrastructure, systems and appliances can help the society to benefit from a safe, clean and efficient energy, which is also the best partner to renewable.

MARCOGAZ, besides its contribution to common Gas Industry activities such as the GasNaturally project or its participation in IGU groups, has continued to bring its technical expertise to many areas and for very different topics.

MARCOGAZ continuously adapts its structure to the changing needs of the Industry. In 2013, 3 new internal groups will start their activity in the fields of LNG, with a specific focus on transport, of smart gas grids, following a first report produced in 2011 and on new residential/commercial end use technologies.

MARCOGAZ has also intensified its very fruitful technical relationship and cooperation with other gas sector associations, especially EASEE-gas, ENTSG, EUROGAZ, GIE, GERG, GII-GNL or FARECOGAZ.

The following examples of achievements/results illustrate the diversity of topics dealt with by issues addressed by MARCOGAZ:

- In December 2011, MARCOGAZ organised a very well attended workshop on gas heat pumps with the aim of accelerating the introduction of this extremely efficient technology to the market,
- In March 2012, the Madrid Forum accepted the Gas Quality Pilot Project proposed together with EASEE-gas. This work aims to identify the practical actions necessary to move to a common gas quality specification in 5 EU Countries,
- During the past 2 years, MARCOGAZ continued to chair the Smart Meters Coordination Group responsible for producing EU standards for smart meters roll out in Europe. More than 60 standards were available at the end of 2012 and more are to come,
- In October 2012, MARCOGAZ issued a benchmarking report on odourisation practices in Europe which was used as a technical input for the discussion regarding the Network Code on Interoperability and Data Exchange Rules worked out by ENTSG and for the preparation of a EN standard on gas quality
- In May 2013, MARCOGAZ together with GERG, with the support of AFG, the French Gas Association and GDF SUEZ organised the very successful 2nd European Gas Technology Conference (EGATEC 2013) which gathered more than 230 participants in Paris.

I would like here to thank the huge network of more than 300 experts representing our 27 Members from 22 Countries who are key to our common success.



Daniel HEC
Secretary General

■ Mission and tasks

Chief mission:

to serve its Members as the European window on technical legislation and standardisation and to promote technical conditions required for the market success of natural gas.

Achievement of the mentioned aims is achieved by:

- Defining views and common positions on technical issues of common interest and representing these to European and International Bodies, in particular to the European Authorities, the United Nations, the European Committee for Standardisation (CEN), the International Organisation for Standardisation (ISO) and other Industry Organisations;
- Promoting and monitoring European standardisation and related certification in selected areas;
- Identifying the need for any new standards on topics of interest to the gas sector and associated research;
- Promoting technical co-operation among the Gas Industry members;
- Organising co-operation with related Industries' Associations, including other pipelines operating Industries and manufacturers of equipment and appliances used for gas supply and for gas utilisation and with Consumers Organisations.



© photo courtesy of GAZ-SYSTEM

The activities of MARCOGAZ in the last 2 years are listed in this report, implicitly highlighting the major objective for MARCOGAZ Members to achieve an effective industry presence and technical response towards public and official queries and regulatory initiatives facing the gas sector at the European level and often following through to the National level. Industry co-operation within MARCOGAZ will ensure timely information, consultation and response, while offering a platform for authoritative and consistent industry representation making most effective use of industry resources in terms of experts, knowledge and finance required.



MARCOGAZ provides its Members a
TECHNICAL SUPPORT for **SAFE,**
SMART,
SUSTAINABLE &
EFFICIENT gas systems

■ Organisation

MARCOGAZ was registered on 23rd May 2005 as an International Association under Belgian law on non-profit International Association and Foundations (laws 27th June 1921 and 2nd May 2002). Its headquarters are located in Brussels. Copy of the official statutes revised on 3rd May 2010 can be obtained from our website www.marcogaz.org or from the Secretariat.

General Assembly and Executive Board

The **General Assembly** of MARCOGAZ consists of delegations representing the various Gas Industry Companies and Bodies sharing in the membership. The General Assembly is chaired by Marc FLORETTE – representing AFG (FR) – who is the President for a 2012 – 2014 term.

Dr. Jean-Claude WEBER - representing SVGW (CH) – has been elected Vice-President of MARCOGAZ on 29th May 2013 by the General Assembly.



(photo: Dr. Jean-Claude WEBER, SVGW, Switzerland)

The **Executive Board** meets normally 3 times a year to define, adopt and control strategies. It gives guidance to the **three Standing Committees** :

- Gas Utilisation
- Gas Infrastructure
- Sustainability

Working Groups are set up when required to deal with specific subjects under the supervision of the three Standing Committees.

Industry **Executives and High Level Experts** are Members of the three Standing Committees and/or Working Groups in charge of their respective fields of activity.

Internal organisation

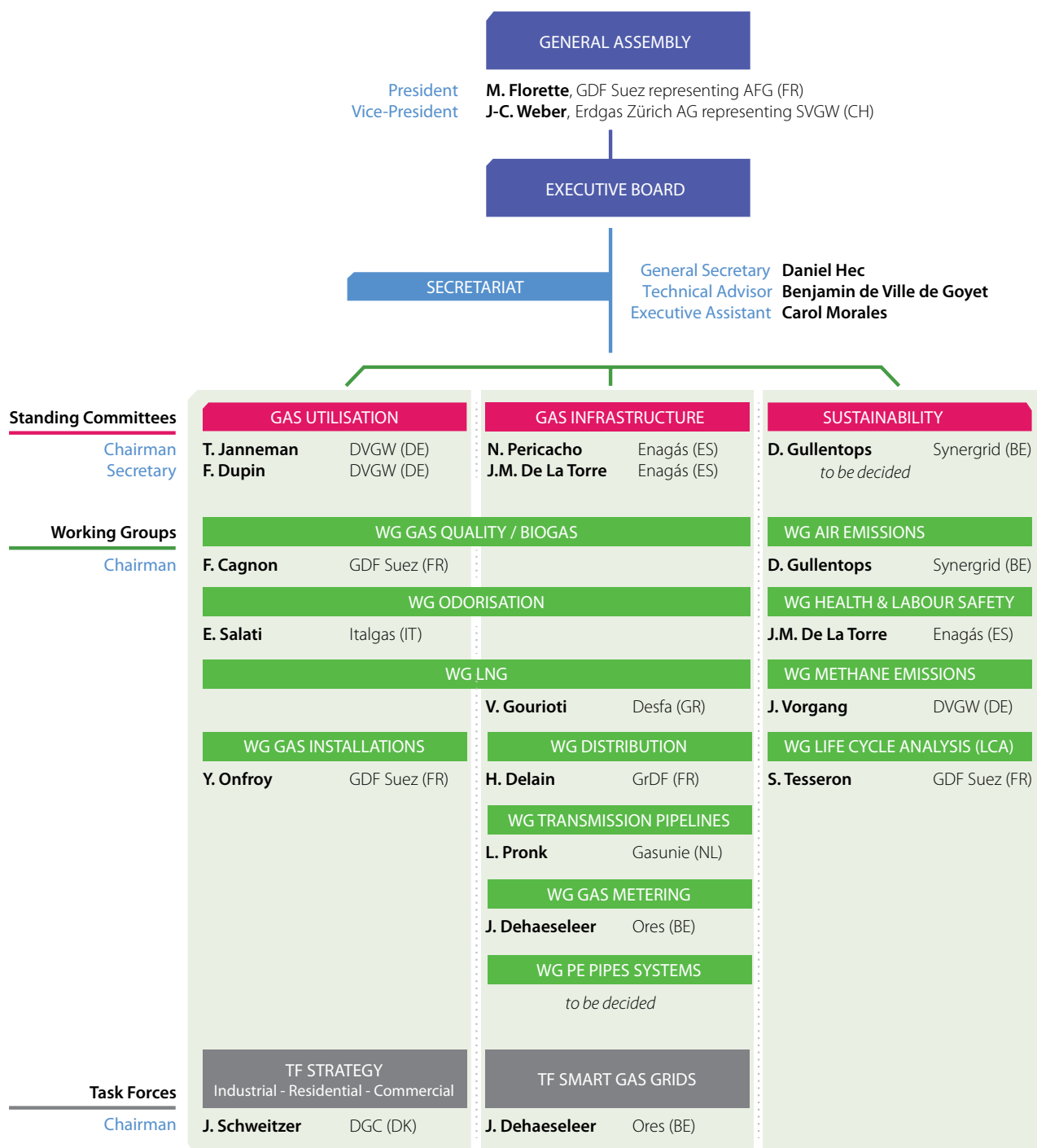
The **General Secretariat**, representing MARCOGAZ with all relevant external official and industry partners and servicing the activities of MARCOGAZ internal bodies, consists of one full time General Secretary, one full time Technical Advisor and one full time Executive Assistant.

MARCOGAZ structure consists in 3 Standing Committees heading Working Groups and Task Forces which are non-permanent. The structure is adapted according to faster and faster changes in the gas sector to meet the expectations of its Members.

MARCOGAZ website www.marcogaz.org offers general information on the Association and its organisation and activities as well as access to major reports and publications. For the Members the site offers the possibility to have access to very valuable technical information.

Internal organisation chart

At the end of July 2013, the internal structure was as follows:



■ Events

Workshop Gas Heat Pumps

Paris



The **objective** of the workshop organised on 1st and 2nd December 2011 in Paris, was to paint a picture of GHP situation and discuss the strategy and actions needed to accelerate the introduction of GHP to the both EU domestic and commercial markets.

Gas Heat Pumps are one of the very efficient new technologies that will help gas to remain competitive in the residential and commercial heating markets and allow to offer gas cooling where this is relevant.

Existing state-of-the-art technologies were presented by manufacturers including Aisin, Bosch, Robur, Sanyo, Soprano, Sorption Energy, Vaillant, Viessmann and Yanmar; and a technical visit to the GDF SUEZ *Research Centre* was an opportunity to visualise and discuss some of the techniques.

Presentation of initiatives in some EU Countries for the promotion and integration of gas heat pumps were given followed a roundtable which aimed to identify further actions to promote GHP in Europe.

Most of the around 80 participants agreed that the following points were essential to introduce the technology to the market:

- Sharing knowledge among the industrial stakeholders. A better understanding of the products and their performances, etc. would greatly benefit the development of the market.
- Speaking with one voice to Authorities at EU and National levels was seen as essential concerning current and new regulations.

- Participation in the definition of the EU regulations such as the implementation of the Eco-design Directive, standardisation activities, IEA work and harmonisation of efficiency concepts and training of installers were considered as important issues.
- Communication and visibility are essential to raise awareness and understanding of gas heat pumps as few Members of the public or the Authorities appreciate that they do exist and are a renewable technology.
- Developing products to suit the new energy landscape: low heat demand, hot water supply and an increasing need for cooling should be taken into account when designing new products.
- Finding new ways to bring products to the market such as working with energy service companies (ESCOs) or leasing of appliances etc.

Participants unanimously agreed that the workshop was very useful and that similar meetings should be organised in the future. MARCOGAZ continues to advocate for a more extensive use of gas heat pumps, especially by participating in the 7th Framework Programme HEAT4YOU aiming at making gas absorption heat pumps available for the residential market in Europe and displaying products in different events such as the Gas Week (April 2012 and 2013) organised by the Gas Industry through the GasNaturally project.

European Forum Gas 2012

Dresden



The European Forum Gas 2012 (EFG 2012) was organized by MARCOGAZ and GERG and hosted by DVGW on June 20th, 2012 in Dresden (Germany). Theme of this edition was standardization for the gas sector. Its aim was to provide participants with the rationale for involvement in standardization:

- For operators of gas infrastructure, the development of European Standards (EN) provides a common sound basis for the design, construction and operation of their assets, and helps share experience and good practices;
- For gas utilisation, development of standards is a key factor for the market development of new technologies by enabling an adequate assessment of their performance (and a subsequently a recognition by regulations), and increasing confidence from potential customers.

After two introductory key note speeches (from a company outlook: a strategic tool, from a macroeconomic perspective: the benefits to the economy), three sessions focused on the following issues:

- Why should the Gas Industry be involved in standards?
- How to best use the framework?
- How standardization helps and is essential for innovation?

The various aspects of standardisation and especially its value for the Gas Industry was presented and discussed. It was clearly carved out that the Gas Industry can take significant advantage of standardization, even in times of increasing regulation. By active participation in standardization the Industry does not only elaborate its own set of technical rules but also shapes the implementation of the European policy for the gas sector.

This is the reason why the EU Commission delegates technical harmonisation necessary to the implementation of the 3rd Energy Package to the sector itself: on one hand by asking the European Gas Transmission Operators, through ENTSOG, to prepare Network Codes; on the other hand by giving standardisation mandates to the 3 European Standardisation Bodies (CEN/CENELEC/ETSI) where gas experts realize the work. Last but not least these activities are accompanied by EU projects/studies, which de facto are (partly) led by European Associations such as Marcogaz or EASEE-gas (e.g. EU Gas Quality Implementation Pilot Project).

The relation between innovation and standardisation were also in the focus: standardisation sets rules on best practices and this leads to the standardization of innovative products and technologies, in order to prepare the market and to set global standards for the future.

The discussions proved that participation in standardisation (and also in the relevant gas Technical Associations) shall be part of each company's strategy because it's worth it!

The evening prior to the Forum, EFG participants visited the facility for demonstration of effects due to gas incident/accidents operated by the Gas Technical Institut DBI – Gas- und Umwelttechnik GmbH in Freiberg, near Dresden. Furthermore the European participants were introduced into some miner's traditions presented at the festive 200 years birthday celebration of the gas lantern, invented by Lampadius in Freiberg.

The very well attended European Forum Gas 2012, organised in Dresden by our German Member DVGW, highlighted the reasons for the Gas Industry, represented at EU level by MARCOGAZ, to be strongly involved in the European Standardisation process.



(photo: Dr.-Ing. Walter Thielen, Managing Director DVGW, Germany)

EGATEC 2013

Paris



The second EGATEC event, which is the main European Conference on the gas technologies of the future, was held in Paris on 30th and 31st May 2013. The conference, which was attended by key persons, was organized around discussions and enabled attendees to review the way in which gas could become one of the most competitive and innovative energy options on the market in a fast-changing European energy landscape, contributing strongly to the EU Climate Change policies.

EGATEC 2013 provided an opportunity to touch on a wide array of topics that are of key interest for the European Gas Industry, including “traditional” topics such as gas quality, smart metering or gas installations safety. In addition, to reflect the challenge set by this 2nd EGATEC event, i.e. to “Imagine Gas Innovation”, the main issues addressed by around 40 speakers were breakthrough issues, like smart gas, biomethane, the “power to gas” revolution, and new applications for gas (micro-cogeneration, hybrid solutions, LNG for transport...).

The participants particularly valued the presentations given by Jérôme Ferrier, the President of the International Gas Union (IGU), by Dr. Fatih Birol, the Chief Economist at the International Energy Agency (IEA), by Satoshi Yoshida, Chairman of the Sustainability Program Committee of IGU, and by David Carroll, Chairman and Chief Executive of the Chicago Gas Technology Institute, and Vice-President of the IGU.

These speakers highlighted three major points: first, the fundamental changes in the global energy landscape, due to the combined effects of new technologies and of natural and environmental disasters; second, the advantage of gas in this context due to the “3E+S” concept, which shows

natural gas’ economic and environmental benefits, which promote energy efficiency and security of gas supply; lastly, the impact of developing renewable energies on a large scale and their strong link with natural gas. Both days of the conference were chaired by Marc Florette, who had combined his role as President of MARCOGAZ with that of Chairman of the Conference Steering Committee.

5th GERG Academic Network prizes

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Around 20 European doctoral students and researchers, whose work was subject to a prior selection process, were given the opportunity to present a summary of their research in poster form at the event. They were able to compare their results with the opinions of the industry professionals and consultants who attended the debates. The four prize-winning posters dealt with:

- The operational security of the natural gas network (F. Ortloff, Germany);
- The optimization of an electro-chemical sensor to measure the quality of natural gas (L. Rojo, Spain);
- Measuring gas quality in networks that include biogas (C. Fiebig, Germany);
- Producing 2nd generation biomethane via catalytic methanisation (A. Khodakhov, France).

Site visits and round tables

In addition to the discussions, three site visits were offered to the attendees: a GNVert CNG vehicle filling station, a Paris District Heating Company (CPCU) co-generation plant, and the GDF SUEZ Research Center.

A round table entitled “gas innovation for energy mix transformation” highlighted the challenges of transforming the European energy mix and the role that gas can play in that transformation. The views of the European representatives, of the Chairman and Chief Executive of Atlantic, of a representative of the Danish network operator Energinet.dk, and of the Chief Executive of the DBI (German Research Institute) gave rise to fruitful discussions, which were led by the Chairman of GasNaturally. Here are a few key ideas generated by those discussions:

- as a fossil fuel, gas may be viewed negatively by political institutions: the key is to publicize its environmental and economic advantages, and its advantages in terms of reliability;
- the capacity of natural gas to effectively combine with renewable energy, especially wind power and biogas;
- the economic and environmental efficiency of natural gas or hybrid products and applications.

This issue was a direct reflection of the position recently adopted by eight European Companies in the energy sector, at GDF SUEZ's initiative. All the Companies want to draw EU leaders' attention to the gravity of the situation (increasing scarcity of investments, etc.), and to the difficulties encountered by the European energy sector (lack of visibility on energy policies, uncertainty regarding regulations, etc.).



(photo: Jérôme Ferrier, Chairman of the IGU, TOTAL, during his opening address)

We invite you to visit www.egatec.2013, in order to view the event presentations and photos.

Next events

The **European Forum Gas 2014** will be hosted by the Czech Gas Association and will take place in Prague on 5th and 6th June 2014.

Following the success of the first two editions, **EGATEC 2015** is to take place in Vienna on 25th and 26th November 2015 and will be organised by ÖVGW.

World Gas Conference 2012 (IGU)

Kuala Lumpur



During the 2009-2012 triennium, the MARCOGAZ Secretariat was involved in the activities of WOC 3 (Transmission), WOC 4 (Distribution) and WOC 5 (Utilisations).

In Kuala Lumpur, the Secretary General:

- chaired an Interactive Showcase session on pipeline integrity
- gave a presentation on smart metering
- co-chaired with J. Schweitzer (DGC) a workshop on gas quality.

MARCOGAZ also participated in the annual IGU Council meetings.

In order to bring the Life Cycle Assessment (LCA) work done in Europe by MARCOGAZ at international level, MARCOGAZ suggested IGU to create a Life Cycle Assessment group. This was accepted and a Study Group has been created within the Programme Committee Sustainability (PGC A) with the aim to produce a 1st IGU LCA to be presented during the next World Gas Conference in Paris in June 2015.



(photo: Daniel Hec, Secretary General MARCOGAZ, at the World Gas Conference 2012 in Kuala Lumpur)

■ Technical activity

The main results of the technical work carried out by MARCOGAZ during the past 2 years are listed below (non exhaustive list)

Gas Utilisation

The Standing Committee Gas Utilisation (SCGU) main mission is to ensure sound technical conditions for a successful future of natural gas use in the residential, commercial, industrial and transport areas.

Specific Working Groups prepare the MARCOGAZ technical input and positions by analyzing the documents issued and proposing technical arguments and answers.

Ecodesign (2009/32/EC) and Labelling Directives (2010/30/EC)

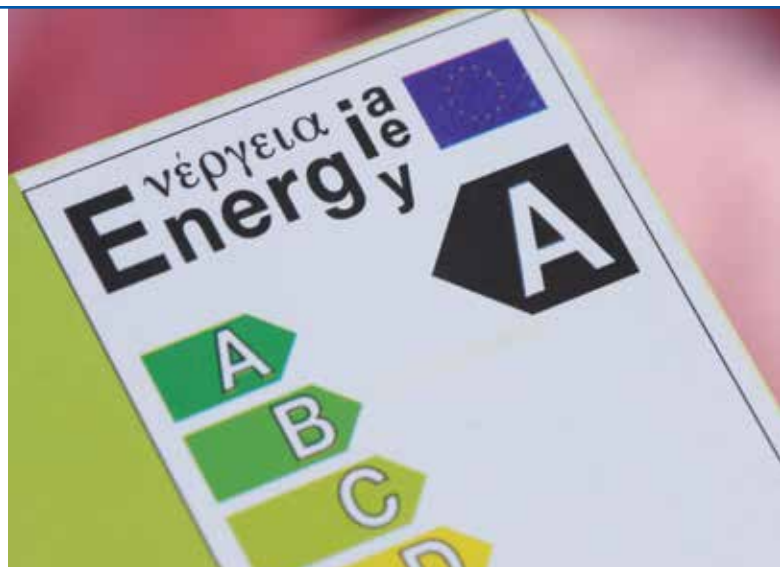
For both directives the proposed implementing regulations for space heaters (lot 1) and water heaters (lot 2), have been examined by the Member States Regulatory Committee and no major changes are expected now. The mandatory measures lay down minimum requirements for efficiency/NOx emissions for the Ecodesign Directive and efficiency performance classes (ranking A+++ to G) according to the Labelling Directive.

Since the start of the discussion, MARCOGAZ participated to the Consultation Forum meetings, was involved in the Expert group on energy efficiency calculation and issued many position papers (see list in this report).

In this context, MARCOGAZ was successful in promoting appliances equipped with new technology such as micro-cogeneration or high performance gas heat pumps (GHP) which can reach upper levels of the performance classes listed in the Labelling Directive.

Notwithstanding this strategy, MARCOGAZ will continue to promote condensing boilers which often represent the best consumer's choice in terms of affordability and efficiency, especially when replacing an old boiler.

One of the priorities for lot 1 and lot 2 will be to follow and to help a smooth practical implementation for gas appliances. In that regard SCGU has organised at the beginning of 2013 a workshop together with the Independent Laboratory Organisation LABTQ dedicated to the standardization situation for Ecodesign testing. Representatives from CEN, the European Commission and the main stakeholders were present acknowledging the central role of MARCOGAZ on this issue.



Gas Appliance Directive (2009/142/EC)

MARCOGAZ is rather disappointed by the recent decision revealed by the Commission possibly not to revise the Gas Appliances Directive, following an impact assessment carried out externally. This would mean that the ad hoc group would have worked for 3 years in vain although a final draft had been submitted with very first positive comments from the Member States and stakeholders.

Particularly some key proposals by SCGU, which were included in the revised proposal, were intended to improve important gas safety aspects such as the extension of the GAD scope to components/equipments of customer gas installations.

MARCOGAZ will consult with other Industry Organisations to eventually prepare a common position.

Gas Quality

During the past 10 years, MARCOGAZ has been very active in the harmonisation process regarding gas quality in Europe, by issuing core position papers, proposing parameters and values to EASEE-gas, taking a significant role in drafting of the Mandate M/400, initiating the GASQUAL project and now promoting, with EASEE-gas the Pilot Project between 5 Countries aims at identifying the solutions to be developed to accept a wide range of Wobbe Index.

MARCOGAZ is actively participating in CEN/TC 234 WG 11, responsible for the second phase of Mandate M/400 that currently prepares an H gas EU standard laying down the main gas characteristics. This future standard is important

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to ensure interoperability of gas systems and therefore prepare a future internal gas market.

MARCOGAZ is also involved in the work of CEN/PC 408 dealing with the injection of biogas into gas grids.

The MARCOGAZ WG “Gas Quality/Biogas” brings technical input on specific issues such as minor constituents and surveys the activities of the groups mentioned above.

Customers gas installations

The adoption of the position paper “European Scheme for the Qualification of gas Installers” was a significant achievement in 2012. Not only for its role in improving the safety of growingly complex installations but also as an illustration for exemplary co-operation with another Association, in this case the European Federation of Installers (GCI-UICP).

Gas installations accident statistics (EGAS C)

MARCOGAZ is collecting and analysing statistics on accidents in consumers gas installations figured out in the report EGAS C 2011 published in June 2013.

The results from this survey demonstrate that using gas is very safe for end users. Nevertheless specific attention should be given to CO poisoning which is the main cause of domestic accidents. MARCOGAZ has undertaken a study of possible best practices to reduce that risk.

Strategy for the development of residential and commercial gas applications

MARCOGAZ is currently preparing a detailed technical survey of gas technologies able to meet the EU energy policy goals in terms of efficiency and development of renewable energy. The scope of work will include new technologies such as micro-CHP, gas heat pumps, hybrid systems or fuel cells for both individual and collective use. The results of this activity will be used to prepare strategic recommendations with other Gas Organisations.



© photo courtesy of Fluxys

Gas Infrastructure

The scope of work covers mainly high pressure gas pipelines (transmission systems) and low pressure distribution grids with a strong focus on safety issues and technical harmonisation.

Critical Infrastructure Protection (CIP)

MARCOGAZ believes there is some benefit in the European legislation on European Energy Infrastructure Protection, particularly by raising awareness and sharing best practices between infrastructure operators and some National Regulatory Authorities and Member States. The GIE/MARCOGAZ group supports the initiative to recast the Directive and proposes to give more focus on a consistent, qualitative and effective implementation of the existing measures.

MARCOGAZ is also participating in the European Commission's DG Energy *"Thematic Network on Critical Infrastructure Protection (TNCEIP)"*, addressed to energy operators with the main object of discussing on security aspects in the context of EU policy in this area. Continuity planning and cyber-attacks are becoming more and more important for EC.

Third Energy Package

Following the request of the Commission to ACER to submit by 31st July 2012 a framework guideline to set out the necessary level of harmonization on interoperability rules and data exchange in the EU gas sector, ENTSG undertook in September 2012 the preparation of a Network Code on Interoperability and Data Exchange.

MARCOGAZ was very active in the process by bringing its technical expertise on 3 issues:

- Harmonisation of units (the draft NC does not use reference conditions prescribed in the relevant CEN and ISO standards);
- Odorisation with the circulation to ENTSG of the MARCOGAZ report on odorisation and interoperability;
- Gas quality where MARCOGAZ highlighted the consequence of adopting technical characteristics at interconnection points on end users.

The Network Code should be adopted during 2nd half of 2013.



Distribution

Main activities dealt by the group in this period have been:

- Update of the Distribution Key Performance Indicators (KPIs);
- Finalisation of the Report on Unaccounted For Gas (UFG);
- EGAS B 2011 (distribution accident statistics) final report;
- Maintenance policies benchmarking.

A detailed analysis has been carried out on the 19 existing KPIs and a 2008-2011 draft report is in preparation.

13 Countries have provided answers for the EGAS B 2011 report which demonstrates the very good overall safety level with an average fatalities frequency of less than 0,5/100.000 km of distribution. Accident due to Third Party Damage are accounting for approximately half of the total.

The last version of the Unaccounted For Gas (UFG) report will be issued for adoption in autumn 2013.

DSO Certification is proposed as a new subject for next year. The reason behind is a new tendency from Regulators to ask competences certification to DSOs (e.g. Austria or Germany).

Gas Metering

MARCOGAZ strongly supported the adoption of the 1st smart meters product standard (EN 16314) prepared by CEN/TC 237, therefore allowing DSOs or Meter Operators to refer to a European standard in their smart metering projects. This is a very good achievement of the Gas Industry.





© photo courtesy of Fluxys - P. Henderyckx

Smart Metering Coordination Group (SM-CG)

SM-CG issued in December 2012 a report highlighting the results obtained during the last 3 years under Mandate M/441 and presenting the list of smart metering standards adopted or nearly adopted. This report was accepted by the Commission and CEN, CENELEC and ETSI. Since additional standards are needed to roll out smart metering systems, it has been decided that SM-CG will continue its activity in 2013, the MARCOGAZ Secretary General continuing to chair the group.

The Commission is currently analyzing the assessment studies (including the Cost Benefit Analysis) prepared for September 2012 by Member States against the Recommendations issued in March 2012, especially checking if and how the 10 minimum functionalities are taken into account. Depending on its findings, the Commission will organize face to face meetings with MS and issue a report to be presented during the next London Forum (Consumers Forum) in November 2013.

The implementation should be easier for electricity, since, contrary to gas meters, electricity meters are connected to the grid. However, the Commission and the Regulators (CEER) have already many times mentioned that electricity and gas consumers should be equally treated.

The following important issues shall be kept in mind for the future:

- Confidentiality of the data treatment (privacy);
- Protection against hackers;
- Safe data storage.

Smart Gas Grids

Smart Gas Grids development is a very good opportunity for the Natural Gas Industry to be part of the smart grid discussions which concerns today nearly only electricity systems.

Following the work of the former EG 4 group which produced the 1st Smart Gas Grid report in June 2011, MARCOGAZ and Eurogas Distribution Committee have proposed to set up an ad hoc group to examine in more details the functionalities and technologies implemented by DSOs.



Transmission Pipelines

The main topics discussed within the WG Transmission Pipelines during the last 2 years were:

- The finalization of a MARCOGAZ document on emergency planning, which could be used when preparing a Network Code on the subject in the future;
- Asset management which continue to be a subject of high importance with certification requested in some EU Countries (NL, U.K.) and ISO 55000 standards issued;
- Question was raised on the necessity to review the MARCOGAZ KPI PIMS Guidelines;
- Ageing of transmission pipelines which is a subject of growing interest;
- The follow up of the standardization activity carried out by CEN/TC 234 WG3

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Task force on a survey for external safety - Policies & Practices

Due to the different policies between Countries regarding external safety a Task Force has been created with the aim to perform a survey of external safety policies, a survey of operational practices applied by companies, and finally a survey of trends in the European Union. The results of the survey are as follows:

- Most respondents believe harmonised legislation and standards for pipeline safety can be achieved at EU level;
- Almost all respondents endorse that harmonisation should be goal setting and only give basic outlines, national rules providing with the technical details;
- There is a slight preference for a quantitative risk standard;
- MARCOGAZ role is firstly to inform its Members about ideas the EC develops regarding pipeline safety;
- MARCOGAZ should be the spokesperson for its Members regarding harmonization.

Protection measures for pipelines are currently being studied. Additional measures (not only safety distance) could emerge from the study. "Protect the pipeline from the people, not the people from the pipe" is the philosophy.

Odourisation

The odourisation report and the odourisation table prepared in 2012 by the MARCOGAZ WG Odourisation were used during the discussions on the Network Code on Interoperability.

MARCOGAZ did not make recommendations on odourisation since practices are different in Europe (e.g. centralized versus decentralized). Cost/benefit analysis will be necessary prior to any decision. Results will depend on many factors, one of them being the number of DSO's in the Country (from 1 to 700+).

WG Odourisation has just launch a new study about the current odourisation practices in Europe. This study would report about how odourisation processes are made (odorant concentration, methodologies, amount of injection points, costs, back-up systems ...).

Sustainability

The Standing Committee Sustainability has monitored and steered the different Working Groups main activities described below. It has also informed the Members of the evolution of the environmental framework of the Gas Industry at European and International level.

Air Emissions

To implement the new Directive on Industrial Emissions (IED), the European Commission will publish regularly Best Available Techniques Reference Documents (BREF's), prepared by the European Integrated Pollution Prevention and Control Bureau (EIPPCB) in Sevilla, to be used by Member States when issuing operating permits.

At stake was the commitment to replace at short notice most compressors of the gas transport system, since their NOx emissions can be not in line with the Best Available Techniques (BAT) and their conversion to low NOx technology is in most cases very costly if not technically impossible.

MARCOGAZ succeeded to send a representative to the EIPPCB to explain that specific BAT regarding compressor stations are specific to each generation of turbines in compressor stations, that the size and operation of those turbines is totally different from that of power generating turbines, and that the number of possible best technologies is very limited.

A position paper was prepared, using a compressor stations database built by the WG. On request of the EIPCCB the WG wrote a specific chapter and amendments on the proposal of amendments formulated by the power sector.

In 2013 the preparation of the BAT reference document by the EIPPCB and the European rules regarding start-up and shutdowns in the framework of the IED and the choice between the different emission monitoring systems will be important topics for MARCOGAZ.

In 2012 the European Commission prepared the second period of the Emission Trading System (ETS), with new rules regarding the granting of emission rights, their quantity and their price. New monitoring and reporting rules were examined and a common interpretation and practice was elaborated.

Methane Emissions

In 2007, MARCOGAZ issued an important document listing practices and technologies used for reducing gas infrastructure methane emissions. A methodology for estimating methane emissions to be used as a reference based on emission factors was also published.

But such factors, because of the high number and types of emitting equipment in the gas chain, shall often be estimated randomly using a statistical approach, this leading to important discrepancies between the different grids, which could not be completely solved.

Since methane is a significant greenhouse gas, with a limited life span, it has been decided to restart the WG Methane Emissions, and to replace the "top down" approach with a "bottom up" approach, using especially a list of North American practices recognised by the American Environmental Protection Agency (EPA) already known by the European Commission. The internal rate of return of the different measures will also be calculated.

Life Cycle Assessment (LCA)

In 2011, MARCOGAZ finalized its LCA of the natural gas chain using EU-25 data from 2004, from production to utilisation, addressing three different natural gas utilisations:

1. Electricity generation in natural gas combined cycle power plant (CCGT);
2. Heat production using condensing modulating boiler;
3. Cogeneration using micro CHP for residential buildings (Stirling or gas engines).

The final functional unit is either "to deliver 1 kWh of electricity with the best available technologies" (combined cycle or CHP) or "to deliver 1 kWh of useful heat with the best available technologies" (condensing boiler or micro-cogeneration).

In order to comply with LCA ISO standards (ISO 14040 and 14044 standards, a peer review has been realized in 2010 by an external body.

Three environmental aspects were examined:

1. Emission of greenhouse gases;
2. Acidification emissions;
3. Non renewable energy depletion.

This important study, the 1st of its kind produced by the Gas Industry, including a significant data base and a calculation program, was also extended in 2011 to natural gas vehicles.

MARCOGAZ has now decided to update its LCA on the basis of 2012 data. A simplified questionnaire has been agreed and circulated to collect environmental data.



Health & Labour Safety

The WG is preparing a paper on safety leadership/safety culture: "Good practices on health and safety in the Gas Industry". The structure of the document is defined and will be completed in 2013. Programs developed by the member companies about safety culture are presented by the Members.

The Members exchanged also information on recent labour incidents and the measures to be taken to avoid them if possible.

A comparison of the emergency plans of the member companies has started and could lead to interesting added values to all Members.

A MARCOGAZ paper with the common points of Safety Data Sheet (SDS) for natural gas as a useful reference for the next revision on the different Gas Companies is being prepared.

The annual Health and Safety data collection activity has been overviewed and some modifications have been agreed:

- 5 year overview of representative companies;
- Accidents by staff per km;
- Accidents by contractors per km, no working hours;
- Also include number of stations and installations;
- For contractors only the LTI (Long Term Illness) will be mentioned;
- The data regarding transmission and distribution will be separated;
- No sickness rate anymore;
- Road traffic accidents: separate work related and home-work commuting.

SWOT analysis

This activity was felt necessary since environmental aspects girdling gas system operators and natural gas are today subject to an accelerated and continuous evolution. Awareness of this evolution and possibility to act pro-actively on (future) changes is essential when steering the activities of especially the Standing Committee Sustainability and its Working Groups.

The SWOT questionnaire is intended to be used frequently in order to detect timely shifts and decide on actions.

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■ Standardisation

As the Technical Association of the Natural Gas Industry, MARCOGAZ is the Industry voice in European and international standardisation, representing its Members in the CEN, CENELEC, ETSI and ISO activities at general and technical committee level.

MARCOGAZ especially:

- influences the standardization policy for the gas sector in the EU, especially regarding gas technical issues by participating in many standardization activities;
- promotes EN standards as a way for the Industry to elaborate common technical rules. EN standards of high quality are necessary for the Gas Industry to keep a high safety level;
- reminds that safety, reliability, efficiency, environmentally friendly and cost-effectiveness are fundamental for gas systems;
- promotes new efficiency gas technologies through early standards;
- is the network of the Gas Industry technical experts.

Standards are for us a privileged way to implement technical legislation (at European level as well as at national level).

In 2012, MARCOGAZ was officially to bring its views regarding the preparation of the CEN/CENELEC European Standardisation Strategy 2020.

In a position paper issued in November 2012, MARCOGAZ reminded its role in the European standardization on behalf of the Gas Industry which consists in:

- influencing the standardization policy for the gas sector in the EU, especially regarding gas technical issues by participating in many standardization activities (Sector Fora: Gas Infrastructure, Gas Utilisation and Energy Management, Smart Meters and Smart Grids Coordination Groups, Technical Committees);
- promoting EN standards as a way for the Industry to elaborate common technical rules. EN standards of high quality are necessary for the Gas Industry to keep a high safety level;
- reminding that safety, reliability, efficiency and cost-effectiveness are fundamental for gas systems;
- helping to introduce new efficiency gas technologies through early standards;
- managing the network of the Gas Industry technical experts.

In order to maintain a close link with the technical standardization, MARCOGAZ is a Liaison Organisation with 18 Technical Committees to date.

MARCOGAZ, at Secretariat level or through its Members is therefore involved in many standardization activities, such as:

- The CEN, CENELEC and ETSI Smart Meters Coordination Group (SM-CG), chaired by D. Hec;
- Sector Forum Gas Infrastructure and Sector Forum Gas Utilisation;
- Sector Forum Energy Management;
- CEN/TC 234 Gas Infrastructure which prepares the common European Standards for design, construction, testing and operation of natural gas grids, also dealing with gas quality (Mandate M/400);
- CEN/PC 408 on biomethane (Mandate M/475);
- CEN/TC 237 on gas meters;
- CEN/TC 299 on gas heat pumps;
- CEN/TC 155 for polyethylene distribution grids



■ EU Public Consultation on Green Paper 2030



MARCOGAZ answered the European Commission public consultation on the Green Paper "A 2030 framework for climate and energy policies". In its response to the consultation, MARCOGAZ highlighted the following:

- Natural gas is the low carbon fossil energy which emits the least GHG; us low carbon system
- Complementarities between natural gas and renewable are made possible by the ability of existing gas infrastructure to store and transport renewable energy
- EC Energy & Climate policy shall give clear position to investors to guaranty stable long term investments
- More support is needed to develop the new technologies necessary to optimise the use of gas: Power to Gas, CCS, gas heat pumps, micro CHP, fuel cells...
- It is urgent to use more gas (LNG and CNG) in the transport sector to reduce GHG emission
- Any 2030 targets shall secure jobs in Europe and take into account the economic environment
- Public acceptance is fundamental for the success of any EU Energy and Climate policy measures
- Shale gas development should be envisaged since it would improve EU security of supply.

Full version of the MARCOGAZ answer can be viewed on the public area of the MARCOGAZ website.

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■ Collaboration with energy key players

MARCOGAZ maintains strong links with different energy sector key players.

MARCOGAZ brings its technical expertise to both Madrid Regulatory Forum and London Consumer's Forum where the European Commission, Regulatory Authorities, Members States Representatives, Gas Systems Operators, gas suppliers and traders, network users, consumers and other stakeholders discuss issues regarding the achievement of a true internal market.



MARCOGAZ is a Member of the following Associations:



EASEE-gas

■ Gas Advocacy: GasNaturally

GasNaturally is an initiative that brings together 7 Associations representing 130+ Companies representing the entire gas chain and aiming to showcase the importance of natural gas in the forthcoming transformation of the EU energy system. **A Unified Voice for Natural Gas!**

GasNaturally rises awareness about advantages of natural gas for the EU to meet its Energy and Climate objectives: "Competitiveness", "Security of Supply" and "Sustainability". GasNaturally advocates for using low carbon fossil energy such as natural gas and its existing infrastructures as a transition to a renewable. A transition period which can be technical, economical and healthy due to natural gas lowest CO₂ emission and operation cost.



MARCOGAZ participation in GasNaturally events

- A communication on new gas technologies for the residential market was given on behalf of MARCOGAZ by Bernard BLEZ from GDF SUEZ (FR).
- Gas Week 2013 – second edition – successfully focused on how natural gas can help Europe make a clean future real and took place from 23rd April 2013 to 25th April 2013 at the European Parliament. High level speakers from the natural gas sector, energy end users (domestic and industrial), technology manufacturer, renewable energy associations attended this event to debate with the European Institutions on post-2020 European energy and to find a solution to the future EU energy, climate and industrial challenges.
- On 24th April 2013, a breakfast event addressed ways of reducing GHG emissions in the medium to long-term

by investing in new energy technologies: "Technology for a Smart Future: Innovation and R&D to Make a Clean Future Real". The breakfast was introduced by the keynote speaker Marc FLORETTE, President of MARCOGAZ, Research and Innovation Senior VP at GDF SUEZ. It was an opportunity for panelists and participants to voice their priorities and concerns vis-à-vis the market roll-out of these technologies.

- Next milestone is the "GasNaturally Member States Gas Forum" under the patronage of the Lithuanian Presidency which will take place in Brussels on 13th November 2013.

A dedicated website (www.gasnaturally.eu) provides all information about GasNaturally, as example the infographic about "Air Quality", next events or weekly tweets.



GasNaturally brings together 7 organisations

■ Reports & publications

The list below mentions some of the most significant technical position papers or reports issued by MARCOGAZ recently. They can be obtained by visiting the MARCOGAZ website or by contacting the Secretariat:

- MARCOGAZ & GIE position paper on “Clean Power for Transport Package”
15/07/2013.
- European Commission – public consultation on green paper “A 2030 framework for climate and energy policies”
02/07/2013;
- EGAS C Report – Statistics 2011
29/05/2013;
- MARCOGAZ answers concerning benzene in natural gas and CAS/EINECS references
23/04/2013;
- CEN/CENELEC European Strategy Workshop – MARCOGAZ contribution
05/11/2012
- MARCOGAZ/GCI-UICP position paper “European scheme for the qualification of gas installers”
24/10/2012;
- Energy Labelling of heaters – Letter to Commissioner Oettinger
20/09/2012;
- Odorisation and interoperability – Natural gas odorisation in Europe
09/10/2012;
- Gas infrastructure position paper on BAT
24/07/2012;
- MARCOGAZ comments on implementing measures for Directive Ecodesign Lots 22 & 23
03/07/2012;
- Proposal for Pilot Study on regional implementation
04/05/2012
- MARCOGAZ/AEGPL Europe position paper “Primary energy & labeling for the implementation of Ecodesign Directive”
14/03/2012;
- MARCOGAZ position paper on “Ecodesign requirements & energy labeling for space heaters, combination heaters (lot1) and water heaters (lot2)”
01/03/2012;

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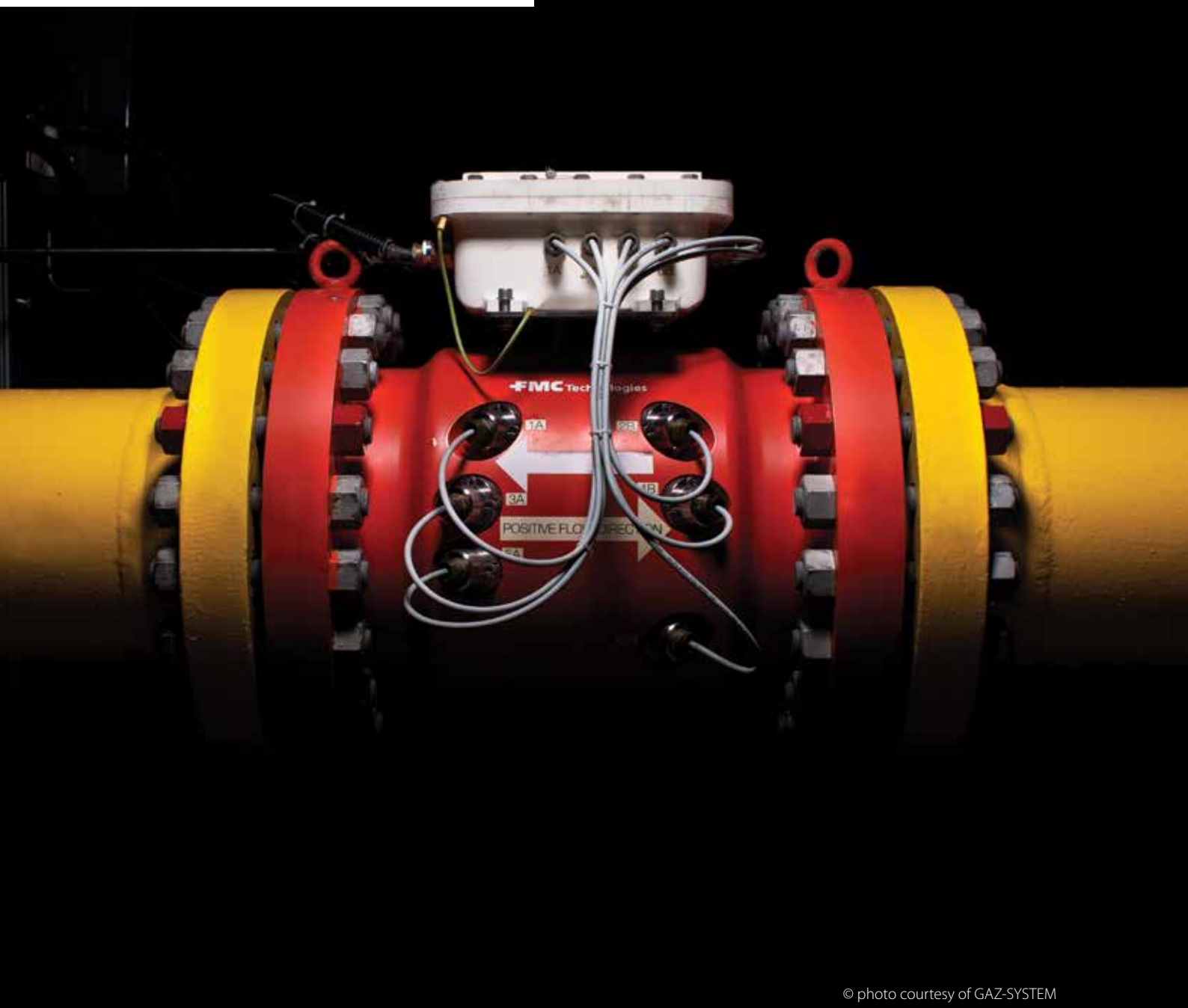
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