SUSTAINING GLOBAL GROWTH

Natural gas is one of the fastest growing components of the world's primary energy consumption. In Malaysia, while there has been significant growth over the years, the industry is not without its challenges. SREEREMA BANOO talks to industry players about some of the issues they face and the way forward.

Over the last two decades, the Malaysian gas industry has grown significantly with the support of government policies aimed at reducing dependence on oil while ensuring a cleaner environment. A large part of this success is attributed to careful planning that has facilitated the timely development of the country's abundant gas resources to meet national economic and energy objectives.

Malaysia is endowed with natural gas reserves three times larger than its oil reserves. With total proven natural gas reserves of 2,400 billion cubic metres (88 trillion cubic feet), Malaysia is ranked the 13th largest in the world. Most of these gas reserves are located offshore Peninsular Malaysia, Sarawak and Sabah. These natural gas resources are carefully harnessed to serve as the main source of fuel for Malaysia's industrialisation through the Industrial Master Plan, charting out the long-term energy utilisation strategy for Malaysia. This saw Malaysia ushering in the gas era in the 1980s with the introduction of natural gas as a source of fuel for power generation and industrial development as well as the harnessing of the gas resources for foreign exchange earnings in the form of liquefied natural gas exports (LNG).

Malaysian gas activities span the entire natural gas chain. This includes gas exploration, gas processing plants, liquefaction plants, pipeline, transmission, marketing and trading of LNG, gas district cooling, natural gas vehicles and the supply of industrial utilities.

Today, Malaysia has one of the world's largest LNG producing facilities in a single location, and has interests in more than 10,000 km of natural gas pipelines worldwide.

Globally, the country meets 21 per cent of total LNG needs. In terms of LNG exports, Malaysia supplies 49 per cent of Taiwan's LNG needs, 25 per cent of Japan's needs and 21 per cent of that of South Korea. Spearheading the country's exports of LNG is Malaysia LNG Sdn Bhd (MLNG), which owns three plants – MLNG Satu, MLNG Dua and MLNG Tiga – in the PETRONAS LNG Complex in Bintulu, Sarawak. In just 30 years since its incorporation and 25 years since its maiden delivery, MLNG has risen to become one

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Ngau Boon Keat... Dialog and other local companies have ensured the smotth and continous development of the local gas industry.

of the world's top five largest exporters of liquid natural gas – certainly no mean feat. Today, the production capacity of MLNG Satu, Dua and Tiga totals about 23 million metric tonnes a year while exports for the financial year ending March 31, 2009, stands at 22.34 million metric tonnes, says MLNG Managing Director and CEO Mohammad Medan Abdullah.

In charting the growth of Malaysia's LNG exports, the role of MISC Bhd cannot be overlooked. The shipping company has grown from a humble player with a fleet of five to what is now the largest single owner-operator of LNG tankers in the world with 29 LNG tankers. According to MISC CEO Amir Hamzah Azizan, MISC's 29 LNG carriers transported about nine per cent (3.6 million cbm) of world LNG (42.7 million cbm) at the end of its financial year 2008/09.

As the country's first LNG port, Bintulu Port in Sarawak has also witnessed the growth of the country's gas industry. According to Bintulu Port Sdn Bhd CEO Mior Ahmad Baiti, growth of LNG throughput through Bintulu Port grew in tandem with the expansion of the LNG plant capacity. "For the first decade from 1983, volume averaged at 6.6 million tonnes per annum, increasing to 15.0 million tonnes when the second plant (MLNG Dua) came onstream in 1994. With the commencement of operation of the third plant (MLNG Tiga) in late 2003, annual volume rose to an average of 22.5 million tonnes," he says, adding that LNG volume contributes about 60 per cent to the port's total throughput and about 75 per cent to its revenue.

While there is no denying the role of MLNG and MISC in the growth of the Malaysian gas industry, the role of companies in the supporting industries cannot be overlooked either. One such company is Dialog Group Bhd, a leading integrated specialist technical services provider to the oil, gas and petrochemical industry.

Chairman and Group Managing Director Ngau Boon Keat says Dialog and other local support companies have enabled the gas industry to continue to grow smoothly. "Over the years, Dialog has developed its experienced work force, technology and equipment to handle maintenance jobs for the gas industry, with standard and quality comparable to that offered by foreign companies. This has resulted in lower costs, and faster and more complete response to demand for services by the local industry," he says.

In the case of Deleum Bhd, which supplies established turbo machinery for the gas industry, Group Managing Director Chandran Rajadurai believes that, as a niche service provider, it is important that the company offer quality and well-coordinated services. "We also play a role in providing opportunities for local Malaysians to develop technical expertise related to our product range and also in implementation of projects for the gas industry," he adds.

TIGHT GAS MARKET

While the gas industry has seen growth over the years, industry players acknowledge the challenging environment. One of the challenges facing the industry is the tight gas market. For Gas Malaysia Sdn Bhd, which supplies natural gas and liquefied petroleum gas to homes, commercial businesses and industries, supply constraints has had an impact on its expansion. Managing Director Muhamad Noor Hamid says while there is a huge potential for growth of gas sales in Malaysia – Gas Malaysia has more than 500 industrial customers that have requested for gas supply – there is insufficient gas supply to meet the demand.

Abdul Razak Saim, Head of Malaysia Gas Management at PETRONAS' Gas Business Unit, says to meet the unprecedented increase in demand more gas reserves have been developed and produced for local consumption. "Nonetheless, the supply increase could not cope with the steep increase in gas demand," he says, adding that sustaining

gas production from domestic gas fields is a challenge because gas production from current gas fields has been declining.

"To mitigate the production decline so that the gas production from domestic gas fields can be sustained at the current prevailing level, more gas fields including small ones have been developed. More domestic gas fields will be developed in the future. More investments will be undertaken to explore and develop oil and gas resources. However, the development of future domestic gas fields will be more costly and challenging because the gas reserves contain high carbon dioxide. Carbon dioxide is corrosive in nature. This would result in higher development cost since the field development projects would have to take into account the corrosion risks and the need to remove carbon dioxide in the gas production.

"Future gas fields are also small, scattered and remotely located in deeper water areas. The challenge is to justify the technical feasibility of the development of these future gas fields," adds Abdul Razak.

Going forward, one option to mitigate the tight gas market is to bring in gas from other new sources. Abdul Razak says natural gas from West Natuna (in Indonesia) has been flowing into Malaysia's gas supply system since 2002 while natural gas supply from the Malaysia-Thailand Joint Development Area (JDA) has been flowing in since 2005. "These additional sources of gas supply have enhanced the tight gas market to a certain extent. Currently, gas supply from these sources comprises about 20 to 24 per cent of total gas supply to Peninsular Malaysia. However, market distortions resulting from the artificially low gas pricing are too dominant. Even these new sources of gas supply could not meet all requests for natural gas," he says.

According to the Ninth Malaysia Plan (2006-2010), natural gas supply from West Natuna, Indonesia and the Malaysia-Thailand JDA is expected to rise to 250 million standard cubic feet per day (mmscfd) and 390 mmscfd respectively in 2010 to meet increasing domestic demand in Peninsular Malaysia.

Abdul Razak points out that, given the heavy cost to the nation, the tight gas market must be mitigated through demand-side management. "This has been done via regular gas price reviews since the root cause of the gas market distortions is the artificially low gas prices," he adds.

IMPACT OF THE GLOBAL SLOWDOWN

Besides the tight gas market, industry players reckon the current global economic slowdown will have an impact on the gas business. They say a large portion of the gas demand comes from industrial users, particularly from the power, petrochemicals and chemicals sectors, food production, iron and steel mills that would then experience a lower utilisation. Gas Malaysia's Muhamad Noor attests to the impact of the slowdown. "The bulk of our customers are industrial customers whose production has been affected by the economic downturn, and this has directly affected the volume of gas consumed," he says.

The slowdown appears to have had an impact on LNG trade as well. Bintulu Port's Mior says, for the first quarter of 2009, LNG exports dropped by seven per cent against MLNG's planned shipping schedule. "If this persists until the end of the year, then we can anticipate a decline in volume this year," he adds.

MISC, however, holds a more optimistic view. "LNG projects generally require long-term contracts and we believe long-term contracts will continue to be the basis of the industry. Most of our LNG vessels are currently servicing long-term charters with a couple of medium charters. At the same time, we are actively seeking out new clients as well as venturing into new technology areas for long-term sustainability," says MISC's Amir.

While Amir concedes that the overcapacity in LNG vessels is expected to put pressure on charter rates for spot and short-term charters, he believes that a number of new production facilities will be coming on-stream and some of the surplus capacity will be absorbed by these facilities. "Moreover, global LNG output is set to triple by 2020 and we believe that this will boost demand for LNG transportation capacity," he adds.

MLNG's Medan, too, does not deny that the current global economic crisis is impacting both gas consuming and exporting countries. "For the gas consuming countries, the economic downturn translates to a review of the respective countries' primary energy mix, leading to a reduction in the import of LNG. For the gas exporting countries, it creates a very challenging situation in terms of managing upstream and midstream activities," he says.

Chandran Rajadurai... Deleum plays a role in helping Malaysians develop technical expertise.

Muhamad Noor Hamid... gas supply does not meet demand.

Abdul Razak Saim... says demand-side management is necessary to deal with the tight gas market.

Medan adds that for LNG exporters, the marketing and trading of excess volume produced and not taken by the buyers is a challenge that cannot be overlooked. "In addition, there is a need to optimise the infrastructure – LNG plants and ships. And, of course, we also need to manage the buyers' expectations," he adds.

GROWING SUSTAINABLY

Medan adds that, while the near-term outlook remains challenging as both gas producing and consuming countries review their respective energy policies and plans to mitigate and/or ride the impact of the global economic turmoil, there is a general consensus that the economy will rebound over the next two to three years. "Over the longer term, natural gas consumption is projected to grow and will continue to compete with coal. We should see a return to the original projection where demand exceeds supply," he adds.

Dialog's Ngau concurs, adding that the industry can also expect increased demand from the residential segment as natural gas is a clean energy source.

Notwithstanding the short-term challenges, Medan believes that the prevailing global economic crisis presents the industry an opportunity for all parties to work together to ensure the LNG industry remains buoyant, robust and dynamic. "This is particularly important for the Asia Pacific region, whereby the major traditional LNG importing countries are almost totally dependent on LNG to complement their overall energy resources needs. All parties must work together to ensure the region's LNG supply and demand scenario remains balanced," he says.

Industry players point out that key to the industry's growth is the role of technology and partnerships.

Deleum's Chandran says, going forward, the company is looking for productive partnerships and collaboration that will enhance its ability and capabilities within the industry.

In underscoring the importance of technology, Medan says the advent of technology over the years has resulted in the development of larger LNG train capacity, as well as larger ships. "This has contributed to more efficient production and transportation," he says.

While these were driven by the availability of abundant gas resources, either onshore and at shallow water areas, Medan points out that huge reserves are gradually depleting, and new ones need to be discovered and developed in order to sustain and supplement the increasing demand for natural gas. "Floating LNG technology and non-conventional LNG projects (coal bed methane to LNG) are now emerging to complement the global gas supply chain. Hence, technology advancement and partnerships between experienced LNG players and proprietary technology owners are essential. This will in turn ensure that the industry remains robust and dynamic," says Medan.

Echoing Medan's thoughts on the importance of technology, MISC's Amir discloses that one area of focus for MISC is to develop a technology-based portfolio by venturing into LNG Offshore Technology Solutions.

PETRONAS' Abdul Razak feels that while Malaysia has done well to develop its oil and gas resources, the challenge is to ensure that the production and utilisation of natural gas is managed responsibly for the benefit of the nation, for both present and future generations.

"As a nation, we need to encourage greater energy efficiency and conservation of a resource that is finite, yet highly valuable," he says.

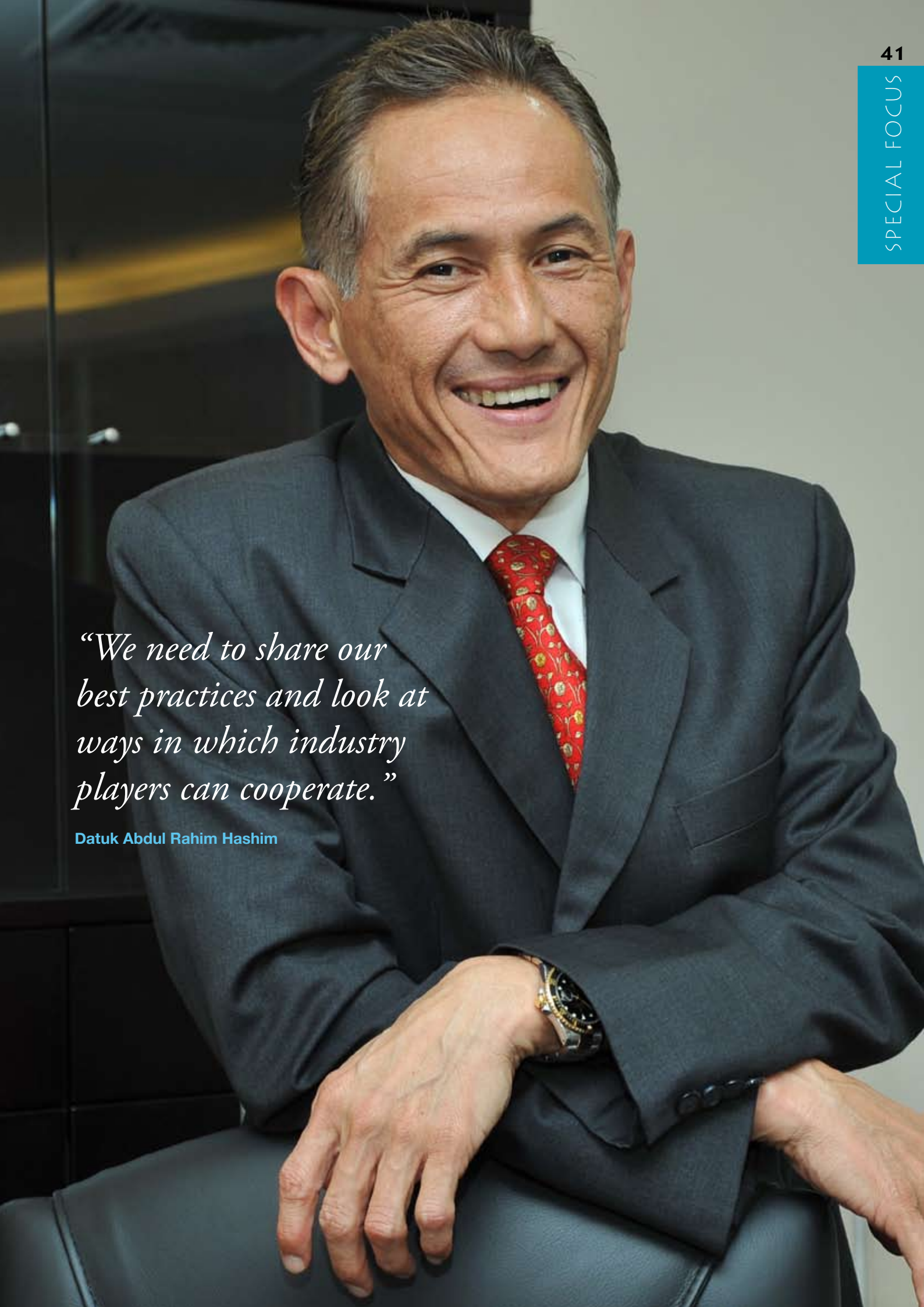
MAKING A DIFFERENCE

As Datuk Abdul Rahim Hashim prepares to assume the helm of the International Gas Union (IGU), the Malaysian Gas Association President is also keenly aware that the 2009-2012 triennium comes at a time when the gas industry faces intense challenges. Here, he talks about these challenges and the preparations for the triennium as well as how he hopes Malaysia will make a difference to the international organisation.

"We are not mere passengers; we want to ensure that something substantive comes out of our presidency." If Datuk Abdul Rahim Hashim's statement sounds emphatic, it's because he is clear and unequivocal about the Malaysian Gas Association (MGA)'s role and responsibility for the next three years. "Winning the presidency is just the beginning. We want to make a difference from the time we assume the presidency to the time we hand over in 2012," he says.

Indeed, since 2005, when the MGA edged Russia to win the bid for the IGU presidency, the non-profit organisation has been busy with the Triennial Work Programme (TWP), which outlines areas of study and projects to be undertaken in the next three years. Apart from initiating a reorganisation of the IGU Coordination Committee, where the role and scope of some of the Programme and Working Committees have been enhanced, the MGA has also introduced three new task forces to tackle projects of special interest.

For Datuk Rahim, two of these – namely building strategic human capital and nurturing future generations – are particularly pertinent. Elaborating on the former, he says: "The industry has expanded so wide and fast within the last decade that in order to protect the integrity of the industry (in terms of facility operations and safety), it really boils down to issues of capacity and competency. If we don't address these issues, the industry will be at risk…we need to share our best practices and look at ways in which industry players can cooperate to achieve this in the long run."



"We need to share our best practices and look at ways in which industry players can cooperate."

Datuk Abdul Rahim Hashim

Equally, he points out, with the younger generation increasingly turning their backs on fields relating to science and mathematics – either because of lack of interest in these subjects or due to the perception that the oil and gas industry is a 'sunset industry' and not sustainable – the industry has an important role to play in rebuilding its image. "We need to send the message that, besides being able to build a career in oil and gas, these industries also contribute towards the well-being of mankind and nation-building," he says, adding that in the past such image building endeavours were carried out by individual companies and not led by an industry group. "The industry has to think out of the box to get the younger generation interested in science and maths…we need to get the talent pipeline established."

Recognising the importance of geo-politics – that pose as barriers or challenges towards developing gas supply markets in some parts of the world – Datuk Rahim and his team have initiated another task force to analyse the geo-politics of the natural gas industry.

"All these task forces will be driven by the presidency and we hope to publish good reports based on the work carried out which will benefit our members and the industry as a whole that can then be used as a basis for future trienniums," he says. Conceding that the IGU at present is relatively low-profile in terms of its projects and activities, Datuk Rahim hopes this will change during the Malaysian presidency. "We want to publish more work and at the same time also ensure that the work is substantive."

Apart from the task forces, a total of 29 studies have been proposed, says Ho Sook Wah, Incoming Chairman of the IGU's Coordination Committee. "With the finalisation of these study topics, invitations will be sent out to all members for their participation in the Committees. The first draft of the TWP document has been completed and we are now in the process of fine-tuning it and readying for presentation at the IGU Executive Committee meeting in London in June."

As Datuk Rahim and his team gear up to assume leadership of the IGU, preparations are also under way for the 25th World Gas Conference in 2012 when the MGA hands over the reins to France. National organising committee chairman Wan Zulkiflee Wan Ariffin says a full-time team comprising dedicated and committed staff has been set up in preparation for the event. In addition, a company has been incorporated to organise the event. "Over the last few months, efforts have been taken mainly to recruit talented individuals, engaging the relevant authorities as well as developing strategic plans for the event," he adds.

SUSTAINING FUTURE GLOBAL GROWTH

While there is definitely excitement in the run-up to the presidency, Datuk Rahim is also keenly aware of the fact that the MGA's presidency to the IGU comes at a time when the industry faces keen challenges. "The next three years will be particularly challenging years for the gas industry as the global economy is grappling to recover from the recession," he says.

Wan Zulkiflee Wan Ariffin... strategic preparations are being made in advance of the 25th World Gas Conference in 2012.

Some of the challenges include issues of supply; the extent, and adequacy, of investment by gas players; the development of appropriate technology to promote efficiency; and the shortage of talent in the industry.

Given the challenging environment, it is apt that the theme chosen for the 2009-2012 triennium is *Gas: Sustaining Future Global Growth*. "Gas continues to be a key element in the global energy mix. The challenge is not just to ensure that gas continues its dominance as the fuel of choice, but to provide for future sustainability from the economic, social, technical and environmental aspects in order to contribute to the global economic growth.

"The gas industry is a long-term business, with investments in major projects taking many years to reach payback. A constantly changing world creates not just economic and technical challenges but also political risks for investors in long-term international projects or downstream infrastructure that relies on remote upstream supplies," says Datuk Rahim.

"Natural gas has been clearly seen as the fuel of choice, but the success of the global gas markets has made perceptions less clear. In several regions, natural gas is now a depleting resource and this encourages approaches that maximise value and strive for increased energy efficiency. The longer-term sustainability of the gas industry requires policy decisions in the short term that encourage investment that (in turn) would benefit the world for many generations to come."

He adds that the studies to be undertaken by the IGU's five working committees are directed towards addressing issues and challenges along the gas value chain. In addition, the studies will also be aligned, where appropriate, to strategic guidelines namely enhancing the role of gas for sustainable development and balancing the needs of all stakeholders; improving the availability of gas and access to markets; maximising efficiency throughout the expanding gas value chain; and ensuring adequate human capability to enable the growth and integrity of the industry.

GOING GLOBAL

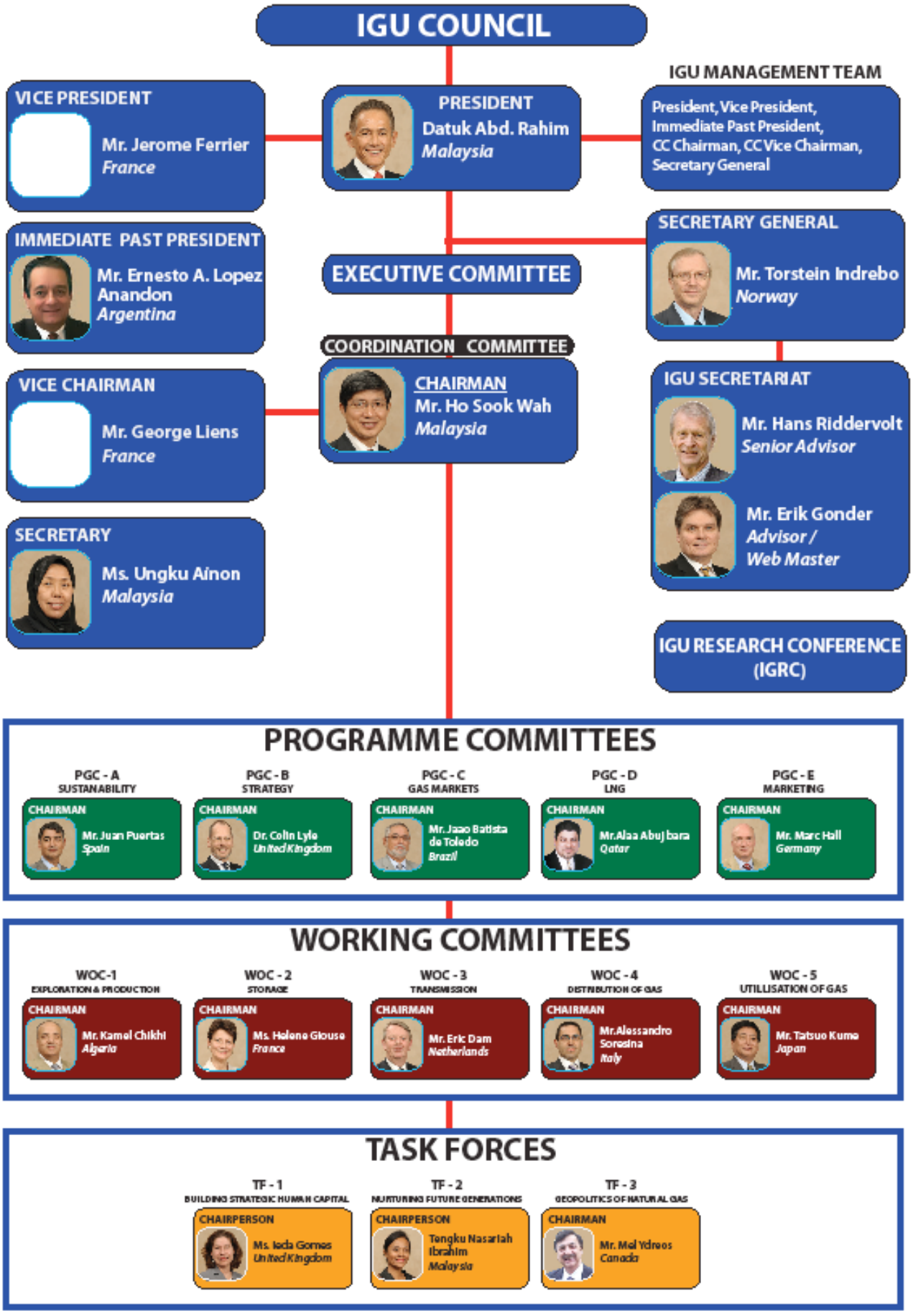
Notwithstanding the challenges, Datuk Rahim acknowledges the significance of Malaysia, through the MGA, assuming the presidency of the IGU. "It helps underscore the fact that Malaysia has the capability and the strength to lead an international organisation. It also demonstrates that Malaysia, through the efforts of PETRONAS, has successfully developed its indigenous gas resources and industry." Within the ASEAN context, he says, the presidency is a reflection of the strong support received from member countries in the region.

That the IGU over the years has become an increasingly global organisation – from its roots as a Europe-centric organisation – is also apparent to Datuk Rahim and, as such, he does not discount the possibility of expanding the organisation's membership to Asia and Africa. "In fact, MGA recently facilitated Vietnam's entry into the IGU. Once we assume the presidency, we will continue to persuade those countries that have yet to become members from ASEAN, Central Asia and Africa to join the IGU and to transform the IGU into a truly international and a global organisation, representing the global gas industry."

Expressing hope that the IGU will be an authoritative voice for the global gas industry, Datuk Rahim discloses that, already, it has initiated dialogue with the International Energy Forum based in Saudi Arabia and has also participated in other dialogues, such as with the International Energy Industry.

"We'd also like the IGU's voice to be heard at international platforms such as the United Nations Framework of Climate Change Convention (UNFCC) or Conference of Parties (COP) meetings on matters relating to sustainable development and mitigation of greenhouse gases that cause global warming."

While it's clear that Datuk Rahim and his team have their work cut out for them during the 2009-2012 triennium, it's also very apparent that the mood is nothing short of exciting. "It's a huge responsibility, but it's something we're all very passionate about."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POWERING GROWTH OF THE INDUSTRY

THE Malaysian Gas Association (MGA) was formed in July 1986 as a non-profit organisation with the objective of serving as an effective platform to bring together key industry players to work towards a common vision of promoting and further developing natural gas to fuel Malaysia's transformation into a fully developed nation by 2020.

The MGA has an impressive stable of founder members – with names such as PETRONAS, Shell, BP and Caltex – while early members include Malaysia LNG Sdn Bhd, PETRONAS Gas Bhd, Sabah Energy Corporation Sdn Bhd and Gas Malaysia Sdn Bhd. MGA has charted two decades of promoting the gas industry and gas utilisation as a clean and efficient source of energy for economic and social development and nation-building. Today, the association has more than 130 corporate and honorary members hailing from the gas and gas-related fraternities covering companies involved in gas and oil exploration, production, processing and transmission, industrial consumers, power generation, distribution and reticulation, logistics services, EPCC, consultancy, research and academia, materials, equipment, trading and regulatory agencies.

Globally, MGA is an active member of the International Gas Union (IGU) – the most influential, effective and independent organisation for the gas industry worldwide. At the IGU Council Meeting held in 2005 in China, MGA was elected to helm the Presidency of the IGU for the 2009-2012 triennium that culminates with the hosting of the 25th World Gas Conference (WGC) in Kuala Lumpur in 2012.

For the MGA, securing the bid for the presidency of this international organisation is a culmination of years of hard work. MGA President and incoming IGU President Datuk Abdul Rahim Hashim says the appointment of MGA to the presidency of the IGU demonstrates the association's ability to offer strong leadership to the IGU.

Dick Benschop, Managing Director of Shell MDS and Vice-President of MGA, agrees, adding that winning the IGU presidency is a recognition of the world-class qualities of Malaysia's gas industry. "Now it is incumbent on us to live up to this reputation. The MGA reflects the development and the growth of the gas industry in the country. The gas industry itself is a metaphor for the country – a growing success story. The Presidency will require hard work, but we should be confident about the result. And, in the end, it will be Malaysia's inimitable hospitality that will carry the day in 2012," he says.

Besides the IGU, the MGA is also an active member of GASEX (Gas Information Exchange in Western Pacific Area). GASEX's membership comprises 11 countries/gas associations from Australia, Brunei, China, Indonesia, Japan, Malaysia, New Zealand, Papua New Guinea, the Philippines, Taiwan and Vietnam. Over the years, MGA has also established close rapport with regional and global gas associations within the IGU.

The RESOURCE Link

DURING his 28 years with PETRONAS, Hamid Ibrahim, Editor-in-Chief of RESOURCE, had postings in a number of gas-related divisions, spanning the entire value chain from upstream to middlestream and downstream. This included three years at the helm of MLNG, from 1996 to 1999. It was while he was Managing Director of PETRONAS Gas Sdn Bhd, from September 1999 till June 2003, however, that he automatically became a Council Member of the Malaysian Gas Association (MGA).

It was during this time also that Malaysia hosted the IGU Council meeting at which the election for the presidency of the 2006-2009 IGU triennium was decided. MGA made its first bid for the presidency, which would have meant hosting the 2009 World Gas Conference. As it turned out, the presidency was won by Argentina which had in fact won the vote three years earlier but was not able to take on the responsibility due to a recession.

"For the 2009-2012 triennium, the MGA team worked extra hard, and we are all extremely pleased with the announcement of their victory at the IGU Council meeting in Tianjin, China in 2005," says Hamid. "Being a previous Council Member of the MGA and the Editor-in-Chief of RESOURCE, we'll be supporting MGA all the way, and there'll be great synergies to make this the most successful IGU triennium yet."

MUTUAL COOPERATION

The ASEAN Council on Petroleum (ASCOPE) was established on October 15, 1975, by Indonesia, Malaysia, the Philippines, Singapore and Thailand as an instrument for regional cooperation among member countries of ASEAN. This spirit of cooperation is especially apparent with the setting up of the ASCOPE Gas Centre.

The objectives of the ASEAN Council on Petroleum (ASCOPE) are spelt out quite clearly. Among others, it aims to: promote active collaboration and mutual assistance in the development of petroleum resources in the region through joint endeavours in all aspects and phases of the petroleum industry in the spirit of equality and partnership; collaborate in the efficient utilisation of petroleum; provide assistance to each other in the form of training, the use of research facilities and services in all phases of the petroleum industry; conduct petroleum conferences on a periodical basis; and maintain close and beneficial co-operation with existing international and regional organisations with similar aims and purposes.

Over the years, ASCOPE has done just that. Member countries are represented by their respective national oil companies (NOCs) or, in cases where the country does not have an NOC, by the authority-in-charge of energy matters. Hosting of the ASCOPE Secretariat is on a five-year rotational basis and by alphabetical order. In May 2009, Malaysia's PETRONAS handed over the Secretariat to the Philippine National Oil Company (PNOC).

Former ASCOPE Secretary-in-Charge (ASIC) Ungku Ainon Ungku Tahir says over the years ASCOPE member countries have undertaken several joint development projects, including the Trans-Thailand-Malaysia Gas Pipeline System, the PM3 Commercial Arrangement Area (CAA) offshore Malaysia and Vietnam, and most recently in the tripartite cooperation between ASCOPE member countries of Indonesia, Malaysia and Vietnam in the upstream sector.

At the ASEAN level of energy cooperation, ASCOPE was instrumental in drafting the revised 2008 ASEAN Petroleum Security Agreement (APSA) and its annex Co-ordinated Emergency Response Mechanism (CERM) which was signed on March 1, 2009, at the 14th ASEAN Summit in Thailand. APSA is a security arrangement within ASEAN to enhance cooperation for helping one another for crude and petroleum products during both times of shortage and surplus. It was first signed in 1986. The revised 2008 APSA and its annex CERM have included, among others, the adoption of strategic options to enhance petroleum security through the provision of short-to-medium to long-term measures. The ASCOPE Resource Matrix Documents, which serve as the framework and guiding principles on activation procedures for emergency response among member countries, was signed on August 25, 2008.

Elaborating on the growth of ASCOPE over the years, Ungku Ainon, who is the Co-ordination Committee Incoming Secretary for the IGU 2009-2012 Triennium, says when ASCOPE was established in 1975, it focused initially on information sharing, networking, sharing of experiences, and capacity-building through training and workshops. The spirit of cooperation engendered is reflected in many of the shared programmes and activities undertaken by ASCOPE members, such as the ASCOPE Games held annually and the ASCOPE Conference and Exhibition (C&E) held every four years. The 9th ASCOPE C&E will be held from November 18-20, 2009, in Bangkok.

In addition, ASCOPE went through a phase of restructuring in 1999 where the Technical, Economic and Legal Working Committees were restructured into Business Development Committees (BDCs) comprising Exploration & Production, Processing & Refining, Trading & Marketing; and a Technology & Services Committee which concentrated on more business-oriented works and activities among ASCOPE members.

Among the key milestones achieved by ASCOPE over the years was the Memorandum of Understanding (MOU) on the Trans-ASEAN Gas Pipeline (TAGP). Signed on July 5, 2002, it commits ASEAN leaders and Governments to ensuring a secure energy/gas supply for ASEAN. TAGP is one of two major projects under the ASEAN Energy Network as envisaged in the ASEAN Vision 2020. ASCOPE also setup the ASEAN Gas Consultative Council (AGCC) to identify and address issues relating to legal and regulatory framework to facilitate cross-border gas flow between ASEAN countries.

Meanwhile, initiatives are being undertaken to create synergistic business opportunities among ASCOPE members to enable interested parties to enter into joint ventures. Another important milestone is the setting up of the ASCOPE Gas Centre in March 2005.

ASCOPE GAS CENTRE

The ASCOPE Gas Centre (AGC) commenced operations in March 2005 with the appointment of Dr Allen Beasley as its first Executive Director. Elaborating on the AGC's activities, Beasley says these have been varied, but have been directed specifically towards the development of the ASEAN natural gas industry and in particular, to facilitate the development of the Trans-ASEAN Gas Pipeline (TAGP) Project. "In terms of physical pipeline infrastructure and with the country-to-country cross-border gas pipelines now in place, it is now 'possible' to move natural gas from Myanmar to Indonesia," he adds.

Nonetheless, he says that the Trans-ASEAN Gas Pipeline grid is still at the 'emerging' stage as there are missing links in the pipeline system. "Much still needs to be done and the work at the Centre over the past four years has focused on developing and presenting a basic framework capable of being adopted as the recently revised TAGP Master Plan is implemented. Our work has been adopted as attachments to the revised TAGP Master Plan, covering areas such as gas quality specifications, gas transit principles (transport of gas involving three or more countries), dispute resolution mechanisms, the structure of the gas industry in an 'open access' environment (where gas can be transported by multiple traders and marketers) and ASEAN gas supply and demand over the period until 2030," he says.

Stressing the importance of partnerships, Dr Beasley says "partnerships between individuals, between companies and between countries will be a key success factor in the evolution of the TAGP in the 21st century".

Recognising the importance of nurturing the young within the gas industry, the AGC has also initiated the Young Pipeline Professional Study Tour. This provides young professionals a kickstart in their careers through a structured introduction to leading international organisations and professionals who can guide them on their career paths. More importantly, says Dr Beasley, it offers the opportunity for young professionals from ASEAN countries with developing gas markets the opportunity to link into the wider professional pipeline community.

The AGC's second major area of activity has been to promote regional ASEAN technical cooperation through the establishment and support of the South East Asia Pipeline Operators Group (SEAPOG) that now has more than 16 active participating companies. "This group is a real success story and has rapidly evolved from being a forum for the sharing of pipeline related issues and experiences to a group which is now actively involved in shaping the future technical direction of ASEAN's pipeline industry. Recent work has included the establishment, over an 18-month period, of a web-based system for the sharing of Emergency Pipeline Repair Equipment between industry participants," adds Dr Beasley.

SEAPOG is now working on gaining 'green lane' Customs clearance for the equipment inventory in the event of an emergency and will be working on immigration clearance for key personnel involved in pipeline repair over the coming months. "This initiative is important because it saves money for companies and, perhaps more importantly, contributes to the region's overall energy security," says Beasley.

In line with ASCOPE's own objective of promoting collaboration and mutual assistance, the AGC has over the years transformed from an organisation that facilitates information sharing to one characterised by a strong and growing level of genuine cooperation. "Our role demonstrates that it is possible to facilitate real cooperation on shared interests within ASEAN, complementing the very competitive nature of the industry itself," he says, adding that its role is strengthened by the fact that AGC places great emphasis on knowledge management. "With the high staff turnover that is apparent in our industry, documentation is seen as a crucial success factor in our quest to foster partnerships and cooperation."

Such cooperation is visible in the area of technology transfer. "Our work on technology transfer to date has focused on paper evaluations of technologies relevant to natural gas development and use. This has included a review of CNG shipping options for the ASEAN region and an assessment of Coal Bed Methane (CBM) technology for the ASEAN region. Additionally, through SEAPOG, AGC will be managing its first cooperative research initiative this year (the project will be looking at better ways to protect pipelines from corrosion, specifically field joint protection). AGC cooperates with a range of international not-for-profit organisations and assists with transfer of recent technological information through its annual Asian Pipeline Conference and Exhibition (APCE), co-organised with the Malaysian Gas Association (MGA), which is now in its fifth year."