

# OFFSHOREMARINE

A newsletter of Keppel Offshore & Marine

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## KEPPEL DELIVERS NORTH SEA JACKUP TO MAERSK



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Keppel Offshore & Marine has signed a management services agreement with Titan Petrochemicals Group Limited (Titan) and Titan Quanzhou Shipyard Co. Ltd (TQS) to manage the TQS shipyard.

Celebrating the partnership are (from right to left) Mr Wong Kok Seng, MD (Offshore) of Keppel O&M, Mr Chow Yew Yuen, CEO of Keppel O&M, Dr Xiong Shaohui, Chairman of Guangdong Zhenrong Energy Co. Ltd, Mr Loh Chin Hua, CEO of Keppel Corporation and Chairman of Keppel O&M, and Mr Zhao Xu Guang, Chairman of Titan.

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# One of the world's first jackups with P&A features

The accommodation jackup rig with Plug & Abandonment (P&A) features will be based on Keppel's KFELS J Class design which is suited for the harsh environment of the Norwegian North Sea.

Keppel FELS has signed an engineering services agreement with Workfox B.V, a subsidiary of the Seafox Group (Seafox), to embark on an engineering study of a purpose-built accommodation jackup rig with well intervention and P&A features.

The project, which is named Seafox 8, is being developed to address a gap in the current P&A market. Subsea fields are reaching the end of their productive lives in areas such as the North Sea and the Gulf of Mexico. With increasing environmental concerns and regulations, there are a substantial

number of wells in both these regions that will need to be properly sealed up in the next few years.

Seafox 8 will be able to offer P&A services, well intervention services, as well as accommodation and crane support services. It has a spacious deck and comprehensive amenities for the comfort of 282 persons on board. The jackup can also be configured for other offshore support services. Compared to existing jackups chartered for P&A work, Seafox 8 is expected to be 25-30% more economical in terms of dayrates.

It will be the first accommodation and service jackup unit that is specifically suited to support rigless activities for P&A and well services at a competitive cost.

Leveraging the successful partnership of an earlier project, Seafox 5, Keppel Offshore & Marine (Keppel O&M) is also in discussion with Seafox to enter into a joint venture to place an order for Seafox 8 upon completion of the study, which is expected in 2H 2014.

*Continues on page 4...*



Seafox 8 will be able to offer P&A services, well intervention services as well as accommodation and crane support services

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Mr Keesjan Cordia, CEO of Seafox, said, "With our background in providing accommodation support, workover, construction, and decommissioning services to the offshore oil & gas industry, we noticed the strong demand for P&A services and identified a need for a specialised rig in this market. We believe the jackup we are conceiving, Seafox 8, offers the ideal solution as it can work all year round including during the North Sea's winter period and undertake multiple services at a time. It is a real workhorse and unlike drilling rigs which are often used to do P&A currently, Seafox 8 has the crane capacity to assist with maintenance and well services activities. It has NORSOK-specified accommodation for crew and client personnel, and a lower operating cost than existing equipment with a single role purpose."

"We are glad to continue this winning partnership we have with Keppel in coming up with innovative products. Seafox 5, a multi-purpose self-elevating platform (MPSEP), which they built for us previously, has been performing extremely well and I am confident that Seafox 8 will be just as successful."

The hull and legs of the new generation jackup rig will be

based on Keppel's new KFELS J Class design which is customised to operate in water depths of up to 112 metres in the harsh offshore environmental conditions of the Norwegian North Sea.

Developed by Offshore Technology Development (OTD), Keppel's R&D arm, the robust KFELS J Class is designed as a drilling jackup rig for the Norwegian North Sea and is an enhancement of Keppel's proven harsh environment drilling rigs – the KFELS N Class and KFELS G Class designs. Keppel O&M has previously delivered three rigs of each design, which have been successfully operating in the North Sea including Norwegian waters.

Mr Wong Kok Seng, Managing Director of Keppel O&M (Offshore) and Keppel FELS said, "We have successfully developed and commercialised many proprietary concepts for a variety of offshore services and challenging frontiers by partnering our trendsetting customers in the early stages of those projects. For Seafox 8, we are taking the hull of an ultra-harsh environment rig in our KFELS J Class for use as an accommodation rig with equipment for P&A services. The KFELS J Class extends the capabilities of our proven KFELS G Class and KFELS N Class designs for work in the North Sea.

"This is an example of how we have been able to leverage and apply our technology expertise innovatively for a variety of offshore applications. And with an experienced partner like Seafox in this market, we are confident Seafox 8 will be well-received and give us a good head start in growing our track record as the leading solutions provider for the P&A services sector."



The KFELS J Class is designed as a drilling jackup rig for the Norwegian North Sea and is an enhancement of Keppel's proven harsh environment drilling rigs – the KFELS N Class (in image) and KFELS G Class

# Baku Shipyard secures first major contract from Shah Deniz



The SCV will be designed by Marine Technology Development, the ship design and development arm of Keppel Offshore & Marine

Baku Shipyard has secured a contract from BP Exploration (Shah Deniz) Ltd, the operator of the Shah Deniz gas field development, to design and build a Subsea Construction Vessel (SCV).

When completed, the SCV will be deployed for the Stage 2 development of the Shah Deniz field, which lies some 70 km offshore in the Azerbaijan sector of the Caspian Sea.

The Shah Deniz Stage 2 project requires a subsea installation vessel to install the subsea structures over 11 years between 2017 and 2027. The vessel will include dynamic positioning to allow for work in 2.5 metres significant wave height (Hs), a 750 metric tonne-main crane for 600 metres-deep subsea operation,

an 18-men two-bell diving system, two work-class remotely operated vehicles, a strengthened moon pool, two engine rooms with 6x4.4MW + 2x3.2MW engines and a deadweight of 5,000 metric tonnes at 6.5 metres draft.

The SCV will be designed by Marine Technology Development, the ship design and development arm of Keppel Offshore & Marine (Keppel O&M). The vessel is expected to be completed in April 2017.

Mr Rovnag Abdullayev, President of State Oil Company of Azerbaijan Republic (SOCAR), said, "We are very privileged that BP Exploration (Shah Deniz) has chosen Baku Shipyard to design and build the SCV which will support the Shah Deniz gas field

Stage 2 development. We believe that Baku Shipyard, under the management of leading global offshore and marine group Keppel O&M, is well placed to support Azerbaijan's growth in the oil and gas sector, and we look forward to building up our track record with more significant contract wins in the years ahead."

Mr Gordon Birrell, BP's Regional President for Azerbaijan, Georgia and Turkey, commented, "We are pleased to begin cooperation with yet another major local service company to advance the executional phase of the giant Shah Deniz Stage 2 development project. This new flagship vessel for the Caspian, to be built by Baku Shipyard, will provide essential support for the construction of the Stage 2 subsea structures which will form the biggest subsea production system in the Caspian. Clearly, the contract underpins our plans to deploy for the first time new advanced subsea production technology in the Caspian as part of the Shah Deniz Stage 2 development.

The SCV is the first major contract secured by Baku Shipyard since its inauguration by President of Azerbaijan, H.E. Ilham Aliyev, in September 2013. The shipbuilding yard was jointly developed by SOCAR, Azerbaijan Investment Company (AIC) and Keppel O&M. SOCAR, AIC and Keppel O&M own 65%, 25% and 10% share in the yard respectively.

# Delivering first of three CJ70 rigs for Maersk



Keppel has delivered the first of three GusoMSC CJ70 jackups for Maersk Drilling

**“Committed to provide state-of-the-art solutions to our customers, Maersk Drilling seeks partners that share our safety, quality and performance standards. We have worked closely with Keppel on a number of projects over the years, and are glad that they continue to prove to be an exceptional partner.”**

*Mr Claus V. Hemmingsen,  
CEO of Maersk Drilling and  
Member of the Executive Board of the A. P. Moller – Maersk Group*

Keppel FELS has delivered the first of three GusoMSC CJ70 jackups for Maersk Drilling, a wholly owned subsidiary of A.P. Moller – Maersk A/S.

The jackup was named Maersk Intrepid by the Lady Sponsor Mrs Karen Tiffen, wife of



Celebrating the successful completion of Maersk Intrepid were Singapore's Minister for Transport, Mr Lui Tuck Yew (seated), (L-R, standing) Mr Choo Chiau Beng, Senior Advisor to the Board of Keppel Corporation, Mr Claus V. Hemmingsen, CEO of Maersk Drilling, H.E. A. Selverajah, Ambassador to Denmark from Singapore, Mr Tong Chong Heong, Senior Advisor to the Board of Keppel O&M, Mr Chow Yew Yuen, CEO of Keppel O&M, Mr Martin Tiffen, MD of Total E&P Norge, and Lady Sponsor Mrs Karen Tiffen

Mr Martin Tiffen, Managing Director of Total E&P Norge AS, in the presence of the Guest-of-Honour Mr Lui Tuck Yew, Singapore's Minister for Transport, at a naming ceremony at Keppel FELS on 21 March 2014.

Mr Chow Yew Yuen, CEO of Keppel Offshore & Marine (Keppel O&M), said, "The successful completion of Maersk Intrepid bears testament to the mutual trust and understanding between Keppel and Maersk Drilling, which have been built up through our various collaborations on challenging projects. Work on the other two CJ70 rigs is also progressing well and we are confident that they

will be delivered to Maersk's satisfaction."

Customised for operations in the North Sea, Maersk Intrepid has been chartered by Total for deployment in the Martin Linge field, offshore Norway.

Mr Claus V. Hemmingsen, CEO of Maersk Drilling and Member of the Executive Board of the A. P. Moller – Maersk Group, said, "Committed to provide state-of-the-art solutions to our customers, Maersk Drilling seeks partners that share our safety, quality and performance standards. We have worked closely with Keppel on a number of projects over the years,

and are glad that they continue to prove to be an exceptional partner.

"Benefitting from Maersk's and Keppel's strong engineering and operational capabilities and experience, I am certain that Maersk Intrepid will be an asset to Total and the industry when deployed in the North Sea."

Keppel and Maersk collaborations span the design, engineering, repair and construction of a variety of rigs and ships. Including the three CJ70 jackups, Keppel and Maersk have joined hands on 12 newbuilding rig projects to-date.

# Servicing Vietnam



Representatives from Keppel, PetroVietnam Technical Services Corporation and Yinson Holdings Berhad together with H.E. Tran Hai Hau, Ambassador of Vietnam to Singapore, celebrated the successful completion of the FPSO Lam Son

Keppel Shipyard has completed a Floating Production Storage and Offloading (FPSO) conversion project for PTSC Asia Pacific, a joint venture between PetroVietnam Technical Services Corporation (PTSC) and Yinson Holdings Berhad (Yinson).

The vessel was named PTSC Lam Son FPSO by the Lady Sponsor Madam Bui Kim Dung in the presence of His Excellency Tran Hai Hau, Ambassador of Vietnam to Singapore on 8 March 2014.

Proceeding in all work activities with a safety first mindset, the project teams have achieved a good safety record on the PTSC Lam Son FPSO project.

When completed, the FPSO will be deployed in the Thang Long and Dong Do oil fields in Cuu Long Basin to support the operations of Lamson Joint Operating Company, a joint operating company between PetroVietnam Exploration Production Corp. and Petronas Carigali Overseas Sdn Co.

Keppel O&M has supported Vietnam's exploration and production activities through a variety of offshore and marine projects over the years. Keppel O&M's first project for the country is the 1,200-tonne floating crane – Hoang Sa – which was delivered in 1984.

Since then, Keppel O&M has completed for the country its first jackup rig, Tam Dao I, three KFELS B Class jackup rigs and one semisubmersible drilling tender. In addition, including PTSC Lam



Son FPSO, it has undertaken seven FPSO and FSO projects for Vietnam.

Keppel Group's partnership with Vietnam extends beyond the provision of offshore and marine solutions. Keppel Land was a pioneer foreign real estate investors in the country, and have actively participated in the development of Vietnam's property sector with quality homes, offices and commercial properties. Today, Keppel Land has a large and diverse portfolio of property projects spanning Hanoi, Ho Chi Minh City, Dong Hai and Vung Tau.

"Keppel has had many good opportunities to support Vietnam's E&P activities over the years. Indeed, 8 March 2014 is a day of double-happiness for PetroVietnam and Keppel. Apart from celebrating the naming of PTSC Lam Son FPSO, we witnessed the keel-laying ceremony of the fourth KFELS B Class rig for Vietnam.

"Keppel's partnership with Vietnam extends beyond the provision of offshore and marine solutions. We were one of the pioneer foreign real estate investors in the country, and have actively participated in the development of Vietnam's property sector with quality homes, offices and commercial properties."

*Mr Michael Chia, MD (Marine & Technology), Keppel Offshore & Marine*

## Striking success

8 March 2014 is a day of double-happiness for PetroVietnam and Keppel O&M. Apart from celebrating the naming of PTSC Lam Son FPSO, the two

companies also marked the keel-laying of Keppel O&M's fourth KFELS B Class rig for Vietnam.

The rig was ordered in July 2013

by PV Drilling Overseas (PVDO). PVDO's largest shareholder is PetroVietnam Drilling and Well Services Corporation.



Senior management from Keppel and PetroVietnam celebrate a growing partnership at Project B363 keel-laying ceremony

# First for Brazil

**P-61, the first Tension Leg Wellhead Platform (TLWP) in offshore Brazil has been successfully installed by FloaTEC, a joint venture company between Keppel FELS and McDermott.**

A specialist technology firm for deepwater floating production systems, FloaTEC will also operate the facility for three years before handing over to the operator, the Papa-Terra joint venture comprising Petrobras and Chevron.

The completion of P-61, which will operate in the Papa Terra Field, Campos Basin, at a water depth of 1,180 m, leveraged the combined strengths and expertise of FloaTEC and its parent companies, Keppel FELS and McDermott. The design, fabrication and completion of the TLWP was coordinated and executed by FloaTEC. The topsides were engineered in Houston by McDermott and constructed in Singapore by Keppel FELS while the hull was designed by FloaTEC in Houston and fabricated in Brazil by Keppel FELS at its BrasFELS yard. The topsides and hull were then integrated at BrasFELS.

For the installation, eight piles were driven to the designated depth, while the installation team executed the critical task of assembling the 128 tendon sections into eight full-length tendons and connecting them to the piles. The P-61 TLWP was then floated over the eight tendons, which was engaged at the corresponding TLWP tendon porches and de-ballasted into position. The project was carried out with significant technical contribution by Chevron



The P-61 TLWP is designed to operate with a Tender Assist Drilling Rig and equipped to receive and support work-over rig operations. It is fully outfitted and equipped for drilling, completion and work-over operations on the wells

to the TLWP design, construction and installation.

Mr TK Das, President of FloaTEC, said, "We are proud to have successfully engineered our first TLWP which will soon be operational. This demonstrates FloaTEC's technical strengths, the expertise of our people and the benefits of our patented technology. Leveraging the support and capabilities of our parent companies, Keppel FELS and McDermott, we are committed to providing high-quality and value-added solutions to our esteemed clients."

Mr Wong Kok Seng, Chairman of FloaTEC as well as MD (Offshore) of Keppel Offshore & Marine (Keppel O&M) and Keppel FELS said, "We are pleased that the timely completion and quality construction of the topsides of the

P-61 by Keppel FELS contributed to the success of this project. Together with the excellent work done by our BrasFELS yard in Angra Dos Reis, Brazil, the P-61 is a perfect example of the collective capabilities and strong execution which Keppel O&M can offer to the industry. This successful delivery has proven that the FloaTEC joint venture remains a strong, capable and experienced solutions provider to the deepwater market."

Mr David Dickson, President and CEO of McDermott said, "The patented Extended Tension Leg Platform technology from FloaTEC, construction capabilities of Keppel FELS, and offshore transportation and installation experience of McDermott combined to form a first-of-a-kind solution for this challenging deepwater environment."

# Flying success

Keppel Singmarine marked the successful completion of its third and last in a series of bulk carriers for Ok Tedi Mining (Ok Tedi) on 11 March 2014. The vessel was completed with a perfect safety record of zero lost-time incident.

Named Fly Challenger, the vessel will be deployed in the Fly River, Papua New Guinea, to provide transportation, support and logistical services to Ok Tedi's mining operations.

Similar to its predecessors,

Fly Challenger is a well-equipped bulk carrier capable of transporting copper concentrate from the mining site to a transshipment

port, as well as bringing fuel and other provisions from the port back to the mining site located upstream of the Fly River.



Management and project teams from Keppel Singmarine and Ok Tedi celebrated the successful collaboration on the bulk carrier, Fly Challenger

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# Barge delivery

Keppel Subic Shipyard delivered Ratu Giok 5, a floating crane transhipper barge, to Indonesian client PT Pelayaran Kartika Samudra Adijaya (KSA) within budget and with a good safety record on 27 February 2014.

This is the first floating barge built in Subic, the Philippines, for KSA that received certification from RINA Services, a widely recognised ship classification service provider. Keppel Batangas Shipyard previously delivered three units crane barge to KSA from 2011 to 2012.

Customised to the client's requirements and equipped with

a 45-tonne lifting capacity deck crane, the barge is well-suited for inland waterway operations

and designed for the transshipment of coal to ocean-going vessels.



Ratu Giok 5 was completed within budget and with a good safety record by Keppel Subic Shipyard

# Charting milestones



Cutting steel to mark the start of the construction of project B364, a Keppel FELS Super B Class Big Foot jackup rig being built for Transocean Offshore Deepwater Holdings, are (L-R) Mr Chris Ong Leng Yeow, Acting Executive Director of Operations, Keppel FELS, Mr Douglas Brown, Project Manager, Transocean, Mr Shawn Yeo, Project Manager, Keppel FELS and Mr Sylvian Lalycan, Senior Electrical Engineer, Transocean

Keppel Offshore & Marine marked critical project milestones which were achieved safely and cost-effectively.

## **STRIKING START**

On 28 February 2014, Keppel FELS held a strike steel ceremony for project B364 for Transocean Offshore Deepwater Holdings (Transocean), which is slated for delivery in 1Q 2016.

Keppel FELS and Transocean have shared a long-standing relationship spanning several significant projects. The three jackup rigs recently delivered are Transocean

Siam Driller, Transocean Andaman and Transocean Ao Thai.

## **LAYING FOUNDATIONS**

Multiple keel-laying ceremonies were held on 18 February 2014.

Keppel FELS marked the keel-laying of Grupo R Projects B354 Cantarell I, B355 Cantarell II and B356 Cantarell III. The rigs are being built simultaneously, with resources shared and leveraged for greater efficiency.

They are scheduled for delivery between 2Q to 4Q 2015. Grupo R is also building another

two rigs with Keppel for delivery in 4Q 2015.

Another customer, TS Drilling, also had a keel laying ceremony for its jackup, B358 or TS Topaz. The KFELS Super B Class is scheduled for delivery in 3Q 2015.



Representatives from Keppel FELS and Grupo R marked the keel-laying ceremony of Projects B354 Cantarell I, B355 Cantarell II and B356 Cantarell III



Keppel FELS and TS Drilling representatives at the keel-laying ceremony of TS Drilling Project B358 TS Topaz

# Sharing on safety

As a leader in its industry, Keppel Offshore & Marine (Keppel O&M) also prides itself on its safety efforts and actively looks to share its experience with the industry.



Mr Chow Yew Yuen, CEO of Keppel Offshore & Marine

## ONBOARD THE NATIONAL WSH COUNCIL

Mr Chow Yew Yuen, CEO of Keppel Offshore & Marine, has been appointed by Singapore Minister for Manpower Mr Tan Chuan-Jin to the Workplace Safety and Health (WSH) Council with effect from 1 April 2014.

The WSH Council works closely with the Ministry of Manpower and other government agencies, the industry, unions and professional associations to develop strategies to raise WSH standards in Singapore.

The Council comprises 18 members from various professional backgrounds who have extensive industry experience. Members of the Council will play a crucial role in guiding transformational changes on the management of

WSH across various sectors and disciplines from construction and landscaping to hospitality and entertainment.

## DRILLING DOWN TO FUNDAMENTALS

A broad framework, comprehensive systems and processes, strong leadership and partnerships with stakeholders are key aspects to ensuring safety excellence.

This was shared by Mr Chow Yew Yuen at the International Association of Drilling Contractors (IADC) HSE&T Asia Pacific 2014 Conference & Exhibition held on 2 and 3 April 2014.

As keynote speaker on the second day of the event, he elaborated on Keppel O&M's approach and wealth of expertise

and experiences in building a sustainable safety culture in a multi-national and multi-party work place in Keppel yards around the world.

In incorporating the different safety requirements, the shipyards had to ensure that it would work in a different cultural context with messages effectively cascaded down to all levels of the workforce. In 2013, Keppel O&M achieved an accident frequency rate of 0.12 per million man-hours worked.

A few hundred safety professionals from the oil and gas industry participated in the event and exchanged ideas on how to improve safety. Keppel O&M was the platinum sponsor of the event which was in its 5th iteration.



Mr Chow Yew Yuen, CEO of Keppel O&M, sharing on Keppel O&M's safety experiences at the International Association of Drilling Contractors HSE&T Asia Pacific 2014 Conference & Exhibition

# Safety milestone



The project teams of vessel H381 from Keppel Singmarine and McDermott celebrate the achievement of one million safe man-hours without lost-time incidents

**“This achievement marks the culmination of the tireless efforts of both the McDermott and Keppel project teams to ensure the safety and well-being of every worker involved in this project.”**

*Mr Jack Bullock,  
VP (Offshore Resources) of McDermott*

In January 2014, the Hull 381 project, a derrick pipelaying vessel that Keppel Singmarine is building for McDermott International (McDermott), achieved one million safe man-hours without lost-time incidents since striking steel in April 2013.

Marking the safety milestone, Keppel Singmarine was presented a plaque by Mr John MacPherson, Project Manager from McDermott, on 31 March 2014.

Mr Jack Bullock, VP (Offshore Resources) of McDermott, congratulated the project teams from Keppel Singmarine and McDermott, “This achievement marks the culmination of the tireless

efforts of both the McDermott and Keppel project teams to ensure the safety and well-being of every worker involved in this project.”

The project teams are currently working towards the launch of the vessel, expected to take place later this year. The Hull 381 project is the biggest newbuild vessel that Keppel Singmarine has undertaken to date.

## Near market, near customer in China

Keppel Offshore & Marine to establish a win-win partnership that will enable Keppel and Titan to become a major offshore solutions provider for China.



Celebrating the partnership between Keppel, Titan and GDZR are (from right to left) Mr Loh Chin Hua, CEO of Keppel Corporation and Chairman of Keppel O&M, Dr Xiong Shaohui, Chairman of GDZR, Mr Wong Kok Seng, MD of Keppel O&M (Offshore) and Keppel FELS, Mr Chow Yew Yuen, CEO of Keppel O&M, Mr Zhao Xu Guang, Chairman of Titan, and Mr Fu Yong Yuan, CEO of TQS

“Having this TQS yard is an extension of our *Near Market, Near Customer* strategy and enables us to service the Chinese market with our suite of proprietary solutions while meeting its requirement of building in-country. This is further complemented by our other shipyard in China, Keppel Nantong, which undertakes specialised shipbuilding and offshore fabrication.”

Mr Chow Yew Yuen  
CEO, Keppel O&M

Keppel Offshore & Marine (Keppel O&M), through its wholly owned subsidiary, FELS Offshore Pte Ltd, signed a management services agreement on 9 April 2014 with Titan Petrochemicals Group Limited (Titan) – of which commodities trading conglomerate Guangdong Zhenrong Energy Co. Ltd. (GDZR) is a major shareholder – and Titan Quanzhou Shipyard Co. Ltd (TQS), to manage the TQS shipyard.

Located in Quanzhou, Fujian Province, TQS is one of the largest shipyards in China, occupying a total area of 110 ha with 3,600 m length of coastline.

When fully completed, the shipyard will have four ultra-large and wide dry docks, including one

of the largest modern-designed docks in China, which will enable it to undertake double hull vessel projects such as Floating Production Storage and Offloading (FPSO) conversions. Besides ship repair and conversion capabilities, the yard is also able to construct offshore rigs including jackups and semisubmersibles.

Under the agreement, which is for a 30-year period and renewable thereafter as mutually agreed, the yard, managed by Keppel O&M, will undertake projects using Keppel’s proprietary designs. This agreement is conditional on the completion of the on-going financial restructuring of Titan and the resumption of the trading of its shares on the Hong Kong Stock Exchange.



Mr Chow Yew Yuen, CEO of Keppel O&M, said, "The offshore oil and gas market in China has been growing significantly, and there is increasing demand for high specification rigs and production vessels. At the same time, China is a market which has strong preference for China-made products. Having this yard is an extension of our *Near Market, Near Customer* strategy which enables us to service the Chinese market with our suite of proprietary solutions while meeting its requirement of building in-country. This is further complemented by our other shipyard in China, Keppel Nantong, which undertakes specialised shipbuilding and offshore fabrication.

"With 20 yards around the world, we have experience in managing existing shipyards and optimising their operations, just as we have done so in Brazil, the Netherlands, USA and the Philippines. Together with the strength of GDZR's extensive connections and experience in China, and our expertise and established track record in the global offshore and marine industry, we are confident that this is a win-win partnership that will enable Keppel and Titan to become a major offshore solutions provider for China."

Mr Zhao Xu Guang, Chairman of



Titan, added, "We are looking to enhance our presence in the offshore and marine business, and partnering Keppel, the world's leading rig builder, is a significant step in this direction. I am confident that with Keppel managing this yard which has good development potential, we will be able to quickly build up the track record of the shipyard and

deliver winning Keppel designs and products to Chinese oil and gas operators. Having studied the market, we believe there are a significant number of potential projects that this yard is capable of undertaking."

*Continues on page 18...*

Continued from page 17...

## Strategic move

Keppel's signing of the agreement to manage the Titan Quanzhou Shipyard generated significant interest. *OffshoreMarine* shares some highlights from a Question & Answer session that senior management held with the investment community on 9 April 2014.

### What are some of the key features of Titan Quanzhou Shipyard (TQS)?

The yard is operational and has experience in building vessels. It is not a green-field project. We will be able to enhance the yard ahead of contracts that it will secure in future.

Quanzhou is strategically located with Shanghai to the north, Hong Kong to the south and Taipei and Kaohsiung across the strait. It is situated along busy trading routes and located within the bay, protected from extreme weather in that part of China.

TQS is a very large yard in China – 110 hectares – that is partially developed. It has extensive plans. When fully completed, it will have four drydocks. The largest dock



The Chinese market presents potential opportunities for Keppel's proprietary designs

there will be 80m wide, which is suitable for whole range of vessels including modern large tankers.

### What opportunities does Keppel see in this partnership?

Traditionally, we have looked at Chinese yards as one of the key competitors in the business that we are in. But they are not just threats. They also present opportunities.

And these opportunities are tremendous. The Chinese are very keen to develop their offshore sector. They are increasing investment in offshore exploration and production activities to RMB 300 billion in its 12th five-year plan, up from RMB 100 billion in its 11th five-year plan.

Up till now, it has been very difficult for foreign yards to break into China's offshore market, which is exclusive to its State-Owned Enterprises. This opportunity came along and the partners came to us as we are able to offer a whole suite of solutions.

We are also privileged to have strong partners with excellent networks and the ambition to establish a leadership position in China.

Importantly, for us, the potential

benefits of this partnership are multi-faceted. For instance, we will be able to populate this market with our proprietary designs. Also, it will entail the use of the facility, including eventually four of the largest drydocks that can handle double-hull tankers. This is potentially a game-changer for us.

### Are you expected to invest capex?

We have a partner with a yard who is willing to invest capital for further enhancements in the yard and enable us to execute the projects.

Our management team will make assessments and recommend enhancements to the owners of the shipyard. The decision lies with them whether to put in the capex. If they do not, the TQS yard can take less of the work, with the remaining work flowing to our other yards in the region.

### How much work do you expect TQS to undertake, and how does this fit in with the rest of Keppel's yards?

The yard will not be able to come on stream immediately. In the initial stages, our Singapore and regional yards will take on higher proportion of the work, before this is transferred slowly as TQS builds up its capability.

# Meeting of minds in Asia



1. From left: Mr Wong Kok Seng, MD (Offshore), Keppel O&M and MD, Keppel FELS; Mr Michael Chia, MD (Marine & Technology), Keppel O&M; Mr Lim Chin Leong, Board Director, Keppel O&M; Mr Chan Eng Soon, NUS Dean of Engineering and Keppel Professor; and Mr Chor How Jat, MD, Keppel Shipyard
2. Mr Chor How Jat (far left) with representatives from key customer MODEC: (from left) Mr Toshiro Miyazaki, President & CEO, MODEC Inc; Mr Kensuke Taniguchi, Deputy Director, MODEC Inc; and Mr Sateesh Dev, President, MODEC Offshore Production Systems Singapore
3. Jamin Mohamad (left), Assistant GM (Commercial) and Gerlynn Cai (right), Marketing Officer from Keppel Shipyard with Mr Andrew Waterson (centre), Technical Manager, M3Energy Malaysia
4. (From left) Mr Wong Kok Seng; Mr Pham Tien Dung, CEO of PV Drilling; Mr Michael Chia; and Hoo Yao Lin, Marketing Executive, Keppel FELS

Keppel Offshore & Marine (Keppel O&M), a longstanding supporter of Offshore Technology Conference (OTC), extended its participation in the event by taking part in the inaugural Asian edition of the conference, branded OTC Asia.

Held in Kuala Lumpur, Malaysia, from 25 to 28 March 2014, the conference saw about 18,000 participants from over 80 countries.

Keppel O&M took up a booth at the exhibition and showcased its established track record as well as its innovative suite of offshore solutions.

A cocktail reception was held at the Keppel booth on 26 March 2014, which was a good opportunity for Keppel O&M's management and team to catch up with customers, business associates and friends.

OTC's expansion into Asia reflects the region's increasing relevance in the global energy space. OTC Asia is an extension of OTC's flagship event held annually in Houston, Texas, United States. Other key conferences held by the same organisers include the Arctic Technology Conference and OTC Brasil.

# Reaffirming business ties

Given Keppel's long standing business ties with the Philippines, the Group has over the years been playing an active role in supporting efforts to further grow the economic linkages between Singapore and the Philippines. Mr Loh Chin Hua, CEO of Keppel Corporation and Chairman of Keppel Offshore & Marine, led a Singapore Business Mission in early April to reaffirm the strong business ties between the two countries.



The Keppel team, led by Mr Loh Chin Hua (front row fifth from right), CEO of Keppel Corporation and Chairman of Keppel Offshore & Marine and Mr Tony Chew (front row fourth from right), Chairman of Singapore Business Federation and Board Director of Keppel Corporation, joined Singapore President Dr Tony Tan and Mrs Mary Tan (front row fifth and fourth from left respectively) for a group photo at a reception at the Singapore Embassy in Manila on 3 April 2014

Keppel and the Philippines go way back – over four decades – to 1975 when Keppel made its very first overseas foray, starting shipyard operations in Batangas. Today, Keppel Batangas Shipyard is one of two established yards which Keppel owns in the Philippines, along with Keppel Subic Shipyard. Beyond the marine sector, Keppel has also invested into the finance and property sectors in the country.

While the Philippines has gone through ups and downs in the past few decades, the country's economy has performed creditably under the administration of President Benigno Aquino in recent years. In 2013, the Philippines was one of the best performing

economies in Asia, with a GDP growth rate of 7.2%. The country has also been upgraded to investment grade rating by top credit rating agencies such as Moody's and Standard & Poor's.

## **BUSINESS DIALOGUES**

Already, the Philippines' strong economic performance has reignited interest among Singapore companies to explore opportunities in the country. Sensing this high level of enthusiasm, the Singapore Business Federation, supported by IE Singapore, organised a 14-member Philippines–Singapore Business Council (PSBC) delegation to Manila from 2 to 5 April 2014 with the aim of advancing business relations between the two countries.

Mr Loh Chin Hua, who is the PSBC Co-Chairman for Singapore, led the Singapore delegation, which comprised business leaders from the infrastructure, transportation and logistics, and consumer services sectors.

Over the course of two days, the Singapore delegates went on site visits and attended a briefing on the trade and investment opportunities in the Philippines. A roundtable dialogue session, led by the PSBC Co-Chairman for the Philippines Mr Guillermo Luchangco, was also arranged for the Singapore delegates and their Philippine counterparts to share ideas and exchange views.

The site visits included a one-day



Mr Leong Siew Loon (left), President of Keppel Batangas Shipyard briefing Mr Loh Chin Hua (centre), CEO of Keppel Corporation and Chairman of Keppel Offshore & Marine, on the yard's facilities and projects during the latter's visit to the yard on 5 April 2014



Mr Loh Chin Hua, CEO of Keppel Corporation, accompanied by Ms Agnes Barbara Lorenzo, Senior VP (Finance & Administration) of Keppel Philippines Marine, greeting a resident of the Keppel-GK Eco Village in Bauan, Batangas

trip to the Clark-Subic Corridor, which is envisioned to be an international service and logistics centre in Southeast Asia. At Subic, the Singapore delegates visited Keppel Subic Shipyard located in Zambales, where they were briefed on the yard's progress on the Depletion Compression Platform project for Shell to be deployed in the Malampaya gas field, as well as the yard's upgrading programme, which includes the new 1,500-tonne gantry crane.

#### NETWORKING LUNCH

A key highlight of the PSBC business mission was the PSBC CXO Lunch on 4 April 2014 involving 40 Philippines business leaders. The Guest of Honour was President Dr Tony Tan Keng Yam who was in the Philippines on a state visit. The lunch was also attended by various distinguished guests including Secretary to the Philippine Cabinet Mr Jose Rene Almendras, Philippine Finance Secretary Mr Cesar Purisima, and Philippine Trade and Industry Secretary Mr Gregory Domingo.

In an address delivered at the lunch, Mr Loh said, "We can certainly see a renewed sense of optimism and confidence, and these are all very positive for the Philippine economy. It augurs well

for Singapore businesses coming to the Philippines.

"Singapore corporate brand names such as SingTel, Ascott, Somerset, YCH, Charles & Keith and Breadtalk are doing well in the Philippines. The Keppel Group also has a deep and entrenched presence in the country. Philippine companies like Jollibee and Ayala Corp are also making profitable inroads into the Singapore market."

In interviews with the Philippine media following the lunch, Mr Loh reiterated Keppel's commitment to continue to participate in and contribute to the economic growth and development of the Philippines. He added that Keppel will continue to seek opportunities to expand and upgrade its two yards in the country.

#### ENGAGING KEPPELITES

During his visit, Mr Loh also took the opportunity to visit Keppel Batangas Shipyard located in the Special Economic Zone in Bauan, Batangas. To better understand the yard operations, Mr Loh walked the yard with Keppel Batangas' management team and was briefed on the status of the yard's repair projects and facilities upgrading programme.

At the end of the visit, Mr Loh rallied the management teams of both Keppel Batangas Shipyard and Keppel Subic Shipyard to ride on their achievements and strive to improve productivity so that the yards can continue to complement the Singapore yards effectively. Mr Loh also reminded the teams to stay focused on achieving good safety performance with zero incidents.

#### COMMUNITY VISIT

Beyond business interests, Keppel also contributes to the communities where it operates. The Keppel-GK Eco Village in Bauan, a 60-unit housing estate for needy families in the community was jointly developed by the local government of the Municipality of Bauan, Gawad Kalinga (GK) and Keppel.

Taking a reprieve from business-related meetings, Mr Loh, accompanied by his wife, visited the Eco Village. Mr and Mrs Loh were warmly welcomed by its residents and their children. Completed in mid-2012, the Eco Village is home today to more than 300 residents, and boast amenities such as a learning centre for preschool pupils and the Nelson Yeo Hall, where community-based activities are held.

# Insights into Keppel



Mr Harold Linssen (left), MD of Keppel Verolme, introducing Ms Ho Ching (in pink), ED and CEO of Temasek, and her delegation to the yard's graving dock, which is one of the largest in Europe

As a leader in the offshore and marine industry, Keppel's global yards attract the attention and interest of many. *OffshoreMarine* features visits in the last couple of months.

## VISIT TO VEROLME

Keppel Verolme in the Netherlands hosted a visit by Singapore investment company, Temasek, on 24 March 2014. The delegation, led by Ms Ho Ching, ED and CEO of Temasek, was given a tour of the yard's facilities by Keppel Verolme's MD Mr Harold Linssen.

The visitors took a closer look at some of the yard's on-going projects and learnt more about the synergies between Keppel

Offshore & Marine's (Keppel O&M) yards worldwide and the strengths of its *Near Market, Near Customer* strategy.

## SWEDE TALK

In Singapore, Ambassador of Sweden to Singapore H.E. Hakan Jevrell and Mrs Karin Öhman, Deputy Head of Swedish Mission in Singapore, visited Keppel O&M on 7 April 2014 to learn more about Keppel O&M's business and explore opportunities for further cooperation with Swedish companies.

During the visit, hosted by MD of Keppel Singmarine, Mr Hoe Eng Hock, and management from Keppel FELS and Keppel Shipyard,

the Swedish diplomats were pleased to learn that Keppel O&M works with a variety of Swedish companies that provide essential equipment in the construction of oil rigs, and that Keppel also has a strong ties with the Swedish-based company Floatel International.

As part of the tour of the yard, the Swedish dignitaries were also shown the 500-tonne gantry crane which was bought over from a Swedish yard in the 1980s.

## NORWEGIAN CONNECTIONS

Ms Dilek Ayhan, Norwegian State Secretary for Trade, Industry and Fisheries, called on Keppel O&M on 8 April 2014.



Swedish Ambassador H.E. Hakan Jevrell (second from left) and Mrs Karin Ohman (left), Deputy Head of the Swedish Mission in Singapore, were shown around Keppel O&M by Mr Hoe Eng Hock (second from right), MD of Keppel Singmarine, and Mr Chris Ong (right), Acting ED (Operations) of Keppel FELS

exchange programme visited Keppel O&M to learn more about the offshore and marine industry. These students comprised scholars from Singapore universities and other reputable universities in Asia who are in Singapore on exchange programmes .

Mr Keith Teo, GM (Marketing) of Keppel FELS and Jan Lye, Assistant GM (Human Resource) of Keppel O&M, engaged the students during their visit by sharing on the growth potential of the industry and its career prospects.

### BRAZILIAN NETWORKS

On 6 March 2014, government and trade representatives from Santa Catarina, Brazil, visited Keppel O&M's facilities in Singapore.



Mr Michael Chia (left), MD (Marine & Technology) of Keppel O&M, and Mr Wong Kok Seng (right), MD (Offshore) of Keppel O&M, hosted Ms Dilek Ayhan (second from right), Norwegian State Secretary for Trade, Industry and Fisheries, and Norwegian Ambassador to Singapore H.E. Tormod C. Endresen (second from left) to a visit at Keppel O&M

Led by Mr Paulo Bournhausen, State Secretary for Sustainable Economic Development, and Mr Alcântaro Correa, President of Brazilian Service of Support for Micro and Small Enterprises, the Santa Catarina delegation was hosted by Mr Loh Chin Hua, CEO of Keppel Corporation and Chairman of Keppel O&M, Mr Choo Chiau Beng, Senior Advisor to the Board of Keppel Corporation, and Mr Tong Chong Heong, Senior Advisor to the Board of Keppel O&M.

They were also joined by Keppel's Brazilian employees from BrasFELS in Angra dos Reis, Rio de Janeiro, and Keppel Singmarine Brasil in Navegantes, Santa Catarina, who were on work attachment to Singapore.

The State Secretary was accompanied on the visit by Ambassador of Norway to Singapore H.E. Tormod C. Endresen, Ms Ida Skard, Director General of the Maritime Department in Sweden's Ministry of Trade, Industry and Fisheries, and representatives from the Norwegian Shipowners' Association.

Mr Michael Chia, MD (Marine & Technology) of Keppel O&M, and

Mr Wong Kok Seng, MD (Offshore) of Keppel O&M, hosted the visitors, who learnt about Keppel O&M's long ties with Norway and the many projects completed for the Norwegian companies.

### STUDENT EXCHANGES

On 10 April 2014, a group of more than 60 students from the Temasek Foundation Leadership Enrichment and Regional Networking (LEaRN)

# Walking the ground

Singapore continues to beckon, as investors seek out new opportunities and safe havens to weather market volatilities and downside risks.

A group of 22 investors, representing several major funds in Malaysia, toured Keppel FELS in Singapore on 6 March 2014, on the sidelines of DMG's first Oil & Gas Conference in Kuala Lumpur.

The investors were engaged in a robust discussion with Mr Wong Ngiam Jih, Keppel Offshore & Marine's CFO, who promptly addressed their queries on the

company's strategic directions, business outlook and global industry concerns. The visitors were also given a comprehensive yard tour and insights into the process of rig construction.

DMG analyst Jason Saw said, "As they had visited another yard earlier in the day, the investors were able to compare the operations between the different yards. The investors were impressed with the scale of Keppel's operations, and appreciated the candid discussion with the management."



Through visits such as yard tours, investors obtain a clearer understanding of Keppel's businesses and operations by observing the action on the ground

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# Quality recognition

Receiving recognition for its sterling yard operations, Keppel Shipyard was presented the Shipbuilding & Repair Yard Award at Seatrade Asia Awards 2014. It was also nominated for the Safety Award in recognition of its efforts and achievements in safety.

The awards event, held on 7 April 2014, brought together leading companies in the maritime industry for a night of networking and celebration.

Mr Chor How Jat, MD of Keppel Shipyard, shared, "We are honoured to be recognised as a leading shipyard at this prestigious award ceremony. Looking ahead,

we will continue to deliver to our customers' satisfaction by remaining focused on product innovation, productivity improvements, and value-added solutions."

At the ceremony, Mr Chor also presented the Shipowner/ Operator Award sponsored by Keppel Shipyard.



Mr Louis Chow (centre), Senior GM (Commercial) of Keppel Shipyard, receiving the Shipbuilding & Repair Yard Award on behalf of Keppel Shipyard at Seatrade Asia Awards 2014 (photo courtesy of Seatrade)



# Uplifting ideas



The team from Keppel Shipyard developed a jig to help move thrusters – from lifting to vehicular transportation – and hold it in place for repairs. The jig not only improved safety, but also resulted in 50% manpower savings over the entire transportation and overhauling process

**“Our client was so impressed with our innovation that they actually purchased our jig for their own use. We are glad that our client can see the value-add we bring to the job.”**

*Madivanan Rajoo,  
Senior Foreman at Keppel Shipyard*

When the Machinery Department at Keppel Shipyard undertook a job to overhaul a thruster in early 2013, the team was faced with the challenge of lifting and transporting the vessel's propulsion device from the drydock to the workshop.

At that time, there were no standard ways or tools to carry a thruster that is irregular in shape and weighs as much as 25 tonnes onshore for repair works.

The team had to improvise by balancing the steel structure on a transporter with wooden blocks and wedges, and securing it with chains and belts. As an added precaution, workers would walk by the sides of the transporter to prevent the thruster from toppling while it was being ferried from the quayside to the workshop.

When the second thruster job came along, the team decided to devise a safer and more effective way of carrying and transporting thrusters.

After much brainstorming, the Machinery Department team came up with an invention that secures a thruster by acting as its container. The result was a cube-like jig whose bottom half has a semi-circular structure for the rounded base of the thruster to rest on, and clamps on the top half to hold the thruster in place.

Once the thruster is fastened to the jig, the workers can transport

the resulting structure with ease as it can be hooked up easily to cranes for lifting, and sit stably on a transporter because of its square base. In fact, the team designed it such that repair works can be carried out on the thruster without even removing it from the jig.

As a result of the innovation, the risk to workers arising from handling and transporting a thruster was greatly reduced. The device also enabled 50% savings in manpower over the whole process of overhauling the thruster to be achieved.

One of the team members, Madivanan Rajoo, Senior Foreman at Keppel Shipyard, said, “Our client was so impressed with our innovation that they actually purchased our jig for their own use. We are glad that our client can see the value-add we bring to the job.

“The beauty of the jig design is that it can be easily modified according to the shapes and sizes of different thrusters. We look forward to sharing our invention with other clients who need it.”

The ingenious invention won the project team a Gold award at the 7th Keppel Group Safety Convention on 7 October 2013, and an award at the 16th Association of Singapore Marine Industries Convention for Workplace Safety and Health Innovations on 25 September 2013.

# Choice employer



Dr Lee Chay Hoon (left), GM (Organisational Development) of Keppel O&M receives the Randstad Award on behalf of Keppel Corporation

Keppel Corporation secured the top spot as the most attractive employer in Singapore in the Engineering Sector Services category at the Randstad Award 2014 held on 11 April 2014.

The award studies the attractiveness of 75 of the largest companies in Singapore as employers. More than 6,500 job seekers were surveyed for this study.

As an employer with more than 40,000 staff worldwide, Keppel's

people development initiatives have been lauded at various national and industry award platforms over the years. In 2013, Keppel Corporation was given the Human Capital Breakthrough Award by Human Capital Singapore for improvements made to its human capital and talent management practices, while Keppel Offshore & Marine (Keppel O&M) received the Best Graduate Development and Best Health & Well-Being Award at the 10th Human Resources Management Awards.

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# Fresh initiative

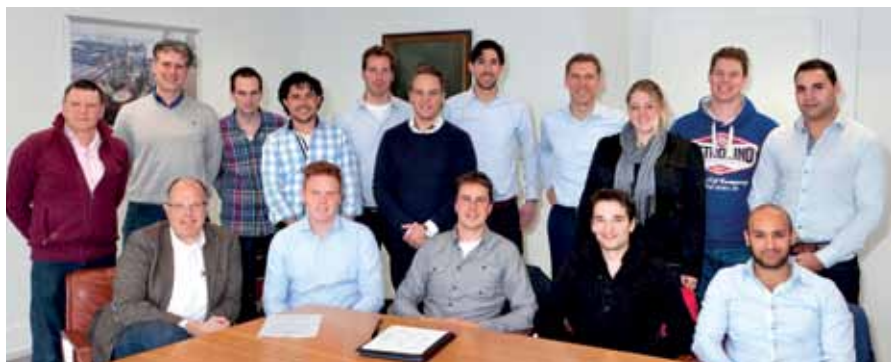
Growing as an employer of choice, Keppel provides platforms for open communication between employees and senior management.

On 7 March 2014, 16 young Keppelites from Keppel Verolme, benefitted from the robust sharing of insights from the company's senior management at the official launch of the "Keppel Verolme Young Professionals" initiative.

Among the senior management present were MD Mr Harold Linssen, CFO Mr Wong Wei Kei, GM (Commercial) Mr Ruud van der Stroom, GM (Human Resources and Health, Safety, Environment and Quality) Mr Bert van Schijndel and Operational Manager, Projects, Production and Dock Mr Jan van der Slik.

The budding initiative is part of Keppel Verolme's talent and succession management framework to develop a capable team with a continuous pipeline of future leaders. It hopes to create greater interaction among promising talents while harnessing their youthful energy and fresh perspectives.

Said Chairman of Keppel Verolme Young Professionals Mr Rick Fikkert, "We are happy to have the support of senior management and firmly believe that such initiatives help strengthen engagement with the younger generation, building up a continuous stream of talent into the company."



The "Keppel Verolme Young Professionals" initiative, launched on 7 March 2014, provides a platform for lively and engaging discussions between young Keppelites and senior management

# Naturalising in Nantong

Like most Singaporeans, Edmund Lek – despite being bilingual – had found communicating fully in Mandarin a challenge when he was first posted to Nantong, China, to helm Keppel Nantong as its new President in end 2012.

Unfamiliarity with the language due to infrequent usage in Singapore, when compounded



Despite not being fluent in Mandarin when he first arrived in China, Edmund Lek (left), President of Keppel Nantong, cultivated a passion for learning about the Chinese culture and language to facilitate his interactions with the locals

by Chinese cultural nuances and colloquialism, had made Edmund's initial months of his first overseas posting frustrating and yet fascinating at the same time.

On his arrival in Nantong, Edmund had to oversee both Keppel Nantong Shipyard, which was an established shipyard, and Keppel Nantong Heavy Industry which was in its initial stage of development.

"Where Keppel Nantong Heavy Industry is today was just a piece of bare land when I first came to Nantong. I had to quickly familiarise myself with Keppel Nantong Shipyard and its team, the contractors and project team involved in the new yard, and at the same time reacquaint myself with Chinese characters as all the documents and contracts were in Mandarin! I was bombarded by new people, new voices, and new challenges every day," shared Edmund.

If anything had prepared him to meet those challenges, it would be the tenacity and perseverance he

had cultivated since his secondary school days. Despite achieving lacklustre GCE 'O' levels results back then, Edmund had persisted with his education by entering into an Institute of Technical Education before his national service to undergo a course in Electrical & Electronic Servicing, and eventually graduating with a Bachelor of Engineering (Electrical) from the Nanyang Technological University.

On top of approaching challenges with perseverance, Edmund also meets each new day with a passion for learning. Knowing that building relationships is critical to getting things done in China, he started to deepen his interest in the Chinese culture and current affairs so that he could understand the locals better.

Today, Edmund is more at ease with conversing in his mother tongue. He had even delivered a speech fully in Mandarin at the inauguration ceremony of a new panel line workshop in October 2013 in the presence of Singapore's Education Minister Heng Swee Keat, Nantong City Mayor Zhang Guohua and a delegation of businessmen from Singapore.

Edmund's confidence and savviness in working with Chinese people are building up with each day.

Practice, and more practice, is the key to his success. As he would tell his team, "天下无难事，只怕有心人" (translation: there is nothing impossible in this world when one has the determination to succeed).



Edmund Lek oversees both Keppel Nantong Shipyard and Keppel Nantong Heavy Industry

# Amazing maritime hunt

With quick wit and fast feet, an all-female team from Keppel FELS reigned at the Amazing Maritime Hunt held on 6 April 2014, clinching the 'Best Corporate Team' title. The event, organised as part of Singapore Maritime Week 2014 and sponsored by Keppel Corporation, comprised a series of maritime-themed games.



The all-female team (four from left) from Keppel FELS reigned at the Amazing Maritime Hunt, celebrate their 'Best Corporate Team' title together with Mr Lui Tuck Yew (centre), Minister for Transport, and representatives from SMF and MPA

Close to 100 Keppelites participated in the hunt, which required teams to strategise and compete on various physical and mental challenges at stations located across Singapore. The flag-off at VivoCity was graced by Mr Michael Chia, Chairman of the Singapore Maritime Foundation and MD (Marine & Technology) of Keppel Offshore & Marine.

The winning team was made up of Zhen Liyi, Nur Hidayah Bte Jumal,

Low Mei Liang and Tan Hui Xian from the production outfit at Keppel FELS. On the team's win, Liyi shared, "Throughout the competition, we kept the Keppel *Can Do!* spirit ablaze in us. We focused our minds on completing all stations as fast as we can and found ways and means to make it happen! We enjoyed the game thoroughly, so the win was really an amazing bonus!"

Singapore Maritime Week, organised by the Maritime and Port Authority of Singapore (MPA), is the leading maritime event in Singapore. Over the week, the international maritime community in Singapore gathered for conferences, dialogues, exhibitions and social events in celebration of all things maritime. Exhibitions at VivoCity, Jurong Point and Parkway Parade were attended by some 100,000 visitors.

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# Chilling with customers



Keppel FELS' customers, employees and partners get cosy at a Sundowner of a different kind

Customers, employees and partners of Keppel FELS came together for drinks and to marvel at ice sculptures at 2Degree Ice

Art, Singapore's first sculpture exhibition of its kind.

The get -cosy event on 28 February

2014 was part of the regular Sundowner programme to foster closer customer relationships organised by Keppel FELS.

# Constant vigilance

With thousands of workers going through the doors of Keppel FELS' yards every day, the threat of a flu pandemic is taken seriously. Keppel FELS conducted a flu pandemic exercise on 1 March 2014 at Keppel FELS Pioneer Yard as well as the Acacia Lodge workers' dormitory, to prepare itself for such scenarios.

Over 1,900 employees and subcontractors' workers participated in the exercise, with observers from senior management and Keppel FELS Employees' Union (KFEU).

Staff set up three screening points at the yard and dormitory

entrances from 5.30am onwards to conduct temperature screening for anyone entering the yard or dormitory.

To test the robustness of its response procedures, the exercise included a simulated scenario of workers detected with high body temperatures. The 'suspected' cases were marked clearly and escorted to another area to be isolated. Contact tracing was also initiated for each case.

The exercise allowed protocols to be tested and reviewed, contributing towards the improvements in the effectiveness of Keppel O&M's business continuity plans.



Flu pandemic exercises carried out by Keppel FELS help to test and improve its robust business continuity plans

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# Pedal for charity

Cyclists from Keppelite Recreation Club competed in The Business Times Charity Challenge on 30 March 2014 to raise funds for the underprivileged. The event was supported by Keppel Corporation in aid of Dover Park Hospice and SingHealth Transplant's TRUEfund.

Chang Hsu and Teo Wei Kiat from Keppel Shipyard, Shawn Lee from Keppel FELS and Lai Jin li from Keppel Singmarine took part in the 40-km race, which was flagged off by Minister for Manpower Mr Tan Chuan-Jin.

Participating in the race for the second year running, Chang Hsu shared, "We are pleased to have done our part for charit. We conquered the punishing, steep climb of Benjamin Sheares Bridge, raced on the East Coast Parkway Expressway, and completed the race with very creditable timings! I certainly look forward to cycling together with my fellow Keppelites again in future."



Cyclists from Keppelite Recreation Club (from left to right) Chang Hsu, Shawn Lee, Teo Wei Kiat and Lai Jin Li do their part for charity by competing in The Business Times Charity Challenge 2014

# Splashes of colour

Keppel Volunteers brought colour and smiles to lives, painting the interiors of Moral Student Care Centre and taking the elderly from Bedok Radiance Seniors Activity Centre out on an excursion to enjoy orchid blooms.

## PAINT IN THE CHEER

Over the weekend from 22 to 23 March 2014, Keppel Volunteers gave Moral Student Care Centre a new look by sprucing up its interiors with a fresh coat of paint. Moral Student Care Centre provides before and after school care services for students from various background, including those with special needs.

34 Keppelites from different business units joined hands in painting the entire centre over three sessions that weekend. Although most of the participants were first-time painters, that did not prevent them from accomplishing their tasks competently and having buckets of fun in the process.

## BRING OUT THE SMILES

On 5 April 2014, Keppel Volunteers took some 27 senior citizens from Bedok Radiance Seniors Activity Centre (SAC) out for an excursion at the National Orchid Garden.

Strolling to the light drizzle that helped to cool the day, participants enjoyed the beautiful scenery from underneath their umbrellas and shelters that lined the walkway.

Event organiser Koh Wei Hang, Operation Engineer from Keppel Shipyard shared, "We were initially



Keppel Volunteers enjoyed a cool morning stroll around the National Orchid Garden with the elderly from Bedok Radiance Seniors Activity Centre

worried about the wet weather, but I can tell that the old folks have enjoyed themselves from the smiles they wore on their faces. It was especially heart-warming for me to see an elderly couple who looked so loving together when they took photos with the flowers

and laughed happily throughout their walk. Sometimes, all it takes is to spend quality time together to bring some sunshine and warmth into one another's lives. "

# GLOBAL NETWORK

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# Keppel secures newbuild ship and turret fabrication contracts



Keppel's track record of ice-class vessels includes the first ice-class supply vessel, M.V. Svetlyy, that Keppel Singmarine delivered to Lukoil Kaliningradmorneft, a subsidiary of Russia-based LUKOIL Oil Company, in 2006

Keppel Shipyard, Keppel Singmarine and Keppel Nantong Shipyard (Keppel Nantong) have secured newbuild ship and fabrication contracts.

Mr Michael Chia, Managing Director (Marine & Technology) of Keppel Offshore & Marine, said, "We are happy to be able to offer our comprehensive suite of offshore and marine solutions to our valued repeat customers, who are once again placing their confidence in Keppel by entrusting their projects with us.

"Keppel Shipyard's latest contract bears testament to our expertise and experience in Floating

Production Storage and Offloading (FPSO) turret fabrication and installation, while Keppel Singmarine's and Keppel Nantong's contracts reiterate our competency in the construction of a variety of ships, including ice-class vessels."

Keppel Shipyard will undertake for SOFEC, Inc. (SOFEC) the fabrication of an external turret mooring system for an FPSO vessel that will operate in the Tweneboa-Enyenra-Ntomme fields in Ghana. Fabrication of the turret is expected to be completed in 1Q 2015.

Meanwhile, Keppel Singmarine has secured three contracts from Bumi

Armada Offshore Holdings Limited – a subsidiary of Bumi Armada Berhad (Bumi Armada) – to build two ice-class supply vessels and an ice-class multi-purpose duty-rescue vessel.

When completed and delivered in 2015, these vessels will support offshore platforms at the Filanovsky oil field in the northern part of the Caspian Sea, off the coast of Russia, providing year-round services such as the delivery of cargoes, salvage, search and rescue functions, fire-fighting operations, and towing and tanker mooring operations.

Keppel Singmarine strengthened its position in the specialised market of ice-class vessels when it won the contract from LUKOIL-Kaliningradmorneft in 2006 to construct Asia's first two icebreakers, and it has continued to build up its capabilities in ice technology since. The contracts from Bumi Armada will add another three to its existing track record of seven newbuild ice-class vessels for the Arctic and Caspian regions, marking a significant stride in the company's endeavours to be a choice partner in this market.

In China, Keppel Nantong secured an order from KSP Towage Sdn Bhd for the construction of two tugs. These tugs, which are scheduled for delivery in 3Q 2014, will be chartered for deployment in Malaysia.