

OFFSHOREMARINE

A newsletter of Keppel Offshore & Marine

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LANDMARK SUBSEA CONSTRUCTION VESSEL DELIVERED

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Keppel's BrasFELS shipyard in Brazil delivered the Cidade de Campos dos Goytacazes MV29, its fifth Floating Production Storage and Offloading (FPSO) vessel to MODEC Offshore Production Systems (Singapore) safely, on time and within budget.

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New opportunities underpinned by robust operations

Keppel Offshore & Marine (Keppel O&M) has maintained a resilient performance in 9M 2017 amidst a challenging external environment while securing a creditable level of orders from existing and new markets. *OffshoreMarine* reproduces extracts of the speech by Mr Loh Chin Hua, CEO of Keppel Corporation and Chairman of Keppel O&M at the Company's 3Q & 9M 2017 results webcast.

It has been an active quarter for the Keppel Group as we worked hard to both deliver our projects, and hunt as a pack for growth opportunities, leveraging our competencies and track record as a solutions provider for sustainable urbanisation.

There appears to be growing optimism on a nascent recovery in the offshore market, fuelled by the momentum in mergers and acquisitions, as well as recent secondary rig transactions. However, with continuing low

utilisation rates and a large supply overhang in the jackup market, it will take time before we can expect to see orders for newbuild jackups. In the meantime, Keppel continues to seek opportunities in other markets, including production assets, Jones Act vessels, as well as Liquefied Natural Gas (LNG)-related solutions.

Despite a much reduced top line, Keppel Offshore and Marine (Keppel O&M) achieved an operating profit of \$39 million in 9M 2017. The operating

profit, supplemented by contribution from associates, was just able to cover financing costs for working capital, which enabled the company to break even.

Keppel O&M's headcount now stands at about 16,000, compared to more than 36,000 at the start of 2015. Keppel O&M will continue its efforts to optimise operations and manage costs tightly even as it builds new capabilities and expands into new markets.

Continues on page 4...



A world leader in FPSO conversions, Keppel Shipyard has secured three FPSO conversion projects in 3Q 2017

Continued from page 3.

Keppel O&M has secured contracts of slightly more than \$1 billion year to date, including LNG containerships and carriers, dredgers as well as Floating Production Storage and Offloading (FPSO) vessel conversions.

The latest FPSO conversion of a Very Large Crude Carrier clinched by Keppel Shipyard is our 25th major project from long-standing customer, SBM Offshore. Upon completion, the FPSO will be deployed to the Liza field, located offshore Guyana.

As at 30 September 2017, Keppel O&M's net orderbook was \$3.9 billion, compared to \$3.4 billion at the end of the last quarter, excluding the projects for Sete Brasil. In 9M 2017, Keppel O&M delivered seven major projects, namely four FPSOs, a semi, a subsea construction vessel and a crane vessel.

In this quarter, we reached an agreement with TS Offshore to defer the delivery of its jackup from 2017 to 2019. We will continue to engage our customers to seek win-win outcomes.

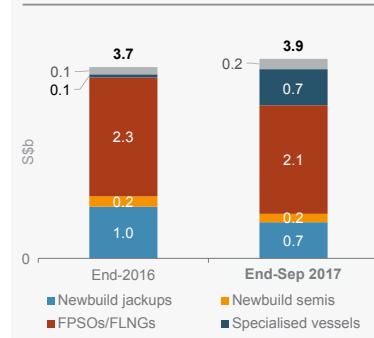
On a separate note, we are heartened by the traction we have made in new markets.

With about 30 years of experience in the LNG space, Keppel has developed cost effective, end-to-end solutions for every stage of the gas value chain.

Offshore & Marine

Net orderbook¹

\$3.9b as at end-Sep 2017



¹ Excludes semis for Sete

[#] Includes modification, upgrading, fabrication and rig repairs

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- 7 major deliveries in 9M 2017 namely 4 FPSOs, a semi, a subsea construction vessel and a crane vessel
- 1 jackup deferral in 3Q 2017
- Gaining traction in new markets
 - Contracted to build 2 Jones Act LNG containerships for Pasha
 - Delivery of Hilli Episeyo
 - FuelNG completed first commercial LNG bunkering
 - Exploring small-scale LNG solutions for Indonesia with Pavilion Energy and PLN

Keppel Corporation

Keppel AmFELS, a wholly-owned subsidiary in the United States, is ideally located and well-equipped to build a wide variety of vessels for the Jones Act market. It recently secured a contract worth more than US\$400 million from Honolulu-based Pasha Hawaii for the construction of two LNG-fueled containerships to be built to our proprietary design. We expect to deliver the two vessels in 2020.

In October, we also witnessed the delivery of the Hilli Episeyo, the world's first FLNG vessel conversion that we completed in partnership with Golar LNG. We are pleased to have provided Golar with a game-changing solution that is not only significantly more cost effective but also much faster to market.

In another milestone for us, FuelNG, our joint venture with Shell, has achieved the first commercial LNG bunker transfer in Singapore by completing truck-to-ship bunkering for Hilli Episeyo.

Keppel O&M has also entered into a Heads of Agreement with Pavilion Energy and Indonesia's state-owned PT Perusahaan Listrik Negara to explore opportunities in the development of small-scale LNG distribution in West Indonesia.

IN CONVERSATION

OffshoreMarine presents highlights of Keppel Corporation's 3Q & 9M 2017 results webcast Question & Answer session with the media and investment community.



Keppel management answering questions at the company's 3Q & 9M 2017 results

Q: Will you consider selling the deferred jackup rigs in the secondary market? Have there been any active resale enquiries by potential customers?

CO: Our rig contracts are still intact and we are working closely with our customers to find win-win solutions, just as we did with the Transocean and Borr Drilling deal. At this moment, we will press on to complete our contractual obligations.

Q: Assuming Sete Brasil is unable to make payment within the next few years, what are your contingency plans for your projects with them? Would you consider reselling the rigs?

LCH: Our contracts with Sete

Brasil remain legally valid but we are faced with the fact that Sete Brasil is undergoing financial restructuring. We have developed plans based on the various scenarios. Of course, we would like to see Sete Brasil continue with its contracts but we recognise that this may not happen and took a provision two years ago. The provision is evaluated every quarter and at this point in time, we believe that they remain adequate.

That said, we are working very closely with Sete Brasil and its other stakeholders to try and see how we can resolve this situation. We are looking at different options, including reselling the rigs.

Q: Will Keppel Capital consider stepping in to fill project financing needs of your potential Offshore & Marine (O&M) customers?

LCH: Currently, Keppel Capital has not stepped in but we are looking at opportunities as there are investors that are keen to look into this sector.

CT: Keppel Capital is always looking to maximise investment returns for our investors. There has been interest in various sectors including O&M and Infrastructure. We will always explore various opportunities with Keppel O&M and will work hand-in-hand with them to look into building interesting opportunities for our investor base.

LCH – Mr Loh Chin Hua,
CEO of Keppel Corporation

CO – Mr Chris Ong,
CEO of Keppel Offshore & Marine

CT – Ms Christina Tan,
CEO of Keppel Capital

Major FPSO conversion project for SBM Offshore



Keppel Shipyard has secured its 25th FPSO conversion project from long-standing customer SBM Offshore. It previously delivered the FPSO Turitella (pictured) to SBM Offshore

Keppel Shipyard, a wholly-owned subsidiary of Keppel Offshore & Marine (Keppel O&M), announced on 5 October 2017 it secured a Floating Production Storage and Offloading vessel (FPSO) conversion contract from long-standing customer, SBM Offshore N.V. (SBM Offshore).

The contract is for the conversion of a Very Large Crude Carrier (VLCC) into an FPSO, which upon completion, will be deployed to the Liza field, located approximately 193km offshore Guyana in the Stabroek block.

The shipyard's work scope includes refurbishment and life extension

works, such as the upgrading of living quarters, fabrication and installation of spread mooring systems, as well as the installation and integration of topside modules.

Mr Chor How Jat, Managing Director (Conversions & Repairs), Keppel O&M and Managing Director, Keppel Shipyard, said, "We are pleased to undertake the conversion of this FPSO, which is our 25th major project from SBM Offshore. It is testament to Keppel's expertise in FPSO conversions and the strong partnership we have developed with SBM Offshore since Keppel Shipyard's first delivery in 1981."

"Over the years we have established a base of strong customers, including SBM Offshore, who choose us for our proven track record and value-add in the conversion, upgrading and repair of vessels."

The converted FPSO will have a storage capacity of 1.6 million barrels of crude oil and is capable of producing up to 120,000 barrels of oil per day. The vessel will have a gas treatment capacity of circa 170 million standard cubic feet per day and a water injection capacity of circa 200,000 barrels of water per day.

Exploring regional LNG solutions

As part its gas strategy, Keppel Offshore & Marine (Keppel O&M) entered into a Heads of Agreement (HOA) with Pavilion Energy and Indonesia state-owned PT Perusahaan Listrik Negara (PLN) to explore opportunities in the development of small-scale Liquefied Natural Gas (LNG) distribution in West Indonesia.

The signing of the agreement took place at the Singapore-Indonesia Leaders' Retreat in Singapore on 7 September 2017.

The HOA follows the discussion between the Indonesia and

Singapore governments regarding bilateral energy cooperation during the Singapore-Indonesia Leaders' Retreat held in Semarang last year. A joint feasibility study was subsequently carried out, which demonstrated the cost savings and mutual benefits that can arise from collaboration in the small-scale LNG value chain.

The HOA intends to leverage on the combined expertise of the companies in the small-scale LNG value chain to distribute LNG in an economic manner to remote areas in West Indonesia. LNG can be delivered to floating and

onshore LNG terminals using small LNG carriers, where it is regasified and used to generate electricity at PLN's power plants.

Mr Chris Ong, CEO of Keppel O&M, said, "Keppel has almost 30 years of experience in the LNG space. With a comprehensive suite of solutions for every stage of the gas value chain, including the world's first Floating Liquefaction Vessel (FLNGV) conversion and the world's first Floating Storage and Regasification Unit (FSRU) conversion, we are able to provide cost effective, end-to-end solutions for our customers."



At the signing of the Heads of Agreement on small-scale LNG collaboration at the Istana were representatives from Keppel O&M, Pavilion Energy and PT Perusahaan Listrik Negara (PLN), including Mr Chris Ong (third from left), CEO of Keppel O&M; Mr Amir Rosidin (fourth from left), Director of PLN, Mr Seah Moon Ming (fifth from left), CEO of Pavilion Energy and Pavilion Gas and Mr Abu Bakar (second from right), MD (Gas & Specialised Vessels), Keppel O&M

Delivery of Hilli Episeyo

FIRST FLNGV TO START PRODUCTION IN AFRICA

Keppel Shipyard has delivered the world's first converted Floating Liquefaction Vessel (FLNGV), Hilli Episeyo, to Golar LNG Partners (Golar) under 40 months and with a commendable safety record of over 19 million man-hours without any lost-time incidents.

The yard commemorated the vessel's sailaway on 12 October 2017. Hilli Episeyo will be deployed to offshore Kribi, Cameroon for Societe Nationale des Hydrocarbures and Perenco Cameroon SA. The vessel is set to arrive in Cameroon by mid-November 2017, making her the first FLNGV to start production in Africa.

Hilli Episeyo was converted from a 1975 built Moss LNG carrier with a storage capacity of 125,000 m³. Sponsons were added on both sides

of the hull to house the topside equipment comprising of pre-treatment systems, four PRICO® single mixed refrigerant liquefaction trains, boil-off gas compression and offloading equipment. The vessel is designed for a liquefaction capacity of about 2.4 million tonnes of LNG per annum.

SALE OF INTEREST IN HILLI EPISEYO

On 15 August 2017, KS Investments (KSI), a subsidiary of Keppel Offshore & Marine, entered into a sale and purchase agreement with Golar and Black & Veatch (B&V) to sell an equity interest in Golar Hilli LLC to a subsidiary of Golar for US\$658 million, less net lease obligations.

The sale is in conjunction with Golar's master limited partnership structure for the partnership to acquire an equity interest in Hilli Episeyo.

Upon closing, which is expected to occur by end-April 2018, KSI, Golar and B&V will sell an aggregate 50% of the common units in Golar Hilli LLC, comprising 44.55% (Golar), 5% (KSI) and 0.45% (B&V), to a subsidiary of the partnership.

Prior to the sale, Keppel had a 10% stake in Golar Hilli LLC. After the sale of interest, Keppel's effective stake in Golar Hilli LLC will be 5% of the common units.

Keppel will also retain its stake of 10% in Series A units which relates to the cash flows associated with oil price linked elements of the tolling fee negotiated in the liquefaction tolling agreement and 10% of Series B units which relates to the cash flows associated with any future expansion of contracted capacity beyond the present 50% of the Hilli.



Keppel Shipyard delivered the world's first converted FLNGV, Hilli Episeyo, to the satisfaction of Golar LNG

LNG bunkering milestone

FueLNG, a joint venture between Keppel Offshore & Marine and Shell Eastern Petroleum (Pte) Ltd (Shell), has achieved the first commercial Liquefied Natural Gas (LNG) bunker transfer in Singapore by completing truck-to-ship bunkering for the floating liquefaction vessel, Hilli Episeyo.

The LNG bunker transfer, which was carried out in batches from 22 July to 23 September 2017, was conducted in accordance with the Singapore Chemical Industry Council Technical Reference 56 for LNG Bunkering, which provides a safe, efficient and sustainable technical framework for LNG bunkering operations.

This marks the first LNG trucking operation for FueLNG following

the facilitation of Singapore LNG's successful gas-up/cool-down and reload operation at its Jurong Island terminal of the Cardissa, Shell's LNG bunker vessel, in June 2017.

Mr Michael Chia, Chairman of FueLNG, said, "This is an exciting milestone for FueLNG as we establish ourselves as a safe, cost-efficient and reliable LNG bunker supplier. The development of proven LNG bunkering infrastructure will give confidence to the industry that LNG can be widely adopted as a marine fuel and is sustainable for the long-term."

FueLNG has also secured contracts from Keppel Smit Towage and Maju Maritime to provide LNG

bunkering services for two dual-fuel LNG harbour tugs.

The contracts will commence in 2018 when construction of the tugs is completed.

Global industry players are poised to pursue greener and more sustainable solutions with the implementation of environmental regulations such as the International Maritime Organisation's (IMO) new 0.5% global sulphur cap on fuel content effective from 1 January 2020.

According to DNV GL, the use of LNG completely removes SOx and particulates, and reduces NOx and carbon dioxide emissions by 85 percent and at least 20 percent respectively.



FueLNG, a joint venture between Keppel O&M and Shell, achieved the first commercial LNG bunker transfer in Singapore by completing truck-to-ship bunkering for the Floating Liquefaction (FLNG) vessel, Hilli Episeyo (in background)

BrasFELS delivers fifth FPSO project for MODEC

Cidade de Campos dos Goytacazes MV29 is also BrasFELS' 9th FPSO project for Brazil.

Keppel Offshore & Marine (Keppel O&M) announced on 29 September 2017 that its wholly owned subsidiary Keppel FELS Brasil's BrasFELS shipyard in Brazil has delivered the Cidade de Campos dos Goytacazes MV29, a Floating Production Storage and Offloading (FPSO) vessel, to repeat customer MODEC Offshore Production Systems (Singapore) Pte. Ltd., an EPCI arm of the MODEC, Inc. group (MODEC).

The FPSO was completed safely, on time and within budget, and departed the shipyard recently for the Bananal Bay in Brazil. It will subsequently be deployed in the Tartaruga Verde and Tartaruga Mestiça Fields, in the Campos Basin, off the coast of Rio de Janeiro, Brazil.

Mr Kwok Kai Choong, then-CEO and President of Keppel FELS Brasil, said, "This is BrasFELS' fifth successful collaboration with our long-standing customer MODEC and we are proud to again deliver to their satisfaction. We would like to express our appreciation to MODEC for their trust and confidence in our commitment and capabilities as well as for the strong teamwork throughout the duration of the project. This is also BrasFELS' 9th FPSO project for Brazil and it demonstrates



The conversion of the FPSO, Cidade de Campos dos Goytacazes MV29, is BrasFELS' ninth such project for Brazil

our commitment and reliability in supporting the country's oil and gas industry."

BrasFELS' workscope for the FPSO Cidade de Campos dos Goytacazes MV29 included the fabrication of nine topside production modules as well as integration works. The FPSO has a production capacity of 150,000 barrels of oil per day (bopd) and five million cubic metres of gas per day, and a storage capacity of 1.6 million barrels of oil.

Mr Sateesh Dev, President & CEO of MODEC Offshore Production

Systems (Singapore), said, "The FPSO Cidade de Campos dos Goytacazes MV29 project bears testament to MODEC's and BrasFELS' shared commitment for safe, on time and high quality execution. Over the years, we have chosen BrasFELS as our choice shipyard in Brazil because of their reliability, cost-efficiency and capability to meet our needs. MODEC is steadfast in supporting the development and growth of Brazil's significant oil and gas industry, and we are glad to have a good partner in the Keppel Group to support us on this journey."

Landmark SCV for the Caspian region

Baku Shipyard, a joint venture between Keppel Offshore & Marine (Keppel O&M), State Oil Company of Azerbaijan Republic (SOCAR) and Azerbaijan Investment Company (AIC), has completed the first Subsea Construction Vessel (SCV) for the Caspian region.

The vessel was named Khankendi

by the President of Azerbaijan, H.E. Ilham Aliyev, at a ceremony in Baku Shipyard on 7 September 2017 and launched by the Shah Deniz consortium.

Khankendi will be deployed to the Shah Deniz field where it is expected to perform subsea installation and construction work over the next 11 years. The SCV

was specifically designed and built to install the biggest subsea production system in the Caspian Sea as part of the Shah Deniz Stage 2 project.

Mr Abu Bakar Bin Mohd Nor, MD (Gas & Specialised Vessels), Keppel O&M, said, "We are proud to have designed and built this highly sophisticated SCV for the Shah Deniz consortium, the first such vessel to be built in the Caspian region. It is a demonstration of how Keppel O&M harnesses synergies across its global network of yards through Keppel Singmarine, Baku Shipyard and Marine Technology Development (MTD) to deliver innovative solutions for Azerbaijan, which is a land-locked country."

Khankendi was built to the design of MTD, the ship design and development arm of Keppel O&M, while Keppel Singmarine had built the vessel's hull as two longitudinal strips to enable safe transportation through the narrow Volga-Don Canal to Baku Shipyard, where the vessel was completed.

The vessel is equipped with dynamic positioning to allow working in 3.5 metre significant wave height, a 900 tonne main crane capable of placing 750 tonne subsea structures down to 600 metres below sea level, an 18-man two-bell diving system, two work-class ROVs and a strengthened moon pool.



Designed by Keppel O&M and built by Baku Shipyard, the state-of-the-art subsea construction vessel, Khankendi, will install the biggest subsea production system in the Caspian Sea



H.E. Ilham Aliyev (right), President of Azerbaijan, congratulating Mr Lam Khee Chong (left), General Manager, Baku Shipyard, on the completion of the Khankendi

Top at WSH Awards 2017



Keppel O&M produced an outstanding safety performance, clinching 32 awards at this year's Workplace Safety and Health (WSH) Awards

Keppel Group has clinched 36 awards at this year's Workplace Safety and Health (WSH) Awards held on 25 July 2017, which was organised by the Workplace Safety and Health Council (WSHC) and Ministry of Manpower (MOM), Singapore. This is the highest number of awards won by a single organisation this year.

Keppel Offshore & Marine (Keppel O&M) clinched 32 of the Group's 36 awards. 28 awards were under the Safety and Health Award Recognition for Projects (SHARP) category for good project safety and health management systems while Keppel FELS and Keppel Singmarine clinched the WSH Performance (Silver) Awards for exemplary safety performances and implementation of strong WSH management systems.

Keppel FELS received the innovation award for the Handy Bolt and Nut Tightener, which improved work productivity and reduced the risk of finger injuries. Its spring lock mechanism can be adjusted to fit bolts and nuts of different sizes, and its neodymium alloy magnets firmly secure the

bolt and nut in place during the tightening and dismantling of flanged pipe connections.

In addition, Mr Saravanan Marimuthu, Senior Welding

Superintendent at Keppel FELS, received the Supervisor Award for his exemplary performance in ensuring a safe working environment for workers under his charge.

WSH SHARP AWARDS

Keppel FELS	B362 FLOATEL TRIUMPH B364 SAGA B365 SKALD B366 TIVAR B369 ENSCO 123 B370 TS JASPER B371 FECON 1 B372 FECON 2 B373 FECON 3 B378 Hakuryu-15 M1179 M1222 M1286 R411 OCEAN GREAT WHITE
Keppel Shipyard	Armada LNG Mediterranean Armada Olombendo FPSO Armada Olombendo FPSO Modules Armada Olombendo FPSO Turret BW Catcher FPSO Armada Kraken FPSO John Agyekum Kufuor Golar Hilli FLNG Golar Hilli Land Fabrication Karapan Armada Sterling III FPSO Marsya PLV Castorone
Keppel Singmarine	DLV 2000 MPV Everest

WSH PERFORMANCE (SILVER AWARDS)

Keppel FELS
Keppel Singmarine

WSH INNOVATION AWARD

Keppel FELS Handy Bolt Nut Tightener

WSH AWARDS FOR SUPERVISORS

Keppel FELS Saravanan Marimuthu

New appointments

Leadership renewal is an essential part in the operations of Keppel Offshore & Marine (Keppel O&M). As part of succession planning, several positions within Keppel O&M have seen new appointments.

Mr Marlin Khiew, formerly President, Estaleiro BrasFELS, was appointed as President and CEO of Keppel FELS Brasil on 5 November 2017. He was also concurrently appointed as General Manager (Marketing), Keppel FELS.

This follows the retirement of Mr Kwok Kai Choong, formerly President and CEO, Keppel FELS Brasil, after 36 years of dedicated service to Keppel O&M and Keppel FELS.

Mr Hermanto Effendy, formerly President-Designate, Estaleiro BrasFELS, was appointed as President, Estaleiro BrasFELS, as of 15 October 2017.

Mr Lau Kuat Pin, CEO of Caspian Shipyard, retired on 15 October

2017 after 20 years of dedicated service to Keppel O&M. Mr Yee Kim Foh Alex was appointed as CEO of Caspian Shipyard Company on 15 October 2017. He will continue his concurrent appointment as General Manager and Country Head of Finance (Azerbaijan), FELS Baku.

In addition, Mr Tan Geok Seng, GM (Special Projects), Keppel O&M, has taken over as CEO, Nakilat-Keppel O&M, with effect from 15 September 2017.

Promoting safety excellence

As part of continual efforts to improve the safety of its people, operations and environment, Keppel FELS held its annual month-long HSE Excellence Promotion Campaign from 25 July 2017 to 31 August 2017.

The interactive campaign involved safety poster competitions and games with workers to highlight the importance of a safety mind set. Interactive games were conducted at the workers' canteen during lunch hour to drive home the key message and slogan of the campaign, "Safety in Mind, Responsibility is Mine."

In addition, safety briefings were conducted at the Acacia and Cassia dormitories to reinforce the



Mr Chris Ong (third from left), CEO of Keppel O&M, and representatives from the Keppel Subcontractors Executive Committee and Keppel FELS Employees Union launching the annual Keppel FELS HSE excellence promotion campaign

importance of taking personal responsibility for safety.

At the closing ceremony on 31 August 2017, Mr Chris Ong, CEO of Keppel Offshore & Marine, presented awards to winners

of various safety competitions organised as part of the month-long HSE excellence promotion campaign, marking yet another milestone in Keppel FELS' journey in promoting a strong safety culture.

Sailaway success for MTC Ledang

Keppel Shipyard held a sailaway ceremony for Floating Production Storage and Offloading (FPSO) MTC Ledang on 8 September 2017 to celebrate the fast-track completion of the project.

The vessel, which was completed safely in less than 5 months, will be chartered by Ophir Production and deployed to the Ophir field, offshore Trengganu, Malaysia.

Mr Albert Kee, ED (Operations), Keppel Shipyard shared, "This is our first partnership with MTC Engineering. However, our good

chemistry, coupled with the expertise of both companies in FPSO projects, enabled the fast-track execution of this project."

To ensure the smooth completion of the project, Keppel Shipyard and MTC Engineering partnered closely together on all aspects, including the fabrication of a flare tower and foundation; the lifting and integration of a crude stabilisation unit, as well as other refurbishment and life extension works.



FPSO MTC Ledang was completed safely, in less than five months, for Keppel Shipyard's new client, MTC Engineering

Laying solid foundation

Keppel Singmarine has advanced its efforts in the non-oil and gas sector with the successful keel

laying for two Trailing Suction Hopper Dredgers on 14 July 2017 at Keppel Nantong Shipyard in

China. This follows the strike steel ceremony that was held in March this year.



Keppel Singmarine is advancing its efforts in the non-oil and gas sector with the successful keel laying for two Trailing Suction Hopper Dredgers

Built for long-standing customer, the Jan De Nul Group, the two dredgers are expected to be completed in 2H 2018. Mainly used for dredging loose and soft soils such as sand, gravel, silt or clay, these dredgers will be able to dredge to a maximum depth of 27.6m and have a hopper capacity of 3,500m³.

The keel laying ceremony was attended by representatives from Keppel Singmarine, Jan De Nul Group, as well as classification society, Bureau Veritas.

Industry outreach

As a market leader, Keppel Offshore & Marine (Keppel O&M) contributes to the growth of the industry by supporting and participating in major trade conferences and conventions.

PARETO SECURITIES' OIL & OFFSHORE CONFERENCE

With rig utilisation rising and the shift in focus of Exploration and Production companies from cost reductions towards growth opportunities, the general consensus during the 24th Pareto Securities' Oil & Offshore conference is that the downturn has bottomed out.

While new orders for rigs are unlikely to return quickly because of the significant oversupply, rigs with high specifications and environmentally-friendly features will be preferred.

Keppel Offshore & Marine (Keppel O&M) is well-placed to capture opportunities as the market recovers as well as in other niche market segments said its CEO, Mr Chris Ong, during the company's presentation at the conference. In addition to providing solutions in offshore rigs and production vessels, Keppel O&M has leveraged its expertise

and technologies to develop a suite of solutions across the gas value chain as well as in renewables.

Held in Oslo on 13 and 14th September, it is the largest oil and offshore investor conference in Europe. Keppel O&M has been presenting at the annual conference since 2009. It provides a platform for the company's management to network with customers, investors, partners, and gain insights into the latest trends and developments.

FPSO WORLD CONGRESS

Keppel Shipyard participated in the 18th FPSO World Congress held on 26 and 27 September 2017. Themed, 'Light at the end of the tunnel: Practical strategies in preparation for market recovery', the congress served as a platform for industry experts to share insights on uncovering new opportunities as the Floating Production Storage and Offloading market recovers.

LATIN ASIA BUSINESS FORUM

Separately, Keppel O&M once again sponsored the biennial Latin Asia Business Forum held on 29 September 2017. Attended by over 300 delegates comprising foreign ministers, ambassadors, state government officials and various industry leaders, the forum examined how Latin America and the Caribbean, as well as Asia, can develop new growth strategies to mitigate the volatile landscape in light of challenges facing the global economy.



Mr Chris Ong, CEO of Keppel O&M, catching up with customers and partners after his presentation at the 24th Pareto Securities' Oil & Offshore conference



During the Latin Asia Business Forum held on 29 September 2017, the Keppel O&M delegate renewed ties with partners and customers

Rewarding innovation



Senior management from Keppel Offshore & Marine with the award winners

Innovation and technology have been an integral part in the growth of Keppel Offshore & Marine (Keppel O&M) and the company is continuing to invest in these areas to maximise its value proposition and provide solutions for existing and new markets.

On 2 October 2017, Keppel O&M held its fifth Innovation Awards to recognise Keppelites who have developed innovative solutions that can make a significant difference to the company and industry.

In his opening address, Mr Chris Ong, CEO of Keppel O&M, said, "As the whole offshore and marine industry, including Keppel O&M, goes through a transformational phase, we have the rare opportunity of shaping the future for the company and our industry.

"In today's industry slowdown, and the increasingly competitive

RIGCARE™

An enabler of the rig after-market business, RigCare™ is a one-stop premium care solution for customers looking for digital solutions to reduce operational costs. It leverages digitalisation and data insights to provide end-to-end solutions, including asset management, remote advisory and rig performance optimisation.

With this new service, Keppel O&M is able to offer reliable solutions throughout the rig's lifecycle, from the rig design, engineering and construction, to its operation and maintenance.

NEAR SHORE INFRASTRUCTURE PROJECTS

In order to repurpose Keppel O&M's offshore technology, the project team from Keppel O&M Technology Centre (KOMtech) has developed

proprietary solutions in near shore infrastructure, such as floating desalination plants and aquaculture hubs. The project won the Bronze award at the 2017 Keppel O&M Innovation Awards.

With coastal cities and populations growing rapidly and the scarcity of land becoming more severe, there is a growing demand for near shore and floating infrastructure to accommodate the possible expansion of cities into the sea.

business environment, the push to innovate is more critical than ever. It is not business as usual for us and we must take this opportunity to see how we can provide new, better and more advanced solutions for the market. At the same time, we need to explore entering new markets and servicing new customers by leveraging our expertise and experience. Innovation is not confined to product innovation but should also include services.”

This year’s awards saw participation from 59 teams across Keppel O&M’s subsidiaries. A total of 5 Bronze, 4 Silver, and 2 Gold awards were presented during the awards ceremony.

Winning the Gold awards were RigCare™, a joint project by Keppel FELS and Keppel Offshore & Marine Technology Centre, as well as the dual-fuel LNG containerships that Keppel AmFELS will be

building for customer Pasha Hawaii.

All winning teams have agreed to contribute 10% of their cash prize to the bursary funds of Shipbuilding and Marine Engineering Employees’ Union (SMEEU), Keppel Employees Union (KEU) and Keppel FELS Employees Union (KFEU), which provide assistance to children of unionised Keppel O&M employees.

List of top awards

PROJECT NAME	BUSINESS UNIT	AWARD
RigCare™	Keppel FELS Ltd Keppel Offshore & Marine Technology Centre	Gold
Keppel’s First GreenMax 2525 Containership for Jones Act Market	Keppel AmFELS Keppel Offshore & Marine USA Marine Technology Development Keppel Offshore & Marine Technology Centre	Gold
Harsh Environment Drilling Semi-Submersible DSS™ 51 HE series	Keppel FELS Deepwater Technology Group	Silver
Ice Class Multipurpose Vessel (MTD 130MPV-IC)	Keppel Singmarine Marine Technology Development	Silver
OTD H1500 Hydraulic Jacking System	Offshore Technology Development	Silver
OTD Jacking Pinion NDT (Non-Intrusive)	Offshore Technology Development	Silver
Near Shore Infrastructure Projects	Deepwater Technology Group Keppel Offshore & Marine Technology Centre	Bronze
Self-Installing Platform (SIP)	Offshore Technology Development Keppel Offshore & Marine Technology Centre	Bronze
Quick Installation of Upper Riser Balcony	Estaleiro BrasFELS	Bronze
Blasting TSD	Keppel Shipyard	Bronze
Gantry Robot System – An Intelligent and Flexible Solution for Panel Welding in Micro Panel Line	Keppel FELS Keppel Offshore & Marine Technology Centre	Bronze

Industry and stakeholder engagement



Dr Koh Poh Koon (sixth from left), Senior Minister of State for Trade and Industry and National Development, toured Keppel O&M's facilities together with management from Keppel, including Mr Chris Ong (fifth from left), CEO of Keppel O&M, Mr Abu Bakar (fourth from left), MD (Gas & Specialised Vessels), Keppel O&M, and Mr Chor How Jat (seventh from left), MD (Conversions & Repairs), Keppel O&M

Keppel O&M regularly hosts visits across its yards worldwide to share, update and discuss on the latest trends with industry partners and customers. In September 2017, it welcomed a visit from the Ministry of Trade and Industry to its Singapore yard and a Shell delegation to its Brazilian yard.

DISCUSSING TRANSFORMATION

On 18 September 2017, Keppel Offshore & Marine (Keppel O&M) hosted Dr Koh Poh Koon, Senior Minister of State for Trade and Industry and National Development, together with members of the Future Economy Council (FEC) manufacturing sub-committee, in a meeting to discuss opportunities for

collaboration for the Ministry of Trade and Industry's Industry Transformation Programme.

Led by Mr Chris Ong, CEO of Keppel O&M, the parties engaged in a robust discussion on opportunities in the market, such as gas solutions, next generation rigs, renewables and infrastructure-related projects.

Delegates also exchanged views on transformational factors in the offshore and marine sector, including digitalisation, automation and 3D printing.

As part of the Industry Transformation Programme, roadmaps will be developed for 23 industries, including the

offshore and marine sector, to address issues and deepen partnerships between the government, firms, industries, trade associations and chambers.

SHELL CALLS ON BRASFELS

On 12 September 2017, BrasFELS hosted a Shell delegation led by Jessica Uhl, Chief Financial Officer of Royal Dutch Shell, Roberto Setubanl, who will join Royal Dutch Shell's Board this year, and Andre Araujo, Country Head of Shell Brazil.

The delegation was warmly welcomed by BrasFELS' then-President Marlin Khiew and then-President-Designate Herman Effendy.



BrasFELS hosted a Shell delegation led by Jessica Uhl (8th from right), CFO of Royal Dutch Shell, and Roberto Setubal (6th from right), who will join Royal Dutch Shell's Board this year

Following a corporate presentation, the delegation toured the shipyard and floating production storage and offloading (FPSO) unit P-69, which is owned by a consortium comprising Petrobras, BG E&P Brasil – a subsidiary of Royal Dutch Shell plc, and Petrogal Brasil.

Celebrating safety at BrasFELS

BrasFELS celebrated Brazil's Independence Day on 6 September with the presentation of safety awards. The awards were for employees who performed exceptionally in two categories – Operations and Leader. Receiving the Operation Awards for safety were Mr Vinicius Souza of Transport department, Mr Johnny Costa de Araújo of Painting section and Mr Reinaldo Caetano da Silva of the Structure Board. As for the Leader Award, it went to Mr Gabriel Telles Guimarães of Maintenance.

Petrobras and MODEC representatives as well as members of the community such as Cornelis Verolme Scouts Group, the Nazira Salomão School Band, and Commander Lieutenant Pedro Hugo Fernandes Teixeira from the Porth Authority of Angra dos

Reis joined the shipyard in the celebration.

Addressing the employees, Marlin Khiew, then-President of BrasFELS, said, "BrasFELS has certainly come a long way from our humble beginnings in 2000. Over the years, we have achieved many milestone projects for Brazil. However, we must not be complacent. We must continue to stretch ourselves and

evolve, so that we can remain relevant to the industry. For BrasFELS to remain viable, we must remain committed to excellence, and be able to execute more efficiently and cost-effectively. I urge all of you to continue to work with each other and our external stakeholders to ensure that we remain an attractive workforce and shipyard".



BrasFELS presented Safety Awards to four employees for their exemplary safety performance and efforts

Sharing best practices

Organised every three years by the International Labour Organisation, the World Congress on Safety and Health at Work held in South-East Asia for the first time from 3-6 September 2017 provided a platform for the exchange of knowledge, strategic and practical ideas that promote safety and health at work.



As part of the World Congress on Safety and Health at Work 2017, Keppel O&M shared safety best practices such as the training of its workers at the Keppel Safety Training Centre

Taking the motto 'A Global Vision of Prevention', the 21st edition of the Congress focused on three main topics: Vision Zero – from vision to reality calls for the establishment of a prevention culture at every level of every organisation; Healthy work – healthy life highlights the importance of an integrated approach to workers' safety and health; and People-

centred prevention underlines the importance of issues such as demographic change, gender, and education in building more inclusive workplaces.

As part of the congress, Keppel Offshore & Marine (Keppel O&M) hosted a delegation from the Workplace Safety and Health Council to share safety best

practices such as High Impact Risk Activities (HIRA) training, and visit facilities such as the Keppel Wellness Gallery.

The Congress ended up on a high with Singapore handing over the baton to Canada, who will host the XXII World Congress on Safety and Health at Work in 2020.

Innovation showcase

In August 2017, Keppel Offshore & Marine leveraged different platforms to showcase innovations that enables the company to capture opportunities in deep sea mining and supercomputing.

On 25 August 2017, representatives from Keppel Offshore & Marine Technology Centre (KOMtech) and Keppel Data Centres briefed Mr Teo Chee Hean, Deputy Prime Minister of Singapore, and Mr Heng Swee Keat, Minister for Finance, during a visit to the National Supercomputing Centre.

Organised by the Info-communications Media Development Authority of Singapore, the session highlighted the potential of tapping synergies between Keppel's business units to deliver solutions in emerging fields such as floating green data centres.

Separately, on 11 August 2017, Ocean Mineral Singapore (OMS) hosted a satellite event as part of the International Seabed Authority's 23rd Annual Session. The event was attended by more than 120 industry players

and showcased solutions that reinforced the company's position as an environmentally responsible contractor with in-depth knowledge of deep sea mining.

OMS is a subsidiary of Keppel Corporation which leverages the expertise of KOMtech and the Keppel-National University of Singapore Corporate Laboratory to explore opportunities in deep sea mining.

Emergency preparedness

Run, Hide and Tell. That is the response when under attack by terrorists as advised by SGSecure, Singapore's initiative to prepare the community against terror attacks.

On 14 July 2017, Keppel Offshore & Marine (Keppel O&M) employees were put to the test in a simulated exercise when a gunman barged into the shipyard. Keppel O&M's security personnel had to be vigilant to activate the Singapore Police Force and alert employees through the PA system of the imminent danger.

Employees had to stay out of the line fire. They locked their offices, turned off the lights and ran to a safer spot to hide before calling for help with their mobile phones. The Police Emergency Response Team arrived within minutes and were appraised of the situation by Keppel O&M's security officers. Through the yard's CCTV cameras, they were able to track the gunman to the engineering department and neutralize him.

The exercise named "KOMSecure" was a jointly conducted by Keppel O&M's Security Department and

the Jurong West Neighbourhood Police Center (JW NPC).

Mr Chris Ong, CEO of Keppel O&M said, "The threat of terrorism is real. It is vital for us to be prepared for an attack. I want to commend our security for being well-trained in their responses. All of us also need to play our part. These are survival skills that will serve us well anywhere and anytime.

I would like to thank the Police for their support in conducting this exercise."

Mr Julian Chee (Deputy Assistant Commissioner), Deputy Commander, Jurong Police Division added, "Joint exercises between businesses and the police are important as it assesses the effectiveness of our co-ordination and responses to contingencies. It has been a pleasure for Jurong Division to work with Keppel O&M yards for this exercise. We believe their employees have benefitted from the knowledge and skills acquired from the SGSecure training."



The Keppel O&M security team worked closely with the Jurong West Police in preparing for a terrorist attack on the yard



Keppel O&M's security team collaborates with the Jurong West Neighbourhood Police Center for a successful terrorist simulation exercise

Building bonds

To strengthen ties between Keppel management and its contractors, Keppel Shipyard Contractor Watch Group (CWG) organised an overnight trip to Malacca from 22 – 23 July 2017. Besides touring historical sites in Malacca, Keppelites and contractors also bonded over sumptuous local food.

A regular networking event which the CWG organises, the trip is part of a comprehensive work plan which also includes safety ownership initiatives, work force management compliances and process enhancement.

Fadley Amin, Operations Manager at Alpine Engineering Services and Chairman of the CWG, said, "This is the third overseas engagement that CWG has organised and it was a fantastic opportunity for both the contractors as well as fellow Keppelites, from ground staff to management, to get to know each other better. We look forward to an even greater partnership amongst the different stakeholders."



Keppel Shipyard bonded with its contractors over sumptuous local food during the overnight trip to Malacca from 22 – 23 July 2017

Championing workplace wellness

For its robust efforts towards building an active and healthy workforce, various business units under Keppel Offshore & Marine (Keppel O&M) bagged awards at the Singapore HEALTH Award Ceremony on 10 October 2017.

Keppel Offshore & Marine Technology Centre (KOMtech) clinched the Corporate Award: Excellence while Keppel FELS won the Merit award. Keppel Shipyard and Keppel Housing also attained the Recognition award for their achievements in workplace health promotion. To promote healthy living, business units across Keppel have implemented a range of activities, from health talks and

periodic broadcasts to fitness classes.

Mr Aziz Merchant, Executive Director, KOMtech, shared, "At Keppel, we believe that an active and healthy workforce contributes

to better productivity and enhanced performance at work. We will continue to implement new initiatives to make healthy living options more accessible at the workplace."



Mr Aziz Merchant (centre), Executive Director, KOMtech, together with HR partners from Keppel O&M, celebrating Keppel's wins at the Singapore HEALTH Award Ceremony on 10 October 2017

Developing future leaders

ADVANCED LEADERS PROGRAMME

The inaugural Advanced Leaders Programme (ALP) under Keppel Leadership Institute was launched in February 2017. The programme aims to develop holistic leaders and equip them with the skills to be change agents in Keppel's transformation journey.

Twenty-three future leaders from across the Group participated in the blended leadership development programme spanning over six months. The programme focused on developing participants in specific areas such as change leadership, future orientation,

collaboration and synergy as well as innovation. The programme utilised a combination of different learning approaches such as, action learning projects, workshops with Keppel Corporation's board and senior management, external company site visits and networking sessions.

Mr Ivan Lim, GM (Operations), Project Management, Keppel Shipyard, added, "The action learning project was truly helpful in honing our skills. It was also a valuable experience having CEO dinners with our project groups where we had the opportunity to exchange views from company matters to world issues."

TRAINEE ENGINEER PROGRAMME

The graduation ceremony for participants of BrasFELS' Trainee Engineer Programme 2015 was held on 27 July 2017. The Trainee Engineer programme is a two-year talent development initiative, where fresh graduate engineers are rotated to various departments in the shipyard for exposure.

Mr Marlin Khiew, then-President of BrasFELS, said, "We congratulate the participants for graduating from the Trainee Engineer programme and wish them the best as they enter a new phase in their career. Over the last two years, we have seen much growth in these young talents, and have been impressed by their commitment to Keppel's Core Values and Operating Principles. We also thank the various managers and seniors in the company that have guided the development of these engineers."

ALUMNI DEVELOPMENT

Members of the BrasFELS Alumni Programme held a General Meeting on 28 July 2017 to take stock of their activities over the past year, such as organising knowledge workshops as well as outline their plans for the rest of the year.

Mr Marlin Khiew said, "The ideas, enthusiasm and efforts of our Alumni members are truly commendable. We are heartened to see how much they have done during the year, contributing to their own and their colleagues' growth."



Participants were grouped in cross businessunit teams to solve a business challenge using the concepts learned in class



Participants of the 2015 Trainee Engineer Programme celebrated their graduation at a ceremony held on 27 July 2017

In step with Singapore

Around the world, Keppelites from Singapore commemorated the country's 52nd National Day.



Keppel's senior management, led by Mr Loh Chin Hua (third row, middle in white), CEO of Keppel Corporation, attended a National Day Parade rehearsal session to show their support for the Keppel contingent

SINGAPORE

As one of Singapore's largest homegrown conglomerates, Keppel joined the nation in commemorating its independence as a Major Partner of Singapore's National Day Parade. In addition, 36 Keppelites from across the Group flew the Keppel flag high as they led the Social and Economic contingents to usher in Singapore's 52nd birthday.

Comprising 51 members, the Keppel contingent was relentless in their pursuit for excellence. While the marching contingent worked to perfect their footwork, the organising committee coordinated trainings and ensured the welfare of the members.

Reflecting their support for the contingent, Keppel senior

management, led by Mr Loh Chin Hua, CEO of Keppel Corporation, attended a rehearsal session on 22 July 2017 and joined the contingent in celebrating the birthdays of Keppelites born in the month of July.

Separately, Keppel Offshore & Marine (Keppel O&M) celebrated the nation's birthday at the Keppel FELS National Day Observance Ceremony held on 10 August 2017.

In his opening address, Mr Loh Chin Hua, CEO of Keppel Corporation and Chairman of Keppel O&M, rallied Keppelites under this year's National Day Parade theme, "One Nation Together", and called on them to harness synergies across the Keppel Group so that the whole is greater than the sum of parts.



Mr Loh (back row, right) and Mr Chris Ong (back row, left), CEO of Keppel Offshore & Marine, celebrated the birthdays of Keppelites born in July

He added, " We recognise the importance of lifelong learning, and award scholarships to eligible Keppelites who are keen to further their studies. Last year, Keppel O&M initiated a multi-skilling programme to enhance the

technical skillset capabilities of our workforce. This programme serves to cross-train our people and equip them with multiple skills so that they can be deployed across the different production trades.

“Innovation is one of our core values, and is key to Keppel O&M staying ahead of its competitors. We have leveraged our expertise to offer robust solutions in adjacent industries as well as non-oil and gas market segments. I would also like to commend Keppelites for your participation in programmes such as the KOM Innovation Award, the Keppel FELS’ Synergy Programme and other yard initiatives.

“Over the years, our yards have formed a strong partnership with the Union and the Government. This partnership has been crucial especially as we navigate challenging times in today’s environment. We are grateful for the strong support from the Government and the Union, and we will continue to work hand in hand to forge a strong and resilient workforce, as well as continue to enhance yard safety and productivity.”

Supporting national defence



Then-President Dr Tony Tan (fourth from left) thanking NSman of the Year winners including MAJ (NS) Tng Dong Sen Thomson (third from right) for their contributions to national defence (Photo credit: MINDEF)

On 16 July 2017, then-President Dr Tony Tan Keng Yam hosted about 550 personnel from the Ministry of Defence (MINDEF) and the Singapore Armed Forces (SAF) to a reception at the Istana to show his appreciation for their contributions.

Among these outstanding individuals was Mr Thomson Tng Dong Sen, Senior Project Manager at Keppel Shipyard, who was awarded the SAF NSman of the Year award.

Serving as Commanding Officer of the 288th Battalion Singapore

Artillery, Major (NS) Thomson Tng said, “Singapore’s security can never be taken for granted and we need support from our families and colleagues for us to focus on our duties. With the close bond with my fellow servicemen, the hard work from my command team and the guidance from our senior commanders, we managed to rise above challenges and put in our best to serve the nation. It is thus a great honour today, to be recognised for the time and effort that we have put in to ensure our country’s peace and security.”

Exemplary role model

On 4 October 2017, Mr Abu Bakar Bin Mohd Nor, MD (Gas & Specialised Vessels), Keppel Offshore & Marine (Keppel O&M), was named Achiever of the Year by Berita Harian, Singapore's Malay daily newspaper, in recognition for his achievements and contribution to society. This award honours Malay/Muslim individuals for their exceptional qualities and accomplishments. Past winners include President Madam Halimah Yacob, then-Assistant Secretary General of National Trades Union Congress, and renowned ceramist Iskandar Jalil.

In his acceptance speech, Mr Abu Bakar dedicated the award to his family, relatives and colleagues,



Mr Abu Bakar Bin Mohd Nor (far left), MD (Gas & Specialised Vessels), Keppel O&M, received the Berita Harian Achiever of the Year Award from Singapore's President Madam Halimah Yacob (centre) and Mr Mohd Saat Abdul Rahman (first right), Editor, Berita Harian

who played important and positive roles in his life. "I would like to thank Keppel, my employer for 27 years, who believed in me and provided me with opportunities to grow and pursue my dreams, in Singapore and overseas."

Over the span of his career, Mr Abu Bakar held various appointments in Keppel O&M, including serving as CEO of Nakilat-Keppel Offshore & Marine from 2011 to 2014, and as MD of Keppel Singmarine since 2015.

Loyalty and pride

At Keppel Offshore & Marine (Keppel O&M), people are the most important asset. On 10 August 2017, Keppel FELS recognised 223 dedicated employees who have through decades of hard work made substantial contributions to the company.

Of these individuals, three have been with Keppel O&M for 45 years, six for 40 years, three for 35 years and six for 30 years. Another 23 have served 20 years, while 182 have been with the company for a decade.

In his opening address, Mr Loh Chin Hua, CEO of Keppel Corporation and Chairman of Keppel O&M, expressed his thanks for the commitment and contributions of these dedicated employees.

The awards was held as part of the National Day celebrations, and was graced by Guest of Honour Mr Ng Chee Meng, Minister for Education (Schools) and Second Minister for Transport.

One of the award recipients,

former Superintendent Mr Musa Bin Daud, was featured on Minister Ng's Facebook post.

Wrote Minister Ng, "Happy to honour and show appreciation to the employees who have contributed to Keppel's success. One of them, Mr Musa Bin Daud, has been working with the company since he joined in 1972. 45 years! The success of the Keppel's story is attributed to the loyalty and pride shown in employees like Musa".

Game for *OneKeppel*



Over 130 Keppelites from across the Group came together for the opening of the 14th Keppel Games

The 14th edition of the annual Keppel Games kicked off with the highly anticipated Opening Ceremony and Golf Challenge held at Raffles Country Club on 25 August 2017.

Over 130 Keppelites from across the Group, including Keppel senior management and the team managers of Atlantic, Caspian and Pacific, took to heart this year's theme of 'Stronger together as *OneKeppel*' to bond through friendly competition.

Getting into the swing of things, Keppelites took to the green in an attempt to out-drive, out-chip and out-putt each other in the Golf Challenge. Eventually, Team Caspian emerged victorious, retaining their Golf Challenge Trophy once again.

Participants were also treated to a lively presentation during the unveiling of the team flags at the Opening Ceremony. After much deliberation, Team Pacific was announced as the winner, with the judges praising the creative use

TEAM	GOLD	SILVER	BRONZE
ATLANTIC	4	4	4
CASPIAN	5	4	5
PACIFIC	4	5	4

Score Board: Total medal tally as at 20 October 2017

of the sailfish, which are known to hunt as a pack, and graphics to symbolise resilience amidst rough tidal waves.

The competition continued to heat up in September, where teams wrestled in a clash of brawns and wits in the International Chess and Table Tennis Challenges.

On 17 September 2017, six teams engaged in a battle of the minds as they vied for the highly coveted International Chess championship title. The participants demonstrated strong tactical play, making it nearly impossible to predict the winner. Eventually, Team Caspian came up tops with the most wins under its belt.

The following week, paddlers from the three teams fiercely competed



Participants took to the green as they vied for top spot in the Golf Challenge

in a Table Tennis showdown. In an impressive showcase of top spins and smashes, the audience was wowed by the skills of our Keppelites. After an afternoon of intense competition, Team Pacific claimed the title of Overall Champion for Table Tennis.

Recognising hard work

Apart from providing financial support, one of the benefits offered by Keppel Credit Union (KCU) is book prizes for the children of KCU members.

On 12 August 2017, 23 students were proud recipients of the KCU Book Prize Awards 2017. Recognised for their outstanding examination results, the recipients

received a total of \$11,950 at the annual awards ceremony held at Keppel Leadership Institute.

In his opening address, Professor Bernard Tan, Chairman of KCU, shared that learning is a lifelong journey and encouraged recipients to keep up the good work.

Overjoyed to receive the book prize award in front of her father's colleagues, Ms Priya Vinodini, daughter of Mr Mathivanan s/o Deivanagam, Senior Foreman of Keppel Shipyard (Tuas), enthused that the award spurred her to reach for even greater heights.



Award recipients with representatives from KCU including Professor Bernard Tan (first row, third from right), Chairman of KCU, and Dr Lee Chay Hoon (first row, third from left), Director of KCU and Director (Organisation Development) of Keppel Offshore & Marine

Viva Mexico

Keppel Offshore & Marine was a proud sponsor of Mexico's National Day celebrations held at Kidzania on 15 September 2017. It has sponsored the event since 2012.

Hosted by H.E. Ambassador Nathan Wolf, Ambassador of Mexico to Singapore, government representatives, diplomats and business leaders were in attendance to celebrate Mexico's 207th Anniversary of Independence.

Kidzania was lit up with a lively showcase of Mexican culture, song and dance.

Keppel has been a strong supporter of the Mexico's oil and gas industry, having delivered jackups to the country since 2004. Besides building new jackup

rigs for Mexico, Keppel has also repaired and serviced some 18 rigs that have been deployed in Mexico.



Keppel is a regular sponsor of Mexico's Independence Day celebrations and enjoys strong business and cultural ties with Mexico

Student outreach by BrasFELS

MARKING DAY OF TREE

On 26 September, BrasFELS hosted 30 ninth-grade students from Amelia Araujo Lage Municipal School, located at Garatucaia neighbourhood.

It was the fourth educational visit organised by the shipyard in 2017 as part of its Teach-it-Forward programme, which aims to reach out to Angra dos Reis' communities' youths.

BrasFELS' engineer, Mr Rafael Portela, presented on the shipyard's history as well as its projects for the Brazilian naval industry. Sharing their experiences in the shipyard as well as the importance of education in their careers were Mr Saulo Costa, Mr Delton Silva, Mr Thais Campelo and Mr Daniel de Souza.

Besides learning about the yard's operations, the students also discovered its environmentally-friendly aspects such as the growth of different trees species in the shipyard. They participated in a tree planting activity with Mr Marlin Khiew, then-President of BrasFELS, and Herman Effendy, then-President-Designate of BrasFELS, to mark the National Tree Day.

"I am impressed about how BrasFELS employees care about the environment and safety", said the student Gabryelle de Sousa. Another student, Robert Santana de Souza, added, "Today, I learned that safety is a value and we should never stop studying."

Teach-it-Forward is an extension of the Keppel Volunteers programme.

BROADENING HORIZONS

The students of Polytechnic School of Sao Paulo University (USP) visited BrasFELS shipyard on 1 August 2017. The group was warmly welcomed by BrasFELS representatives led by Mr Luiz Caetano, Director (Operations) of BrasFELS and by Human Resources department.

In addition to learning about the operations and history of the yard, they were also brought on a tour of the shipyard and saw projects such as the FPSO Cidade de Campos dos Goytacazes MV29 as well as the drilling rigs Urca and Olinda Star up close.

BrasFELS' customer, MODEC, also participated with Project Manager Mr Eric Powell sharing with the students on MODEC's operations and corporate structure.



BrasFELS received a visit from 30 ninth-grade students from Amelia Araujo Lage Municipal School, located at Garatucaia neighbourhood



USP students got up close with BrasFELS' projects during their visit to the BrasFELS shipyard

Caring for our communities

Keppel is committed to uplift communities wherever it operates. With volunteerism as a key thrust of the Group's community engagement programmes, August has been designated Keppel Community Month. During this month, Keppelites across the Group rally behind good causes that make a positive impact on people in need and the environment.

Keppelites have demonstrated through Keppel Community Month how we can make a difference wherever we operate through compassionate giving of our diverse talents, time and efforts.

NURTURING LIVES

Volunteers from Keppel Offshore & Marine (Keppel O&M) and Keppel Capital organised workshops aimed to equip underprivileged children with skills in arts and crafts, terrarium-making and even baking.

In China, disabled children had fun

in the sun and enjoyed games at the beach thanks to Keppelites.

Separately, volunteers from our shipyard in Brazil guided and shared experiences with students as part of the Teach-It-Forward programme.

In the Philippines, young children rediscovered values through folklore in a series of story-telling sessions at the Keppel-GK Eco Village.

FORGING FRIENDSHIPS THROUGH FOOD

As part of the Mid-Autumn Festival

celebrations, Keppel Shipyard volunteers organised an evening visit to Gardens by the Bay for 24 elderly from Care Corner Senior Activity Centre.

The elderly basked in the glow of the elaborate lantern decorations and excitedly recounted personal memories of celebrating this special festival. One of the elderly, Mdm Lee Bee Lam, enthused, "The lantern display was so beautiful! The volunteers took very good care of us and always made sure that we were comfortable and safe."



In the Philippines, young children rediscovered values through folklore in a series of story-telling sessions organised by Keppel Volunteers at the Keppel-GK Eco Village



Elderly and beneficiaries bonded over mooncakes and tea that they made together

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Keppel to build two LNG containerships for Jones Act market



The two state-of-the-art dual-fuel LNG containerships for Pasha will be built to Keppel's proprietary innovative design

Keppel AmFELS, a wholly owned subsidiary of Keppel Offshore & Marine Ltd (Keppel O&M) in the United States (US), announced on 24 August 2017 the securing of a contract from Honolulu-based Pasha Hawaii for the construction of two Liquefied Natural Gas (LNG) fueled containerships.

The dual-fuel LNG vessels will be built to Keppel's proprietary design with delivery of the first vessel expected in 1Q 2020, and the second vessel in 3Q 2020.

Mr Simon Lee, President of Keppel AmFELS said, "We are pleased that Pasha has chosen us to build their first two LNG fueled containerships to our innovative design. Keppel O&M is at the forefront of designing vessels that run on LNG propulsion systems and has the experience in LNG vessel conversions as well as the expertise in newbuild specialised vessels. In addition, Keppel AmFELS is ideally located and well-equipped to build a wide variety of vessels for the Jones Act market. We look forward

to building these ships which will have a direct impact on American jobs at our shipyard and suppliers across the country."

"This contract with Keppel allows Pasha Hawaii to continue to move forward in our commitment to providing the best resources possible for our customers and Hawaii's shipping industry, while minimising our environmental footprint," said George Pasha, IV, President and CEO of The Pasha Group. "We are proud supporters of the Jones Act and look forward to working with Keppel's team of highly skilled shipbuilders."

Customised to Pasha Hawaii's requirements, the new, 774-foot Jones Act vessels will be able to carry 2,525 TEUs (twenty-foot equivalent units), including a fully laden capacity of 500 45-foot containers, 400 refrigerated containers, and 300 40-foot dry containers, with a sailing speed of 23 knots. The ship's hull has been fully optimised using computational fluid dynamics

(CFD) and will be one of the most hydrodynamically efficient hulls in the world.

The containerships will be able to run completely on LNG fuel, dramatically reducing their environmental impact and increasing fuel efficiency. Energy savings will also be achieved with a state-of-the-art engine, an optimised hull form, and an underwater propulsion system with a high-efficiency rudder and propeller.

Located in Brownsville, Texas, Keppel AmFELS possesses comprehensive facilities, a highly-capable workforce, and a strong track record in the construction, refurbishment, conversion, life extension and repair of a variety of projects.

The Jones Act requires vessels carrying goods between US ports to be built in the US, and Keppel AmFELS is well-positioned to capture opportunities in this market. The average age of the US-built fleet of vessels is more than 30 years old, beyond the typical operating life of most ocean-going vessels, and new vessels will be needed to meet the latest safety and environmental standards.