

IGU MANAGEMENT TEAM



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Mr George H. B. Verberg, Immediate Past President (The Netherlands)



Mr Roberto D. Brandt, Chairman of IGU Coordination Committee (Argentina)



Mr Ho Sook Wah, Vice Chairman of IGU Coordination Committee (Malaysia)



Mr Torstein Indrebø, Secretary General

IGU EXECUTIVE COMMITTEE 2006-2009 TRIENNIUM

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CIB (Egypt)

The Commercial International Bank was established in 1975 as a joint venture between the National Bank of Egypt (51%) and the Chase Manhattan Bank (49%) under its original name 'Chase National Bank of Egypt'. Following Chase's decision to divest its equity stake in 1987, National Bank of Egypt increased its shareholding to 99.9%, and the Bank changed its name to Commercial International Bank (Egypt) S.A.E.

During 1993, as part of its privatisation strategy, CIB successfully launched a public share issue resulting in a decrease of the major shareholder's stake to 43%, while CIB and NBE employees became the owners of 16% of the Bank's capital in a parallel employee ownership plan. The remaining 41% was sold to over 14,000 Egyptian, Arab and multinational investors, including the International Finance Corporation.

In July 1996, National Bank of Egypt (NBE), CIB's principal shareholder, sold an additional 20% equity stake in CIB's capital through a Global Depository Receipts (GDR) offering listed on the London Stock Exchange. This was the first such offering by an Egyptian company and has proven to be a great success representing the highest level of subscription of any Middle East international equity offer to date, raising over \$120 million.

In 1999, CIB launched its Retail Banking activity offering a wide range of products and services aiming at diversifying CIB income mix, and capitalising on CIB's strong corporate base.

CIB then started an ambitious four-year plan to centralise the Bank (investing in the future). The IT conversion was finalised early in 2003 and the bank became fully centralised.

In 2003, CIB signed a contract with IFC whereby IFC would offer consultancy in developing the SMEs business. Also, CIB has upgraded its risk management in anticipation of Basle-II.

Capital has been belayed by a stock 1:1 stock dividend which doubled CIB Paid-in Capital to EGP 1,300 MM (up from EGP 650 MM).

In February 2006, a consortium of investors led by Ripplewood Holdings acquired NBE's 18.7% equity stake in Commercial International Bank of Egypt ("CIB") in a US\$230 MM transaction.

The consortium includes Ripplewood Holdings (9.6%), Eton Park and RHJ International (each less than 5%), as well as other investors and prominent international business executives. The investment is part of a strategy to support CIB as it grows organically and through acquisitions.

► Growth

Over the last few years, CIB added CI Capital Holding, Commercial International Life Insurance (CIL), CONTACT Car Trading Company, and CorpLease for Financial Leasing to its affiliates.

CIB now stands at a 5% market share in loans (public banks included), with plans for increasing this share to 10%, cross-border expansion, stock listing and regional presence.

CIB remains to be focused on human capital acquisition and retention, core corporate culture and values, and integrating its synergies as Egypt's leading financial service conglomerate offering premier quality to its customers while maximising shareholders' value.

CIB-Algeria will start operations in 2008.



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From the IGU Secretariat

These pages feature news items and information from the Secretary General (TI), the Senior Advisor (HR), the Advisor and Webmaster (EG) and the Assistant to the Secretary General (BAS). However, 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.

● **Transfer of the Secretariat to Norway**

As of November 1, 2007, the Secretariat started operating out of StatoilHydro's offices in Sandvika, Oslo.

Torstein Indrebø was introduced to you in the last issue of the magazine as the Norwegian candidate for Secretary General, and he was elected to the position by the IGU Council on October 24, 2007 (see the Council report on pages 42-50). He has a staff of three people.

Hans Riddervold, Senior Advisor

For several years Hans Riddervold has represented Norway on the Council and the Executive

Committee. Hans is also well known to IGU members as a former Secretary General of the Norwegian Petroleum Society (NPF), of which the Norwegian Gas Association is a part. His role is to act as Senior Advisor to the Secretary General and the Secretariat.

Erik Gonder, Advisor and Webmaster

Erik Gonder has been relieved from other tasks in the newly-formed Norwegian energy company StatoilHydro in order to work for the Secretariat. Erik has broad experience of upstream and downstream gas activities and previously dealt with Norsk Hydro's German long-term gas sales agreements. He also ran exhibition projects on behalf of Hydro Oil & Energy including its participation in WGC 2006. Erik is working closely with the Secretary General and his responsibilities also include the IGU website, member services and communication issues.

Barbara Anette Schmid, Assistant to the General Secretary

Barbara Anette Schmid originally joined the Secretariat in 2006, when it was hosted by Denmark, and is continuing her secondment from RWE Transportnetz Gas until the end of August. This continuity has eased the transfer of the Secretariat. Barbara's main tasks are to prepare speeches and



Torstein Indrebø,
Secretary General.



Hans Riddervold,
Senior Advisor.



Erik Gonder,
Advisor and Webmaster.



Barbara Anette Schmid,
Assistant to the Secretary General.



The Secretariat is operating out of StatoilHydro's offices in Sandvika, Oslo.

presentations for the Secretary General and to administer the IGU Gas Efficiency Award. Furthermore, she is responsible for the IGU Knowledge Centre and for updating the online interactive maps. She is also involved in arrangements for events and conferences, and continues her work as a member of the IGU Marketing Committee's Study Group M.2.

TI

● IEF-IGU Ministerial Gas Forum

The International Energy Forum (IEF) is cooperating with IGU in order to address the challenges of the developing global gas market and IGU has been invited to join the 3rd International Energy Business Forum to be hosted by Italy in Rome on April 20, preceding the 11th IEF Ministerial, April 21-22.

IEF and IGU are also planning a joint Ministerial Gas Forum which will take the form of an exclusive roundtable discussion enabling policymakers and representatives of leading energy companies together with IEF and IGU experts to discuss various aspects of energy challenges.

This was originally scheduled to take place in Vienna on March 11, hosted by the Austrian Ministry of Economic Affairs & Labour and OMV. However, the date proved inconvenient for several potential delegates and the event has now been postponed to later in the year.

TI

● Promotion of natural gas in the transportation sector

While they were in St Petersburg for the 2007 Council session the President of IGU, Ernesto López Anadón, the President of IANGV, John Lyon, and the President of Marcogaz, Luigi Scopesi, signed



two letters, one addressed to national and local governments and the other to chief executives in the global gas industry. The intention of the letters was to make the recipients aware of the energy, economic and environmental benefits associated with a growing NGV industry.

IGU members received the letters for further distribution to governments and chief executives, while a press release was published on the IGU website. There is also more information on pages 60-61 of this magazine.

The Secretariat would appreciate feedback from members as regards reaction to the letters.

● **Gas Efficiency Award**

As you are aware, IGU has established a Gas Efficiency Award in order to call for new ideas and projects aimed at obtaining greater efficiency in the use of gas. The deadline for sending proposals for the 2008 prizes to the Secretariat is the end of May. For further details, please see pages 52-53.

BAS

● **IGU subscription fee for 2008**

In January/February the Secretariat usually sends out letters and invoices to members regarding the annual membership fee, which remains at €4,500 for 2008. In past years we have normally received the payments very quickly, but some members were not so prompt last year and, by January 2008, 14 members still had not paid for 2007. Please take this seriously since membership depends on the member actually paying the fee. In case you are in doubt about the payments of your organisation or have any questions related to this, please contact the Secretariat.

BAS

● **Knowledge Centre**

The IGU Knowledge Centre is an umbrella term for all information services within IGU. The Secretariat will continue to serve its members as regards indi-

vidual questions on all aspects of the gas industry, and we will also rely on assistance from the Technical Committees if needed. The cooperation with the two research centres of BP and Total will continue throughout the current Triennium.

As regards the online interactive maps with statistics, the Secretariat has updated the gas intelligence data. Members are encouraged to send the IGU Secretariat relevant links to websites giving information about gas-related issues in their respective countries.

BAS

TI ● **New Secondee from Croatia**

It has now been confirmed that Florijana Dedović, currently employed by Plinarco in Zagreb, will be seconded to the Secretariat from April. She will be introduced to the tasks of the Secretariat and overlap with Barbara Schmid until Barbara leaves in August. We are looking forward to starting to work with Florijana, and she will be introduced to members of the Council and the Executive Committee in September in Korea.

EG

● **Presidency 2012-2015**

The deadline for applications from Charter Members for the 2012-2015 Presidency was March 1 and the election will take place at the Council meeting in September in Gyeongju, Korea. The Charter Member elected to the Presidency will then be responsible for preparing the Triennial Work Programme for 2012-2015 and hosting the 26th World Gas Conference in 2015. This issue will be covered in more detail in the next edition.

TI

● **UN Climate Change Conference in Bali**

It has become customary for the Secretary General to participate in the annual meetings of the United Nations Framework Convention on Climate Change (UNFCCC). The 13th session of the Conference of the Parties to the Convention (COP 13)

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More than 10,000 delegates attended the UN Climate Change Conference in Bali.

took place in Bali, Indonesia, December 3-14, 2007. More than 10,000 delegates and media representatives from all over the world met to discuss climate change issues and to seek a road-map for a post-Kyoto agreement.

IGU had a stand at COP 13 to distribute publications, including a large number of copies of the Guiding Principles for Sustainable Development, to promote WGC 2009 and to provide information about the Union's activities.

The gas industry has to prepare itself for the impact from the climate change and protection debate, whether one believes in manmade climate change or not. This is no longer a matter of scientific discussion, but how we as an industry respond to public and individual expectations for action. It is too early to say in what way we will be affected, but whatever the outcome, it will have an impact on our business.

Natural gas has a very good starting point as the fossil fuel with the lowest carbon content. We must, however, continue to demonstrate to the world that we are aware of our responsibilities as

an industry through activities such as:

- Energy efficiency along the whole gas value chain from the reservoir to the customer;
- Reduced emissions of methane and CO₂;
- R&D efforts to reduce the emission of greenhouse gases; and
- CO₂ capture and storage projects.

The IGU Triennial Work Programme has an extensive ongoing study programme related to these challenges, which will be presented at the 24th World Gas Conference in Buenos Aires next year.

The UN negotiations will be followed up at COP 14 to be held in Poznan, Poland, December 1-12, with the ambitious objective of reaching a post-Kyoto agreement at COP 15 in Copenhagen in 2009.

TI

● Slovak Conference

Slovakia celebrated the 35th anniversary of the inauguration of the country's natural gas transit pipeline system last year and the Slovak Gas and



Associazione Nazionale Industriali Gas

We have been representing gas companies in Italy for over 60 years now

Anigas helps network and assemble local distribution companies which develop their services in over 3.000 small and large towns in Italy, such as Rome, Naples, Taranto, Florence, Venice, Piacenza, Rimini, Avellino, Trapani. Anigas, in addition to the above, also represents natural gas marketing companies that serve more than 10 million customers for domestic, commercial and industrial purposes. Anigas is associated with Confindustria and is the largest association in the gas field. Anigas boasts of over a 50% representation of the Italian Gas Industry with a total of about 100 companies that employ over 9.000 people.



Houston will be the venue for LNG-17.

Oil Association (SGOA) marked the occasion with its Autumn Conference. This was held in Bratislava, November 15-16, 2007, with participants from the European gas industry. The main topic of the event was "Future Prospects and Strategies for Transmission, Distribution and Storage Capacities Trading". IGU was invited to attend and the Secretary General gave a presentation about the Union and its activities in this part of the value chain.

During the conference the Slovak transmission company SPP-preprava a. s. introduced its new trade name and logo. On January 1, it started trading as eustream a. s., a name which highlights its role in transporting Russian gas to Europe.

● Russian Gas Forum

IGU was invited to participate in the 5th International Forum on Russian Gas, which was hosted by Gazprom in Moscow on November 20, 2007. The agenda covered the prospects for gas field developments in Russia, the country's gas market, trends in international gas markets and environmental issues. Hans Riddervold gave a presentation on IGU and how the Union is supporting the focus on gas as the cleanest of the fossil fuels, while representatives of several IGU members attended.

HR

● GIE Annual Conference

Gas Infrastructure Europe (GIE) is one of IGU's affiliated organisations and Erik Gonder represented the Secretariat at GIE's 2007 Annual Conference, which was held November 22-23. It was hosted by Enagás in Madrid, Spain, and attracted a wide audience from the European gas sector, including various stakeholders, representatives of the European Commission and regulators.

The conference took place shortly before the start of discussions on the EU's third energy liberalisation package, which was naturally a key item on the agenda. GIE's sub-division representing transmission system operators, Gas Transmission Europe, presented its views on the new proposals, with particular reference to the establishment of the European Network of Transmission System Operators (ENTSO) as a means of enhancing cooperation between transmission system operators.

Other major topics included recent developments on transparency and challenges facing gas suppliers, while the day before the conference GIE's General Assembly elected Marcel Kramer, CEO of Gasunie, as its next President to succeed Geert Joosten.

EG

TI

● LNG-17 will be in Houston

The site selection committee for LNG-17 in 2013 has chosen Houston as the site for the triennial conference and exhibition. Following the LNG Steering Committee's decision that the USA would host LNG-17, Houston and San Diego had been contending for the event, but the former's importance as an energy centre won the day. The American Gas Association is chairing the National Organising Committee and forecasts that LNG-17 will attract between 3,000 and 5,000 delegates and will require 28,000 to 46,000 square metres of exhibition space.

EG

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Key figures of Cameroon's gas resources

- The total recoverable reserves are estimated at 9.14 TCF, or 274 billion m³, and total resources at 23.19 TCF, or 695 billion m³;
- The total volume of gas flared on the active rigs in 2006 is about 1.8 billion m³.

Main projects

- The Kribi gas-to-power thermal plant;
- Power generation from the Logbaba field;
- LPG distribution;
- Construction of LPG storage tanks; and
- Exportation of LNG to Equatorial Guinea.

Contact

P.O. Box: 955, Yaoundé, Cameroon
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 (237) 22 20 98 65
 Fax: (237) 22 20 46 51
 (237) 22 20 98 69



◀ Gas flared on a platform in the Rio del Rey basin

A stimulating legal and regulatory framework

The gas code, which was adopted in 2002, offers incentives to potential investors in the gas sector. This code provides for:

- the concession regime for transport and distribution activities;
- the licence regime for processing, storage, import and export activities; and
- the authorisation regime for activities

related to the sale of gas, importation, and installation of equipment and material to start up gas transportation and distribution networks.

Reliable partners

- **Upstream:** SNH, Total, Shell, EurOil, Perenco and Noble Energy;
- **Downstream:** SONARA, CSPH, Hydrac, Tradex, First Oil, SCDP, SCTM, CAMGAZ, Mobil and Total.



Message from StatoilHydro – The New Host of the IGU Secretariat

Dear Readers of the IGU Magazine

In my capacity as Executive Vice President for Natural Gas in the Norwegian energy company, StatoilHydro ASA, I am delighted that the company will host the IGU Secretariat for the next six years. StatoilHydro was formed in 2007 through the merger of Statoil and Hydro's oil and gas activities.

Energy issues are high on the geopolitical agenda and demand for natural gas is growing strongly. There is a global debate about security of supplies, climate change and sustainable development, and natural gas – as the cleanest of the fossil fuels – has a key part to play in the transition to a low-carbon future. Clearly, IGU's role in speaking for and promoting the global gas industry has never been more important.

The Secretariat, led by Torstein Indrebø as Secretary General, has to ensure that the high profile of the Union is maintained, while running the day-to-day business of a large international organisation. I am confident that Torstein and his team working out of StatoilHydro's Oslo office will provide the highest level of service to all members of the Union, as well as to other contacts within the gas world.

● **Norway, a key gas exporter**

Through major new gas development projects on the Norwegian Continental Shelf coming on stream in late 2007, such as Ormen Lange and Snøhvit, StatoilHydro has invested in both piped gas for Europe and in LNG, which can be transported to more distant markets.

Norway's remarkable energy adventure started with the discovery of the Ekofisk field on December 23, 1969, which turned the country into an oil and gas producing nation. The conclusion of the Troll



Rune Bjørnson, Executive Vice President for Natural Gas, StatoilHydro.

Gas Sales Agreements in 1986, followed by the start up of the Sleipner gas field in 1993 and the immense Troll gas field in 1996, were important milestones for Norway as a gas nation. Indeed, Norwegian gas production has doubled in the last decade.

Developing the offshore fields has called for technical innovation. From concrete platforms in the early days to the advanced subsea equipment we find at Ormen Lange and Snøhvit, the technology used by StatoilHydro and its partners on the Norwegian Continental Shelf has been cutting-edge. By having the courage and human capital to embark on these projects in areas of Norway with a harsh climate, we have proved our ability to exploit gas reserves using subsea facilities located at depths of up to 1100 metres. Moreover, we have established a strong platform on which to develop further as an energy company of global stature.

Natural gas now represents a growing share of StatoilHydro's production; within the next 10 years almost half of our production will be gas. The company also has unique market positions in some of the most attractive gas markets in the world, and we will expand on these positions in the years ahead.

● Norway and IGU

Norway was an observer at the creation of IGU in 1931 in the days of town gas, and went on to join the Union after World War II. But it was the development of the country's natural gas industry which really spurred IGU involvement. The Norwegian Petroleum Society started a gas association and this became the Charter Member for Norway in 1985. Four years later, Norway hosted the IGU Council meeting. The Council returned to Norway for the 2004 meeting in Oslo.

At first Norway's active participation in the Union was focused on upstream activities, but it subsequently widened to cover the full scope of activities in IGU. This is why the country's gas industry, and specifically StatoilHydro, strongly supported the bid to host the IGU Secretariat from 2007 to 2013.

I am convinced that a worldwide organisation like IGU has an important role to play in order to set the agenda for the gas industry, and also to



Gas from the Snøhvit field is piped to a liquefaction plant at Melkøya for export as LNG.

debate and propose innovative and sustainable solutions for the future.

With best regards,

Rune Bjørnson



Gas from the Ormen Lange field is processed onshore at Nyhamna and then exported by pipeline.

We are hands-on with tomorrow's energy challenges

Learn more on www.statoilhydro.com

40 years of pioneering operations on the Norwegian continental shelf have made us world leaders in the field of maritime oil and gas activities. We apply our skills and experiences from these demanding conditions to the rest of the world. We

consistently work to find sustainable solutions for the energy requirements of the future. Our pioneering projects for carbon capture and storage are vital in order to reduce the climate impact.

StatoilHydro



StatoilHydro's smarter solutions

StatoilHydro ranks as one of the world's biggest integrated oil and gas companies. Based in Norway, it is the leading operator on the strategically important Norwegian continental shelf (NCS). Already present in 40 countries, its pioneering work is allowing it to expand even further internationally.

“The NCS has always been a laboratory for groundbreaking technology, and we've played a leading role here,” says Tom Therkildsen, strategy manager in the group's Natural Gas business area.

Having Norway's unforgiving waters as a training ground has actually been a blessing for StatoilHydro. These extreme conditions have meant that the group has solved seemingly impossible development tasks together with a vital domestic supplies industry. Today, it is transferring this know-how to projects worldwide.

Beacons of innovation

Two particularly complex projects on the NCS stand out as beacons of innovation and problem-solving – the Snøhvit field and Ormen Lange.

Snøhvit has been brought on stream with new technology which allowed StatoilHydro to achieve the first offshore development

A track record of extraordinary technological achievements in complex petroleum projects makes StatoilHydro stand out as an energy innovator.

in the Barents Sea. Creating the first export facility for liquefied natural gas (LNG) in Norway and Europe, which also ranks as the world's northernmost gas liquefaction plant, provides new opportunities and enhances the group's gas position.

This field is also the first major development on the NCS with no surface installations. Instead, its subsea production facilities stand on the seabed in a water depth of 250-345 metres.

“This development has set several industry records, including the longest subsea pipeline for unprocessed wellstream transport without midway compression,” says Therkildsen.

The seabed facilities are designed to be over-trawlable, so that neither they nor fishing equipment will suffer any damage from coming into contact with each other.

Unprecedented challenges were also presented to StatoilHydro by the vast Ormen Lange gas field off the coast of mid-Norway.

This discovery lies in 850-1,100 metres of water in the Norwegian Sea, and gas has never previously been produced from such water depths anywhere in the world. It is also far from land and European markets.

In addition, the development team faced a difficult underwater terrain, with a fractured sea floor where ice-cold currents flow through high peaks and deep valleys.

New technology has made it possible to design and build appropriate subsea installations. These are again tied back directly to land without surface installations. And the 1,200-kilometre pipeline carrying Ormen Lange output to market is the world's longest underwater gas pipeline.

Redefining limits

As the world's largest operator of deepwater fields, StatoilHydro is continually redefining the limits of recoverable resources.

With an annual supply portfolio totalling some 70 billion cubic metres, the group is Europe's second biggest natural gas supplier and the sixth largest worldwide. Within the next 10 years, this commodity will account for half its annual production.

Statfjord demonstrates how StatoilHydro maximises its use of resources. Converting this 25-year-old North Sea field from oil to gas production is expected to keep it in profitable operation until 2019. Knowledge gained here can benefit similar oil-to-gas conversions on several other fields.

Sustainable

StatoilHydro strives to minimise its carbon emissions. In September 2007, the Dow Jones Sustainability Index ranked the former Statoil group as the world's most sustainable oil and gas company for the fourth consecutive year. Hydro, as it then was, received the same accolade in the basic resources sector for the second year running.

“We've long recognised that greenhouse gas emissions and climate change are one of the biggest challenges of our time, and were one of the first multinational oil companies to support the Kyoto protocol,” says Therkildsen.

StatoilHydro works purposefully to reduce carbon emissions from its installations through such measures as injecting the greenhouse gas underground for long-term storage or improved oil recovery (IOR).

Other solutions being pursued involve using hydroelectricity from the Norwegian grid to power offshore installations which currently utilise on-site generation, and enhancing energy efficiency.

The group has also taken a lead on carbon capture and storage (CCS) through such projects as the Sleipner fields in the Norwegian North Sea.

Natural gas from Sleipner West contains around 9% carbon dioxide, which must be separated out to meet customer specifications. The question faced in the mid-1990s was what to do with the unwanted greenhouse gas.

Releasing it to the air was not a good option, particularly since the Norwegian authorities had introduced an offshore carbon tax in a bid to curb emissions.

So StatoilHydro came up with a groundbreaking environmental solution, extracting the carbon dioxide on the field and injecting it into a geological formation deep beneath the Sleipner platforms at a rate of roughly one million tonnes per annum since 1996.

The group is also involved in three other large-scale CCS projects – the Snøhvit development in the Barents Sea, the In Salah gas field in Algeria, and Norway's Mongstad refinery near Bergen.

Cooperation

As energy projects become more complex, and increasingly take place in deeper waters and harsher conditions, cooperation is even more vital for success. StatoilHydro has set ambitious targets for international growth, and is seeking upstream opportunities globally for its expertise – particularly offshore. Deepwater developments are a special target.

“Projects on the NCS are typically developed through a system of shared licences,” says Therkildsen. “Our experience shows that such partnerships can lead to success. These mutually beneficial collaborations are an integral part of the way we do business.”

StatoilHydro's cooperation with Gazprom and Total over the development of the Shtokman field in the Barents Sea is a case in point.

Therkildsen says that the group aims to strengthen its ties with national petroleum companies which hold major undeveloped resources, particularly in the Organisation of Petroleum Exporting Countries (Opec) and in Brazil, Russia, China and India.

“Realising the commercial potential of natural gas is often a challenge,” Therkildsen observes. “We have a proven talent for maximising the commercial value of gas resources through insightful marketing and models for industrial gas value chains.”





Council Delegates Celebrate the Growth of IGU

By Mark Blacklock

Addressing the 2007 Council meeting in St Petersburg, Russia, President Ernesto López Anadón declared that “we are broadening the presence of IGU worldwide”. The Union is growing in size – indeed, delegates approved four new members during the meeting – but most significantly it is growing in influence. Once a purely technical organisation, IGU now has a much wider scope as a strategic player on the global energy stage.

This is also reflected in deepening relationships with the International Energy Agency (IEA) and the ministerial International Energy Forum (IEF), and the launch of an annual Strategic Statement on key gas issues. Work on the first Strategic Statement is underway and it will be presented for approval in September. Meanwhile, IGU is receiving more and more invitations for representatives to address energy events around the world, and the development of

added value for members through initiatives such as the Knowledge Centre, the interactive maps on the website and the establishment of a Gas Efficiency Award also enhances the Union’s visibility.

The Council meeting was held at the Corinthia Nevskij Palace Hotel in St Petersburg on October 24, following sessions of the Coordination Committee and the Executive Committee. The whole event was organised by the Charter Member for Russia, OAO Gazprom, and was attended by 143 delegates and some 50 accompanying persons.

● New members and new Secretary General

Delegates approved four applications for membership and welcomed Overgas Inc. of Bulgaria as a Charter Member together with China National Petroleum Corporation (CNPC), the Interstate Natural Gas Association of America (INGAA) and Taqa, Arab Company for Energy (Egypt), as Associate Members. IGU now has 68 Charter Members and 31 Associate Members.

Delegates also approved the application of Alcatel-Lucent to become a Supporter of IGU. This



IGU President Ernesto López Anadón convenes the 2007 Council meeting.



Delegates dealt with a range of business including approving the applications of four new members.

type of involvement is aimed at organisations active in the energy business but which do not fulfil the conditions for membership or affiliation. Although the category was introduced in 2005, Alcatel-Lucent's was the first formal application.

IGU's marketing plan has identified a number of countries and companies which are being encouraged to join the Union, and further developments on the membership front are expected.

The Council went on to approve IGU's accounts for 2006 and the budget for 2008, before moving to the election of a new Secretary General. At the 2005 Council meeting Norway had won the election to become the host of the Secretariat for 2007-2013; at St Petersburg the Council elected the Norwegian candidate for Secretary General, Torstein Indrebø, who took the floor to address delegates.

"I cannot think of a more challenging and important role," he said, going on to introduce his team which includes an additional full-time position as pledged by Norway when it originally campaigned to host the Secretariat. Working alongside

Torstein Indrebø are Hans Riddervold, a former Secretary General of the Norwegian Petroleum Society (NPF) who has had many years of involvement with IGU, Erik Gonder who comes from StatoilHydro, and Barbara Anette Schmid, who is continuing her secondment from RWE for a year in the new Secretariat.

Torstein Indrebø also paid tribute to the outgoing Secretary General: "Peter Storm has set very high standards for us taking over, and I hope to maintain his high level of service, visibility and professionalism."

● **Accolades**

Having served as IGU's eighth Secretary General during a time of significant development for the Union with the introduction of new Articles of Association and a substantial growth in membership, Peter Storm was given a big and well-deserved send-off.

His term of office started in 2000 with the Japanese Presidency and Honorary President

The world is growing by more than
70 million people a year.

So is that a problem, or a solution?

With our planet's population continuing to increase, and the quality of life for millions in the developing world improving daily, our demand for energy is also growing. And to meet everyone's needs 25 years from now may take 50% more energy than we use today.

Finding and developing all the fuel and power we need for our homes, businesses and vehicles, while protecting the environment, could be one of the greatest challenges our generation will face.

The key to ensuring success is found in the same place that created this need: humanity itself. When the unique spirit we all possess is allowed to flourish, mankind has proven its ability to take on, and overcome, any issue. It's a spirit of hard work, ingenuity, drive, courage and no small measure of commitment. To success, to each other, to the planet.

The problem...becomes the solution.

This human energy that drives us to succeed has been there every day since the beginning. And it will be with us to shape many tomorrows to come.

So join us in tapping the most powerful source of energy in the world. Ourselves.

And watch what the human race can do.





The gifts for retiring (and now Honorary) Secretary General Peter Storm included this Argentine poncho.

Hiroshi Urano sent a personal message of appreciation while Akio Nomura, Chairman of the Japan Gas Association, presented a gift. Immediate Past President George Verberg gave a speech of thanks on behalf of the Dutch Presidency, whose gift was presented by Bert Panman, the former Coordination Committee (CC) Chairman. The current CC Chairman, Roberto Brandt, presented the Argentine gift and the President, Ernesto López Anadón, awarded Peter Storm the new title of Honorary Secretary General.

Thanking the Council, Peter Storm said he was proud to have served for seven years as Secretary General, noting that his term had seen both an increase in the use of gas and a rise of its profile in the energy field. He also praised the work of his assistants Lisbeth Koefoed, who left the Secretariat in 2006, Lotta Hällén-Kragh and Barbara Anette Schmid.

● Presentations

The morning's business then continued with a series of presentations. Hae-Jung Oh, Secretary General of the Korea Gas Union, introduced delegates to Gyeongju, the venue for the 2008 Council meeting which will be held September 22-25. The Council last met in Korea in 1999 when delegates convened on Cheju Island.

After the coffee break, Roberto Brandt reported on the status of the Triennial Work Programme. He said that membership of the Committees and Task Forces had reached 731, an all-time record, and that two new projects had been added. These are on CO₂ sequestration, which will be the responsibility of Programme Committee A with help from four other Committees, and the identification of best practices in different parts of the gas chain, which will be coordinated by the R&D Task Force

STEERING COMMITTEE FOR 2030 OUTLOOK STUDY

Tim Eggar	Chairman, Harrison Lovegrove & Co.
Coby van der Linde	Director, Clingendael International Energy Programme
Shigeru Muraki	Chief Executive Technical Development, Tokyo Gas
Rajendra Pachauri	Chairman, Intergovernmental Panel on Climate Change
Bert Panman	Director Special Projects, Nederlandse Gasunie
Roman Samsonov	General Director, VNIIGAZ
Nobuo Tanaka	Executive Director, International Energy Agency
Daniel Yergin	Chief Executive, Cambridge Energy Research Associates



Fresh from his election as Secretary General, Torstein Indrebø (second from right) takes a coffee break with Eduardo Ojea Quintana, NOC Chairman for WGC 2009 (LEFT), Jay Copan from the American Gas Association (SECOND LEFT) and Past President George Verberg (RIGHT).

with input from all Committees. With reference to the 2030 Outlook Study, he said that a Steering Committee of eight external experts (see *Table*) had been set up and that its first meeting would take place the next day.

Roberto Brandt went on to review cooperation with other energy organisations, highlighting work with the IEA and IEF, and the fact that IGU had been invited to organise a special session on natural gas issues at the 19th World Petroleum Congress. This will be held in Madrid, June 29-July 3.

Next up were Marc Hall, Chairman of the IGU Marketing Committee (IGM), who briefed delegates on IGM's recent activities, Eduardo Ojea Quintana, Chairman of the National Organising Committee (NOC) for WGC 2009, who detailed the latest preparations for the 24th World Gas Conference,

and three speakers promoting the next IGU Research Conference (IGRC 2008). This will take place in Paris, October 8-10, and George Verberg spoke in his role as Chairman of the Policy Committee, followed by Christian Beckervordersandforth, Chairman of the Technical Programme Committee and Daniel Paccoud, NOC Chairman. It was also announced that Korea would host IGRC 2011. More information on IGM and the conferences can be found in separate articles in this issue of the magazine.

They were followed by representatives of five energy organisations who briefed delegates on their work: Alain Tournebise, Database Manager of the Gas Centre of the UN Economic Commission for Europe; John Lyon, President of the International Association for Natural Gas Vehicles (IANGV); Jean Vermeire, President of the International Group of LNG Importers (Groupe Internationale des Importateurs de Gaz Naturel Liquéfié – GIIGNL); Pedro Baridon, Senior Vice President of the World Petroleum Council; and Luc Henriod, Executive Secretary of the International



CC Chairman Roberto Brandt reports on the Triennial Work Programme.



Gazprom's Alexander I. Medvedev addresses the afternoon session.

Pipeline and Offshore Contractors Association (IPLOCA).

● Afternoon session

Following lunch the Council reconvened for the third session, which followed the regular format of having a presentation from the host country followed by a round table and general discussion.

Alexander I. Medvedev, Deputy Chairman of the Management Committee of OAO Gazprom, started the proceedings with an overview of the Russian gas industry and Gazprom's export strategy. Russia is the world's largest gas producer and its enormous production and transportation system comprises 83 gas fields, 25 underground storage facilities and 155,000 kilometres of pipelines with 268 compressor stations. Approximately 55% of production is sold to domestic customers with 45% going to export markets.

"Russian gas is a key factor in European energy security," declared Alexander Medvedev, while

quoting figures that demonstrated the reciprocal importance to Russia of European payments for that gas.

He said that Russia exported 151.1 bcm of gas to the states of Central and Western Europe in 2006 and was paid \$37.2 billion, which amounted to 14.5% of the country's total export earnings.

Germany is Gazprom's largest export customer and Mr Medvedev focused on the German market as an example of how the company has developed an integrated export strategy by investing together with local partners in pipelines and underground storage facilities. He also outlined plans to build a CCGT power plant in Eisenhüttenstadt in partnership with Soteg of Luxembourg.

Pointing to the way Gazprom has built up a downstream presence in Germany, Mr Medvedev declared that "we are no strangers to competition," but he stressed the importance of striking a balance between the European Commission's desire to liberalise markets and the need to provide a secure basis for long-term investment.

Answering questions from delegates, he outlined how Gazprom had become involved in LNG trading in advance of the Sakhalin II project coming onstream through swaps of cargoes for pipeline gas, and that the company's current plans for the Shtokman development envisaged a 50:50 split between pipeline gas and LNG.

Moving to a global perspective, the round table looked at the key drivers for security of demand and supply in the world gas industry and was moderated by Professor Dr Coby van der Linde, Director of the Clingendael International Energy Programme. The panellists were Ian Cronshaw, Head of the Energy Diversification Division at the IEA; Simon Blakey, Senior Director for European Research at Cambridge Energy Research Associates; and Roman Samsonov, General Director of VNIIGAZ, the research institute of Gazprom.

Ian Cronshaw contrasted the rapid growth in demand for energy – the IEA is forecasting a 50% increase by 2030 – with underinvestment through-



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out the supply chain. To close the gap he stressed the need for a regulatory environment that encourages timely investment and ensures markets work effectively, backed up by better cost control when developing oil and gas projects.

Simon Blakey considered the growth of the LNG business and the way it is drawing regional markets together. "A global gas price is emerging and the global spot price is the Henry Hub price," he declared, "but the world will continue to have multiple price mechanisms and levels." In addition to the investment issue highlighted by Ian Cronshaw, he stressed the need to increase recruitment and training to address skills shortages and the age profile of the industry's workforce.

Roman Samsonov looked at the prospects for gas projects in Eastern Siberia and Russia's Far East, which he said had the potential to supply further development of the domestic market as well as meeting increased demand for exports. By 2030

he predicted the region's annual gas production would reach 207 bcm, a 10-fold increase over 2007. In response to a question from Simon Blakey he said that there was scope for independent Russian producers to become involved in the new projects.

Taking the measure of the ensuing discussion of how to ensure security of demand and supply, Coby van der Linde felt that the real problem was at the strategic level. "I think we are suffering from insecurity in policymaking," she concluded.

As the most senior Honorary President present, Hans Jørgen Rasmusen closed the meeting with a vote of thanks to the President for a well-conducted meeting and to the Russian hosts. The day was rounded off with a gala dinner in the Marble Palace.

Mark Blacklock is the Editor-in-Chief of International Systems and Communications.



Raising a toast at the gala dinner.



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The IGU Gas Efficiency Award: Conservation and Efficiency are the Cheapest Forms of New Energy

By Barbara Anette Schmid

IGU considers energy efficiency to be one of the more important ways of achieving a more sustainable future and enhancing security of supply. The Union has therefore established a Gas Efficiency Award to bring forward new ideas and projects aimed at obtaining greater efficiency in the use of gas.

By introducing this Award IGU seeks to:

- Act as a socially responsible organisation in generating ideas and proposals for improved energy efficiency;
- Make good use of its assets and thereby promote the Union to the general public; and
- Strengthen its ties with the academic world and industry.

All IGU members are invited to nominate projects related to gas efficiency and being developed either in the academic sector or by people working in the gas industry.

In 2008 and again in 2009 the best two projects, which are deemed new, feasible and achievable, and which provide the most substantial improvements in gas efficiency, will each be awarded a prize of €10,000. Then the best of the four will be chosen and the overall winner (in the case of a team project a single representative) will be invited by the IGU President to present the project at the World Gas Conference in Buenos Aires in October 2009.

● What kind of projects?

Gas efficiency projects with any background (technical, economic or social) are eligible provided that they are new ideas.

Operational projects have to be submitted to the IGU Secretariat within a year of start-up. For those not yet operating the submission needs to detail how and when the project will be implemented.

● Which documents need to be submitted?

Submissions should give a full description of the project in no more than five A4 pages and elaborate on:

- The idea (what is the “new” element);
- The benefit/savings of gas which will be realised by the project;
- The current project phase; and
- Project realisation.

A CV of the project author(s) covering no more than two A4 pages should also be included.

● The prizes

During the Argentine Triennium IGU is offering four awards each of €10,000. The person invited to present the best of the four projects at the World Gas Conference will receive free registration for the conference as well as travel and accommodation expenses. Furthermore the winners and their projects will be featured in the IGU magazine as well as on the IGU website.

● The Evaluation Committee

Projects received will be evaluated by a special committee consisting of:

- The IGU President;
- The Chairman of the IGU Coordination Committee;
- The Secretary General of IGU;
- A representative of IEA; and
- A representative of the academic sector.

The decision by simple majority of the Evaluation Committee is final.

Should the invitation result in a large number of projects, the IGU President may ask two academics of his choice to carry out an initial screening in order to limit the number of proposals to be considered by the Evaluation Committee.

● Schedule and procedure

For 2008, IEA will be represented on the Evaluation Committee by its Executive Director, Nobuo Tanaka, while the representative of the academic sector will be Prof. Rainer Reimert from the University of Karlsruhe in Germany. The Secretariat has sent out an invitation to all IGU members encouraging them to nominate candidates for the IGU Gas Efficiency Award.

May 30

Deadline for sending submission to the IGU Secretariat for the 2008 prizes.

June

The submissions received will be sent to the members of the Evaluation Committee.

August

The selection of the best two projects and the reasons for choosing them will be sent to the IGU Secretariat before the end of August, which will then inform candidates of the outcome.

September

The winning projects will be announced during the IGU Council meeting.

April 2009

The 2008 winners and projects will be presented in the first 2009 issue of the IGU Magazine.

May 29, 2009

Submission deadline for the 2009 prizes.

June 2009

The proposals received will be sent to the members of the Evaluation Committee.

August 2009

Before the end of August the selection of the best two projects and the reasons for choosing them will be sent to the IGU Secretariat, which will inform



the candidates of the outcome. The Evaluation Committee will then select the best of the four.

October 2009

The names of the 2009 winners and the projects will be announced during the IGU Council meeting and the overall winning project will be presented at the 24th World Gas Conference.

Barbara Anette Schmid is the Assistant to the Secretary General. For more information please contact her at secrigu@statoilhydro.com.



Using gas efficiently: a co-generation plant (ABOVE) and a CNG-hybrid prototype car based on a Toyota Prius II (TOP).

Technip, a major player in LNG

Technip, in joint venture, is now building the world's six largest LNG trains (7.8 Mtpa each) that will allow Qatar to become by far the largest LNG producer (with some 77 Mtpa). Technip was awarded successively the EPC contracts for Qatargas II (trains 4 and 5), RasGas III (trains 6 and 7) and for Qatargas III and IV (trains 6 and 7). This followed the successful debottlenecking of the three Qatargas LNG trains. Still in the Middle East, Technip signed in September 2005 a major lump sum turnkey contract with Yemen LNG Company Ltd (YLNG) for the country's first LNG plant. Technip is also currently finalising major LNG turnkey projects in West Africa and the United States including the sixth train of Nigeria LNG Ltd. at Bonny Island and the Freeport LNG receiving terminal in Texas.

Furthermore, Technip is implementing a new technology for ethane recovery integrated in an LNG train, through a conceptual and FEED for Sonatrach in Arzew, Algeria.

This extensive experience at both ends of the LNG chain is now being used to address the challenges of near shore and offshore LNG terminals. By combining this know-how with that of our marine and subsea divisions, a range of new technologies and methods has been evolved, which include cryogenic flexibles, rigid pipe-in-pipe, and complete transfer systems and architectures.

Continuous R&D activities have also allowed Technip to offer innovative solutions for the benefit of investors in LNG production plants. This includes:

- The use of hydraulic turbines in place of Joule-Thomson valves,
- Efficient Nitrogen Removal process applied in several Middle East projects,
- Deep NGL extraction integrated into the liquefaction scheme,
- Increase of LNG production with the MLP (Maximum LNG Production) gas phase sub-cooling cycle,
- Highly efficient refrigerant evaporators and condensers in association with tube manufacturer Wieland.

With a workforce of 22,000 people, Technip ranks among the top five corporations in the field of oil, gas and petrochemical engineering, construction and services. The Group is headquartered in Paris. The Group's main operating centers are located in France, Italy, Germany, the UK, Norway, Finland, the Netherlands, the USA, Brazil, Abu-Dhabi, China, India, Malaysia and Australia. In support of its activities, the Group manufactures flexible pipes and umbilicals, and builds offshore platforms in its manufacturing plants and fabrication yards in France, Brazil, the UK, the USA, Finland and Angola, and has a fleet of specialized vessels for pipeline installation and subsea construction. The Technip share is listed on Euronext Paris.

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- Qualified and project ready - Large bore cryogenic flexibles and straight-line Pipe-in-Pipe

Green LNG terminals fitting the most demanding sites

World's largest and most energy efficient LNG trains

- Pre-FEED
- FEED
- Detailed engineering and construction



IGM: The IGU Marketing Committee Prepares for Buenos Aires

By Marc Hall

The 100th session of the IGU Marketing Committee (IGM), formerly Intergas Marketing, was hosted by Swissgas, Erdgas Zürich and l'Association Suisse de l'Industrie Gazière (ASIG), October 4-5, 2007. The meeting took place in the picturesque surroundings of Lake Zürich in Küsnacht, Switzerland.

The IGU Marketing Committee is currently in a transitional phase; while under the wing of IGU, it is not fully integrated into the structure of Technical Committees. A decision about full integration as of the 2009-2012 Triennium will be taken before the end of the current Triennium.

IGM's work is focused on information and debate about the latest gas marketing initiatives in national and regional markets, and the global

transfer of marketing experience between different markets. Two Study Groups have been set up to deal with important questions surrounding the marketing of natural gas.

Study Group M.1 deals with natural gas and renewables using a marketing approach, and Study Group M.2 investigates how marketing can contribute to promoting natural gas in new areas and new technologies.

● Meeting report

During the two-day session in Küsnacht, delegates discussed the presentation of IGM's report on the work being carried out during this Triennium to WGC 2009 in Buenos Aires. At WGC 2009, the Committee expects to have a two-hour slot and will need a large conference hall. The current plan is to use the work and findings of the Study Groups, and to organise a multimedia marketing show with the participation of internal and external experts and presenters. The topics covered by this session will be renewables, new technologies and security of supply. Furthermore, IGM aims to secure close



Marc Hall, Chairman of IGM.



ties to the 2030 Gas Industry Outlook study being prepared under the leadership of the current IGU Presidency.

Study Group M.1

Leader: Lars Møller Jørgensen (Denmark)
lmjoe@dongenergy.dk

Co-Leader: Anne Sypkens-Smits (The Netherlands)

Members discussed the outline and topics of the Study Group's report. Possible topics include an assessment of the potential for natural gas to be the energy that will be associated with renewables. Furthermore, there are plans to identify how a combination of natural gas and renewables could sustain or even increase the use of natural gas, as well as improving the public image of gas companies. This Study Group cooperates with WOC 5.

Study Group M.2

Leader: Khaled Abu Bakr (Egypt)
k.abubakr@taqa.com.eg

Co-Leader: Alexander Moiseev (Russia)

The Study Group discussed three possible case studies representing new technologies and their marketing strategies. These are most likely to be:

- Mother-daughter CNG system (Iran);
- District cooling (Egypt); and
- Micro co-generation (The Netherlands).

● **Future plans**

Any IGU member can participate in IGM's activities and the Committee and its two Study Groups welcome new participants, in particular from dynamic organisations or markets in transition.

At presstime the next IGM Plenary Session and Study Group meetings were due to be held in Cairo, Egypt, March 18-20. The meetings during the second half of 2008 will be held in Europe, although the exact dates and a venue have yet to be decided, while the first meetings of 2009 will be held in Teheran, Iran.

Marc Hall is the Chairman of the IGU Marketing Committee and can be contacted at Marc.Hall@rwe.com.



IGM delegates pose for a group photo during the October 2007 session in Küssnacht.



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the power of the drop
THE ENERGY TO TRANSFORM



IGU and Affiliated Organisations: A Joint NGV Initiative

Two of the organisations affiliated to IGU, the International Association for Natural Gas Vehicles (IANGV) and Marcogaz, have joined with the Union to issue open letters promoting the use of natural gas in the transportation sector.

Two letters were issued in November 2007: one addressed to national and local governments and the other to chief executives in the global gas industry. The letters have the same core content

with the one to governments highlighting the economic and environmental benefits of NGVs, while chief executives are urged to seize the business opportunities of a growing NGV market. Both letters set out a number of action points.

According to the latest figures from IANGV there are now 7.1 million NGVs and 11,000 refuelling stations worldwide. The growth in the global fleet has averaged 30.6% a year since 2000 and its current annual consumption of gas is 22 bcm. Looking ahead to 2020 and taking a more conservative annual growth rate of 18% (which has been the average since 1991), the forecast is for 65 million NGVs consuming 200 bcm.

In terms of reducing global greenhouse gas emissions, the current fleet emits 15 million tonnes less CO₂ in a year compared to gasoline or diesel fuelled vehicles. And as far as the local environment is concerned, NGVs also emit less NO_x and particulates, and are quieter.

Since transportation accounts for some 65% of global oil use, greater use of NGVs can reduce oil dependency and in turn has the potential to dampen oil price fluctuations. Those countries with domestic natural gas production that can substitute for imported oil will see an immediate balance of payments improvement, while using biomethane could bring this benefit to all. Biomethane can be produced from organic agricultural and communal waste and thus does not involve diversion from food production, unlike liquid biofuels. Several countries have already introduced biomethane in their vehicle fuel mix.

Developing the NGV market will offer more flexibility in terms of energy choice and thus enhance overall security of supply. It will also create new jobs and new domestic industries, and offers a pathway to the use of hydrogen as a transport fuel in the longer term.

IGU, IANGV and Marcogaz point out that NGV technology is mature, safe and reliable. The majority of NGVs on the road today are after-market conversions, but most vehicle manufacturers have



In the Indian capital New Delhi all public vehicles have been converted to use CNG.

natural gas versions of popular models of cars, trucks and buses. The technology for the refuelling of NGVs is often integrated into conventional service stations, while private owners can now also refuel at home. Larger commercial users run their own depots.

They also point out that the G8 leaders (in their July 2006 summit) and the APEC Energy Ministers (in May 2007) supported the enhancement of global energy security through actions to promote energy efficiency in transportation and to diversify the fuel mix. Moreover, in December 2003 the European Union endorsed the concept of natural gas replacing 10% of the petroleum in the transportation sector by 2020.

● Action needed

IGU, IANGV and Marcogaz urge governments to make a long-term commitment to support NGV programmes and specifically to:

- Lead by example by introducing natural gas in fleets owned or sub-contracted;
- Implement public awareness programmes covering all aspects of NGVs and refuelling and what can be achieved from the environmental point of view;
- Support education and training at all levels in the NGV and motor vehicle industry;
- Support refuelling station development plans;
- Cooperate on developing and harmonising NGV-related standards and codes; and
- Support investments by stakeholders (vehicle owners, car manufacturers, gas companies and fuel distributors) through fiscal incentives and non-technical measures such as preferential parking spaces and traffic zones/routes for NGVs.

They believe that NGVs offer a significant market growth opportunity and urge the gas industry to become more actively involved by:

- Investing with fuel distributor partners in refuelling infrastructure;
- Committing to use natural gas in industry vehicles;

TOP FIVE NATIONAL NGV FLEETS (MILLIONS)

Country	2007	World Rank	2000	World Rank
Argentina	1.65	1	0.462	1
Pakistan	1.55	2	0.12	3
Brazil	1.426	3	0.06	6
Italy	0.433	4	0.32	2
India	0.335	5	0.01	10

Source: IANGV.

- Providing incentives and support for early adopters;
- Communicating to customers the advantages of NGVs; and
- Committing to move through the stages of innovation to profitability.

IGU, IANGV and Marcogaz are convinced that natural gas in the transportation sector will benefit society, and that closer cooperation between the industry and governments should be encouraged.

More information is available at www.igu.org, www.iangv.org and www.marcogaz.org.



A CNG refuelling station in Rio de Janeiro, Brazil.



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