

Counting Down to the 23rd World Gas Conference

By Robert C. A. Doets

Preparations are well underway for the 23rd World Gas Conference and Exhibition, which will take place at Amsterdam RAI Congress Centre in the Netherlands in June 2006. In this short report you will find details about the current status of the activities developed by the Organisers.

• IGU Graduate Thesis Prizes 2006

The Organisers of WGC2006 are the Royal Dutch Gas Association (KVGN), EnergieNed and Gasunie, and one of their aims is to promote promising young graduates in the relevant beta sciences (such as physics, chemistry and engineering) and gamma sciences (such as economics and sociology), who want to become professionals in the gas industry. For that reason they have set up a competition and endowed a "Dutch Gas Industry Prize" with students finishing their studies in the Netherlands between early May and the end of 2005 eligible to enter. Participants need to submit a paper that addresses issues related to the areas covered by the Strategic Guidelines for the current IGU Triennium and the most outstanding and innovative paper will win.

The Royal Dutch Gas Association, EnergieNed and Gasunie hope that other countries will follow this example and set up similar national competitions. As a stimulation to do so they have endowed international IGU Prizes worth €20,000. The idea is that the first prize winners (in beta as well as in gamma sciences) of the national competitions will be nominated by the IGU Charter Member to go forward to an international competition, which will take place provided a minimum of three Charter Members nominate contestants. The IGU Prizes will be awarded in two categories (the first covering technology and sustainability and the

second corporate social responsibility) and the award in each category will consist of a certificate and a cash prize of €10,000.

There is a further incentive for Charter Members to organise national competitions. Once they have done so and then nominated a beta and/or gamma first prize winner, they will receive a free voucher for a course at the Energy Delta Institute, the International Business School & Research Centre for Natural Gas. Located in Groningen, this Institute is a joint initiative of the University of Groningen, Gazprom and Gasunie.

For further information and the full rules for the "IGU Prize" please see www.igu.org under "News".

Technical programme

The Coordination Committee and the Executive Committee held their second formal meeting of this Triennium in Doha, Qatar, in March. The meeting was organised following the LNG-14 Conference and along the same lines as the first meeting in Cape Town. The Committees, Task Forces and Projects presented the first results of their work and it was announced that the organisation of the 23rd World Gas Conference in Amsterdam would be basically the same as for the 22nd WGC in Tokyo. The final programme will be presented at the IGU Council meeting in Oslo, Norway, in September.

Marketing

In recent months WGC2006 has been promoted at three major gas events in cooperation with the IGU Secretariat. These were LNG-14 in Doha, Gasex 2004 in Singapore and the International Conference on Development in the Gas Industry of South and East European Countries in Transition in Belgrade. At presstime preparations were in hand for further promotion at the 19th World Energy Congress in Sydney in September.

At the end of June the second formal announcement was made and more than 10,000 copies were distributed all over the world. The database was created with the assistance of many

116

COUNTING DOWN TO THE 23RD WORLD GAS CONFERENCE



IGU Members, who kindly provided mailing lists. Of course, the second announcement was also published on the WGC2006 website (www.wgc2006.nl).

Key dates

Key dates in the run-up to WGC2006 are:

March 1, 2005 Publication of call for papers

September 1, 2005 Deadline for abstract

submission

Deadline for names of invited

speakers

November 1, 2005 Paper selection ready, authors

to be notified

November 2005 Publication of the general

programme and registration

handbook

February 1, 2006 Deadline for paper submission

by invited speakers

Deadline for Committee report

submission

June 5-9, 2006 Conference and Exhibition

dates

Exhibition

On June 17 and 18 the first site inspection and presentation of the WGC venue for country delegations was held. Over 60 participants came to Amsterdam to visit the RAI Exhibition and Congress Centre and major hotels. At the RAI, 17,500 square metres net are available for the exhibition and so far companies from all over the world have already reserved more than 8,000 square metres. The second site inspection will take place on October 6 and 7, 2005.

Technical visits

There will be two technical visits. One will be organised in cooperation with Fluxys of Belgium to the Zeebrugge gas hub and participants will stay in the picturesque Belgian town of Brugge. The other will be to the Groningen gas field on the North Sea coast of the Netherlands with accommodation in Groningen.



More information

Please refer to www.wgc2006.nl to find more details about Amsterdam, the tentative programme, how to reserve hotel accommodation, contact details of the Conference Secretariat and other information. We look forward to seeing you in Amsterdam.

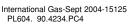
Robert C. A. Doets is the Chairman of the National Organising Committee WGC2006.



Technical visits will be made to the Zeebrugge gas hub operated by Fluxys (TOP) and the Groningen gas field (ABOVE) operated by NAM (Nederlandse Aardolie Maatschappij), a 50/50 Shell/ExxonMobil joint venture).

112





Abu Dhabi Gas Liquefaction Company Ltd (ADGAS)

A pioneer LNG producer

ADGAS has built a reputation as one of the most reliable and experienced suppliers of LNG and LPG to world markets. To maintain its reputation and commitment to its customers, ADGAS has embarked on a number of major initiatives which enhance the longevity and reliability of its plant.

Abu Dhabi Gas Liquefaction Company (ADGAS), a member of the Adnoc group of companies, has been producing and exporting LNG and LPG since 1977, mainly to Asia-Pacific markets. ADGAS, the first LNG producer in the Middle East, was envisaged and established thanks to the foresightedness of the president of the United Arab Emirates (UAE), His Highness Sheikh Zayed Bin Sultan Al-Nahyan.

ADGAS has been a pioneer in the production of clean energy and protection of the environment through processing the gas separated during the process of oil production, which would otherwise be flared.

The ADGAS plant consists of three processing trains. Each of trains 1 and 2, which were commissioned in April 1977, has a production capacity of 170 tonnes an hour. Train 3, the largest LNG train in the world when constructed, was commissioned in July 1994 and has a production capacity of 320 tonnes an hour.

Feed gas for the LNG plant is made up of associated and non-associated gas. The associated

General Information

Plant: Das Island; Train I, II & III

tart-up: 1977/1994

Shareholders: ADNOC, 70%; Mitsui, 15%;

BP, 10%, Total 5%

Capacity (million t/y): 8.0

Process method: APCI

Gas fields: Abu Dhabi Offshore fields Exports to: Japan, other Asian markets,

Europe & USA

Table 1.

gas is separated at Abu Dhabi's offshore oilfields under various pressures. The non-associated gas fields include Abu Al Bukoosh Khuff, Uweinat, Areaj and Umm Shaif Khuff.

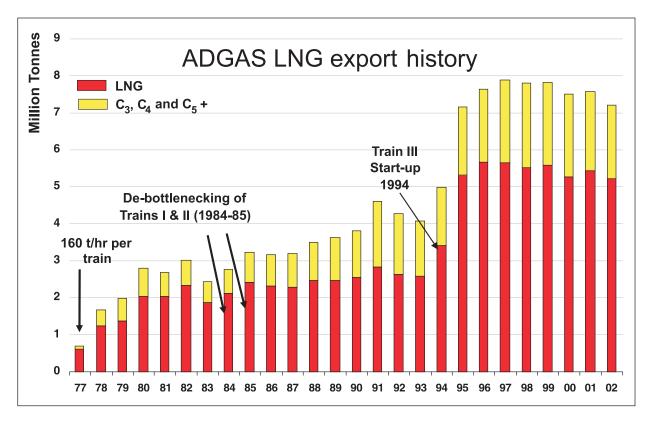
Markets and customers

ADGAS produces and exports around 8 million tonnes a year (t/y) of LNG, LPG, C5 and liquid sulphur. LNG represents around 65% of total sales revenues. In 1972, an agreement was signed with Tokyo Electric Power Company (Tepco), as sole buyer of around 2 million t/y of LNG over a 20year contract period. The first LNG shipment left Das Island, where ADGAS LNG Plant is located, for Tepco in April 1977. The relationship between the two companies was further expanded and consolidated, resulting in the signing of an agreement, in October 1990, under which ADGAS doubled its production as from 1994, and Tepco agreed to purchase most of the additional volumes for a 25-year period. Since 1995, surplus production has been successfully sold to LNG buyers in Europe, Asia and the USA.

▶ HSE performance and initiatives

ADGAS has always had a strong commitment to health, safety and environmental (HSE) issues, and to the safety and wellbeing of its employees and contractors. It treats HSE issues on a par with other key business objectives and has developed key performance measures for HSE improvements. Procedures and systems have always been seen by ADGAS as the key to providing assurance and consistency in all aspects of the gas liquefaction business.

The company's safety performance record speaks for itself. Its first major milestone, in safety terms, was achieved in July 1993 when it was awarded the advanced 3 Star International Safety



Rating System (IRIS) — evaluated by external auditors of the International Loss Control Institute. The award moved ADGAS to an independently verified level comparable with many of the best performing multinational companies in the industry. A landmark achievement of 8 million man-hours worked without a lost time injury was reached in January 2004.

Since its early days, ADGAS has taken numerous initiatives to improve the environment, including the commissioning of sulphur-recovery plants, and

ADGAS Sal	es Contracts
------------------	--------------

Purchaser:	TEPCO	BP Gas Marketing
Amount (million t/y): 4.70		0.5 - 0.75
Contract Length:	to 2019	3 years
Start:	1977	2002
Signed:	1972	2001

Table 2

reducing sulphur dioxide emission. All have resulted in significant environmental improvement and new similar projects are planned, including the installation of a third boil-off gas (BOG) compressor to reduce flaring further, and the upgrading of the sulphur-recovery unit, to reduce emissions. ADGAS achieved ISO14001 certification in 2004; which evidences its success in environmental management.

Human resources

ADGAS work force – its most precious asset – has also developed over the years. Employing some 1,000 highly trained professionals, ADGAS is proud that the number of UAE national employees has steadily increased, from 16 in 1977, or 3% of the work force, to 483 by 2003, nearly 46% of the work force. In recent years, a comprehensive competence based programme for continuous development of the work force has begun to ensure business continuity with quality experience for the future success of ADGAS workforce.



Publications and Documents Available from IGU

As a non-commercial organisation promoting technical and economic progress in the gas industry worldwide, IGU offers its publications free of charge and you are invited to order the IGU publications currently available from the Secretariat. (All documents are A4 format unless stated otherwise.)

2003-2006 Programme

- Strategic
 Guidelines as
 approved by the
 IGU Executive
 Committee in
 Tatranska
 Lomnica on April
 10, 2003, (4
 pages)*.
- Triennial Work
 Programme as approved by the



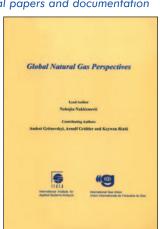
- Summary of Triennial Work Programme, (14 pages).
- TWP 2003-2006 session on the 22nd World Gas Conference 2003, (DVD and video).
- Exhibition WGC 2006, leaflet introducing the World Gas Exhibition in Amsterdam, (3 pages).

2000-2003 Programme

- Triennium 2000-2003, TCC Final report, IGU October 2003, (132 pages).
- Triennium 2000-2003, NOC Final report, IGU October 2003, (30 pages).
- 22nd World Gas Conference Tokyo 2003, (DVD).

Scientific and technical papers and documentation

Global Natural Gas Perspectives, Nebojša Nakićenović e.o., IIASA, IGU, October 2000 (71 pages 18 x 25.7cm). This booklet presents research based arguments as to how natural gas appears to be suited to provide a bridge from the current energy system to a new era of more environmentally sound



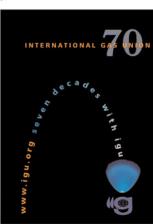


Natural Gas
 Supply to 2100,
 M. A. Adelman
 and Michael C.

energy systems.

Lynch, DRI-WEFA, IGU, October 2002 (51 pages 18 x 25.7 cm). This booklet outlines the authors' assessment of a long-term supply curve for natural gas using recent estimates of costs and known reserves.

Seven Decades with IGU, ISC 2003, (186 pages). IGU's 70th anniversary fell in 2001 and at the next World Gas Conference in 2003 this book was launched containing

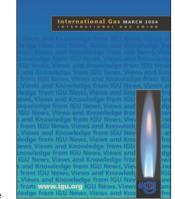




PUBLICATIONS AND DOCUMENTS AVAILABLE FROM IGU



- articles on the organisation's history as well as on current and future issues facing the international gas industry.
- Proceedings of the 20th World Gas Conference, Copenhagen 1997, (CD Rom).
- Proceedings of the 21st World Gas Conference, Nice 2000, (CD Rom).
- Proceedings of the 22nd World Gas Conference, Tokyo 2003, (2 CD Roms).
- IGU Triennium 2000-2003 WOC 2 Basic activity study, Worldwide UGS Database, (CD Rom)**.
- International Gas, ISC March 2004 (128 pages). The first issue of the IGU magazine

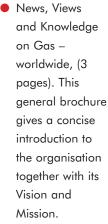


IGU organisational information

- IGU Articles of Association, as approved by the
 - IGU Council September 18, 2002, (28 pages A5).
- IGU Guiding Principles for Sustainable Development, October 2003, (12 pages A5). This leaflet contains the recently updated and approved recommendations to IGU Members

and the global gas industry regarding responsible behaviour in this context.







- A Better Future Towards Sustainable Development, (5 pages). This brochure highlights IGU's position in promoting natural gas as a part of the solution to climate change.
- IGU Organisation Chart 2003-2006, (3 pages).
- * Can also be downloaded from the IGU website
- ** Can also be downloaded from the IGU collaboration portal

The publications, brochures, DVDs and CD Roms can be ordered (as long as available) from:

The IGU Secretariat Lisbeth Koefoed P. O. Box 550 c/o DONG A/S Agern Allé 24-26 DK-2970 Hørsholm Denmark

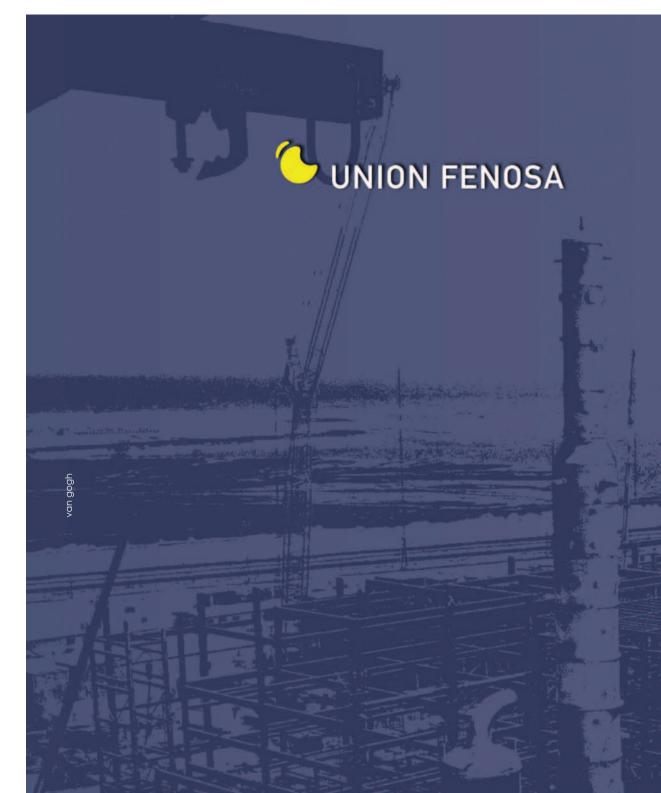
Tel: +45 45 17 12 00 Fax: +45 45 17 19 00

E-mail: secr.igu@dong.dk

or from the Coordination Committee Secretariat







qas SEGAS







SEGAS, a company owned by UNION FENOSA GAS, which is 50 % Eni and 50 % UNION FENOSA, is constructing an LNG plant in the free zone area of Damietta Port. The 35 months schedule of the project commenced on the 26th of November, 2001. On December 2003, after approximately 26 months progress, the project is 80 % complete. The LNG production is expected in November 2004

Damietta LNG plant is the first LNG plant built in Egypt and it will be the first exporter of LNG to Europe and other markets, making Egypt to join the LNG exporters club and setting a new milestone in Egypt's energy business. The plant location at Damietta Port on the Mediterranean is a very strategic position which gives potential access to all the LNG markets.

The LNG plant of SEGAS is the biggest capacity train in the world to date and it is designed to produce 4.8 million tonnes per annum. The technology used is propane pre-cooled mixed refrigerant liquefaction process (APCI).

The plan is to complete all utilities start up by July 2004 after which process train units will be commissioned one after the other, up to November 2004, when the train begins to produce LNG, in order to export the First Cargo by December 2004.

The project represents an important boost to Egypt's economy as it will generate significant currency hard revenues for the Country. The project construction work force is around 6000 people,97 % of which are local resources.

Safety records of the project are highly commended as its results are setting a world class performance standard.

Egypt's First LNGPlant

WAY FORWARD

January 2004	Jetty completion
June 2004	Liquefaction train completion
July 2004	Mechanical assembly completion
August 2004	Storage tanks completion
September 2004	Process train pre-commissioning/commissioning
November 2004	Start-up
December 2004	Export the first LNG cargo
January 2005	Plant fully operating

SEGAS (Cairo Office) 21-23 Charles de Gaulle Street Nile Tower Building, 19th Floor 12211 Giza / Cairo, Egypt Tel +2(02) 571 51 31 Fax +2(02) 572 86 46

SEGAS (Damietta Office) LNG Project, Damietta Port Damietta, Egypt
Tel +2(057) 291 042
Fax +2(057) 291 052

International Gas Sept 2004- 15125 best EPSON BEOMSTRUE PRO 7600 PICO







IGU Events and IGU-related Events 2004-2005

2004

September 20-23 IGU Council Meeting Oslo, Norway

October 8-10 IGM 94th Session Berlin, Germany

October 12-15 WPC Youth Forum Beijing, China

October 26-28
9th IANGV Conference &
Exhibition NGV 2004
Buenos Aires, Argentina

November 1-4 IGRC-2004 Vancouver, Canada

2005

April 14-15 IGU Executive Committee Warsaw, Poland

May 23-25 IGU/ICT Global Congress Busan, Korea

September 26-30 WPC 2005 Johannesburg, South Africa

October 17-20 IGU Council Meeting Tianjin City, China

2006

March 9-11 IGU Executive Committee Goa, India

June 5 IGU Council Meeting Amsterdam, The Netherlands

June 5-9 23rd World Gas Conference Amsterdam, The Netherlands

You can find links to many of the above events by visiting www.igu.org and clicking on "Events". Under "Energyrelated Events" in the dropdown menu you can also find a link to the WEC Events Calendar displaying a multitude of energy-related events.

Acknowledgements

For the IGU Secretariat

Peter K. Storm: Secretary General Lisbeth Koefoed, Assistant to the Secretary General

For ISC

Editor-in-Chief: Mark Blacklock
Copy & Picture Editor: Elena
Christodoulou
Publisher: Nigel Ruddin
Publications Director: Robert Miskin
Finance Director: Yvonne O'Donnell
Marketing Director: Ben Clarke
Senior Consultants: Derek
Armandias, Karin Hawksley
Research Executive: Harold Green
Liaison Officer: Sirje Burton

Art and Design Director: Michael Morey Printed by: Times Offset (M) Sdn Bhd

IGU and ISC would like to express their thanks to all those who helped in the preparation of this publication. Thanks are also due to the following companies, people and organisations for providing pictures. The credits are listed by article. Where the pictures for an article came from a variety of sources, the appropriate page numbers are given in brackets after

Cover flame: David Parker/Science Photo Library.

Messages: John Stoel Fotografie (8), Søren Svendsen (12).

IGU Organisation and From the IGU Secretariat: All IGU except George Verberg, Bert Panman and Rob Aptroot: John Stoel Fotografie, Peter Storm: Søren Svendsen. Information from Organisations Affiliated to IGU: IGM (24), Marcogaz (28).

A Gallery of Pictures from the IGU Meetings in Doha: IGU.

LNG-14 in Qatar – An Emphasis on Liquefaction Plant Design: Qatar Petroleum (78, 79, 80 & 84), GE Energy (82).

Gas Developments in the Americas: EnCana Corporation (86 & 88), Atlantic LNG (90), Tony Morrison/ South American Pictures (92 & 93).

WOC 1 Takes a New Approach: BP plc (98), IGU (99), Centrica plc (100), Emerson Process Management (104).

Gas Research Comes to Vancouver: Vancouver Convention & Exhibition Centre.

Counting Down to the 23rd World Gas Conference: Fluxys (117 upper), NAM (117 lower).

124

IGU EVENTS AND IGU-RELATED EVENTS 2004-2005/ACKNOWLEDGEMENTS



An Integrated, Reliable Supplier Of LNG

With a production capacity of 23 million tonnes per annum, the PETRONAS LNG Complex in Bintulu, Sarawak is now the world's largest producer of LNG at a single location. A key player in the world's LNG business, PETRONAS owns and operates on a joint venture basis, three LNG plants which cater to the power, industrial and residential sectors in Japan, South Korea and Taiwan under long term contracts. To date, more than 3,900 cargoes have been sold with credible track record of delivery over more than 20 years.

Other than being involved in the LNG trading business, PETRONAS recently ventured into an LNG project in Egypt and a regassification terminal in the UK. With this expansion of its activities into the Atlantic Basin, PETRONAS has now emerged as an integrated global LNG player.

With state-of-the-art on site facilities, an integrated LNG infrastructure supported by well trained manpower and backed by the world's largest fleet of subsidiary-owned LNG tankers, PETRONAS with its proven delivery track record is poised to forge ahead into the global LNG industry as An Integrated, Reliable Supplier of LNG.

PETROLIAM NASIONAL BERHAD

Media Relations & Information Department, Level 70, Tower 1, PETRONAS Twin Towers, 50088 Kuala Lumpur, Malaysia
Tel: +603-2331 4766 Fax: +603-2331 2894 www.petronas.com.my

PETRONAS - Building On Its Competitive Strengths



An aerial view of the PETRONAS LNG Complex



Established on 17 August 1974, PETRONAS, the acronym for Petroliam Nasional Berhad, is one of the few successful national oil companies that grew to become a multinational corporation with an increasingly significant global presence. From its beginnings as a mere regulator and manager of Malaysia's upstream sector, it has evolved into a fully integrated petroleum group of companies engaged in a broad spectrum of oil and gas operations worldwide. This could largely be attributed to its strategy embarked in the early 1990s to globalise, expand, integrate and add value to its businesses. The strategy has worked well, as testified by PETRONAS' track record. With business interests in 35 countries, PETRONAS today derives about 80% of its revenue from international operations and exports.

PETRONAS' value-adding activities in Malaysia have helped spearhead the economy, where the development of its many oil and gas infrastructure and related facilities has provided the catalyst for industrialisation and many spin-off benefits in the country. The development of the industry has also brought about technological transfers that in turn have

contributed towards the building and enhancing of local capabilities. examples of such developments are the integrated PETRONAS Petroleum Industry Complex (PPIC) in Kertih, Terengganu in Peninsular Malaysia which is supported by the Peninsular Gas Utilisation (PGU) system, as well as the PETRONAS LNG Complex in Bintulu, Sarawak in East Malaysia.

The unique experience and expertise in nation building, coupled with the technical and operational competencies it has acquired through its involvement in the development of the Malaysian petroleum industry, have allowed PETRONAS to increasingly be the preferred strategic partner to international companies and to the host countries where it operates. Just as it has established mutually beneficial long-term partnerships with leading multinationals in Malaysia, PETRONAS adopts the same strategic approach in forging alliances in the global arena, whether with existing or new partners. In spreading its wings globally, PETRONAS places significant importance on the development of gas as a clean and environmentally friendly fuel as well as one of its key focus areas for growth in the international market.

Adding Value To Malaysia's Gas Resources

With Malaysia's gas reserves currently amounting to 87.0 trillion standard cubic feet, ranked as the 13th largest in the world, PETRONAS has invested significantly in the development of the domestic gas industry to add value to the country's abundant gas resources as well as to encourage the use of natural gas as an alternative fuel. Among the major gas projects undertaken by PETRONAS in Malaysia are the multi-phase PGU gas transmission pipeline system in Peninsular Malaysia and the LNG complex in Bintulu.

Started in 1984 and completed in 1997, the PGU system has become the backbone of the country's industrialisation, supplying processed gas to consumers in the power, industrial, commercial and residential sectors in Peninsular Malaysia. One of the biggest gas infrastructure projects implemented by PETRONAS, the PGU system comprises PETRONAS' six gas processing plants (GPPs) with a total processing capacity of 2 billion standard cubic feet per day and a trans-peninsular gas transmission pipeline spanning more than 2,200 kilometres from the GPPs in the east coast of Peninsular Malaysia to the west coast stretching from the Malaysia-Thailand border in the North to Singapore in the South. Currently, more than 70% of Malaysia's power generation is fuelled by gas supplied by PETRONAS.

While it has successfully reduced Malaysia's dependence on oil in electricity generation, the PGU project has also pioneered the first cross-border gas export in the Association of South East Asian Nations (ASEAN) region from Malaysia to Singapore in 1991. The PGU system indeed represents a vital link in the cross-border gas pipeline inter-connections of the Trans-ASEAN Gas Pipeline (TAGP) project which PETRONAS has been entrusted by the ASEAN Council on Petroleum to lead. TAGP will form the backbone of energy supply and security in ASEAN by 2020. The second linkage with TAGP is the subsea pipeline from the West Natuna fields in Indonesia to PETRONAS' offshore Duyong gas facility which received the first gas delivery from Indonesia in August 2002.

The PGU system has also provided the catalyst for the development of the petrochemical industry in Malaysia. To help realise the Government's aspiration to turn Malaysia into a regional petrochemical hub, PETRONAS is actively expanding its gasbased petrochemical business in the country through joint ventures with foreign partners who have the expertise and ready markets. This has led to the development of the integrated petrochemical complexes (IPCs) in Kertih, Terengganu and Gebeng, Pahang. The Kertih IPC constitutes part of the PPIC, developed over a period of 20 years on about 4,000 hectares of land.

The PPIC is a fully integrated world-class industrial complex housing 41 petroleumbased installations and supporting plants 20/0/04 12.44 FM rage 123

developed by PETRONAS and its partners. Of these, 11 are gas-based petrochemical plants. It is within this complex that natural gas from offshore Peninsular Malaysia is processed and piped to various commercial, industrial and residential end-users.

As part of its efforts to add value to the country's abundant gas resources, PETRONAS has introduced the Natural Gas for Vehicles (NGV) to the Malaysian transportation industry in 1986 with a pilot programme to promote the use of NGV as a cheaper and cleaner alternative fuel. PETRONAS subsequently formed a subsidiary in 1995 to undertake the development and commercialisation of NGV in Malaysia. Currently, there is a total of 37 stations providing NGV refuelling facilities in Peninsular Malaysia and there are more than 7,000 vehicles (taxis and privately owned cars) running on NGV

PETRONAS has also introduced the integrated gas district cooling (GDC) and co-generation system using natural gas as an energy source to produce chilled water for air conditioning and electricity generation. PETRONAS has successfully installed the GDC and co-generation system in three of Malaysia's most prestigious projects, namely the Kuala Lumpur City Centre where the PETRONAS Twin Towers are located, the Kuala Lumpur International Airport and Putrajaya which houses the Federal Government's Administrative Centre. The system is also used at the University of Technology PETRONAS and the Tanjung Langsat Industrial Park.

In Bintulu, Sarawak, PETRONAS owns and operates on a joint venture basis, three liquefied natural gas (LNG) plants to process and liquefy the natural gas found off the shore of Sarawak for the export market. Situated in the PETRONAS LNG Complex, the three plants have a combined annual production capacity of 23 million tonnes, making the complex the world's largest LNG production facility at a single location. Todate, the PETRONAS LNG Complex has delivered more than 4,000 LNG cargoes with credible shipment track record for more than 20 years to mainly the power, industrial and residential sectors in Japan, South Korea and Taiwan under long-term contracts, making a name for itself as an integrated, reliable and flexible supplier of LNG.

The LNG is transported to the overseas customers by a fleet of LNG tankers owned and operated by PETRONAS' shipping subsidiary, Malaysia International Shipping Corporation Berhad (MISC). With a fleet of 17 LNG tankers, which is expected to expand to 23 by the end of 2007, MISC is



LNG tank under construction in Alexandria, Egypt

the single largest owner and operator of LNG vessels in the world. The LNG tankers are an integral part of MISC's fleet of 138 vessels, including three Very Large Crude Carriers (VLCC) and 35 Aframax tankers.

With its strong position in the LNG transportation business, PETRONAS has set up an LNG trading company, Asean LNG Trading Co. (Altco) to venture into shortterm LNG trading. Altco would trade LNG above its term contracts and would operate using MISC's tonnage or other vessels if reauired.

Making In-roads Into The Global LNG Market

Backed by its solid experience and capabilities acquired through its active involvement in the development of the gas industry in Malaysia as well as its interests in gas pipeline projects in Argentina and Australia, PETRONAS has recently ventured into the global LNG arena and has already established itself as a key player in the Asian

In April 2003, PETRONAS acquired a 35.5% interest in the Egyptian LNG (ELNG) Project from Edison S.p.A. of Italy. The USD 1.9 million ELNG Project comprises the development and operation of LNG liquefaction plant and related infrastructure at Idku, approximately 50 km east of Alexandria in Egypt.

This plant is being designed to accommodate up to six trains and would provide opportunities for other

producers in Egypt to invest in future LNG export trains, without having to replicate supporting infrastructure and facilities. Construction work of ELNG's Train 1 and the initial work on Train 2 is under way. The entire LNG production output for both trains has been committed to buyers such as Gaz de France and BG Marketing Limited, a subsidiary of the British Gas (BG) Group.

The ELNG acquisition paves the entry of PETRONAS into the Atlantic Basin LNG market. Coupled with its already strong position in the LNG market of North Asia. the acquisition effectively transforms PETRONAS into one of the leading players in the global LNG industry

To further enhance this position, PETRONAS signed a letter of intent with Petroplus International NV to acquire a 30% equity in Dragon LNG to develop a proposed LNG terminal and related facilities in Milford Haven, Wales, United Kingdom. PETRONAS, Petroplus and BG Energy Holdings Ltd will jointly develop the terminal complex to receive, store, re-gas and deliver LNG to customers. This LNG terminal project, comprising a 308,000 cubic metre storage capacity, deep water jetties, a refinery and a co-generation facility, is expected to become operational in 2007. PETRONAS' other overseas LNG interests include the Pars LNG in Iran and the Kakinada Indian Oil LNG Consortium in India.

With the strong foundation laid, supported by well-trained manpower and its proven delivery and shipping track record, PETRONAS is poised to build on its competitive strengths and forge ahead in the global LNG industry as an Integrated, Reliable Supplier of LNG.

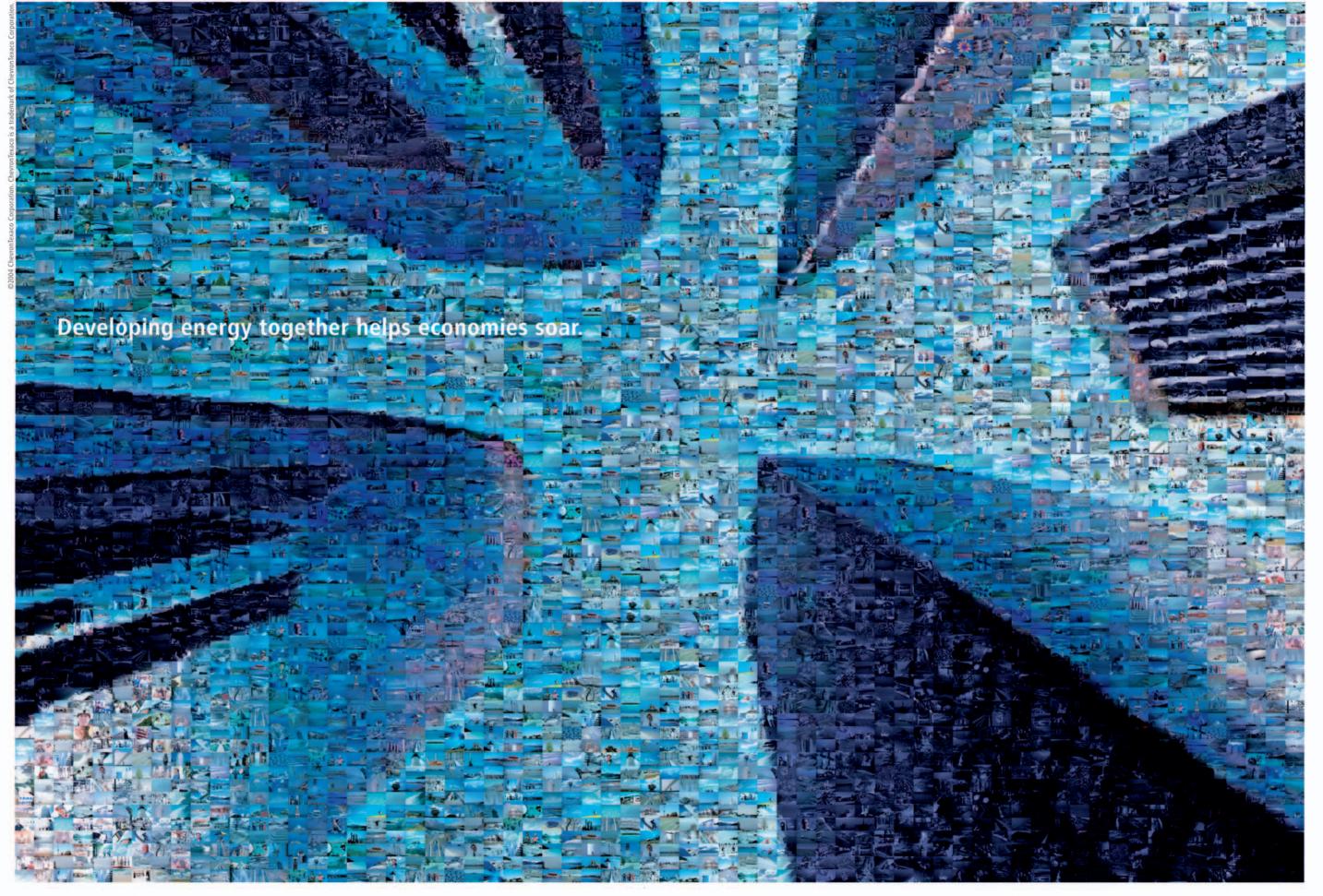


Puteri Zamrud Satu during sea trial



For more information, contact: CORPORATE AFFAIRS UNIT, PETRONAS Level 70, Tower 1, PETRONAS Twin Towers Kuala Lumpur City Centre, 50088 Kuala Lumpur, Malavsia.

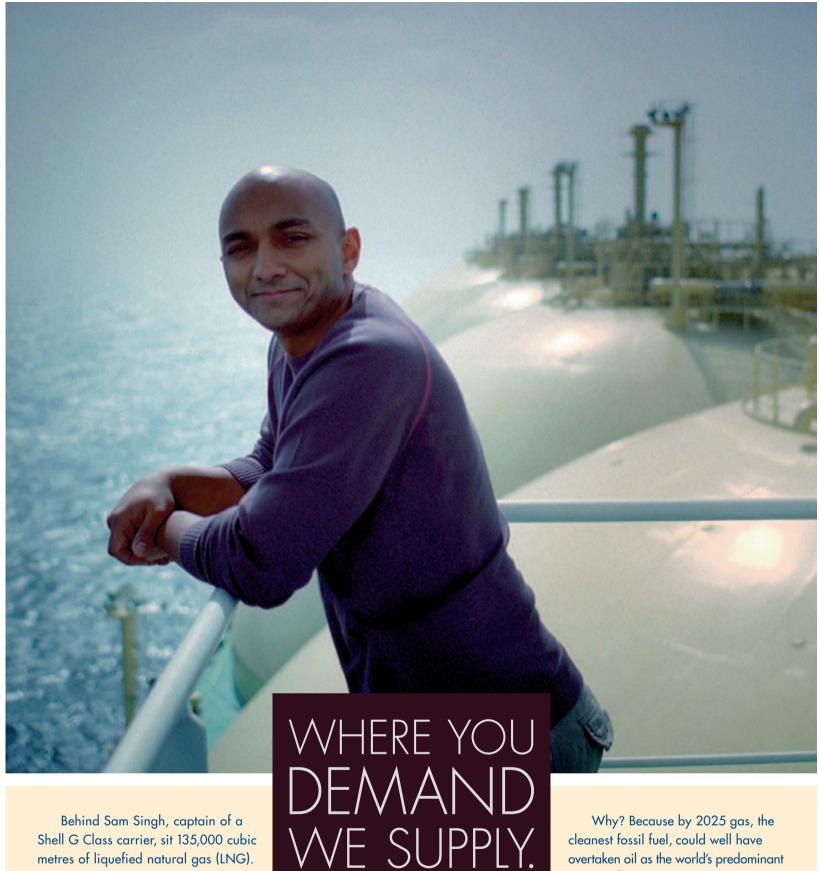
Tel: 603-23315000/20515000. Fax: 603-20512894 Website: www.petronas.com e-mail: webmaster@petronas.com.my



Working with our partners, we're developing natural gas resources that once were locked far from markets. Together, we're developing new ways to deliver gas to North America and Asia. As a global LNG leader, we're delivering more than energy. Our partnerships also deliver all the growth and promise that come with it.

ChevronTexaco

Turning partnership into energy.™



Shell G Class carrier, sit 135,000 cubic metres of liquefied natural gas (LNG).

On deck, it's a balmy 25 degrees. In the insulated LNG containers, it's minus 160°C. Sam's carrier is just one of our specialised fleet that carries over nine million

tonnes of LNG around the world every year.

They bridge the gap between places like Brunei, Oman and Nigeria, with an abundance of natural gas, and markets with a rapidly rising demand like Asia, the Americas and Europe.

We have been investing in our LNG operations for over forty years. Now these efforts are paying off handsomely.

Within ten years, the number of our LNG plants will have doubled. So too will the number of countries we supply.

cleanest fossil fuel, could well have overtaken oil as the world's predominant source of energy.

Developing and connecting the gas markets of the world is an increasingly crucial business in which no one matches our expertise and commitment.

And if people like Sam have anything to do with it, no one

To find out more about our Gas & Power business visit www.shell.com



PI 604 89/4239