

# The Future of Oil and Gas Engineering Companies

by Ms. Suvarna Ooi

**THE** Malaysian oil and gas sector is currently undergoing a major growth phase as numerous multi-billion ringgit deals are currently being made. This growth, however, has to be supported by local oil and gas engineering companies as well as engineers if the country is to achieve its vision of being an important oil and gas hub in the region.

To get an overview on the state of readiness of local oil and gas engineering companies in dealing with the challenges to realise this vision, JURUTERA spoke to Ir. Mohd. Jamin bin Mohd. Isa, President of the Association of Malaysian Oil and Gas Engineering Consultants (MOGEC). Ir. Mohd. Jamin bin Mohd. Isa has about 25 years of experience in the oil, gas and petrochemical industry, including 13 years of working experience in Quality Management, HSE and in Information Security Management Systems. He is currently involved in organisational development for a leading oil and gas company.

He has been involved in numerous offshore oil and gas projects and onshore petrochemical projects. His involvement includes conceptual, detailed engineering design, procurement and construction supervision phases of project implementation.

Mohd. Jamin believes that the industry's current outlook is very promising with the introduction of various government initiatives to boost the sector which include various Economic Transformation Programmes. The recent announcement by the government to turn Malaysia into a regional hub for oil and gas in the region is certainly another boost for the industry.

He said, "Although it may take some time to achieve this objective, I believe there is proof that the government is taking this challenge very seriously. One example is the launch of the refinery and petrochemical integrated development (RAPID) project in Pengerang, Johor. The project is expected to attract at least RM120 billion worth of investments over the next five years."



*Ir. Mohd. Jamin bin Mohd. Isa, President of the Association of Malaysian Oil and Gas Engineering Consultants (MOGEC)*



*Photo courtesy of MOGEC*



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The RAPID project in Pengerang will have a capacity to refine 300,000 barrels of imported crude oil and will offer 4,000 permanent jobs. This will help raise the level of skills, knowledge and capability of the local companies in the fields of engineering, procurement and technical installation.

He pointed out that that the RAPID project would merely be one of many opportunities available for oil and gas engineering companies in Malaysia to expand. He stated that recent announcements on new projects by multinational oil companies would also help create more opportunities for the sector. Further, the rejuvenation of existing fields through enhanced oil recovery (EOR) by the major oil and gas companies is one of the government's Entry Point Projects (EPPs).

Mohd. Jamin stressed that local oil and gas engineering companies need to tap into this potential and seize the work opportunities that are rapidly materialising. He said, "There is currently a high demand for a competent and skilled workforce in the country. In fact, all the major engineering companies are now dealing with the problem of getting the right talent for their organisation. The demand for a highly qualified workforce has created a shortage of competent local engineers who can take up the available positions."

According to Mohd. Jamin, MOGEC has been working closely with Malaysia Petroleum Resources Corporation

(MPRC). The latter was established in April 2011 with a role to promote, catalyse and transform the country's oil and gas services sector as well as to position Malaysia as the number one oil and gas hub in the Asia Pacific region by 2017.

He said, "For the very first time, MOGEC was invited by MPRC to take part in a recent offshore technology conference in Houston, Texas. The event was a very good opportunity to showcase the capabilities of local companies. In fact, the event was a major success as I have read news that several Memoranda of Understanding (MOUs) were signed between local and foreign companies."

Mohd. Jamin also pointed that MOGEC is also currently developing a human capital development programme together with MPRC. He said, "We have recently embarked on a collaboration with local universities to introduce more aggressive internship programmes. The objective of this programme is to expose young talents, especially third or fourth year students at local universities, to the industry."

He went on to explain that, with the framework of this pilot programme having been established, an MOU between participating local engineering companies and local universities will soon be signed. The event will be jointly hosted by MOGEC and MPRC.



He highlighted a recent article that appeared in a local English daily in which Datuk Seri Mohd. Najib bin Tun Abdul Razak talked about the “cradle to career” human resource development approach during his visit to New York. According to the article, the prime minister believed that the time has come to restructure the whole education system in the country from kindergarten right up to the university level to adequately prepare graduates for the industry.

Mohd. Jamin said, “I believe that the introduction of this innovative and improved education system will help the young workforce to grow and learn faster and more efficiently, so that they can be ready for the market and be competent right from the very first day they join the industry. This is especially true for engineering as there is a need for engineers who can join the industry and have the ability to fit into their new work environment fast.”

He pointed out that in order for Malaysia to achieve its objective of being the number one oil and gas hub in the Asia Pacific region, the country needed all the best talent that it can get. He said, “Despite claims from some quarters that local graduates are not competent enough, I have personally seen much improvement across the board at some multinational companies. In addition, I strongly believe that all companies should have an internal career development programme to continuously drive and sustain human capital development in Malaysia.”

In recent years, a number of local engineering companies have expanded and established their presence overseas. Mohd Jamin believed that the biggest challenge in marketing or delivering local oil and gas services outside Malaysia is in having the right people to do the job at the right time.

The challenge, he believed, lies in enlarging the industry’s human capital as many local oil and gas engineers

have been lured away by other countries. He said, “This has led to the shortage in the number of experienced local engineers. As such, we have to speed up the learning curve of some of our young engineers for them to be on par with foreign or expatriate engineers. Small local oil and gas companies that specialise in certain fields do have the potential to grow bigger if they can get the right resources to meet this demand.”

Despite the numerous risks and objections by detractors, Mohd Jamin believed that there is both a positive and negative side to the liberalisation of engineering services in the country. He said, “Our local oil and gas engineers can certainly stand to benefit from the knowledge and technology exchange from the foreign companies that set up base in the country.”

He added, “It is very unlikely that the large oil and gas companies in Malaysia would face any issues as most of them have been working with their foreign partners for a number of years. The newcomers or smaller firms may face a problem or feel the impact more acutely. However, if these firms have established themselves and have a solid foundation to boot, they should not be facing any major obstacles.”

Going forward, Mohd. Jamin indicated that MOGEC would like to get more actively involved in government initiatives that affect the oil and gas industry, including proposing incentives by the government to help local companies to become bigger oil and gas players. He also hopes for a more active collaboration between MOGEC and the Institution of Engineers, Malaysia, and would like to organise joint training or seminar sessions with the latter in the near future. ■



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A training session conducted by MOGEC