International Gas OCTOBER 2005

INTERNATIONAL GAS UNION

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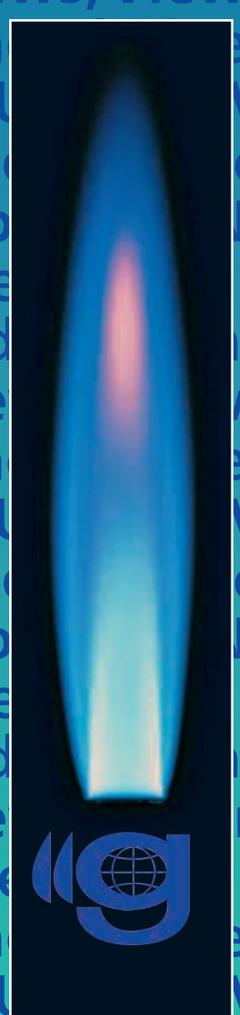

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THE BEST OF BOTH WORLDS

Energy Valley

The north of The Netherlands where a wealth of expertise on natural gas, sustainability and technical innovation is concentrated.

Energy Delta Institute

International Business School & Research Centre, a Gasunie initiative together with Gazprom and the Groninger University. For sharing knowledge, if you want to know it yourself on management level.

Trade

- Sales of 85 billion m^3 in 2004.
- Export of natural gas to Germany, Belgium, France, Italy, United Kingdom and Switzerland.
- Imports from Norway, Russia, United Kingdom and Germany.
- Supplier of gas for all sectors of the Dutch market.

Gas transport

- Almost 12,000 kilometres of main pipeline network. A Dutch-UK connection under construction.
- Transmission of natural gas in 2004 of over 90 billion m^3.
- Including an independent network operator, called Gas Tranport Services.

Gasunie Engineering & Technology

- Know how of supply processes, pipeline integrity, transport, measuring and technological application solutions.
- Expertise on the engineering, operations and maintenance aspects of the underground and above ground transport system and all related areas.
- Operating internationally.

Gasunie

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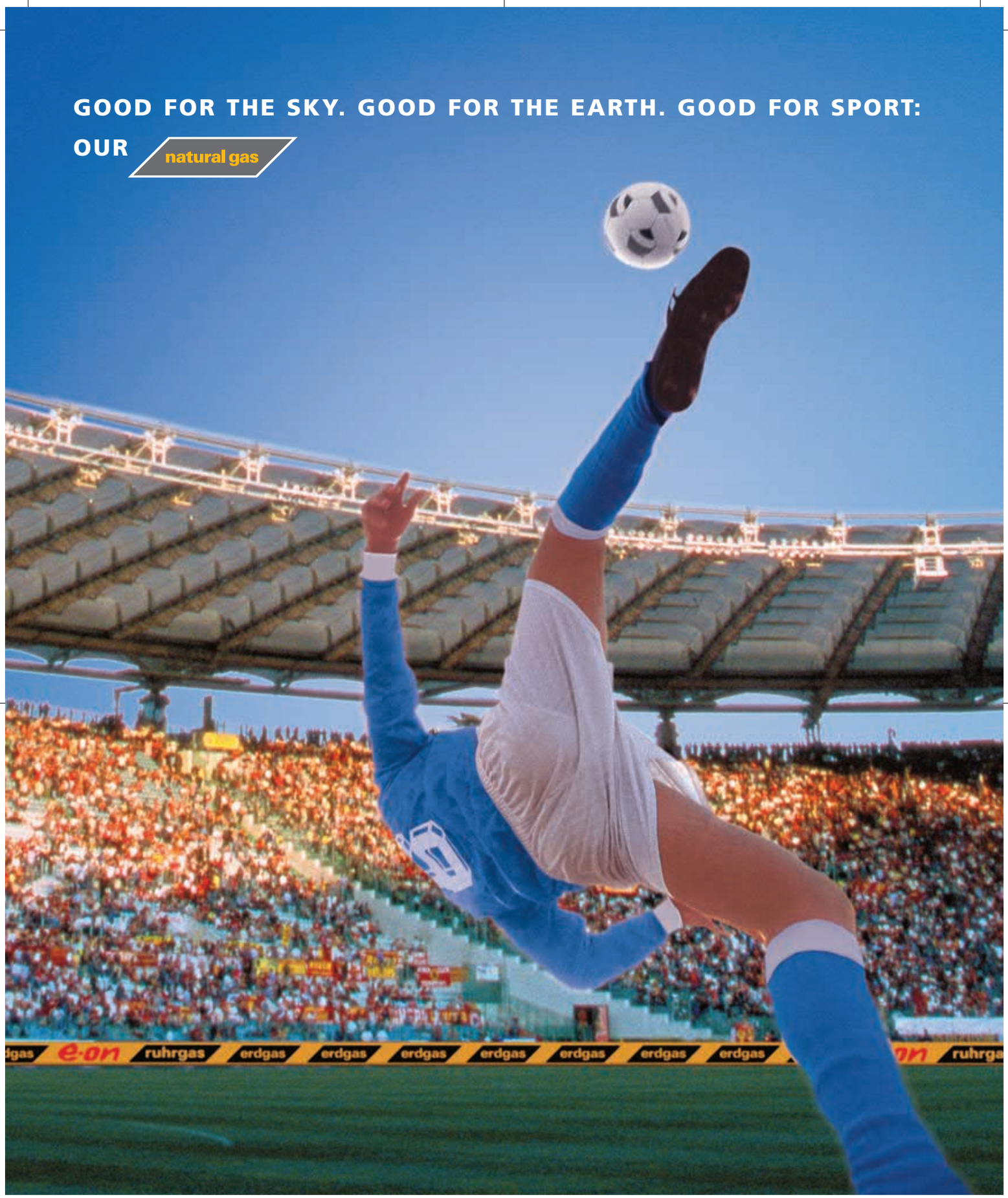

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Vision, Mission and Objectives

The International Gas Union (IGU) is a worldwide, non-profit organisation promoting the progress of the gas industry. Through its many member countries representing approximately 95% of global gas sales, IGU covers all aspects of the natural gas industry.

The Vision

Recognising that natural gas has an important part to play in satisfying the global need for an environment-friendly energy source, IGU will be the most influential, effective and independent non-profit organisation, while serving as the spokesman for the gas industry worldwide.

The Mission

IGU will actively, directly and through its members, promote the technical and economic progress of the global gas industry.

IGU will work towards improving the competitiveness of gas in the world energy markets. By promoting the development and application of new technologies and best practices, IGU will help optimise the economics of the entire gas chain, while emphasising sound environmental performance, safety and reliability.

IGU – serving as a global information clearing house – will promote transfer of technology and know-how.

In carrying out this mission, IGU will maximise value to its members and gas customers.

Objectives

In striving towards the vision and fulfilling the mission, IGU will regarding:

ECONOMY: Promote all activities within the entire gas chain, which can add to the technical and economic progress of gas;

CUSTOMERS: Encourage development of good customer services and customer relations;

TECHNOLOGY: Encourage research and development towards new and better technologies for the gas community;

SAFETY: Promote the safe production, transmission, distribution and utilisation of gas;

ENVIRONMENT: Encourage and promote development of clean technology, renewable energy applications and other activities, which will add to the environmental benefits of gas;

INTERNATIONAL GAS TRADE: Encourage international trade in gas by supporting non-discriminatory policies and sound contracting principles and practices;

LEGAL: Promote and contribute to the development of legislation concerning:

- the establishment of equitable, non-discriminatory and reasonable environmental and energy efficiency regulations, and
- efforts to establish appropriate and relevant international standards,

as well as

- the promotion of and participation in the exchange of information relating to regulatory processes;

COOPERATION: Enhance partnership with industry and manufacturers, and cooperation with governments, policy makers and international energy related organisations, and promote the exchange of information among members in order to help them in improving the efficiency and safety of gas operations.

Contents

Message from the President

Dear Colleagues

The most striking occurrences of the past months, partly interrelated, are the further increase of the oil price, passing $60 per barrel, and the unremitting growth of the economies of China and India and the associated energy demand of these nations.

Gas prices follow oil – or oil product prices, as oil products and natural gas are interchangeable in certain demand sectors and industries. For example, in the largest gas and oil market, the USA, many industries operate boilers with dual-fuel capabilities. Gas consumers thus experience the high price level just like oil consumers, although in Europe there is often a time lag included in the structure of the gas price formula. In some cases the price level may lead to loss of markets for the gas sellers, as feedstock users relocate their production facilities to countries where the commodity gas can be obtained at more advantageous terms. However, gas remains the fuel of choice worldwide, due to its excellent environmental performance and convenience for the end user.

Looking at the near future, the import dependence of the traditional gas and oil consuming markets will grow steadily. North America imports 40% of its oil but only 10% of its gas needs, the European Union around 80% of its oil and 50% of its gas. The big Asian industrial countries, Japan and Korea, have hardly any significant domestic oil or gas production. As for the growing economies of India and China, India started gas imports in 2004 and China is due to start in 2006.

The International Energy Agency (IEA) has calculated that the current investment level in oil and gas developments is 10 to 20% less than necessary to meet the growing demand. Demand rises worldwide at around 2% per annum. This will result in intensifying competition for gas (pipeline and LNG) and oil between the different regions in the world. Therefore, there is a need for a substantial expansion of gas production and it seems very unlikely that energy prices will soon return to the 1990s money of the day level.

Thanks to the rapidly increasing weight of the Chinese and Indian economies, together comprising one-third of the world's population, it will not be long before their influence in the gas market will be felt all around the globe. I will not predict the exact date when China and India sneezing will shake the world gas market, but I would be surprised if it took more than 10 years.

Under these circumstances, and in particular due to the growth of the LNG trade, for the years to come the gas market will be tilted towards a sellers' market. LNG is rapidly becoming the product that fills a substantial part of the gap between demand and supply from local sources, and gas producers increasingly have more of a choice as to where to send their uncommitted gas. As the LNG market expands and more vessels become available, some of which are not being built for a specific shipping route, arbitrage between regional gas markets might become common practice.

However, as the investments in an LNG chain are large and investors are always looking for robust commercial relationships, it is not appropriate to introduce a hit and run behaviour. It is therefore likely that limited volumes – an expected 15-20% – will be traded on the (LNG) spot market. Nevertheless, the last sold cubic metre can set the price for a much larger part of the market, when price-formulae in long-running supply and sales contracts are indexed partly to the spot price. The latter is expected to become more common as demand for gas remains high and purchasers do not want to depend solely on the spot market. In a tight market they want to secure volumes. On the other hand, sellers do not want to miss the advantage of relatively high spot prices if this is the

suppliers' view of the market development. I know there are gas sellers who nowadays prefer the spot price option to the traditional oil-linked gas price.

As long as demand for energy and gas in particular is in line with the expectations of forecasters like IEA, there is globally no sign of oversupply. Arbitrage between regional markets will lead to a decrease of inter-regional price differentials. This could be beneficial to end users, as they will not experience extreme price volatility, and industries using gas as a feedstock will have somewhat less worries as to where to build their factory. So to conclude, trading of large LNG volumes is a necessity for a mature world gas market to develop. This is not imminent within a couple of years, as most large LNG projects are in the construction phase or being planned.

Added to the impact LNG has on the world gas market, one should not underestimate the impact of liberalisation in several of the main regional markets, like Europe and the Pacific Rim. This is a development which requires new sales and marketing concepts with much more flexibility in order to appeal and adjust to the wishes of the consumer. And this reinventing of the sales and marketing policy for sure will also affect the purchasers' side of the

George H. B. Verberg, President.

gas industry. At the very least it will require quite a bit of added flexibility in the contracts compared with the old ones. For instance, buyers of LNG could be relieved from stringent take-or-pay clauses if the seller has the right to reallocate certain volumes the buyer does not need.

Of course no one can tell how long the high oil prices will last. But from the above it seems reasonable to expect that for some time to come the energy price will stay above $40 per barrel. How these price levels will affect investments at the end user level remains to be seen. We know that the power sector is a main driver behind the rising gas demand. Generating electricity with a combined-cycle gas turbine plant is technically the most efficient method to produce power, but with such a plant switching to a cheaper fuel is impossible. The merit order of gas-fired power plants deteriorates *vis-à-vis* coal-fired generators. If investors are deterred by the fuel costs of a gas power plant and turn to coal, the environment will get a setback unless CO_2 capture and storage is developed at the same time. The call for a revival of nuclear power is also heard. But given the lengthy legislation procedures this will not be a serious alternative for the short term in Europe and the USA. China and India might, however, have other perspectives about the public acceptability of nuclear power, particularly if the pebble bed reactor, which China intends to build, lives up to expectations that it will create a breakthrough. Pebble bed reactors are thought to be inherently safe. But it is a long road from the drawing board towards a commercially viable installation. Altogether, natural gas will continue to be the bridging fuel while alternative and sustainable technology is under development.

Another interesting development is that Asian production companies, often national oil companies, have started investing upstream outside their borders, to get access to oil and gas resources and to dilute price risks and reduce dependence on the world markets for their imports. In fact, American and European oil companies have long since followed the same path. They have become international companies, active in the whole chain from production to end user marketing and have been searching for hydrocarbons all over the world. Although the majors are important investors upstream, the control of worldwide production seems to be more and more in the hands of the national (or state) oil companies in the producing countries. Independent oil companies are only expected to produce around one-third of the remaining commercial reserves.

In line with this, governments of importing countries are increasingly interested in the security of supplies from the producing nations. Regulation has been called upon to enhance competition between suppliers of the same kind of energy, and this target is approaching its final stage in Europe. When imports rise, will governments assign new tasks to regulators, like enforcing diversification of primary energy sources and of exporting regions?

Thanks to the rapidly increasing weight of the Chinese and Indian economies, it will not be long before their influence in the gas market will be felt all around the globe. The *Gemmata* delivers India's first gas imports to the Hazira LNG terminal, which was formally inaugurated on April 21, 2004.

WGC2006

These and many other issues will be discussed at the 23rd World Gas Conference, which will be held

China is hosting the 2005 Council meeting. Currently a net oil importer, the country is gearing up to start gas imports in 2006.

June 5-9, 2006 in Amsterdam. The organisers of the WGC2006 conference and exhibition are working hard to make this event a success. Keynote speakers from many important gas companies have confirmed their participation. Papers to be presented at the numerous Working Committee sessions are being submitted to our Coordination Committee. You can read about it in this magazine and more information will be published in the conference handbook, which is due to be issued by November 1. The handbook will tell you all about how to register as a delegate to WGC2006 and will detail the programme.

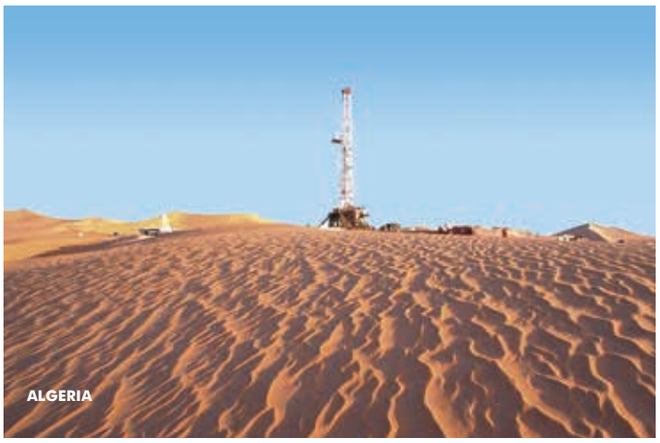
2005 Council meeting in China

Reflecting the increased importance of the gas market in the People's Republic of China, the Council is holding its 2005 meeting in Tianjin this month. Our host is Charter Member the China City Gas Society. One of the items on the agenda is of particular importance for the future of our organisation: the election of the country that will organise the 25th World Gas Conference in 2012 and will lead IGU during the Triennium 2009-2012 (after our Argentinian friends, who will take care of the Triennium 2006-2009).

Shortly after you have received this magazine, we will know whether Malaysia or Russia has been elected and whether WGC2012 will take place in Kuala Lumpur or Moscow.

I hope the articles in this magazine will rouse your interest to learn more about the fascinating world of energy and natural gas and urge you to register early for WGC2006!

George H. B. Verberg



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Mærsk Olie og Gas AS (Maersk Oil) is an independent oil company in the A.P. Moller – Maersk Group.

Maersk Oil is operating oil and gas production in Denmark, Qatar and Kazakhstan of some 700,000 barrels of oil equivalent per day. In addition Maersk Oil participates in the 500,000 barrels of oil per day Berkine Basin development in Algeria.

Exploration and development activities are ongoing in Denmark, Qatar, Algeria, Oman, Turkmenistan, Brazil, Norway, Morocco, Suriname, the UK and a number of other countries.

MAERSK OIL CONTINUES TO SEEK NEW VENTURES IN PARTNERSHIP OR ALONE.

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Countries Represented in IGU October 2005

Algeria
Argentina
Australia
Austria
Bangladesh
Belarus, Republic of
Belgium
Bolivia
Bosnia and Herzegovina
Brazil
Brunei
Cameroon
Canada
China, People's Republic of
Croatia
Czech Republic
Denmark
Egypt
Estonia
Finland
France
Germany
Greece
Hong Kong, China
Hungary
India
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Iran
Ireland, Republic of
Israel
Italy
Japan
Kazakhstan
Korea, Republic of
Latvia
Lithuania
Malaysia
Monaco
Netherlands, The
Nigeria
Norway
Oman, Sultanate of
Pakistan
Poland
Portugal
Qatar
Romania
Russia, Federation of
Saudi Arabia
Serbia and Montenegro
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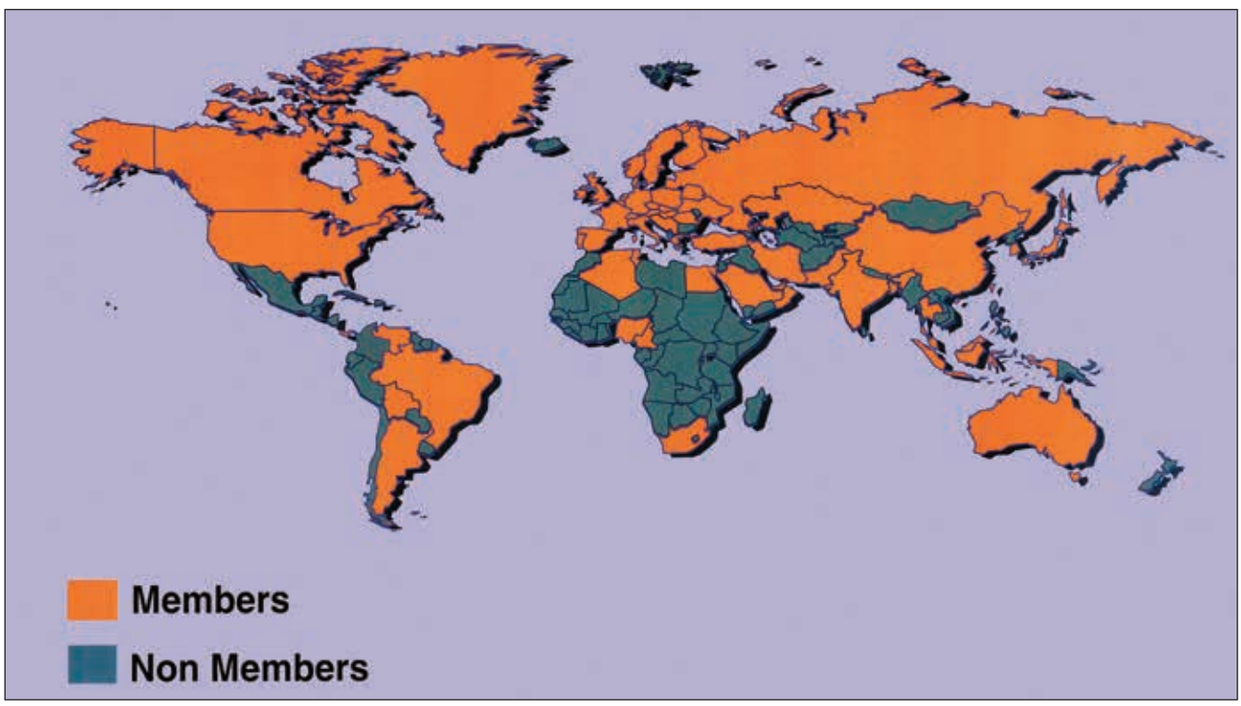
Venezuela



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Algeria
Association Algérienne de l'Industrie du Gaz – AIG

Argentina
Instituto Argentino del Petróleo y del Gas

Australia
Australian Gas Industry Trust c/o Energy Networks Association

Austria
Österreichische Vereinigung für das Gas- und Wasserfach (ÖVGW)

Bangladesh
Petrobangla (Bangladesh Oil, Gas & Mineral Corporation)

Belarus, Republic of
Beltransgas

Belgium
Association Royale des Gaziers Belges

Bolivia
Cámara Boliviana de Hidrocarburos

Bosnia and Herzegovina
Gas Association of Bosnia and Herzegovina

Brazil
Associação Brasileira das Empresas Distribuidoras de Gás Canalizado (ABEGAS)

Brunei
Brunei LNG Sendirian Berhad

Cameroon
Société Nationale des Hydrocarbures

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Canadian Gas Association

China, People's Republic of
China City Gas Society

Croatia
Croatian Gas Association c/o INA Naftalin

Czech Republic
Czech Gas Association

Denmark
Dansk Gas Forening – Danish Gas Association

Egypt
Egyptian Gas Association

Estonia
Estonian Gas Association

Eurogas

Finland
The Finnish Natural Gas Association

LEFT
The IGU Secretariat is currently hosted by the Danish energy company DONG in its offices in Hørsholm outside Copenhagen.

CHARTER MEMBERS (CONTINUED)

France
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Hong Kong, China
The Hong Kong & China Gas Co. Ltd

Hungary
Association of Gas Distribution Companies

India
Gas Authority of India Ltd (GAIL)

Indonesia
Indonesian Gas Association (IGA)

Iran
National Iranian Gas Company (NIGC)

Ireland
Irish Gas Association – Bord Gais Eireann

Israel
The Israel Institute of Petroleum & Energy

Italy
Associazione Tecnica Italiana del Gas (ATIG)

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The Japan Gas Association

Kazakhstan
KazTransGas

Korea, Republic of
Korea Gas Union

Latvia
Latvijas Gāze

Lithuania
Lithuanian Gas Association

Malaysia
Malaysian Gas Association c/o Petronas

Monaco
Société Monégasque de l'Électricité et du Gaz (SMEG)

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Nigeria
Nigerian Gas Association c/o Nigeria LNG Ltd

Norway
Norwegian Petroleum Society (NPF) – Gas Group

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Oman LNG L.L.C.

Pakistan
Petroleum Institute of Pakistan

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Saudi Arabia
Saudi Aramco

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Gas Association of Serbia & Montenegro

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Slovenia
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CEF Ltd

Spain
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Sweden
Svenska Gasföreningen – Swedish Gas Association

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Société Suisse de l'Industrie du Gaz et des Eaux

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The Gas Association of the Republic of China, Taipei

Thailand
PTT Public Company Ltd – Petroleum Authority of Thailand

Trinidad and Tobago
The National Gas Company of Trinidad and Tobago Ltd

Tunisia
Association Tunisienne du Pétrole et du Gaz (ATPG) c/o ETAP

Turkey
BOTAŞ

Ukraine
Ukrainian Oil and Gas Academy /Naftogaz of Ukraine

United Arab Emirates
Abu Dhabi Liquefaction Company Ltd (ADGAS)

United Kingdom
The Institution of Gas Engineers and Managers

United States of America
American Gas Association

Venezuela
Petróleos de Venezuela S.A. (PDVSA)

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Bursagaz (Turkey)

Chevron Corp. (USA)

ConocoPhillips Company (USA)

Gaz de France (France)

IGDAŞ – Istanbul Gas Distribution Co. (Turkey)

Instituto Brasileiro Petróleo e Gás (Brazil)

Naturgas Fyn A/S (Denmark)

NV NUON Asset Management (The Netherlands)

Petróleo Brasileiro S.A. – Petrobras (Brazil)

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Russian Gas Society (Russia)

RWE Gas AG/ RWE Energy (Germany)

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TBG – Transportadora Brasileira Gasoduto Bolívia-Brasil S/A (Brazil)

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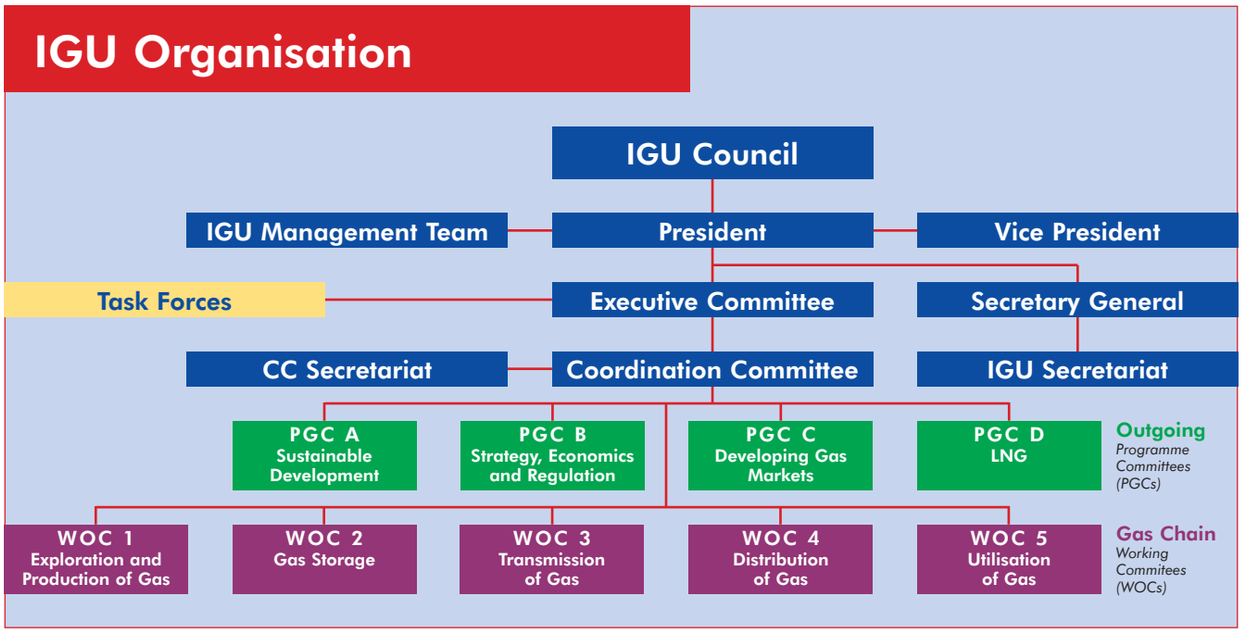
Unión Fenosa Gas (Spain)

Union of Independent Gas Producers (Russia)

IGU Organisation



From left to right in this photograph taken at the Executive Committee meeting in Warsaw, Poland in April 2005 are Boleslaw Rey, Pablo Ferrero, Ole Nygaard Olsen, Ali Hached, Jong-Sool Kim, Datuk Abdul Rahim Haji Hashim, Chawki M. Rahal (who substituted for Ali Hached during the first part of the meeting), Hiroshi Urano, George H. B. Verberg, John Kean Sr, Pavol Janočko, Daniel Paccoud, Hans Riddervold, Roberto D. Brandt, Alexander I. Lipatov, Robert J. Harris, Juan Pons (who was substituting for Antoni Llardén) and Peter K. Storm (who attended as Secretary General and is not a member of the Executive Committee). Christian Beckervordersandforth, Domenico Dispenza and Jürgen Lenz attended the meeting but missed the photo session, while Ernesto L. Anadón, Bert Panman and Yves Tournié could not attend the meeting or send substitutes.

IGU MANAGEMENT TEAM

Mr George H. B. Verberg, IGU President (Chairman) (The Netherlands)

Mr Ernesto L. Anadón, IGU Vice President (Argentina)

Mr Hiroshi Urano, Immediate Past President (Japan)

Mr Bert Panman, Chairman of IGU Coordination Committee 2003-2006 (The Netherlands)

Mr Roberto D. Brandt, Vice Chairman of IGU Coordination Committee 2003-2006 (Argentina)

Mr Peter K. Storm, Secretary General

IGU EXECUTIVE COMMITTEE AS OF JANUARY 2005

Mr Ali Hached
Algeria

Mr Ernesto L. Anadón
Argentina

Mr Roberto Daniel Brandt
Argentina

Mr Pablo Ferrero
Argentina

Mr Ole Nygaard Olsen
Denmark

M. Daniel Paccoud
France

Dr Jürgen Lenz
Germany

Dr Eng. Domenico Dispenza
Italy

Mr Hiroshi Urano
Japan

Mr Jong-Sool Kim
Republic of Korea

Mr Abdul Rahim Haji Hashim
Malaysia

Mr George H. B. Verberg
The Netherlands

Mr Engbert (Bert) Panman
The Netherlands

Mr Hans Riddervold
Norway

Mr Boleslaw Rey
Poland

Mr Alexander I. Lipatov
Russia

Mr Pavol Janočko
Slovak Republic

Mr Antoni Llardén
Spain

Dr Robert J. Harris
United Kingdom

Mr John Kean Sr
United States of America

Mr Christian Beckervordersandforth
Ruhrgas AG, Associate Member

M. Yves Tournié
Total, Associate Member

It's not just what a president stands for that counts. It's also who stands behind him.

Partnerships are what make the presidency work. And we have been privileged to work with partners we respect. Partners that have stood with us in our efforts to advance the industry. The Malaysian Gas Association accepts their support in our campaign for the IGU presidency, for the term 2009-2012.

Datuk Abdul Rahim Hj.
Hashim for IGU President.

MGA
MALAYSIAN GAS ASSOCIATION

MGA council members:

bp · DELCOM · DIALOG · ExxonMobil · GAS MALAYSIA · MALAKOFF · MALAYSIA LNG SDN. BHD. · PETRONAS GAS · Shell · TENAGA NASIONAL BERHAD · PETRONAS

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MALAYSIAN GAS ASSOCIATION (MGA)

Established on 21 July 1986, MGA serves as a focal point for the government on matters relating to the gas industry including formulation and recommendation of policies and regulations. Under the presidency of PETRONAS, MGA now has 126 corporate members including Shell, ExxonMobil, BP, Mitsubishi and Nippon Oil. It participates actively in worldwide gas activities under the auspices of the International Gas Union (IGU) and Gas Information Exchange in Western Pacific Areas (GASEX). These activities, include amongst others, its hosting of the 10th LNG International Conference and Exhibition in 1992, GASEX 1996 Conference, International NGV Conference and Exhibition in 1996, IGU Executive & Council Meeting 2002, International Gas Distribution and Utilisation Expo & Conference and the Asia Pacific NGV Association 2005 Conference in Kuala Lumpur.

PETRONAS

Petroliam Nasional Berhad (PETRONAS), the national oil corporation of Malaysia, is a fully integrated petroleum multinational corporation with more than three decades of vast experience. Its activities range from oil and gas exploration and production to oil refining; marketing and distribution of petroleum products; trading; gas processing and liquefaction; gas transmission pipeline operations; marketing of liquefied natural gas (LNG); petrochemical manufacturing and marketing; shipping; and property investment.

Today, PETRONAS is ranked among the FORTUNE Global 500 largest corporations in the world, with operations in over 30 countries. Its strategy to balance business excellence while contributing to the well being of the local communities has positioned PETRONAS to be increasingly accepted as the preferred strategic partner by international companies and the host countries where it operates.

Operating alongside and in partnership with other oil majors, PETRONAS has developed a number of distinctive competencies, notable among which are proven capabilities in oil and gas exploration and production, gas pipeline network system and LNG operations.

With natural gas constituting 75% of Malaysia's total reserves, PETRONAS spearheaded the monetisation of these reserves. It undertook two mega projects in the early 1980s, namely the Peninsular Gas Utilisation (PGU) system and the PETRONAS LNG Complex.

The PGU system forms the backbone for Peninsular Malaysia's gas supply infrastructure comprising a 1,700km trans-peninsular gas transmission pipeline and a 2 billion standard cubic feet per day gas processing complex. The PGU spurred the country's industrialistion especially the gas-based petrochemical industry. Notably, the PETRONAS Petroleum Industry Complex on the east coast in Kertih, housing more than 40 petroleum-based installations and supporting plants which has attracted the participation of multinationals including ExxonMobil, Dow Chemicals, BASF and BP-Amoco.

The PGU also stretches to Singapore in the south, marking the beginning of cross-border piped gas trading undertaken by PETRONAS. It is also linked in the north to the Trans Thailand-Malaysia (TTM) gas pipeline system, forming an integral part of the Trans-ASEAN Gas Pipeline Grid. The TTM pipeline transports gas from the Malaysia-Thailand Joint Development Area into the PGU system.

To further promote the use of gas, PETRONAS embarked on a natural gas for vehicles (NGV) programme and introduced the gas district cooling system. This system uses natural gas to produce chilled water for air conditioning together with co-generation in an integrated energy system.

PETRONAS exports LNG through its three joint-venture plants in the PETRONAS LNG Complex in Bintulu, Sarawak. With a total capacity of 23 million tonnes per annum (MTPA), the Complex is the world's largest LNG production facility at a single location, making Malaysia the second largest LNG producer after Indonesia. An integrated facility where upstream activities are directly connected to the downstream gas liquefaction process, utilities, storage, and terminal and loading facilities, the Complex exports LNG to Japan, South Korea and Taiwan.

With a reputation of more than 20 years of uninterrupted and timely delivery, PETRONAS' LNG business is synergistically supported by its shipping subsidiary. The Malaysia International Shipping Corporation Berhad is the owner and operator of the world's largest LNG fleet of 18 vessels which is expected to increase to 28 by 2008.

PETRONAS has also ventured into the lucrative Atlantic Basin LNG market through its investment in the Egyptian LNG (ELNG) project. Its partners are the British Gas Group (BG) and local government-linked firms, Egyptian General Petroleum Corporation and Egyptian Natural Gas Holding Company. ELNG is one of the fastest-growing LNG projects to emerge in recent years. PETRONAS has interests in the project's production capacity and gas supply through its stake in the West Delta Deep Marine concession. It was deeply involved in all stages of the development from providing manpower, know-how and expertise to lifting ELNG's first pre-commissioning cargo on its own LNG vessel, Puteri Zamrud Satu in May 2005, four months ahead of schedule.

PETRONAS also owns a 30 percent stake in Dragon LNG, a consortium formed with BG and Petroplus, which is building a 4.4 MTPA LNG import terminal in Milford Haven, Wales, expected to begin operation by end 2007.

In Australia, PETRONAS is involved in partnership with the Australian Gas Light Company to build the proposed Australian portion of the Papua New Guinea-Queensland natural gas pipeline project. It also has a stake in the Tansportardora de Gas Del Norte S A and Transportadora de Gas Del Mancorsur S A pipelines in Argentina.

To support its expanding gas business, PETRONAS has created research and technical facilities to carry out testing and R & D through the PETRONAS Gas Centre.

In line with its commitment towards the development of the Malaysian and regional gas industry through long term partnerships, PETRONAS initiated the establishment of MGA in 1986 and succeeded in winning the bid for the ASEAN Council on Petroleum (ASCOPE) Gas Centre.

ASCOPE Gas Centre

In 2003, PETRONAS won the bid to host the ASCOPE Gas Centre due to its excellent gas infrastructure and vast experience in integrated gas development projects. A joint effort among ASEAN national oil companies, the Centre advises the ASEAN Gas Consultative Council and ASCOPE on technical matters relating to gas. It also undertakes joint techno-economic studies for the implementation of the Trans ASEAN Gas Pipeline project and gas-related projects as well as an exchange programme for technologists and researchers to produce research on natural gas. The Centre represents the first step in developing local and regional technological know-how.

MALAYSIA

Malaysia is a rich and diverse multi-cultural and multi-ethnic country, home to many multinational corporations. It is a business haven, with its liberal investment environment, stable government, healthy economic climate, widely English-speaking, warm and friendly people and attractive offerings of a wide range of local and international cuisine and multi-cultural diversities.

Recognised as one of the 12 most bio-diverse countries in the world, Malaysia offers many places of interests to visitors including Mount Kinabalu, the highest peak in Southeast Asia, the Mulu Caves-a world heritage site as well as various world class diving spots and national parks around the country. With its well-developed infrastructure, Malaysia has also become a favourable venue for international sporting events, notably the PETRONAS Malaysian Formula One Grand Prix as well as major international conferences and exhibitions.

A conference and exhibition hub, Malaysia's capital city, Kuala Lumpur offers various world-class venues. Located next to the PETRONAS Twin Towers is its latest and most advanced MICE facility, the Kuala Lumpur Convention Centre. All located within the heart of the city, it offers an experience within which one may work, live, shop, visit and enjoy life.

From the IGU Secretariat

Peter K. Storm, Secretary General.

Lisbeth Koefoed, Assistant to the Secretary General.

Lotta Hållén-Kragh, Secretary and Webmaster.

These pages feature news items and information from the Secretary General (PKS) and his Assistant (LKO). In this issue the Secretary General of Charter Member the Korea Gas Union (JSK) has contributed a report on ICT2005, while comments and suggestions of general interest from members or other organisations may also be displayed here. When submitting contributions to the Secretariat please ensure that any electronic pictures are supplied in a high resolution – 300dpi is the minimum required for print reproduction.

● Welcome to Bursagaz and ConocoPhillips

After endorsement by the Executive Committee of their applications to become Associate Members, the IGU Council was asked to approve the membership of Bursagaz, a large Turkish distribution company and of ConocoPhillips. This was done in an Electronic Session in May and the two applications were supported by a large number of countries and approved by all Charter Members. This brings the number of Associate Members up to 20.

PKS

● Spring 2006 meeting of the IGU Executive Committee

At the start of the Dutch Triennium it was announced that the spring 2006 meeting of the Executive Committee would take place in Goa, India, hosted by the Indian Charter Member GAIL. The idea was to hold the meeting in connection with the Fourth Asian Gas Buyers' Summit also organised by GAIL together with FICCI, the Federation of Indian Chambers of Commerce and Industry.

However, together with our Indian colleagues we have had to realise that access to Goa will be difficult and time consuming. It has few international flight connections meaning that participants would have to arrive in the evening in one of the major Indian cities, stay overnight and then proceed to Goa with a domestic flight the following day, prolonging the trip by at least two extra days.

Although Goa – a former Portuguese colony – is an exotic and extremely pleasant venue, we have decided that we cannot impose such lengthy and difficult travel on the members of the Executive Committee and the Committee chairmen attending the spring CC meeting, all being busy gas executives.

The venue has consequently been moved to the Indian capital, New Delhi. Full information will be sent to participants in due course.

PKS

● LNG conferences

The increasing importance of LNG globally is reflected in the many conferences dealing with the subject. However, there is only one conference series on LNG that is organised by the gas industry itself and without any commercial intent. This is the triennial LNG X series, organised by the Gas Technology Institute in the USA (GTI), the International Institute of Refrigeration (IIR) and IGU. I explained in more detail about the IGU involvement in these conferences in the spring edition of this magazine.

LNG-14 in Doha, Qatar, in March 2004 was extremely successful and the preparations are well

underway for LNG-15, which will take place in Barcelona, Spain, April 24-27, 2007.

The call for papers has been issued and papers presented at other conferences will not be allowed. The exhibition space has already been sold out and the final programme and registration handbook will be distributed in the middle of next year.

LNG-15 in Barcelona will be the premier LNG conference in the coming years.

PKS

For more information on LNG-15 see the website at www.lng15.com.

● Associate Membership of IGU

The introduction of Associate Membership in 2003 has been a great success and the list of the current 20 Associate Members is impressive (*see page 15*).

A special benefit for Associate Members is that they can elect two representatives to the IGU Executive Committee from their midst. This happened for the first time in the spring of 2003 when E.ON Ruhrgas and Total were elected through an electronic voting procedure conducted by the Secretariat for the Triennium 2003-2006.

The forthcoming World Gas Conference in Amsterdam next June means also that a new Triennium is about to start and that a new Executive Committee will be elected. All Associate Members will therefore be approached next spring and encouraged to vote for their representatives in the Executive Committee for the Triennium 2006-2009.

Currently the 20 Associate Members have two representatives, but the IGU Articles of Association prescribe that if the number of Associate Members exceeds 20 they can elect three representatives. So, we just need to see one more Associate Member being admitted before next spring in order to accomplish that.

PKS

● The IGU Executive Committee for the Triennium 2006-2009

When the IGU Council meets on June 5, 2006 in Amsterdam – the day before the 23rd World Gas Conference is opened – one of its tasks will be to elect a new Executive Committee for the next Triennium.

Apart from the IGU Management the Executive Committee has 17-18 members. The nine Charter Members taking responsibility for one of the IGU Committees and providing the Chairman for the next Triennium each have a seat. Six Charter Members from other countries than the nine mentioned above can get a seat. Traditionally there is competition for these seats and a vote takes place. Finally, as mentioned above, the Associate Members may elect two or three representatives to the Committee.

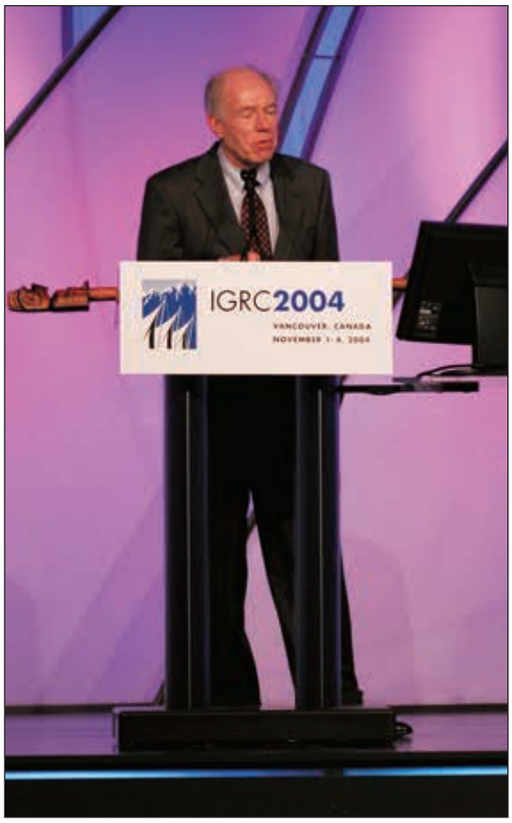
The persons elected are traditionally high echelon gas executives. The Executive Committee meets twice a year.

PKS

● IGRC now = IGU Gas Research Conference

The IGU Executive Committee meeting in Warsaw in April approved the proposal from the IGU Management about how to organise IGRC in the future, and the IGU Council was informed about the result during this spring's Electronic Session.

The proposal follows the general wish about bringing IGRC more under the auspices of IGU in the future as "the research arm" of IGU, which is



The last IGRC was held in Vancouver, Canada in November 2004 and the next is scheduled for 2008.

why IGRC now stands for IGU Gas Research Conference.

However, the main organisation is maintained as before and it is considered of the utmost importance to keep and expand contacts to academia and to have a broad representation of the important gas research facilities around the world. The idea is to make IGRC global and not as before essentially limiting it to Europe, Japan and North America.

The Policy Committee (PC) will in the future be chaired by IGU, but it will retain the same area of responsibility as the supreme organ for IGRC. As before it will consist of around a dozen senior representatives from the most important research departments and institutes globally. The IGU Secretariat will serve as the Secretariat for the Policy Committee.

The Technical Programme Committee (TPC) will as before be established by the Policy Committee and will still be the Committee responsible for organising and establishing the Technical Programme for the conferences. It will consist of a broad range of R&D experts from the global gas industry. The TPC will be served by a special IGRC Secretariat, called "Foundation IGU Gas Research Conference" established by the Dutch gas industry on the basis of a foundation created for IGRC 2001 in Amsterdam.

A National Organising Committee (NOC) will be established in the country chosen by the PC to host an IGRC. The NOC will work closely together with the TPC and the IGRC Secretariat and will report to the PC.

It has also been decided to hold each IGRC closer to the World Gas Conferences, typically in the year before, so that the best results can be prepared for a further presentation during the WGC. This means that the next IGRC is expected to take place in 2008.

The participating departments and institutes will in different ways be required to donate funds to IGRC, so that a sound budget can be established.

Any wishes to participate in one way or another to assist in organising the next IGRC should be addressed to the IGU Secretariat, who will present it to the PC.

PKS

● WPC – now a Council

IGU works closely with the other two global energy organisations, the World Energy Council (WEC) and WPC. Formerly the World Petroleum Congress, the latter is now known as the World Petroleum Council to differentiate the organisation from the triennial World Petroleum Congress.

IGU and WPC have entered into an agreement about close cooperation and coordination in a number of ways. One of the results was that when WPC held its 18th Congress in Johannesburg, South Africa last month, IGU organised a session about gas and the IGU President was one of the keynote speakers. Another consequence of the agreement is ongoing cooperation between the two Secretariats.

The WPC Secretariat is based in London, UK. For more information go to the WPC website at www.world-petroleum.org.

LKO

● GERG – Now Affiliated to IGU

For many years IGU has had close ties to the European Gas Research Group/Groupe Européen de Recherches Gazières (GERG) based in Brussels. With the introduction of the concept "Affiliated to IGU" both organisations saw an opportunity of strengthening these ties even further.

"Affiliation" is not a formal term within IGU circles but indicates a pragmatic closer cooperation between IGU and its "affiliated" sister organisations within the gas industry.

An organisation/association being "Affiliated to IGU" fulfils the following criteria:

- It is an independent entity focusing only or primarily with gas;
- It is a global or regional entity having members in more than one country; and
- It is an entity which deals with issues of interest to IGU that may become either an integrated or separate part of the IGU Triennial Work Programme.

Until recently IGU had entered into Affiliation Agreements with the following organisations:

- Intergas Marketing (June 2003);
- Marcogaz (January 2004);
- International Association for Natural Gas Vehicles (IANGV) including its European section ENGVA (December 2004); and
- IGU Gas Research Conference (April 2005).

Continuing this positive development, IGU and GERG concluded their Agreement in May 2005.

Founded in 1961, GERG's priorities are technical information exchange and collaborative R&D with projects carried out by multidisciplinary project teams drawing upon resources from academia, manufacturers and non-member organisations. (*For more information see pages 30/31 and www.gerg.info.*)

One issue of mutual interest for both IGU and GERG is its NaturalHy integrated project investigating the possible use of existing networks for mixtures of gas and hydrogen offering a cost-effective opportunity to progressively introduce hydrogen as part of a full hydrogen system. IGU is involved in the Strategic Advisory Committee supervising this project.

LKO

● www.igu.org

The IGU website receives around 100,000 hits each month, possibly reflecting the fact that a lot of interesting information can be found on the many web pages. For example, did you know that there are links to energy news agencies where you can find the latest news and also that you can find links to external energy databases,

Gas to Power: The Driver for Market Growth

By Rebecca McDonald, President Gas & Power, BHP Billiton

Gas is the fastest growing hydrocarbon energy source, driven largely by demand for power generation. Analysts expect its market share will continue to grow, gradually displacing more carbon intense fuels. The rapid growth in gas consumption means the gas industry is at a turning point, not only in terms of demand, but also in other respects: market, trade and supply. Some commentators remark that we may be at the dawn of the "century of gas". I believe that the sun is already high in the sky!

Gas is ideally suited for power generation because it is capable of much higher conversion than other fossil fuels. Gas-fired combined heat and power plants can reach efficiencies as high as 70-80%, while the latest combined-cycle gas turbine technology can achieve thermal efficiency of just over 50%. And whilst it doesn't suit all economies and industries, many are turning to natural gas as primary energy for environmental reasons.

The rapid economic growth in China and India will require significant growth in power generation, much of which is likely to be gas-fired. Indigenous supplies are relatively limited and securing diverse supplies of primary energy has become a priority.

So how will that demand be met? Firstly, the global gas industry will require significant investment across all elements of the value chain, with the majority of that investment required in the upstream end of the business. Greenfield and expansion liquefaction facilities, new LNG carriers and new LNG re-gasification terminals will also be required. Several trans-national pipelines which link major gas resources to expanding markets are also being seriously considered.

Secondly, given the concentration of gas resources in non-OECD countries and the worldwide growth in gas demand, it is inevitable that international trade will grow, primarily through LNG. In North America, as indigenous production becomes more costly, there is scope for significant volumes of LNG to lower prices post-2010 and stimulate demand.

In Europe, apart from the UK, large new supplies will not be needed until the end of the decade. LNG will compete with pipeline supply post-2010. In the UK, new pipeline and LNG imports will come to market over the next five years as indigenous supply declines.

In Asia, strong demand growth will require significant gas imports. In addition to the traditional markets of Japan, Korea and Taiwan, China and India are emerging as major LNG markets.

For BHP Billiton Energy, natural gas is an important part of our overall product offering. It currently represents some 45% of BHP Billiton's overall "petroleum" production. We have a strong supply position into the markets of eastern Australia and a vested interest in the LNG business through our one-sixth ownership of the North West Shelf Joint Venture, Australia's largest resource project. We also produce gas in Algeria, Pakistan, the US Gulf of Mexico and the UK.

However, it is our proposal to import LNG to the US west coast which best illustrates the changing gas industry. Through our Cabrillo Port proposal we are seeking approval to construct and operate a Floating Storage and Re-gasification Unit (FSRU) approximately 20 miles off the California coast. Here, California-bound LNG would be re-gasified for safe delivery into existing natural gas pipelines, minimising environmental impact by providing protection from on-shore coastal development. Cabrillo Port would supply almost 15% of California's daily gas demand – a new trade flow, into a market already short of power, stimulating investment in upstream production and LNG liquefaction facilities. This is a real example of why I believe we are already into the "century of gas".

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POSITIVE ENERGY

Energy is essential to our way of life. Natural gas will play a key role in meeting energy demand. BHP Billiton's Energy Group is a significant player in the energy industry. And the discovery, production and marketing of gas is an increasingly important part of our business.

We are partners in the North West Shelf Venture, Australia's largest resource project, and a major supplier of the country's domestic gas. We also produce gas in Algeria, Pakistan, the US Gulf of Mexico and the UK. We have plans to do more.

BHP Billiton. Thinking positively about Energy

bhpbilliton

statistics, energy prices and policies? You just have to visit the website and look under "Links" and "IGU knowledge" to see the many possibilities.

The website has experienced some problems during the last six months in the members-only zone, which has been barred from entrance too many times. For security reasons our administrator of the server follows the rule that if a wrong password has been tried five times consecutively then it automatically closes down and can only be opened by the administrator. Fortunately this only takes a few minutes, provided we become aware of the problems and the administrator's office is open. To avoid too many problems for users an automatic check every half-hour 24 hours a day is now installed to unlock the site if it finds it locked.

If you experience problems with the IGU website please give us a call or send us a mail, and if you have forgotten the password or for instance that one capital letter and one number is part of it, then please contact us to get it right instead of trying too many times.

I plan to refurbish the website somewhat next year, when the Argentinian Triennium starts and in that connection all current problems should be solved. Any suggestions for improvements are most welcome.

PKS

The ICT2005 exhibition area hosted eight exhibitors.

Kyu-sun Lee, President of Korea Gas Union and Acting Chairman, President & CEO of KOGAS, addresses the opening ceremony of ICT2005.

Successful ICT2005

The 7th Global Congress on Information and Communication Technology in Energy (ICT2005) was held with great success in Busan, Korea in May. There were over 500 participants from 37 countries and more than 50 papers and posters were presented. Korea was the first Asian country to host the triennial ICT Congress and ICT2005 was the first in the series to broaden its scope from gas to the whole energy industry.

With the theme of "Value Creation with ICT in Energy Companies", the Congress opened on May 23 at the Busan Exhibition and Conference Centre (BEXCO). Seung-hwan Lee, Chairman of the ICT2005 National Organising Committee (NOC), commenced the proceedings and IGU President George H. B. Verberg presented the opening remarks. Kyu-sun Lee, President of the Korea Gas Union; David Younghoon Kim, Chairman of Korea City Gas Association; and Nam-sik Hur, Major of Busan Metropolitan City, extended their greetings to the delegates.

A welcome reception was held that evening in the garden of the Paradise Hotel with guests being entertained by the National Orchestra Company of Korea.

Keynote speeches

Leading figures in the global energy and IT sectors including Jong-Yong Yoon, Vice Chairman & CEO of

Samsung Electronics; Clive Mather, President & CEO of Shell Canada; Henk Dijkgraaf, CEO of Gasunie; Andrew Bartels, Vice President and Research Analyst of Forrester Research; and Anatole Gershman, Partner & Director of Research, Accenture Technology Labs, gave high-level presentations addressing major strategic issues and a global overview of current and future ICT trends in the energy industry.

CEO forum

There was a special forum to hear CEOs of leading energy and IT businesses discuss their vision of value creation with ICT. Henk Dijkgraaf, CEO of Gasunie; Jean-Marie Dauger, COO of Gaz de France; David Younghoon Kim, Chairman of Korea City Gas Association; Andrew Bartels, Vice President of Forrester Research; and Zin-oh Kim, Vice President of Korea Energy Economics Institute, addressed various topics such as the role of IT as the partner of the whole organisation and the alignment of IT with corporate strategy.

Closing ceremony

ICT2005's proceedings ended on May 25 with a report from the NOC Chairman and closing addresses by the President of IGU and representatives of the supporting organisations, World Energy Council (WEC) and World Petroleum Council (WPC). WEC was represented by Yoshihiro Hatano, Manager for Regional Programmes, and WPC by Dr Pierce Riemer, Director General. Finally Véronique Durand-Charlot, Chairwoman of IGU's ICT Task Force, wound up business with concluding comments on the Congress.

That evening the farewell dinner was held at the Theatre Restaurant of the Busan Lotte Hotel, where guests were treated to a performance of traditional Korean dance.

JSK

News from Organisations Affiliated to IGU

The European Gas Research Group (GERG)

By Dave Pinchbeck

The European Gas Research Group was founded in 1961 to strengthen the gas industry within the European Community. It achieves this by promoting research and technological innovation in all aspects of the gas chain.

Established initially as a network to enable exchange of information between a select group of specialist R&D centres to avoid duplication of effort, GERG has grown steadily to its current size whilst retaining and expanding its original aims. It became an organisation affiliated to IGU in 2005.

GERG members have developed a large European reservoir of specialist knowledge, which currently represents a high quality research resource numbering in excess of 2000, many of whom are international leaders in their field. Its priorities are: networking; technical information exchange; and the promotion of collaborative R&D, as evidenced by its wide portfolio of projects, many with European Union funding, carried out by dedicated, multi-disciplinary Project Teams.

GERG membership currently stands at 15 members from 10 countries, each actively involved in natural gas R&D, and these members serve a European gas industry which employs in excess of 190,000 people with the responsibility of supplying more than 85 million domestic, commercial, industrial and power station customers. In fact more than 210 million people across Europe gain a direct benefit from the use of natural gas. It should be noted that despite, or maybe as a result of, the changes in the European natural gas landscape, GERG membership is growing steadily, with five new members in recent years and more on the horizon.

GERG has evolved, from the small, original group of gas industry R&D organisations run part-time by one of the members, to a considerably stronger organisation, with a professional Secretariat located in Brussels to benefit from proximity to the institutions of the European Union. Correspondingly, more emphasis is placed these days on maintenance of links with the EU, working for recognition of the importance of natural gas-related R&D and providing support to members in setting up collaborative R&D projects under the European Union's R&D Framework Programmes.

How does it work?

Like any successful organisation, GERG operates at several levels, with a Board and Plenary responsible for strategic direction, operating within a structure designed to maximise high-level networking. However, the success of GERG relies principally on the interactions within the Programme Committees, where groups of technical experts, drawn from the member organisations, meet on a regular basis. Their objectives are to exchange ideas, to explore the potential for collaboration and, most important, to establish GERG projects.

The whole activity is supported by a professional, full-time Secretariat based in Brussels, to underpin the activities of GERG and to maintain links with outside bodies, particularly the offices of the EU and gas industry organisations worldwide.

GERG operates primarily as a project brokerage, based in the technical Programme Committees, and thrives on a steady flow of new project proposals. Members decide whether new proposals are of interest, whether they wish to support them and, in conjunction with the Secretariat, whether they could be eligible for EU funding. Once projects have been initiated, they are run by dedicated Project Teams which can, and often do, include non-GERG members such as universities, manufacturers and non-European natural gas organisations.

GERG has four Programme Committees (PCs), covering the gas industry's main areas of activity and running a wide range of projects:

- PC General Studies;
- PC Transmission and Storage;
- PC Distribution; and
- PC Utilisation.

What does it do for the gas industry?

The GERG Secretariat was relocated to Brussels in 1996 so that it would be better placed to work with the organisations of the EU, to aid in the development of gas research programmes of value to Europe and to increase the allocation of funds for natural gas R&D. GERG has adopted a pro-active approach to external funding by maintaining an awareness of external funding opportunities and by stimulating the development of EU-funded GERG R&D projects.

To support this initiative, the GERG Secretariat attempts to provide members with a path through the maze which is European funding by maintaining a network of European Commission staff. It is very important that strong links are maintained with the European Commission to ensure a two-way flow of information, so that the Commission is aware of major gas industry R&D issues and that GERG members fully appreciate the fine print of Commission Calls for Proposals to increase their probability of success, when applying for grants.

Probably the most important feature of GERG membership is that it facilitates participation in collaborative R&D projects with shared cost and shared risk, with or without European Commission funding. At times of reducing R&D expenditure and increasing short-term views, this can enable R&D projects to take place when they otherwise may have failed to get off the ground. It is also clear that the pro-active approach adopted by GERG towards EU funding has provided access to considerable additional leverage on project funding in recent years, increasing income from the European Commission significantly.

The future

Given the key role of natural gas in both primary energy supply and in achieving EU environmental objectives, it is vital to ensure that the gas industry's R&D capability is maintained so that the benefits of gas are fully exploited. GERG projects clearly prove that there are gas companies in Europe who consider it essential to be involved in R&D that will deliver solutions important for their business and, crucially, for their future survival.

In Europe we are facing significant reductions in R&D funding – amongst other liberalisation-induced pressures. In such times, many agree that it is essential to maintain involvement in organisations that allow, even promote, collaboration in R&D – to ensure that mechanisms exist for shared cost and shared risk activities – in a period when short-term business thinking has become increasingly prevalent.

The members of GERG represent some of the most expert technical performers in the international natural gas R&D community, combining to contribute key skills and experience that would be impossible to resource at the purely national level. The combination makes for a very strong organisation, significantly stronger than its individual parts, which is well-equipped to undertake energy sector research and technological development within Europe. Importantly, the resulting network guarantees access to external funding to leverage longer-term, essential projects and enable collaborative efforts in organisations where R&D activities are increasingly under pressure.

GERG has been active in catalysing such activity over the past 40 years. Revitalised in recent years, it continues to attract fresh new members who increasingly see the benefits of gearing up their research funds by working with their peers and by seeking financial support from the European Union where – at a time of reduced R&D funding – they are winning unprecedented levels of external financial support.

Dave Pinchbeck is the General Secretary of GERG.

GERG membership currently stands at 15 members from 10 countries.

Intergas Marketing (IGM)

By Urs Zeller

Change is the only thing that is constant nowadays. With extensive market deregulation in practically all countries, natural gas marketing and thus Intergas Marketing are on the doorstep of new challenges. As a result, areas of common ground have shifted. One-time allies have become rivals overnight. But as the latest meetings confirmed, an exchange of ideas and experience among competitors can be both necessary and interesting.

IGM has seen the signs of the times, and revised its Articles of Association to take account of the new situation. Strategic guidelines have been drawn up formulating 10 good reasons for working with IGM, and a strategy has been adopted to reach the ambitious goals set by IGM for the future.

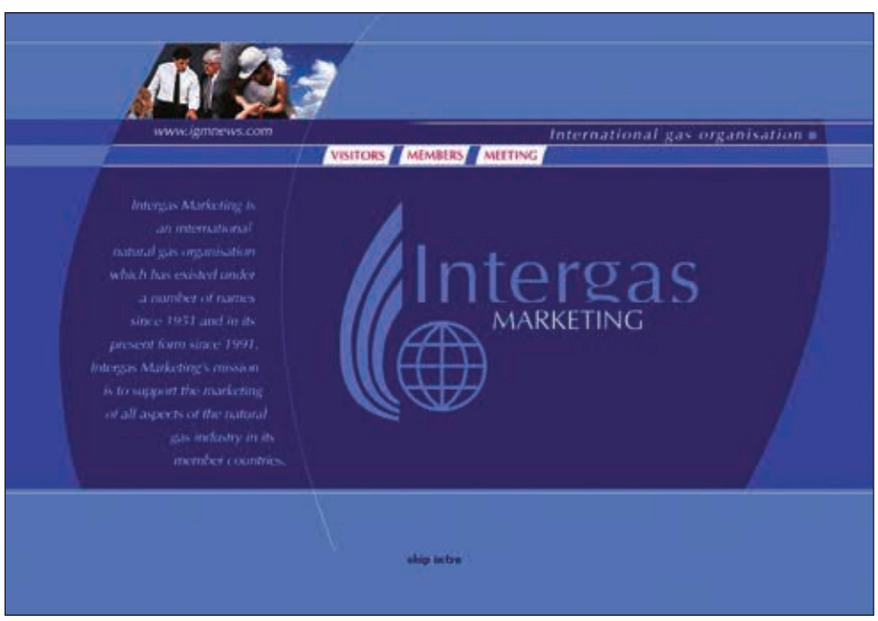
Thanks to immediate implementation, this strategy has already brought success. At the last conference (the 95th Session), which was held in Barcelona in May, Croatia became a new member of our community, and the meeting was joined by a guest delegation from Sweden.

On behalf of IGU, IGM has drawn up a "Profiling proposal for the International Gas Union as responsible corporate citizen". The Working Group on "Customer Satisfaction Inquiries" has presented its final report, and good progress is being made on the second theme of "Entering New Markets".

At the next World Gas Conference in Amsterdam, Intergas Marketing will focus on "The strategy, constraints and operational consequences for marketing and marketing communication in the new world". The various marketing levels will be examined starting with the level of specific constraints as far as gas marketing is concerned. Secondly, the international scope of developments, duties and limitations will be covered, followed by the level of national circumstances, rules and regulations. And fourthly, we shall examine the local cultural aspects.

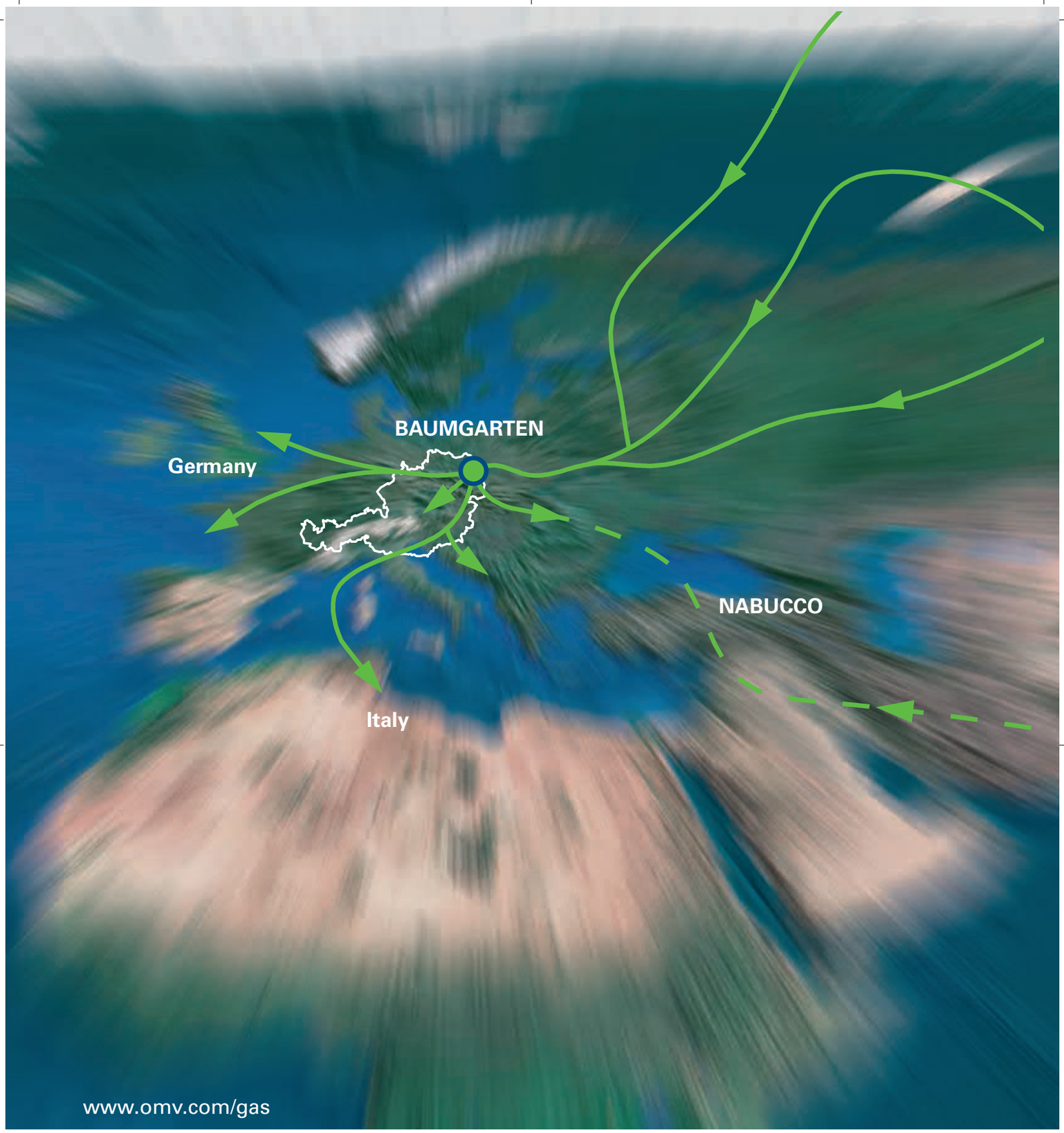
Intergas Marketing has accepted the new challenges, and is well on the way to putting the requisite measures in place.

Urs Zeller is the President of IGM.



ABOVE
Urs Zeller.

LEFT
The IGM website is at www.igmnews.org.



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● The International Association for Natural Gas Vehicles (IANGV): Global Standards Essential as Alternative Fuels Develop

By Dr Garth Harris

Worldwide, the future of liquid fuels for transport is increasingly in the news. Prices at the pump remain high, long-term availability is often under question, stability of the main producing countries can be a concern – and there is an ongoing quest for alternatives.

But it is not a new challenge. As just one example, 70 years ago Italy emerged as a pioneer in using gas as a fuel for internal combustion engines, and today that country remains one of the most prolific users of natural gas as a vehicle fuel.

In more recent times there have been almost as many solutions as there have been challenges – electric vehicles, vehicles operating on fuels as diverse as used cooking oil and ethanol made from corn, hybrid vehicles using combinations of technologies. For most countries such solutions are likely to make only a small impact in the short- to medium-term.

Most headlines now are for vehicles propelled by hydrogen-powered fuel cells – a concept that works, but is still far from commercial viability. Certainly there are a few such vehicles in operation, but for the immediate future they are in demonstration-mode only, very expensive and in very small numbers.

True commercial reality of renewable hydrogen-powered vehicles may be 20 years away.

For the present at least the practical focus is on vehicles using natural gas as their fuel. Already there are four million on the world's highways using proven technology that continues to be enhanced by the day. The environmental benefits are well recognised, reliance on fuel supply from countries that may have a volatile political landscape is lessened, and the refuelling infrastructure is in place – and growing – in many parts of the world.

The vast majority of NGVs run on natural gas compressed to 200 bar (CNG) with some running on LNG. ABOVE A CNG filling station in New Delhi, India. OPPOSITE One of a fleet of buses fuelled by LNG operated by Dallas Area Rapid Transit in Texas, USA.

But there are still issues to be debated and challenges to be met: for example use of NGVs can be enhanced by far greater harmonisation of standards and codes of practice across countries and regions. The market introduction and commercialisation of natural gas vehicles is often hindered by the complexity of the different standards that exist in different countries.

There are common factors that already link the use of natural gas and hydrogen as vehicle fuels – not least in fuelling technology and that, for the present, natural gas is regarded as the most practical source of hydrogen.

This demands that a platform be established for the worldwide harmonisation of standards for the use of both fuels. It is a concept that is at the heart of vehicle and refuelling technology commercialisation.

The potential benefits arising from this common approach are far-reaching, among them the promotion of uniformity and safety, assisting the development and acceptance of common equipment for all markets, and thereby providing lower costs to consumers.

The objectives have to be to produce new and additional standards for both NGVs and H_2 that avoid international overlap and duplication, harmonise existing standards across countries, speed-up the development of H_2 standards and adopt international codes of practice. IANGV and the European NGV Association have been working for the last two years to initiate an international effort on harmonisation. A round-table organised by the International Organisation for Standardisation (ISO) to discuss the issues will be held in 2006 as the first step in the process.

Dr Garth Harris is the Secretary General of the International Association for Natural Gas Vehicles, which is the global industry body that brings together the NGV industry's diverse interests, strongly supported by regional associations in North and South America, Europe, Asia and elsewhere. IANGV can be contacted by email at iangv@iangv.org; further information is available at www.iangv.org.

Gaining a Global Gas Position

Gas is becoming more and more important to Norwegian oil company Statoil, with this commodity set to equal crude in its production mix within the next 10-15 years. Roughly 40 per cent of that gas output will come from beyond the Norwegian continental shelf (NCS). And its market scope is broadening from western Europe to the continent's southern and eastern parts – as well as the other side of the Atlantic.

When Statoil was formed as Norway's state oil company in 1972, gas was considered as more of a problem than an opportunity – a by-product of oil production. However, the company soon saw the long-term strategic value of gas, and it has been at the helm of the development of the formidable gas infrastructure which now links its Norwegian fields to the main European markets.

Statoil ranks today as one of the biggest gas players in Europe, and aims to maintain its position and strength in what ranks as the world's fastest-growing gas market.

Norway's big Troll field has been and is still viewed as the guarantor of large and reliable gas deliveries to Europe. On stream since 1996, the Troll Gas development operated by Statoil comprises the field's A platform, the Kollsnes gas processing plant near Bergen and the connecting pipelines.

Under the Troll gas sales agreements, customers in Belgium, France, the Netherlands, Germany, Spain and Austria will receive some 1000 billion cubic metres of Norwegian gas over 30 years. Deliveries are set to reach plateau level in 2005-2006.

In addition to its big reserves on the NCS, Statoil will be able to deliver pipeline gas to Europe in coming years from its own sources in other countries.

The group has a 25.5 per cent interest in the big Shah Deniz gas field in Azerbaijan, for instance. Contracts for annual gas sales of 8.4 billion cubic metres have been secured in Turkey, Azerbaijan and Georgia. Caspian gas is due to start flowing in 2006 through the 690-kilometre South Caucasus Pipeline, now under construction.

In Algeria, Statoil holds substantial interests in the In Salah gas field in the Sahara desert, which started deliveries in July 2004, and in the In Amenas gas condensate field due to come on stream in late 2005. It is also operator for the large Hassi Mouina gas block, where exploration is under way.

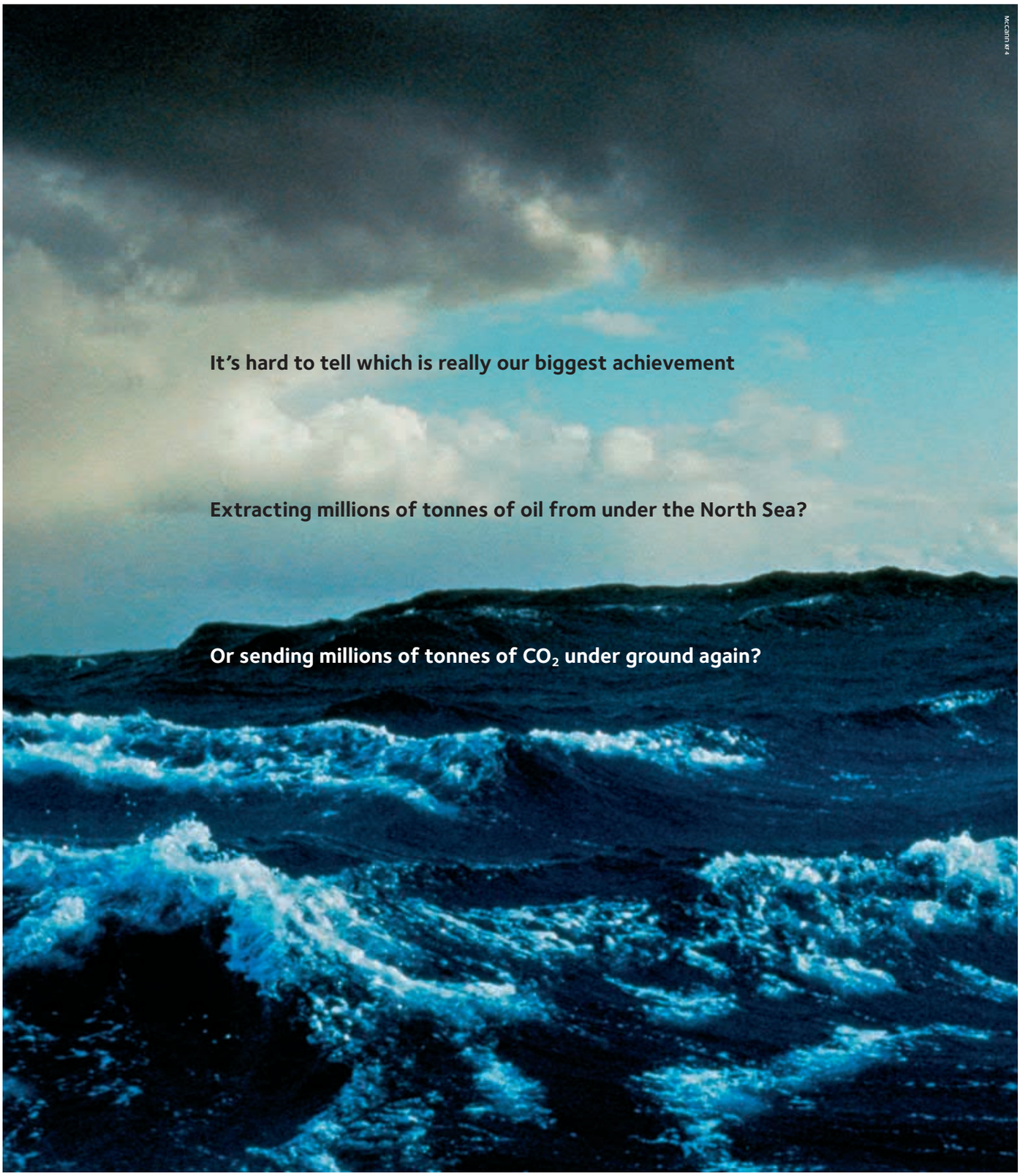
The Snøhvit development in the Norwegian Barents Sea is opening completely new perspectives for Statoil's gas involvement – both technologically and in market terms.

Being the first of its kind in Europe, Snøhvit is the group's entry ticket to the liquefied natural gas business, providing a route into the rapidly-expanding North American gas market. Norwegian LNG will be shipped to the Cove Point terminal in Maryland, where Statoil has secured reception capacity.

The Snøhvit field is also the first ever field development in the Barents Sea, an area where the group is aggressively pursuing new business opportunities, both on the Norwegian and the Russian side.

This summer Statoil announced an ambition to increase its annual entitlement gas production towards 50 billion cubic metres in 2015 – double the present level. New gas volumes from the Barents Sea to the US market constitute one potential building block in this ambition. Further development of the giant Troll field in the North Sea and Shah Deniz in the Caspian are others.

In addition the group is working with a number of opportunities for producing gas to be liquefied and sold in the global market. Statoil already has discovered gas in west Africa, and is pursuing business development in the Middle East and South America. It has secured the operatorship for acreage in the Plataforma Deltana area off Venezuela, which is thought to contain gas. Again, LNG represents the most interesting transport option in view of this Latin American country's proximity to the US market.



Statoil is an oil and gas company with 24,000 employees and growing activities in 30 countries. It is the national oil company of Norway – a country where environmental care is not just a necessity, but also a national tradition. Statoil has developed an advanced method for reducing CO_2 emissions from offshore production platforms. Rather than allowing this harmful substance to destroy the atmosphere, we separate it from the produced gas and pump it back under ground, more than 1,000 metres below the seabed – one million tonnes each year. We plan to do the same in the Barents Sea from next year, and are also applying North Sea technology in our gas operations in Algeria, where the CO_2 is stored safely beneath the desert. Statoil's method of capturing and storing CO_2 has won international recognition and could play an important role in world efforts to reduce greenhouse gas emissions. Thinking ahead can sometimes mean doing things backwards.

www.statoil.com

STATOIL

Eight Months to the 23rd World Gas Conference

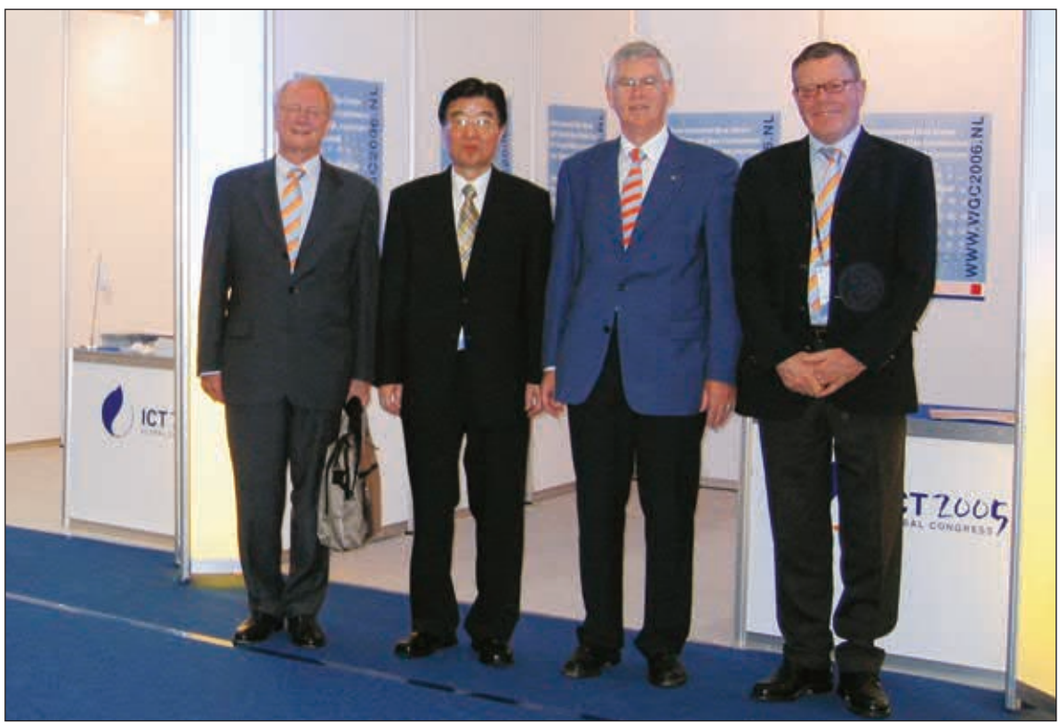
By Robert C. A. Doets

With just eight months to go until June 2006, preparations for the 23rd World Gas Conference in Amsterdam are in full swing.

IGU's Coordination, Working and Programme Committees are busy preparing the content, while the Dutch National Organising Committee (NOC) is responsible for the organisation and smooth running of the Conference and its associated Exhibition. Apart from logistical matters such as audio and visual equipment, security and transportation, the NOC is working on a social events programme including the Opening Ceremony, Gala Dinner, tours for accompanying people, the Closing Ceremony and Farewell Party. There will also be two technical visits: one to the Groningen gas field on the North Sea coast of The Netherlands, and the other (organised in cooperation with Fluxys of Belgium) to the Zeebrugge gas hub.

The Programme and Registration Book will be sent out at the beginning of November to a mailing list of 20,000 addresses. If you do not receive an example you can download the information from our website www.wgc2006.nl.

I recommend that you register early to take advantage of our money-saving early-bird offers. Those registering prior to February 28, 2006 will benefit from the largest discount, while registrations in March and April will



A special stand at ICT2005 promoted WGC2006. From left to right are IGU President George H. B. Verberg, Seung-Hwan Lee, Chairman of the ICT2005 NOC, Robert C. A. Doets, Chairman of the WGC2006 NOC, and Daniel Vlugt, Chairman of the WGC2006 Exhibition Committee.

receive a smaller discount. Late bookers from May 1, 2006 will pay the full registration fee.

Exhibition

The Conference venue will house an extensive Exhibition on the latest equipment, technology and corporate strategies covering all aspects of the gas-related energy industry from upstream, transportation and distribution to utilisation. Apart from the major oil and gas companies, you will find exhibition stands of contractors, ICT companies, measurement and control equipment suppliers, engineering firms, pipe and pipe material suppliers, international organisations involved in gas and natural gas vehicle equipment manufacturers.

Key dates

At the beginning of this month the second site inspection for country delegations was due to take place at the RAI Exhibition and Congress Centre in Amsterdam.

Following the earlier call for papers, the WGC2006 Conference Secretariat will send notifications of acceptance or rejection of abstracts by e-mail to all main authors before November 6. Authors of accepted abstracts are requested to submit full papers through the WGC2006 website by February 1, 2006.

February 1, 2006 is also the deadline for the submission of Committee reports.

The Conference and Exhibition will take place from June 5-9, 2006.

Welcome

The World Gas Conference and its associated Exhibition will be, as it was during earlier occasions, a meeting place for you with many of your colleagues involved in gas, energy and related fields. We look forward to welcoming you to WGC2006 in Amsterdam.

Robert C. A. Doets is the Chairman of the National Organising Committee WGC2006.

PRELIMINARY PROGRAMME OVERVIEW

MONDAY JUNE 5, 2006

09.00 – 18.00	Registration
10.00 – 15.00	Amsterdam city tours by boat departing from Amsterdam RAI Harbour
16.00 – 18.00	Opening Ceremony
18.00 – 22.00	Gala Dinner

TUESDAY JUNE 6, 2006

07.30 – 17.30	Registration
08.30 – 18.00	Conference programme
10.00 – 17.30	Opening times of the exhibition
11.30 – 12.00	Official opening of the exhibition

WEDNESDAY AND THURSDAY JUNE 7 & 8, 2006

08.30 – 18.00	Conference programme
10.00 – 17.30	Opening times of the exhibition

FRIDAY JUNE 9, 2006

08.30 – 15.30	Conference programme
10.00 – 17.30	Opening times of the exhibition
15.30 – 17.00	Closing Ceremony
17.00 – 22.00	Farewell Party

For more information see the website www.wgc2006.nl.

SUEZ starts with one advantage over most other global energy companies: it is involved in both gas and electricity supply and distribution; and it can also provide a range of other value-added services such as consultancy, engineering, management and maintenance. As far as natural gas is concerned, SUEZ operates in almost all parts of the gas supply chain: supply contracts, gas processing and transportation, gas storage, gas marketing, gas trading (wholesale and retail) and LNG activities. The SUEZ Group operates a unified business model that works by integrating electricity and gas operations around a central portfolio management.

Distrigas is a merchant company offering industries, distribution companies, electricity producers and natural gas resellers, tailor-made solutions at competitive price, combining with flexibility and security of supply. Its core businesses are natural gas sales and arbitrage, sale of international transit and transport capacity, LNG trade and shipping.

Fluxys completes the picture by offering natural gas transmission and storage services and LNG terminalling services in Belgium, while operating also the Zeebrugge Hub, the leading international short-term market for natural gas in Western Europe.

SUEZ's international energy division operates gas distribution networks in Korea, Argentina, Mexico and Peru and holds significant shares in the national gas distributors of Thailand and Chile.

The SUEZ business model is reflected in its worldwide LNG operations. For example, the Group has established a strong position in the LNG sector through four of its subsidiaries - Distrigas, Fluxys, SUEZ Global LNG and SUEZ LNG North America. **SUEZ Global LNG** leads the worldwide expansion of the SUEZ Group's LNG business activities while **SUEZ LNG North America** is one of the leading importers and most experienced LNG terminal operators in North America. Here again, it uses its strength in this market to balance supply and demand, thus ensuring competitive prices and stability of supply.

SUEZ strives for absolute mastery of art, and in all aspects of its business provides all the necessary value-added services. Its subsidiary **Tractebel Gas Engineering** for example is recognised as one of the leading specialists in the design and construction of plants for the handling of gas (LNG and LPG) from well-head to storage throughout the gas chain.

To summarise, it is **SUEZ**'s unique combination of skills and expertise across the full spectrum of the natural gas and electricity business, and its proven ability to harness these in an effective and efficient business model, which has been the driving force behind the company's success even in today's difficult energy markets.

GET IN TOUCH WITH OUR EXPERTS

DISTRIGAS
www.distrigas.be

FLUXYS
www.fluxys.net

TRACTEBEL GAS ENGINEERING
www.tractebel.de

SUEZ GLOBAL LNG
www.suez.com

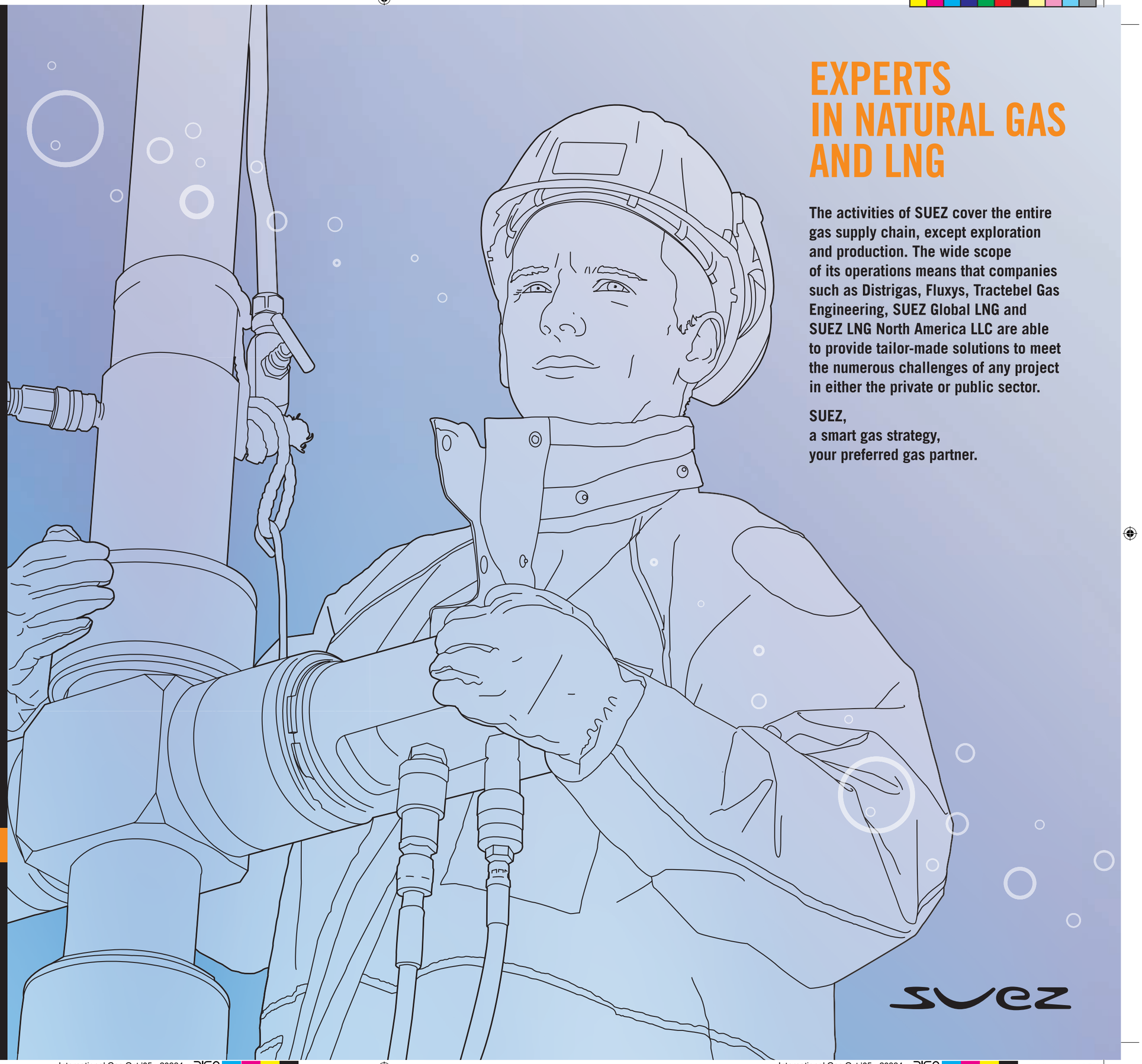
SUEZ LNG NORTH AMERICA
www.suez.com

SUEZ
www.suez.com

EXPERTS IN NATURAL GAS AND LNG

The activities of SUEZ cover the entire gas supply chain, except exploration and production. The wide scope of its operations means that companies such as Distrigas, Fluxys, Tractebel Gas Engineering, SUEZ Global LNG and SUEZ LNG North America LLC are able to provide tailor-made solutions to meet the numerous challenges of any project in either the private or public sector.

SUEZ,
a smart gas strategy,
your preferred gas partner.



suez

The IGU Knowledge Centre

By Bert Huizing

The quantity of information readily available to businesses, government, managers and professionals in today's Information Society is unprecedented, but its quality is a different matter.

Sorting the data for accuracy and relevance can be a frustrating and at times overwhelming process, and IGU and its members are no strangers to information overload.

The IGU Coordination Committee considers that part of its mission is to support members in their search for information, and thereby generate added value for IGU. This article describes briefly how the IGU Knowledge Centre supports the members of IGU by providing relevant and high-quality information.

Information Society

The Information Society is a new kind of society, a society in which economic life is critically dependent on information and communication technologies.

The Information Society is a new kind of society.

In his book *Information Anxiety*[1], Richard Wurman claimed that the weekday edition of *The New York Times* contains more information than the average person in 17th-century England was likely to come across in a lifetime. This personalises the oft-cited estimate that more information has been produced in the last 30 years than in the previous 5000. Statistics like these highlight the phenomenon of an information explosion and its consequence: information overload.

The development of this new society has been accompanied by an increase in the information needed to keep up with constant change. This leads to psychological, physical and social problems. A worldwide survey by Reuters found that two-thirds of managers suffer from increased tension and one-third from ill health because of information overload. Other effects of too much information include anxiety, difficulties in memorising and remembering, poor decision-making and reduced attention span.

IGU and information

One of the most important objectives of IGU is to increase the value to its members as a forum for the structured enhancement and exchange of information and knowledge. Over the years IGU's Working Committees and Task Forces have produced valuable information and knowledge for the gas industry as a whole. To continue this important task, improvements must be made since some preconditions are changing. One example is the liberalisation of the European gas market.

To improve Committee performance and to deal with the information problems that IGU Committee members face, the Coordination Committee, as stated in the Triennial Work Programme 2003-2006, aims to implement information management to streamline and improve the process of obtaining relevant information. For the realisation of this objective, the

1. R. S. Wurman, *Information Anxiety*, New York: Doubleday, 1989.

Coordination Committee asked Gasunie Engineering & Technology for advice, since they have relevant expertise and experience in information and knowledge management.

As a result the Coordination Committee and Gasunie Engineering & Technology have established the experimental IGU Knowledge Centre (IKC) in Groningen, The Netherlands, which started operations in January. After the World Gas Conference in June 2006 IGU will evaluate the added value of the IKC service. Decisions about if and how this service should continue will be taken in the next Triennium.

IGU Knowledge Centre

The IGU Knowledge Centre supplies all interested IGU members with information and knowledge. It provides basic information free of charge and will issue a quotation for more elaborate questions.

Services include literature searches, delivery of facts and figures related to market research, business intelligence and strategic studies. Furthermore, the Centre is able to give advice on various aspects of information and knowledge management.

For more information and inquiries you can contact the IGU Knowledge Centre by e-mail: IKC@wgc2006.nl.

Bert Huizing is Information and Knowledge Specialist at Gasunie Engineering & Technology, where he is responsible for information management, document processing, knowledge management and competence management. He can be contacted via e-mail: b.huizing@gasunie.nl.

The IGU Knowledge Centre is hosted by Gasunie Engineering & Technology in Groningen.

NIGC at a Glance

Strategically located along the Persian Gulf, Islamic Republic of Iran can play a crucial role in the global gas supply; acting as a bridge between the huge Middle-Eastern gas reserves and major demand centers in Europe and Asia. Iran holds the world's second largest natural gas resources with proven reserves of over 28 tcm, half of which lies in the off-shore South Pars field in the Persian Gulf waters.

National Iranian Gas Company, NIGC, which was established 40 years ago, is responsible for treating, transmission and distribution of natural gas to consumers across the country as well as contributing in import & export policy making. NIGC now covers 39 sub-companies which are under deregulation and privatization.

NIGC Highlights

At the end of the year 2004, NIGC has completed almost 20 thousand km of high pressure pipelines and over 105 thousand km of natural gas distribution network with over 7.5 million connections, covering 10.5 million households (45.2 million population). The share of natural gas within the country's fossil energy basket reached to 57% at the end of 2004 and is expected to rise to 70% by the end of 2009.

Exploration

NIGC receives natural gas from National Iranian Oil Company, NIOC. A minor share of natural gas consumption is supplied by import from Turkmenistan. In 2004, the total received and imported gas has been 99.5 and 5.9 bcm, respectively. Natural gas for domestic consumption and exports is generally supplied from independent gas fields while the associated gas is basically allocated for gas injection projects.

Treating

NIGC treating and dehydration capacity during the period of 1997-2004 with average annual growth of 14.9 % has increased from 128.5 mcm/d in 1996 to 375 mcm/d in 2004.

Transmission

More than 9500 km of high pressure pipelines have been constructed by NIGC during the period of 1997-2004, with an average annual rate of 1,200 km. At the end of the year 2004, the total trunklines exceeded 20,000 km.

Distribution

NIGC has built over 63,000 km domestic gas distribution network during 1997-2004. At the end of 2004, with an average annual growth rate of 13.3 %, the total length of country's gas network reached the figure of 105,000 km.

Export

The contract of gas export to Turkey was signed with Botash Company in the year 1996, for a volume of 10 bcm/y. To realize this project, a 40 inch pipeline with a length of 253 km was constructed through the city of Tabriz towards the border of Bazargan. Gas export to Turkey has commenced since December 2001, and the export rate in 2004 has risen up to 3.51 bcm and it is intended to approach 10 bcm/y within the next 4 years.

In June 2005, Iran and India finalized and signed a $22bn deal for Tehran to supply India an amount of five million tones of LNG every year for a 25-years period commencing from 2009.

Furthermore, a number of gas export pipeline projects are under negotiation with regional and international investors. Iran is planning to export gas to the neighboring countries Kuwait, UAE, Oman, Azerbaijan Republic, Armenia as well as to the European Union and China.

South Pars Gas Field

South Pars near *Assaluyeh* with more than 13 tcm of content is a gigantic off-shore gas field with extremely competitive upstream development costs. High rate of condensate produced from South Pars, makes the potential for Iran to capture an estimated 10-20% of LNG market in Europe as well as in Asia Pacific by 2015.

Research at NIGC

In the year 2003, the organization of NIGC was revised to form an independent Research and Technology Division in order to promote research activities in gas industries throughout the country. This division also coordinates IGU programs in Iran, including participating in working committees (WOC's) and/or program committees (PGC's) of IGU.

NIGC Developing Plans

Gas Treating Plants

- Parsian — Total Capacity: 114 mcm/day
- Ilam
- Bid Boland II
- Masjed Suleyman

Transmission Lines

- Iranian Gas Trunklines : IGAT-IV, V, VI, VIII — Total Length: 4,000 km; Total Capacity: 366 mcm/day
- 2nd North-Eastern Trunkline

Underground Storage

- Yortshay — Total Capacity: 2, 650 (mcm/year)
- Sarajeh — Total Production: 26 (mcm/day)

Nation-Wide Dispatching

- One Main Center
- 12 Operating Centers
- 24 Gas Delivery Centers
- 400 Remote Control and Measurement Terminals

NIGC Strategies and Prospects

- Full domestic gas supply coverage
- Gas injection for enhanced oil recoveries
- LNG/pipeline gas trade
- Improving tariffs and regulation towards customer satisfaction and a better sustainability
- Granting authority to sub-companies in order to achieve a higher profitability
- Leaving the projects open to private sector
- Increase gas supply confidence level for domestic consumers and exports
- Relying on consulting capacities and domestic vendors
- Productivity increase in various levels

NIGC Key Data (2004)

Natural Gas Reserves	28 tcm
Treatment Capacity	375 mcm/d
Transmission Lines	20000 km
Distribution Lines	105000 km
Delivered Natural Gas	99.5 bcm
Number of Customers	10.5 millions
Export (to Turkey)	3.51 bcm

NIGC

National Iranian Gas Company

www.nigc.ir

Naturally One-of-a-kind

- Holding the World's 2nd Largest Gas Reserves
- Exploiting the Giant South Pars Field
- Unique Privilege of Pipeline/LNG Trade
- Huge Investment Opportunities

afg
association française du gaz

LE SYNDICAT PROFESSIONNEL DU GAZ EN FRANCE

L'AFG est le syndicat professionnel de l'ensemble des acteurs de la filière gazière (Gaz Naturel et GPL).

L'AFG rassemble l'ensemble des entreprises, industriels, professionnels et associations professionnelles intervenant sur le marché français.

L'AFG est le lien entre tous les acteurs de ce secteur et contribue à sa promotion.

Etre adhérent de l'AFG, c'est être représenté dans tous les domaines de l'industrie gazière.

L'AFG représente l'industrie gazière française au sein de l'Union Internationale de l'Industrie du Gaz (UIIG).

L'AFG est membre d'Eurogas (Union Européenne de l'Industrie du Gaz Naturel), de Marcogaz (Association Technique de l'Industrie Européenne du Gaz Naturel) et d'EASEE – gas (Association Européenne pour la Rationalisation des Echanges d'Energie – gas). Elle est ainsi en mesure de mettre en valeur, de promouvoir et de défendre l'industrie française au niveau européen et, plus largement à l'international.

THE GAS TRADE ASSOCIATION IN FRANCE

The AFG is the trade association for all those involved in the gas sector (Natural Gas and LPG).

It includes all businesses, manufacturers, companies and trade associations operating on the French market.

The AFG is the link between all participants in this sector and contributes to promoting it.

Being a member of the AFG means being represented in all fields of the gas industry.

The AFG represents the French gas industry in the International Gas Union (IGU).

The AFG is a member of Eurogas (European Union of the Natural Gas Industry), of Marcogaz (Technical Association of the European Natural Gas Industry) and EASEE – gas (European Association for the streamlining of Energy Exchange – gas). It is thus able to enhance, promote and défend the French industry in Europe and, more broadly international.

AFG – 62, rue de Courcelles 75008 Paris
Tél. : ++33 (0)1 44 01 87 87 – Fax : ++33 (0)1 42 27 49 43
www.afgaz.fr

com'océan 07/05

COORDINATION COMMITTEE PROGRESS REPORT

Introduction and Key Developments

The purpose of this Coordination Committee progress report is to provide all Charter and Associate Members of IGU, together with members of the Council, Executive Committee, Coordination Committee, Programme and Working Committees, Task Forces and Special Projects, as well as other interested parties, with information about the progress of the work as described in the Triennial Work Programme (TWP). The progress report consists of contributions from all parties involved. It is published as part of the IGU Magazine as well as on the IGU Collaboration Portal. The report is edited by the Coordination Committee (CC) Secretariat under the responsibility of the CC Chairman.

As far as the content of the work of the Committees, Task Forces and Special Projects is concerned, this fourth report in the Dutch Triennium concentrates on the first six months of 2005.

WGC2006 call for papers

The call for papers for the 23rd World Gas Conference was published and sent out around the end of February 2005 to almost 15,000 addresses.

The submission site for abstracts was opened on March 1 and was due to be closed in September, when some 400 abstracts were expected to have been received. A procedure for selecting papers was discussed during the CC meeting in Warsaw in April. The Committees were due to start selecting papers for inclusion in the WGC2006 programme in September, and by the first week of November the authors will be notified about the acceptance of their paper. The full papers are due by February 1, 2006.

CC meeting

The Coordination Committee held its fourth formal meeting in Warsaw, Poland on April 14 and 15. Organisational matters were discussed for one and a half hours on the first day, followed on the second day by three hours of content delivered by the respective chairs and leaders of the Committees, Task Forces and Special Projects in the presence of IGU Executive Committee members and guests. The minutes of the meeting and the respective presentations are published on the CC section of the Collaboration Portal.

Since the CC Chairman was unable to attend, Vice Chairman Roberto Brandt filled in for him at very short notice, in an excellent manner. The meeting was held in the 100-year-old restored premises of the Polish Technical Organisation, which gave the meeting a special atmosphere. We would like to thank our Polish hosts for their excellent organisation and hospitality.

WGC2006 in Amsterdam

The preparations for the World Gas Conference in June 2006 are progressing well.

The Committees have provided their contributions to the handbook that details the sessions of WGC2006 and includes all the information necessary for registration to the conference. The handbook will be released by November 1.

The structure of the conference has been set up and we have started to invite keynote speakers and panellists.

The preliminary conference programme we have in mind will cover the themes Market Growth and Gas to Power on the Tuesday, Sustainability and Security of Supply on Wednesday, Regulation and LNG on Thursday and finally on Friday a Policy Panel on Gas goes Global: Sellers' or Buyers' Market? However, all this might change during the process and depends on the availability of the speakers

The Committee sessions and Expert Forums have been allocated to the different time slots and conference rooms.

At presstime the following keynote speakers and panellists had confirmed their attendance: