

CONFIGURED FOR GROWTH

Report to Stakeholders 2013



Vision

Our vision is to be the provider of choice and partner for solutions in the global offshore and marine industry.

Mission

Keppel Offshore & Marine is a global leader in offshore rig design, construction and repair, ship repair and conversion, and specialised shipbuilding. We harness the synergy of 20 yards worldwide to be near our customers and their markets.

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SUSTAINABILITY REPORT

Sustaining Growth

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Constantly shaping itself for the future, Keppel's drive for sustainable growth finds expression in the tangram, a symbol of flexibility and potential.

Key Figures for 2013

New Orders Secured

\$7b

2013 continued to be a strong year with a healthy level of new contracts.

Net Orderbook

\$14.2b

Record net orderbook at end-2013 with deliveries extending to 2019.

Rig Deliveries

22

Number of rigs delivered in 2013, 21 of which were by Keppel FELS, setting a record for most number of rigs delivered in a year by a company.

KFELS B CLASS Rigs Delivered

51

The number of our proprietary KFELS B Class rigs delivered since 2000 which accounts for a third of the jackups delivered to the market since then.

Accident Frequency Rate

0.12

The latest accident frequency rate per million man-hours worked, down from 0.24 in 2011 and maintains the 0.11 in 2012.

Training Investment

\$16.7m

The amount spent on training employees worldwide during the year.

Key Figures for 2013 $\hspace{1.5cm} 1$

Chairman's Statement



A leader in its industry, Keppel Offshore & Marine is focused on staying ahead by delivering differentiated and superior solutions in a timely and safe manner. We will continue to build a strong bench strength capable of seizing opportunities and growing the company through technological innovation, strategic partnerships and execution excellence.

DEAR SHAREHOLDERS.

The global economic climate in 2013 fared better than expected, although the improvement was rather weak and sporadic. The Eurozone crisis was contained while the US showed signs of recovery. China's growth rate was moderate and political turmoil in the Middle East simmered but did not erupt.

Brent crude oil prices hovered around US\$100 per barrel throughout the year, underlining the long term fundamentals of the oil and gas industry. Drilling contractors and speculators continued the cycle of acquiring new and higher specification rigs to replace ageing fleets worldwide, although at a slower pace than 2012.

Looking ahead, the global economic condition remains fragile, with worries over the sustainability of growth and the threat of the US tapering of its quantitative easing programme leading to higher global interest rates. This may prevent oil companies from expanding their capex in a more significant way.

Amidst an uneven global economic recovery and increased competition, Keppel Offshore & Marine (Keppel O&M) delivered another set of creditable results in 2013, as it continued to be the choice yard for established offshore and marine service providers as well as new entrants.

Keppel O&M recorded revenue of \$7.13 billion in 2013, compared to \$7.96 billion in 2012. Net profit before revaluation, impairment and divestments (RID) was slightly lower at \$929 million compared to \$962 million in 2012. Economic Value Added before RID remained healthy at \$701 million.

STRONG CORE COMPETENCIES

DELIVERING RECORD EXECUTION

In 2013, Keppel O&M augmented its sterling track record as a reliable solutions provider to the offshore and marine industries, with deliveries of 45 major projects. These include 22 rigs, a Tension Leg Wellhead Platform (TLWP), five Floating Production Storage and Offloading (FPSO)/ Floating Storage and Offloading (FSO) projects, eight specialised vessels and several major rig upgrades and repairs.

Of the 22 rigs delivered for the year by the group, 21 were by Keppel FELS, surpassing its previous record of 13 deliveries in 2009. This feat was made possible through the use of new technology and equipment to improve productivity, efficient construction processes, synergies with our satellite yards in the region and a highly productive and innovative workforce.

The synergies between our yards were also demonstrated with the deliveries of the TLWP P-61, and the FPSO Cidade de Paraty, by BrasFELS. P-61 is the first TLWP completed in Brazil and was supported by Keppel FELS in the construction of the topsides. FPSO Cidade de Paraty first underwent marine conversion at Keppel Shipyard before having its topside modules installed in BrasFELS.

SETTING INDUSTRY BENCHMARK

The strength of our innovation and technology was evident as all of our orders for newbuild rigs in 2013 were to our proprietary designs.

Of the 21 new rig orders in 2013, 18 were for our industry-leading KFELS B Class jackup rig, strengthening the market position of this design. In addition, we have received another four jackup orders of this design in the first three months of 2014. As at end March 2014, the total number of KFELS B Class jackup rigs delivered and on order is 78. Since 2000, 51 have been delivered which accounts for around 30% of the total jackups completed globally since then.

Meppel FELS' feat of delivering a record 21 rigs was made possible through the use of new technology and equipment to improve productivity, efficient construction processes, synergies with our satellite yards in the region and a highly productive and innovative workforce.

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TAPPING GROWTH MARKETS

Having an early presence and track record in the Caspian Sea enabled our Caspian Shipyard Company (CSC) to win the DSS™ 38M semisubmersible order from the State Oil Company of Azerbaijan Republic in June 2013. In addition to our investment in CSC, we inaugurated our second yard in the region, Baku Shipyard, in September 2013. Our foothold in the Caspian Sea is important as the region has vast reserves but is landlocked. We are continuously upgrading our yard facilities and transferring technology and expertise to CSC, strengthening it to seize the growing opportunities in the region.

Our other overseas yards such as BrasFELS in Brazil, Nakilat-Keppel Offshore & Marine in Qatar, Keppel Nantong in China and Keppel Subic in the Philippines are also making progress in their projects or yard expansion programmes.

Mexico is another country with local content ambitions where we believe we can add value and be successful in. During the year, we signed a Memorandum of Understanding with PEMEX to jointly develop, own and operate a yard in Mexico. The first phase of this facility is to support the construction of six KFELS B Class jackups for PEMEX. In fact, Keppel O&M is already a longstanding supporter of Mexico's oil and gas programme, with 20 projects delivered or on order for Mexico.

SUSTAINABILITY AND RESILIENCE

BUILDING BENCH STRENGTH

Competition for experienced and skilled manpower in the industry has always been stiff and while we have built up a strong core team, we are in need of more talent as we grow our business. We have programmes in place across our global yards to recruit and retain talent through competitive remuneration packages, ample career opportunities as well as fostering strong Keppel core values and providing comprehensive training and mentorship.

REINFORCING SAFETY

Safety is critical to our business, and we have continued to remain vigilant in reducing incidents in 2013. We continue to invest in safety infrastructure and training while cultivating a safety mindset across all stakeholders. Over the course of the year, our Accident Frequency Rate was 0.12 reportable cases for every million man-hours worked, compared to the industry average of 1.40. Our Accident Severity Rate improved to 67 man days lost per million man-hours worked, compared to 77 in 2012.

FORESIGHT AND PREPAREDNESS

MEETING MARKET TRENDS WITH INNOVATION

Developing products that are commercially viable and relevant to market needs continues to drive our technology thrust. With the Technology Division, we have created a conducive environment for innovation in our R&D efforts through close collaboration between technology units, the shipyards as well as customers and trendsetting partners. Currently, we have a suite of about 30 proprietary designs.

More innovative and trendsetting solutions are on the horizon as we continue to work with customers, oil majors and universities to develop solutions for frontier markets. At end-2013, we announced the collaboration with the National University of Singapore and the National Research Foundation to set up the Keppel-NUS Corporate Laboratory to pursue three main research thrusts in Future Systems, Future Yards and Future Resources.

CONFIGURED FOR GROWTH

2014 will pose challenges as the global economic landscape continues to be challenging. Oil companies are cutting back on their budgets and this is expected to lead to slower growth in the oil and gas industry, particularly in the deepwater segment. At the same time, we are facing increased competition from rival shipyards.





Nevertheless, our global yards will be kept busy fulfilling our orderbook and we are well positioned to seize new growth opportunities. We will continue to press ahead with strengthening all our yards, in particular our satellite yards in China, the Philippines and Indonesia, so that they can better support our yards in Singapore.

The fundamentals of oil and gas demand remain robust with increased energy needs from developing countries, and there continues to be a shortage of high specification drilling rigs. Over the years, our experience has helped us to configure our components into a competitive and cohesive whole, increasing our capabilities to provide the market with value-added solutions and create sustainable growth.

THE NEXT LAP

As part of the Keppel Group's succession planning, I assumed the role of Chairman of Keppel O θ M with effect from 1 January 2014. Mr Chow Yew Yuen, who was Chief Operating Officer of Keppel O θ M, was appointed Chief Executive Officer (CEO) from 1 February 2014. He brings with him 30 years of experience in the offshore and marine industry.

I am privileged to build on the solid foundations laid by my predecessors. As I take over the helm, I am grateful that our Board of Directors will continue to support and provide their invaluable contributions and wise counsel. With Keppel's *Can-Do!* spirit, ambition, innovation, clarity of focus and commitment to excellence, the Board and I are confident that together with the management and rank and file of Keppel O&M, we can drive the world's leading offshore and marine group towards greater heights of excellence.

ACKNOWLEDGEMENT

On behalf of the Board of Directors, I would like to acknowledge the immense contributions of Mr Choo Chiau Beng and Mr Tong Chong Heong, who have stepped down as Chairman and CEO of Keppel O&M respectively in early 2014. They were instrumental in growing Keppel O&M from a humble ship repair yard into a world leader in the offshore and marine industry. Through sheer grit and hard work, they have built the foundations of the company and boldly led it through economic cycles and various corporate milestones. We are grateful that Chong Heong has agreed to continue to serve Keppel O&M as the Senior Advisor to the Board.

During the year, Mr Robert Somerville, previously Chairman of the Board of American Bureau of Shipping, was appointed to the Board. We are pleased to welcome Robert.

We would also like to thank all our valued customers, business associates, class societies, vendors, suppliers and contractors for their continuing support. Special appreciation goes to our dedicated and loyal employees who are our most important assets. I would also like to acknowledge the assistance and support of all local, state and federal authorities in the host countries where we have operations.

With a strong management team leading a passionate workforce and supported by our partners and customers, I am confident that together, we will grow beyond and chart another lap of growth.

Yours sincerely,

LOH CHIN HUA CHAIRMAN 31 March 2014 Dur global yards will be kept busy fulfilling our orderbook and we are well positioned to seize new growth opportunities. More innovative and trendsetting solutions are on the horizon as we continue to work with customers, oil majors and universities to develop solutions for frontier markets.

- 1. Keppel FELS delivered two rigs to Mexican customer, CP Latina, in 2013. This is part of the 10 projects that Keppel has delivered to Mexico with another 10 rigs on order.
- 2. Keppel Shipyard delivered FPSO Armada Claire in early 2014. The shipyard delivered four FPSOs/FSOs in 2013.

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Interview with CEO



New Chief Executive Officer of Keppel Offshore & Marine, Mr Chow Yew Yuen, shares his plans on taking the company to its next phase of growth by strengthening core competencies and seizing growth opportunities to further enhance value for stakeholders.

Q: What is Keppel Offshore & Marine's (Keppel O&M) view on the offshore and marine market for 2014?

A: We had a positive year in 2013 with a good level of new orders. We ended the year with a record net orderbook of \$14.2 billion with deliveries extending to 2019.

For 2014, the fundamentals of the offshore and marine industry are expected to remain strong, underpinned by robust energy demand and healthy exploration and production (E&P) spending. According to the International Energy Agency, oil demand is expected to increase by 1.3% in 2014. Global E&P spending will also reach a new record of US\$723 billion in 2014, an increase of 6.1% from US\$682 billion in 2013.

In the shallow water segment, we expect to see continuing demand for jackup rigs due to a sustained replacement cycle. Apart from the need for jackup rigs suitable for benign waters, there is also interest in harsh environment jackup rigs for the UK sector of the North Sea.

In the deepwater segment, while near-term demand is expected to slow down, over the longer term, demand for deepwater drilling rigs is increasing. Capital expenditure is expected to more than double from now till 2018. This is primarily driven by a deepwater rig fleet renewal post-Macondo and demand for rigs capable of development drilling. More sophisticated rigs are also required with the shift towards more challenging well operations in deeper waters.

In terms of geographical markets, demand for rigs will come from areas like Mexico, the Middle East, the North Sea, West Africa and South East Asia. Mexico's recent plans to open up its oil and gas sector to private companies are expected to significantly raise the country's oil output. We will also see continued demand from Brazil and possibly from frontier regions such as East Africa, the Black Sea and the Barents Sea.

In Floating Production Storage and Offloading (FPSO) vessel conversions, we saw a slow market in 2013 though longer term prospects remain healthy. According to International Maritime Associates, there are over 200 floating production projects in various stages of planning at the end of 2013, and around 55% of these involve FPSOs. Douglas-Westwood estimates that the market will need 100 new FPSOs from now till end 2017, representing a growth of more than 50% in fleet size, provided the industry is able to overcome challenges in project execution and rising costs.

Q: As the new CEO, how do you intend to take Keppel O&M to the next level in the midst of a rapidly changing industry landscape?

A: The key drivers of growth for Keppel O&M will lie in our continued ability to meet the evolving needs of the industry. We will continue to be customer and future-focused, and stay close to market trends and demands.

With E&P activities requiring higher specification and more technologically advanced equipment, we are in a good position to benefit from this trend through our strong track record in the construction of well-designed mobile offshore rigs and vessels, and delivering them in a timely, safe and cost-efficient manner.

Our established capabilities in execution, entrenched culture of innovation and R&D, and close relationship with customers, vendors and classification societies, enable us to understand what our customers and markets require. However, we will not rest on our laurels and as the new CEO, I will continue to strengthen our core competencies and actively seek growth opportunities.

In the near term, one of my key priorities will be to ensure we continue to have the quality human capital to support the group's next phase of growth. In my opinion, the underlying pillars of strength of Keppel O&M's achievements all these years are our people, and their alignment with our core values of *Can-Do!*, Customer Focus, Commitment to HSE, Accountability, Integrity, Innovation and Learning, Global Mindset and People & Teamwork. We are embarking on initiatives to better equip and align our next generation of management and workforce based on our eight core values.

Q: Please tell us more about your plans to further expand Keppel's global network of yards.

A: An important competitive advantage which we have built up over the years is our *Near Market, Near Customer* strategy, which arose from our desire to be customer-focused. Today, our global network of 20 yards worldwide is able to provide a full range of quality offshore and marine

Interview with CEO /



Strong partnership as Mr Emilio Lozoya Austin (left), CEO of Pemex and Mr Chow Yew Yuen, CEO of Keppel O&M discuss win-win solutions.

services at the doorsteps of major offshore oil and gas fields as well as meet local content requirements.

We will continue to expand our yard network to where our customers require us, and will focus on markets which have growth potential and are commercially viable for us. Our decision to proceed to set up a yard in Mexico with PEMEX, Mexico's national oil company, after tracking the country for more than ten years, was due primarily to the growing demand for rigs in Mexico and our strong relationship with Mexican customers.

Since 2004, through our yards in Singapore and the US, we have completed two accommodation platforms and eight jackups for the Mexican market. Currently, we have ten ongoing projects for Mexico – eight jackups at Keppel FELS and two at Keppel AmFELS.

For several years, we have been on the lookout for a suitable site for a yard in Mexico, and have identified the Altamira location in the State of Tamaulipas for some time. We have decided to proceed with the yard development plans as Mexico is ready with a slew of efforts to boost the nation's oil and gas production.

Indeed, in 2013, PEMEX announced plans to increase production by adding to its drilling fleet as well as unveiled investment plans of US\$25.3 billion, of which US\$20 billion will be targeted at upstream activities. Last year, Mexico also signed into law a bill which allows foreign and local companies to participate in Mexico's oil and gas industry. Presently, Mexico is developing the framework that will specify how the government awards contracts and how profits are shared. Industry analysts expect approval of this framework by the end of 2014.

We have also found a suitable JV partner – a PEMEX subsidiary – to jointly develop, own and operate this yard facility in Mexico, the first phase of which is to support the construction of six KFELS B class jackup drilling rigs for PEMEX. A yard in Mexico would enable us to further support the newbuilding needs of the country, and the proposed yard will also be a convenient stopping point for repair and upgrading services for rigs operating in the Gulf of Mexico.

Looking ahead, we see much potential in Mexico's deepwater market, which may hold 25 to 30 billion barrels of oil. Currently, Mexico's deepwater resources are still very much untapped. Over the next 15 years, Mexico is expected to get to where the US is today, and hence both shallow water and deepwater opportunities in Mexico are tremendous.

Q: You talked about Keppel's culture of innovation and R&D. What initiatives are Keppel taking to continue to stay ahead in this area?

A: In 2012, to better coordinate the R&D, product development, commercialisation work and productivity improvement efforts across the various units within Keppel O&M, we established the Technology Division. So far, we have seen good results. There is improved collaboration among the relevant units, and most important of all, it helps to drive home the message across the group that innovation is everyone's business.

As part of our ongoing efforts to foster a culture of continuous improvements through innovation, in 2013, we held the inaugural Keppel O&M Innovation Awards to recognise innovative projects and work process improvements. 29 awards were given out based on criteria including impactfulness and scalability, alignment with Keppel's commercial objectives and sustainability of results over the longer term. We will continue to have more of such initiatives.

The past year has also seen a number of new solutions being developed by our technology units as a result of market feedback. In the shallow water jackup space, we continue to develop advanced and next-generation rig designs for the North Sea. Some of these designs include the ultra-premium KFELS E Class and KFELS J Class jackups, as well as the KFELS N Plus jackup, for which we have secured one order in early 2014. With legs measuring 678 feet or about 68 storeys tall, the KFELS N Plus is able to meet stringent operating requirements for the most challenging wells. It can work at a maximum water depth of 500 feet, drill to depths of 35,000 feet, and is equipped with a 100 feet cantilever outreach.

In the Arctic space, apart from the ice-worthy jackup design which we have been working on with ConocoPhillips, our R&D also extends to other possible offshore solutions such as an Arctic transporter which can carry ice-worthy or harsh environment jackup drilling rigs across the ice to the drilling location.

We are also making progress on our recent newer designs in the deepwater space. We continue to work on our harsh environment semisubmersible (semi) design, the DSS™ 51/60HE, and have also developed a cost effective mid-water semi capable of working in the harsh environment of the UK sector of the North Sea – the SSDU5000. We have also decided to proceed with the construction of our CAN-DO drillship.

Our collaboration with the National University of Singapore (NUS) in the Keppel-NUS Corporate Laboratory is also expected to yield positive results in the three focus areas of Future Systems, Future Yards and Future Resources. The research thrust on Future Systems will focus on deepwater and Arctic technology, while Future Yards will address the needs to increase productivity and reduce reliance on manual labour in three main yard activities – welding, painting and operations in confined spaces. The research thrust in Future Resources will be to develop core competencies in environmental impact assessment and environmentally-benign exploration and exploitation of mineral resources in the deep ocean. We expect the laboratory to be up and running in 2014.



Keppel FELS delivered its first four KFELS Super A Class jackups in 2013, two each to Hercules Offshore and Ensco. They can work in harsh environments of the North Sea and other parts of the world.

Looking ahead, we will continue to utilise our R&D capabilities and established industry knowledge to provide cost-effective and adaptable solutions to meet a broad spectrum of operating requirements, including deep waters and harsh environments.

Q: Why has Keppel O&M decided to build a drillship without an order?

A: The development of our own drillship design was a natural progression from our focus of providing offshore solutions suitable for deeper waters and harsher environments. While we have taken the direction many years ago to focus on the design and construction of semis due to yard space constraints, we challenged ourselves to leverage our R&D capabilities to come up with a commercially viable drillship solution.

After trying out a number of possible designs, we developed, in collaboration with GustoMSC, the CAN-DO drillship design based on feedback which we have solicited from major oil companies, drilling contractors and key vendors. The key differentiating features of our CAN-DO drillship, which is designed to meet a need in the market, are its capabilities in development and completion drilling, in addition to the conventional exploration drilling. The drillship can also handle next generation 20K psi blowout preventers and has a large functional deck space.

After launching the design earlier in 2013, we received very encouraging response from the market and hence we have decided to proceed with the construction of the drillship while pursuing an order. To overcome the constraint of limited space at our Singapore yards, we are building the hull of the drillship at an established shipyard in Japan. We are excited at the prospects of this new drillship and look forward to its successful completion come 2016.

Q: What new initiatives do you have in productivity and process improvements?

A: The record delivery of 21 rigs by Keppel FELS in 2013 is testament to our determination to overcome the limitations of space and manpower which we face in Singapore. Our achievement last year was based on our years of investment in productivity improvement initiatives, not just in Singapore, but across our overseas satellite yards in China, the Philippines and Indonesia.



Marking the significant milestone of Caspian Shipyard Company building a new semi in Azerbaijan is the country's President, H.E. Mr Ilham Aliyev (centre) and his wife Mehriban Aliyeva (second from left), together with Mr Farid Akhundov (far right), General Director, Caspian Drilling Company, and Keppel O&M management.



The CAN-DO barge at Keppel FELS has increased the yard's capability to take on bigger projects like the construction of the hull of the DSS™ 38E semi for Brazil.

Q: What are the new growth areas which Keppel O&M will be focusing on for the next three to five years?

Some of the specific initiatives which we are undertaking include a number of automation and yard enhancements, such as the 1,500-tonne gantry crane which was erected at Keppel Subic towards the end of 2013, the 2,000-tonne gantry crane which BrasFELS in Brazil is constructing, and the 700-tonne crane to be erected at Keppel FELS in Singapore. Keppel Nantong also has a 600-tonne gantry crane and completed a new panel line workshop capable of fabricating up to 25,000 tonnes of steel per year, and this will bolster the construction capacity for offshore and marine structures at the yard.

Keppel Shipyard has widened and lengthened one of its docks, Raffles Dock, at its Tuas Yard in Singapore. The Raffles Dock now measures 400 metres by 64 metres, allowing Keppel Shipyard to accommodate larger vessels such as the new generation ultra-large containerships.

In the area of our human capital development, we continue to work on skills upgrading initiatives and programmes. During the year, we renewed our longstanding collaboration with Singapore's Institute of Technical Education (ITE), where we work together to train and equip ITE students for a career in the offshore and marine industry. Our Keppel O&M Training Centre is the first training centre in the industry to be accredited to offer the Higher National ITE Certificate in Marine & Offshore technology. The centre received its first batch of trainees in early 2012.

A: In the next three to five years, our focus will be on ensuring that the yard in Mexico, which we will develop with our JV partner PEMEX, has the capabilities to construct quality offshore rigs for the Mexican market. At the same time, we will continue to seek opportunities to expand to countries with growth potential in their oil and gas sector and where we currently do not have a presence, such as Africa. In the countries where we already have a presence, we will look for areas where we can deepen and grow our value-add.

We will also commit ourselves to growing our market position in new solutions like drillships. We are confident that our CAN-DO drillship, with its state-of-the-art and unique features, will be able to meet the rising demand for deepwater development drilling in the market.

We continue to expand our suite of jackup designs with ultra deepwater and harsh environment jackups like the KFELS N Plus and the KFELS Super A Class.

Liquefied Natural Gas (LNG) is another growth area which we have identified. Our Keppel O&M Technology Centre has a portfolio of research projects covering LNG liquefaction systems, LNG-fuelled vessels and a mini-LNG supply-chain for associated gas. We are excited about the upcoming opportunity to work with Golar LNG to develop its first Floating LNG (FLNG) vessel, and this builds on Keppel Shipyard's track record of converting three Floating Storage Re-gasification Units (FSRU) for Golar. This first FLNG vessel will utilise the latest FLNG solutions. With natural gas as the fastest growing major energy source, we believe that FLNG vessels will be an attractive solution for the market as it offers a flexible option for developing fields at remote locations where huge infrastructure investment is not economical.

Apart from our existing core products, we also aim to diversify into other new solutions such as the Arctic transporter for drilling rigs. These new areas have been identified as they complement our existing suite of offshore solutions and more importantly, are targeted to meet the needs of the market. At Keppel, our greatest value-add comes from our customer-focused approach, and we will continue to be guided in our strategic business direction by commercial viability and market demands.

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Group Financial Highlights

Consolidated Balance Sheet as at 31 December 2013		
	2013	2012
Share capital	\$\$'000	S\$'000 339,716
Reserves	2,144,405	2,193,353
Shareholders' funds	2,484,121	2,533,069
Non-Controlling interests	201,849	200,014
Capital employed	2,685,970	2,733,083
Represented by:		
Fixed assets	1,512,577	1,364,557
Associates	506,731	410,670
Loans receivable	92,027	60,655
Goodwill	36,363	36,363
nvestments	83,062	70,383
	2,230,760	1,942,628
Current assets		
Stocks	218,473	156,928
Nork-in-progress (cost > billings)	1,573,545	2,132,050
Related companies & associates	665,987	525,459
Other assets	264,950	326,372
Debtors	821,521	647,536
Bank balances, deposits & cash	2,256,894	1,916,678
	5,801,370	5,705,023
Current liabilities		2.24.2.225
Creditors	2,056,747	2,218,896
Vork-in-progress (billings > cost)	2,499,142	1,394,730
Related companies & associates Other liabilities	279,592_ 93,314	672,591
Chort term loans	36,265	112,300
Faxation	268,761	369,319
i azattori	5,233,821	4,789,789
Net current assets	567,549	915,234
Non-current liabilities		
Long term loans	111,281	93,924
Deferred taxation	(330)	29,465
Deferred liabilities	1,388	1,390
	112,339	124,779
Net assets	2,685,970	2,733,083

Consolidated Profit & Loss Account

for the financial year ended 31 December 2013

	2013 S\$'000	2012 S\$'000	Change %
Revenue	7,129,942	7,963,307	-10
Operating profit	1,044,031	1,101,647	-5
Net Interest/investment income	67,166	74,054	-9
Share of results of associates	75,508	29,989	+152
Profit before tax	1,186,705	1,205,690	-2
Taxation	(221,269)	(228,166)	-3
Profit after tax	965,436	977,524	-1
Non-Controlling interests	(36,408)	(15,468)	+135
Profit before non-recurring items	929,028	962,056	-3
Non-Recurring items	15,000	12,000	+25
Net profit	944,028	974,056	-3
Economic Value Added (Before non-recurring items)	701,436	707,699	-1

Keppel Offshore & Marine achieved a creditable set of results in 2013. Revenue decreased by 10% to \$7.1 billion due to timing differences on the recognition of jobs in hand. Operating profit of \$1,044 million was 5% below that of 2012 due to lower revenue. Net interest income was 10% lower at \$64.8 million. Contribution from associates of \$75.5 million was 152% higher. Profit after tax of \$965.4 million was 1% lower compared to 2012, while net profit of \$944.0 million was 3% lower.

The Group's return on equity (before non-recurring items) was 37%, while Economic Value Added was a healthy \$701.4 million.

The Group delivered a record 22 rigs, 5 FPSO/FSO conversion/ upgrade/integration projects and 8 specialised vessels in 2013. The total value of contracts secured for the year was around \$7 billion, and the Group ended the year with a net orderbook of \$14.2 billion.

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Group at a Glance

KEPPEL OFFSHORE & MARINE

Global leader in offshore rig design, construction and repair, shiprepair and conversion, and specialised shipbuilding.

Headquartered in Singapore, Keppel O&M integrates and harnesses the experience and expertise of 20 yards worldwide to optimise deployment of resources and effectively execute our Near Market, Near Customer strategy.

The head office serves two central functions, providing Operational Services including technology, design and development, engineering and procurement, as well as Corporate Services covering finance, legal, human resources, information services and corporate development.

Driven by innovation and a capable people with the Can Do! spirit, we strive to become a builder of distinction in every aspect of our business.

GROUP FOCUS FOR 2014/2015

FORTIFY CORE COMPETENCIES

 Build on operational excellence and raise productivity levels to deliver projects safely, on time and within budget.

LEVERAGE GROWTH PLATFORMS

 Extend expertise to offer a wider range of products, solutions and services for the offshore and marine industry through RftD.

HARNESS GLOBAL SYNERGIES

 Develop and draw on the collective strength of global yards and offices to reinforce Near Market, Near Customer strategy and deliver value to customers.

INCREASE BUSINESS ROBUSTNESS

 Seek opportunities to strategically acquire or co-invest with partners in new capabilities and facilities, and enter into new markets.

OFFSHORE



Leading designer, builder and repairer of high-performance mobile offshore drilling rigs. The Offshore Division, helmed by Keppel FELS, is a leading designer, builder and repairer of high-performance mobile offshore drilling rigs.

The Division's portfolio of proprietary designs and floating production solutions meets a broad spectrum of operating requirements including deep waters and harsh environments.

With technology innovation and competent design and engineering capabilities, this Division offers viable, cost-effective and highly adaptable solutions for newbuilds and upgraded offshore units.

MARINE Shiprepair and Conversion



Trusted industry name for the repair, conversion and upgrade of a diverse range of vessels.

In the Marine Division, Keppel Shipyard is the trusted industry name for the repair, conversion and upgrade of a diverse range of vessels.

Keppel Shipyard is a leader in the conversion of Floating Production Storage and Offloading; Floating Storage and Offloading; and Floating Storage Re-gasification Units. Its competencies include topside and turret fabrication.

With strong commitment to Health, Safety and Environment and an established reputation of reliability, flexibility and quality for complex projects with quick turnaround, the Division continues to deliver high value to its customers.

MARINE Specialised Shipbuilding



Designer and builder of a wide spectrum of highly specialised ships for a global clientele.

The Specialised Shipbuilding arm in the Marine Division is led by Keppel Singmarine, which has a track record of some 400 newbuild vessels of diverse functions and sophistication.

Its portfolio of customised vessels spans Anchor Handling Tug/ Supply vessels, multi-purpose Offshore Support Vessels and tugboats to highly advanced solutions such as ice-capable vessels.

Harnessing its suite of design and engineering solutions, strong logistics and infrastructure support in Singapore, Keppel Singmarine provides customers with one-stop value-added services.

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Board of Directors







CHAIRMAN
Keppel Offshore & Marine Ltd
Keppel FELS Ltd
Keppel Shipyard Ltd
Keppel Offshore & Marine Technology
Centre Pte Ltd
Keppel Land Ltd
Keppel Infrastructure Holdings Pte Ltd
Alpha Investment Partners Ltd

NON-EXECUTIVE DIRECTOR Keppel Telecommunications & Transportation Ltd KrisEnergy Ltd Keppel REIT Management Limited (as the Manager of Keppel REIT) (ceased as director on 10 January 2014)

CHIEF EXECUTIVE OFFICER Keppel Corporation

CHIEF EXECUTIVE OFFICER Keppel Offshore & Marine Ltd

CHAIRMAN Keppel AmFELS, LLC Keppel Offshore & Marine USA, Inc Keppel Singmarine Pte Ltd

DEPUTY CHAIRMAN Keppel FELS Brasil SA CHAIRMAN World-Wide Shipping Agency Limited, Hong Kong







DR MALCOLM SHARPLES

PROFESSOR OF MECHANICAL ENGINEERING AND DIRECTOR OF DEVELOPMENT School of Engineering, Cranfield University, UK

PRESIDENT Offshore Risk & Technology Consulting Inc, USA INDEPENDENT DIRECTOR Hong Leong Finance Limited Tiger Airways Holdings Limited

17 **Board of Directors**

Board of Directors







TAN EK KIA

LIM CHIN LEONG

CHAIRMAN City Gas Pte Ltd Star Energy Group Holdings Pte Ltd

INDEPENDENT AND NON-EXECUTIVE DIRECTOR Keppel Corporation Limited Transocean Ltd

NON-EXECUTIVE DIRECTOR SMRT Corporation Ltd

FORMER CHAIRMAN OF ASIA Schlumberger

VICE CHAIRMAN Maine Maritime Academy Board of Trustees

DIRECTOR GasLog Ltd Knightsbridge Tankers Ltd

FORMER CHAIRMAN AND CEO American Bureau of Shipping







SENIOR EXECUTIVE DIRECTOR Keppel Corporation Limited

CHAIRMAN Keppel Telecommunications and Transportation Ltd M1 Limited DIRECTOR Keppel AmFELS, LLC CHIEF FINANCIAL OFFICER Keppel Corporation Ltd

DIRECTOR Keppel Infrastructure Holdings Pte Ltd Singapore Accountancy Commission

Board of Directors 19

Key Personnel



OFFSHORE & MARINE

- 1. CHOR HOW JAT

 MANAGING DIRECTOR
 (KEPPEL SHIPYARD)
- 2. WONG NGIAM JIH CHIEF FINANCIAL OFFICER
- 3. HOE ENG HOCK
 MANAGING DIRECTOR
 (KEPPEL SINGMARINE)
- **4. CHOW YEW YUEN**CHIEF EXECUTIVE OFFICER
- 5. WONG KOK SENG MANAGING DIRECTOR (OFFSHORE AND KEPPEL FELS)

- 6. LOH CHIN HUA CHAIRMAN
- 7. MICHAEL CHIA MANAGING DIRECTOR (MARINE & TECHNOLOGY)
- 8. LAI CHING CHUAN SENIOR GENERAL MANAGER (CORPORATE DEVELOPMENT)
- 9. CHEE JIN KIONG

 EXECUTIVE DIRECTOR
 (HUMAN RESOURCES)



1. PHILLIP MAH GENERAL MANAGER (SECURITY)

2. **JEFFERY CHOW**GENERAL MANAGER (LEGAL)

3. JACOB TONG GENERAL MANAGER (INFORMATION SYSTEMS)

4. YONG CHEE MIN GENERAL MANAGER (PROJECTS AND HEALTH, SAFETY & ENVIRONMENT)

5. KENNETH CHONG ASSISTANT GENERAL MANAGER (LEGAL) COMPANY SECRETARY

6. EDMUND MAHGENERAL MANAGER (FINANCE)

7. FONG SWEE THENG GROUP FACILITIES MANAGER

8. DR LEE CHAY HOON GENERAL MANAGER (ORGANISATION DEVELOPMENT)

Key Personnel 21



KEPPEL FELS

- 1. **KEITH TEO**GENERAL MANAGER
 (MARKETING)
- 2. CHRIS ONG
 ACTING EXECUTIVE DIRECTOR
 (OPERATIONS)
- 3. WONG FOOK SENG EXECUTIVE DIRECTOR (PROCESS EXCELLENCE & PLANNING)
- 4. MOHAMED SAHLAN BIN SALLEH GENERAL MANAGER (OPERATIONS)
- 5. WONG KOK SENG MANAGING DIRECTOR

- 6. AZIZ AMIRALI MERCHANT EXECUTIVE DIRECTOR (ENGINEERING)
- 7. DAVID LEE FINANCIAL CONTROLLER
- 8. LIM AH CHENG ASSISTANT GENERAL MANAGER (COMMERCIAL)
- 9. YEO YUE NGIAP GENERAL MANAGER (COMMERCIAL) [Not In Photo]



► KEPPEL SHIPYARD

1. TAN PENG PONG

GENERAL MANAGER (ENGINEERING & SYSTEMS DEVELOPMENT)

2. LOUIS CHOW

SENIOR GENERAL MANAGER (COMMERCIAL)

3. IVAN LIM

GENERAL MANAGER (OPERATIONS)

4. CHOR HOW JAT

MANAGING DIRECTOR

5. CHARLES SIM

GENERAL MANAGER
(OFFSHORE PRODUCTION)

6. MICHAEL CHIA

MANAGING DIRECTOR (MARINE)

7. BURT LOH

GENERAL MANAGER (OPERATIONS)

8. JIM LIM

FINANCIAL CONTROLLER

9. CHIN SZE KIUN

GENERAL MANAGER (COMMERCIAL – REPAIR)

Key Personnel 23



KEPPEL SINGMARINE

- 1. POON TAI LUM GENERAL MANAGER (COMMERCIAL/MARKETING)
- 2. AU YEONG KIN HO GENERAL MANAGER (ENGINEERING)
- 3. TOH KO LIN EXECUTIVE DIRECTOR

- **4. HOE ENG HOCK**MANAGING DIRECTOR
- 5. CHIN LIK KIONG SENIOR YARD MANAGER



RESEARCH & DEVELOPMENT

1. LIM TENG KIAT

GENERAL MANAGER,
OFFSHORE TECHNOLOGY DEVELOPMENT

2. AZIZ AMIRALI MERCHANT

EXECUTIVE DIRECTOR (DEEPWATER TECHNOLOGY), KOMTECH; EXECUTIVE DIRECTOR, DEEPWATER TECHNOLOGY GROUP

3. DR MATTHEW QUAH

SENIOR PROGRAMME MANAGER (OFFSHORE STRUCTURES AND ANALYSIS), KOMTECH; ASSISTANT GENERAL MANAGER, OFFSHORE TECHNOLOGY DEVELOPMENT

4. AU YEONG KIN HO

GENERAL MANAGER, MARINE TECHNOLOGY DEVELOPMENT

5. CHARLES FOO

DIRECTOR/ADVISOR, KOMTECH

6. ANIS ALTAF HUSSAIN

PROGRAMME DIRECTOR (DEEPWATER TECHNOLOGY), KOMTECH

7. MICHAEL CHIA

MANAGING DIRECTOR (TECHNOLOGY), KEPPEL O&M; MANAGING DIRECTOR, KOMTECH

8. CHARLES SIM

TECHNICAL AND PROJECTS DIRECTOR (FPSO AND OFFSHORE PRODUCTION), KOMTECH

9. DR FOO KOK SENG

EXECUTIVE DIRECTOR
(SHALLOW WATER TECHNOLOGY), KOMTECH;
EXECUTIVE DIRECTOR,
OFFSHORE TECHNOLOGY DEVELOPMENT

10. DR BASIL LUI

ASSISTANT GENERAL MANAGER (CORPORATE AND TECHNOLOGY DEPARTMENT), KOMTECH

Key Personnel 25

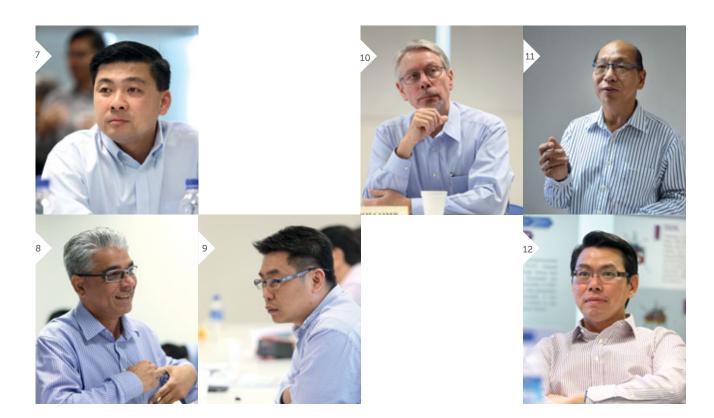
Key Personnel



OVERSEAS MANAGERS

- 1. KWOK KAI CHOONG KEPPEL FELS BRASIL
- 2. LEE YOONG HOONG
 KEPPEL SINGMARINE BRASIL
- 3. HAROLD LINSSEN KEPPEL VEROLME

- 4. ABU BAKAR MOHD NOR NAKILAT-KEPPEL OFFSHORE & MARINE
- 5. LEONG KOK WENG KEPPEL SUBIC SHIPYARD
- **6. LEONG SIEW LOON**KEPPEL BATANGAS SHIPYARD



- 7. SIMON LEE KEPPEL AMFELS
- 8. CHANDRU SIRUMAL RAJWANI CASPIAN SHIPYARD COMPANY
- 9. EDMUND LEK

 KEPPEL NANTONG SHIPYARD

 KEPPEL NANTONG HEAVY INDUSTRY

10. MICHAEL HOLCOMBKEPPEL MARINE AGENCIES INTERNATIONAL

- 11. JIMMY LOH ARAB HEAVY INDUSTRIES
- **12. LAM KHEE CHONG**BAKU SHIPYARD

27 Key Personnel

OVERSEAS OPERATIONAL CENTRES

ArabHeavy Industries PJSC

JIMMY LOH

MANAGING DIRECTOR

CHAN LIM HONG

GENERAL MANAGER

ADRIAN KWAN

ADMINISTRATOR AND FINANCIAL CONTROLLER

PT Bintan Offshore

THOMSON HALIM

ASSISTANT GENERAL MANAGER

Keppel Phillipines Marine, Inc.

TOH KO LIN

PRESIDENT

STEFAN TONG

EXECUTIVE VICE PRESIDENT

AGNES BARBARA L. LORENZO

SENIOR VICE PRESIDENT (FINANCE & ADMINISTRATION)

Keppel Batangas Shipyard LEONG SIEW LOON

PRESIDENT

Keppel Subic Shipyard, Inc.

LEONG KOK WENG

PRESIDENT

FROILAN DELA CRUZ

VICE PRESIDENT

(COMMERCIAL & MARKETING)

Keppel Offshore & Marine USA, Inc TOMMY SAM

VICE PRESIDENT

CHEUNG TAK ON

VICE PRESIDENT (TECHNOLOGY)

Keppel AmFELS, LLC SIMON LEE

PRESIDENT

ERIC PHUA

VICE PRESIDENT (COMMERCIAL)

TOMMY SAM

CHIEF FINANCIAL OFFICER

TOM MCCOY

VICE PRESIDENT (PRODUCTION)

Keppel FELS Brasil S.A.

KWOK KAI CHOONG

PRESIDENT & CHIEF EXECUTIVE OFFICER

TOMMY SAM

VICE PRESIDENT

GILBERTO ISRAEL

COMMERCIAL DIRECTOR

LOW HAN KIAT

CHIEF FINANCIAL OFFICER

ALCEU MARIANO

INSTITUTIONAL RELATIONS DIRECTOR

LUIZ CAETANO

OPERATIONS DIRECTOR

KARINA STOFF

LEGAL AND HR DIRECTOR

LOW TIAU TONG

DIRECTOR

(SPECIAL PROJECTS)

LEWIS LIANG KUN

GENERAL MANAGER (PROJECTS)

Keppel Verolme BV

HAROLD LINSSEN

MANAGING DIRECTOR

WONG WEI KEI

CHIEF FINANCIAL OFFICER

Caspian Shipyard Company Ltd CHANDRU SIRUMAL RAJWANI

PRESIDENT

LAU KUAT PIN

EXECUTIVE VICE PRESIDENT

ELSHAN GURBANOV

CHIEF FINANCIAL OFFICER

Keppel Nantong Shipyard Co. Ltd Keppel Nantong Heavy Industry Co. Ltd

EDMUND LEK

PRESIDENT

WONG PHUAY CHENG

VICE PRESIDENT (OPERATIONS)

LI GANG

VICE PRESIDENT (COMMERCIAL)

DANNY ANG

VICE PRESIDENT (FINANCE)

Nakilat-Keppel Offshore & Marine Ltd

ABU BAKAR MOHD NOR

CHIEF EXECUTIVE OFFICER

ALBERT KEE

GENERAL MANAGER (OPERATIONS)

Regency Steel Japan Ltd WONG CHUN YU

PRESIDENT

SHIGEYUKI HATANO

CHIEF OPERATING OFFICER

Keppel Singmarine Brasil Ltda

HOE ENG HOCK

EXECUTIVE DIRECTOR

LEE YOONG HOONG

GENERAL MANAGER

Baku Shipyard LLC LAM KHEE CHONG

PRESIDENT/GENERAL MANAGER

ENGINEERING/ **TECHNOLOGY CENTRES**

Keppel Offshore & Marine Technology Centre Pte Ltd MICHAEL CHIA

MANAGING DIRECTOR

DR FOO KOK SENG

EXECUTIVE DIRECTOR (SHALLOW WATER TECHNOLOGY)

AZIZ AMIRALI MERCHANT

EXECUTIVE DIRECTOR (DEEPWATER TECHNOLOGY)

CHARLES FOO

DIRECTOR/ADVISOR

CHARLES SIM

TECHNICAL & PROJECTS DIRECTOR (FPSO AND OFFSHORE PRODUCTION)

ANIS ALTAF HUSSAIN

PROGRAMME DIRECTOR (DEEPWATER TECHNOLOGY)

DR MATTHEW QUAH

SENIOR PROGRAMME MANAGER (OFFSHORE STRUCTURES & ANALYSIS)

Offshore Technology Development Pte Ltd

DR FOO KOK SENG

EXECUTIVE DIRECTOR

LIM TENG KIAT

GENERAL MANAGER

Deepwater Technology Group Pte Ltd AZIZ AMIRALI MERCHANT

EXECUTIVE DIRECTOR

Marine Technology Development Pte Ltd

AU YEONG KIN HO

GENERAL MANAGER

Blue Ocean Solutions Pte Ltd DR JERRY NG

CHIEF EXECUTIVE OFFICER

Bennett & Associates, LLC TOMMY SAM

PRESIDENT & CHIEF EXECUTIVE **OFFICER**

FloaTEC, LLC

TK DAS

PRESIDENT

Keppel FELS Baltech Ltd

LYUDMIL STOEV

GENERAL MANAGER

IVAN PETROV PELOV

SENIOR ENGINEERING MANAGER

Keppel FELS Engineering Shenzhen Co. Ltd

HO JONG HENG

GENERAL MANAGER

Keppel Offshore & Marine Engineering Services Mumbai Pte Ltd

SYED AHAMED KABEER

GENERAL MANAGER

REPRESENTATIVE OFFICES

Keppel Marine Agencies International, LLC

MICHAEL HOLCOMB

PRESIDENT/DIRECTOR

JOHN J. BAJOR

DIRECTOR, NEW JERSEY

Keppel Prince Engineering Pty Ltd

CHARLES CHIAM

DIRECTOR

MARINE SERVICES

Asian Lift Pte Ltd JOHN CHUA

GENERAL MANAGER

Keppel Smit Towage Pte Ltd PIETER VAN STEIN

MANAGING DIRECTOR

JERRY WONG

GENERAL MANAGER

EMPLOYEE UNIONS

Keppel Employees Union RAZALI BIN MAULOD

PRESIDENT

MOHD YUSOF B MOHD

GENERAL SECRETARY

Keppel FELS Employees Union VINCENT HO MUN CHOONG

PRESIDENT

ATYYAH HASSAN

GENERAL SECRETARY

DAVID LIM KIN WAI

EXECUTIVE SECRETARY

Shipbuilding & Marine Engineering

Employees Union
TOMMY GOH HOCK WAN

PRESIDENT

EILEEN YEO CHOR GEK

ASSISTANT GENERAL SECRETARY

MAH CHEONG FATT

EXECUTIVE SECRETARY

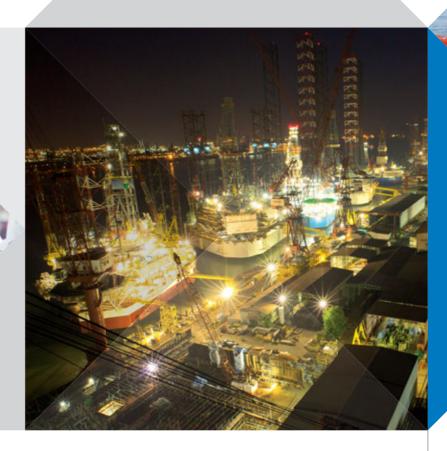
Key Personnel

CONFIGURED FOR GROWTH

In the 2013 Annual Reports of the Keppel Group of Companies, the distinctive Keppel spur is reflected in the tangram, a symbol of flexibility and creativity in shaping endless possibilities. Likewise, in a world of volatility, Keppel Offshore & Marine continually strives to configure all its components and competencies into a cohesive and optimal whole to capture value and enjoy sustainable growth.

Distinctive Innovation

Our pursuit of innovation in our technological offerings and processes, coupled with growing our *Near Market, Near Customer* strategy, enables us to better service existing markets as well as penetrate new ones.



Safety and Productivity Excellence

With a focus on Health, Safety and the Environment, we will further enhance the capabilities of our workforce, and raise productivity and efficiency across all our operations worldwide to ensure we consistently deliver on our promises.

SPECIAL FEATURE

SETTING NEW BENCHMARKS

Our success in 2013 was underpinned by our strong design and operational capabilities. Honing our capabilities and innovating continuously, we strive to deliver value-added services to our customers.

value-added services to our customers, and stay ahead of our competition.

2013 has been a milestone year for Keppel Offshore & Marine (Keppel O&M) as we set new benchmarks in our operations and product designs.

In project management and execution, we further proved our mettle with a record number of deliveries. Across Keppel O&M's yards, we completed 45 major projects.

These included 20 jackup rigs, two semisubmersible (semi) rigs, a tension leg wellhead platform (TLWP), eight specialised ships, the conversion or upgrade of five Floating Production Storage and Offloading (FPSO) or Floating Storage and Offloading (FSO) vessels as well as a number of repair, upgrading and completion projects.

The projects delivered were in keeping with our track record of being on time and within budget. A number of factors were key in contributing to this performance: execution expertise and experience, synergy across our yards, proprietary designs comprising the bulk of our projects and innovative construction methodologies.

Of the 22 rigs delivered, 21 were completed at Keppel FELS, exceeding the company's initial target of 20 and setting the record for the most number of rigs to be delivered by a company in a single year.

All but one of the rigs delivered in 2013 were built to five of Keppel's proprietary designs: three jackup types – KFELS Super A Class, KFELS B Class and KFELS Super B Class – and two semi designs – KFELS SSDTTM 3600E and KFELS SSAUTM 5000NG.

Keppel's frontrunning rig design – the KFELS B Class – made up 15 of these units, bringing the total number of such rigs delivered to the market from 2000 to 2013 to 51.

RECORD DELIVERIES

A confluence of critical factors was key to Keppel FELS achieving the 21-rig record delivery. The success factors include the timing of the rig orders as well as the availability of equipment and resources. This makes the record difficult to replicate.

In this case, the contracts were secured two to three years before. When the first of these orders came, the global industry was just recovering from a slowdown; as such, competition between yards was intense and all were offering attractive terms for jobs.

Keppel FELS could count on its excellent delivery track record and strong proprietary designs to secure new orders. After that, what the yard could control was forward planning. All departments – marketing, engineering, procurement, logistics, planning, project management, production and operations amongst others had to be fighting fit. Until 2013, Keppel FELS' previous record number of deliveries in a single year was in 2009 when it delivered 13.

Mr Wong Kok Seng, Managing Director (Offshore) of Keppel O&M and of Keppel FELS, said, "To complete 21 rigs in a year, we had to deliver a vessel nearly every two weeks. At the same time there were some 45 projects going on simultaneously, including repair works on other vessels. Our project operations were packed back-to-back.

"That many of the rigs under construction were of similar designs helped to ensure a smoother construction process. We were able to streamline the engineering and production processes. We are also able to standardise materials and equipment, leading to higher efficiencies and cost-savings."

While the bulk of the fabrication was undertaken at Keppel FELS' yards in Singapore, certain parts were fabricated by sister yards in Indonesia, the Philippines and China as well as our subcontractors' facilities.

The blocks were then brought back to Keppel FELS for integration.

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Keppel Shipyard completed three FPSO and one FSO conversion/upgrading projects in 2013 and had eight FPSO and three turret fabrication projects in progress in 2014.

- 2. The KFELS B Class is the industry benchmark rig with 51 delivered at end-2013 since 2000.
- Being customer-focused has resulted in innovative solutions that are delivered safely, on time and on budget.

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Keppel Offshore & Marine Ltd Report to Stakeholders 2013

Special Feature

SPECIAL FEATURE

The thousands of components that go into a particular rig are supplied by hundreds of vendors from all over the world. The right components must arrive at the right time to enable a smooth construction process.

Keppel O&M' supply chain management capabilities have been built up over many years to increase our capacity in rig building. At Keppel KFELS, from 2008-2012, an average of nine rigs were delivered a year, a substantial workload for most offshore yards. To meet the delivery schedules of the 21 rigs, it had to build on our existing supply chain management systems.

The successful coordination of materials, equipment and blocks from all over the world as well as the people and operations to tie them together bears testament to the good teamwork among Keppel O&M yards and its unions. It also reflects our good rapport with our customers, the classification societies, suppliers and government and industry bodies. Mr Wong added, "2013 has definitely been a demanding year for Keppel FELS. It is through the hard work and commitment of Keppelites and our subcontractors and business partners that we have been able to successfully deliver 21 rigs, and so further prove our mettle for

WINNING DESIGNS

Setting another benchmark in 2013 was the delivery of 51 KFELS B Class rigs to the market since 2000 which makes up a third of the jackup rigs delivered since then. In addition, 18 of the 21 new rigs ordered during the year were for KFELS B Class units.

The design was first launched in 2000 which even then surpassed the standards of the best ultra-premium rigs of its day. Today, the KFELS B Class has truly established itself as the industry standard for a high-performance, cost-effective rig for benign waters.

With a large deck space and high variable deck load, the KFELS B Class is able to meet a variety of operational and customer requirements.

The KFELS B Class also comprises Keppel's patented jacking and fixation system, which is recognised by the industry as being the most robust and reliable.

Over the years, variations of the KFELS B Class have been developed. The KFELS Super B Class is capable of drilling deeper and at high temperatures and pressures.

Apart from the KFELS B Class, Keppel's harsh environment jackup designs – the KFELS N Class and KFELS Super A Class – are also gaining traction amongst rig owners and operators. To-date, three KFELS N Class rigs and four KFELS Super A Class rigs have been delivered. All four KFELS Super A Class rigs were delivered in 2013; two were for Ensco and two were for Hercules Offshore.

An enhancement of the KFELS N Class is the KFELS N Plus which received an order for China waters in early 2014. The KFELS N Plus design is one of the few rigs in the world able to work in 500 feet water depth in harsh environments. We have also been growing our suite of deepwater solutions. Together with our design partner, GustoMSC, we have developed a range of semi solutions known collectively as DSSTM Series.

Our first DSSTM Series drilling rig, the DSSTM 20 Maersk Explorer, was completed in 2003. Since then, we have built seven DSSTM Series drilling rigs, and have another seven under construction.

Six are DSSTM 38E rigs, which are well-suited for operations in many parts of the world including Brazil, West Africa and the Gulf of Mexico. One is a DSSTM 38M semi which is

customised for the Caspian Sea's harsh environmental conditions.

In 2013, the lower hull of the first of the six DSS™ 38E semis, left Singapore for Brazil to be integrated with the components of the rig, which is being built in Keppel's BrasFELS yard in Brazil.

We also continue to enhance our semi designs for the North Sea. Our designs, DSS™ 51HE and DSS™ 60HE, are equipped with winterised features such as derrick cladding and machinery space heating. During the year, we also delivered Floatel Victory, a semi accommodation unit built to our SSAU™ 5000NG design, which is able to operate in some of the world's harshest environments.

With positive feedback and strong enquiries from the market, we have also proceeded with the construction of our new CAN-DO drillship. The design is jointly developed by Keppel Offshore & Marine Technology Centre and GustoMSC. When completed in 2016, the drillship is expected to be the first-of-its-kind deepwater exploration, development and completion drilling vessel.

- Mega blocks built and assembled at BrasFELS will be fitted onto the lower hull of the first DSS™ 38E semi drilling unit that Keppel O&M is building for Brazil.
- 2. Keppel FELS delivered three KFELS Super B Class rigs to Transocean in 2013 including Transocean Siam Driller and Transocean Andaman which were named on 2 February 2013. Another five such rigs are on order from Transocean.
- 3. The successfully mated P-61 at Angra Dos Reis, Brazil, is another example of the strong synergy between Keppel yards.

First TLWP for Brazil

Over the years, Keppel has delivered a strong line-up of projects for Brazil. Our projects for the country include three mammoth Floating Production Units, P-52, P-51 and P-56.

In 2013, we further enhanced our range of solutions for the country with P-61, Brazil's first Tension Leg Wellhead Platform (TLWP). P-61 has been deployed in the Papa Terra field, in the Campos Basin, located near Rio de Janeiro, Brazil.

This TLWP was designed by FloaTEC, a joint venture between Keppel FELS and McDermott. The lower hull of P-61 was built at BrasFELS, while the topsides were constructed at Keppel FELS. The components were then integrated at BrasFELS, fulfilling local content requirements.

The project is another demonstration of Keppel O&M's successful synergy of its network of yards to meet its customer's needs. It is also an example of innovative and expert construction techniques.

During the topsides-to-hull mating operation, the four-column hull was ballasted to the required mating draft while the topsides, mounted on a specially built float-over barge, was positioned over the hull. Upon deballasting, the hull gradually emerged from the ocean and connected with the topsides via specially designed receptacles and stab-in cones. The float-over barge was then removed from below the topsides completing the offshore mating of the first locally-built TLWP for Brazil.

Petrobras' P-61 Project Director, Mr Everton Rebelo, commended the BrasFELS' team, "Everybody knows that the history of success that is being written on our P-61 would not be possible without the relentless and remarkable support from BrasFELS."

The P-61 TLWP is fully outfitted and equipped for drilling, completion and work-over operations. Moored by piles and tendons, it will work together with an FPSO unit to produce 140,000 barrels of oil per day.





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Operations Review & Outlook

We leverage the synergies from our global network of yards, which continue to strengthen their competencies, deliver operational excellence and pursue technological innovations to stay ahead.

SIGNIFICANT MILESTONES IN 2013

- 21 new rig orders were based on Keppel's proprietary designs.
- Delivered 51
 KFELS B Class jackup rigs since 2000 and has another 23 on order.
- Completed five FPSO/FSO conversions/upgrades.
- An MOU was signed with PEMEX to develop a yard in Mexico.
- Reinforced Near Market, Near Customer strategy with new yard in Azerbaijan.
- Increased capacity with development of Keppel Nantong Heavy Industries and raised productivity with yard enhancements across Keppel O&M yards.
- Launched Keppel-NUS Corporate Laboratory to augment innovation and R&D efforts.



2013 was a milestone year for Keppel Offshore & Marine (Keppel O&M) as it demonstrated its operational capabilities by delivering a record number of projects. 22 rigs, a tension leg wellhead platform (TLWP), five Floating Production Storage and Offloading (FPSO)/Floating Storage and Offloading (FSO) conversion/upgrade projects and eight specialised vessels were delivered, among other repair, upgrade and completion projects.

Keppel O&M was also entrusted with around \$7 billion worth of new orders in the year, boosting its net orderbook to a new high of \$14.2 billion as at end-2013, with deliveries and revenue visibility stretching till 2019.

Customers signaled their confidence in Keppel O&M's technology prowess with all 21 new rig orders in 2013 based on the Company's proprietary designs.

- Delivered in 1Q 2013, the KFELS Super B Class rigs, Transocean Siam and Transocean Andaman, have been performing well for Chevron in offshore Thailand.
- 2. La Santa Maria is the first of two jackups delivered to CP Latina in 2013.

Of the rigs delivered in 2013, 15 were KFELS B Class designs, bringing the total number of such rigs delivered to the market since 2000 to 51. This accounts for a third of the global jackup rigs delivered since 2000. Another 23 units were on order as at end-2013. Besides the KFELS B Class, proprietary designs like the DSS™ 38E for semisubmersibles (semi) and KFELS Super A Class jackup rig for harsh environments are also gaining traction in the market.

As an extension to its breadth of product offerings, Keppel O&M also proceeded to construct the Keppel CAN-DO drillship to a design developed in close consultation with customers, major oil companies and vendors. Meanwhile, Keppel Shipyard is in discussions with Golar LNG to embark on the world's first Floating Liquefied Natural Gas (FLNG) vessel conversion.

Across its global network of yards, the group continued to deepen its presence and upgrade the competencies and productivity of its yards. Being Near Market, Near Customer, the group is well-positioned to capitalise on opportunities in new markets or markets which require local content. This strategy resulted in an MOU with PEMEX to develop, own and operate a greenfield yard in Mexico to support the building of six jackup rigs as a start. Over in Azerbaijan, the group's second yard in the country, Baku Shipyard, was inaugurated.

While the macro environment continues to be challenging in 2014, the group will remain focused on growing its leadership position by reinforcing its core strengths of execution excellence, technology leadership and strong customer relationships. It will also keenly seek new growth areas and invest in enhancing its value propositions.

Major Orders Secured by Keppel O&M in 2013

pside fabrication and	
on	MTOPS
turret fabrication vbuild FPSO	SBM Offshore
Class jackup	Star Drilling, Jindal Group
5006 semi upgrade	Ensco
Patriot semi upgrade	Diamond Offshore
ELS B Class jackups	Grupo R
Class Bigfoot jackup	Ensco
uper B Class jackup	Falcon Energy
BM semi	SOCAR
Class jackup	PVDO
Class jackup	Grupo R
Class jackup	Parden
5000 NG	Floatel
nversion	SBM Offshore
nversion	M3nergy
furbishment and conversion	Lundin Services
ELS B Class jackups	Clearwater
Class jackup	Perforadora Central
LS Super B Class jackups	Transocean
uper A Class jackup	Ensco
nversion	Bumi Armada
furbishment	Apache Energy
	EMAS
mersible barges	Smit Shipping Singapore
	turret fabrication wbuild FPSO Class jackup 5006 semi upgrade Patriot semi upgrade ELS B Class jackups Class Bigfoot jackup uper B Class jackup 8M semi Class jackup Class jackup Class jackup class jackup fonversion conversion furbishment and conversion ELS B Class jackups Class jackup conversion furbishment and conversion ELS B Class jackups class jackup furbishment and conversion furbishment furret fabrication for def SO comersible barges



Operations Review & Outlook

Moving with Mexico

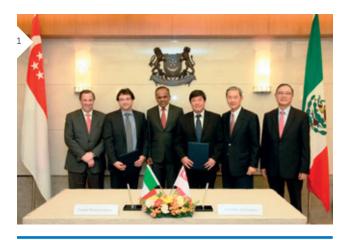
Keppel O&M signed an MOU in October 2013 with PEMEX Exploracion y Produccion (PEP) and P.M.I. Norteamérica, S.A. de C.V. (PMI), both subsidiaries of Mexico's national oil company, Petroleos Mexicanos (PEMEX), to jointly develop, own and operate a yard facility in Mexico.

The yard's first phase of development will equip it to undertake certain portions of the work scope in the construction of six KFELS B class jackup rigs. Subsequent phases would enable it to take in deep-draft semis and drillships for repairs, undertake FPSO and FLNG vessel conversions, as well as fabricate topside modules and other offshore structures.

To be located strategically in the modern Port of Altamira along the coast of the Gulf of Mexico, the yard will not only provide local content to support the industry's growth in Mexico but also employment, training and skills development for the local workforce through Keppel O&M's training and development schemes.

Mr Emilio Lozoya, CEO of PEMEX, said, "This MOU highlights PEMEX's commitment to increase oil and gas production in the long term by developing a sustainable offshore and marine industry in Mexico that can readily meet our needs. By partnering with the world's leading rig builder Keppel, we are confident that the shipyard will be a success and help to provide a wide array of solutions for the production of oil and gas."

Keppel O&M has delivered projects for Mexico since 2004. It has completed eight jackup rigs and two accommodation platforms which are successfully working for PEMEX and is currently building another 10 jackup rigs to be deployed in Mexico.



OFFSHORE

KEPPEL FELS

Keppel FELS set a record by delivering 21 rigs in a year, surpassing its previous record of 13 rigs in 2009. The feat was made possible by good planning, close collaboration within the group and a passionate workforce. It meant that Keppel FELS was delivering a new rig nearly every two weeks to international owners and operators, namely Arabian Drilling Company, Asia Offshore Drilling, CP Latina, Ensco, Floatel International, Gulf Drilling International, Hercules Offshore, Japan Drilling Company, Oro Negro, SapuraKencana, Transocean, UMW Oil & Gas and Vision Drilling.

The projects were all completed on time or early, which saw Keppel FELS rewarded with early delivery bonuses from some customers. One major delivery was the first KFELS Super A Class jackup to Ensco. It was customised for Ensco as the ENSCO 120 series and received positive customer reviews. Ensco subsequently placed an order in 4Q 2013 to build their fourth KFELS Super A Class jackup rig.

Other major new orders include five KFELS Super B Class jackups for repeat customer Transocean and five KFELS B Class jackups for Grupo R. Keppel FELS also won contracts from returning customers such as Star Drilling, Clearwater and Floatel International.

Even as the yard busied itself to meet delivery targets in 2013, it was even more vigilant and focused on its commitment to Health, Safety and Environment (HSE). It garnered a total of 13 awards at the 2013 Safety & Health Award Recognition for Projects (SHARP) organised by the Workplace Safety and Health (WSH) Council in Singapore. For its safety performance and the excellent work by its piping safety squad, Keppel FELS was awarded the Silver Award at the Association of Singapore Marine Industries (ASMI) 16th WSH Innovation Convention 2013.

Keppel FELS was also lauded for its innovative rig designs, with the DSS™ 20NS, a harsh environment





accommodation semi design, conferred the IES Prestigious Engineering Achievement Award 2013 by the Institution of Engineers Singapore (IES).

KEPPEL AMFELS

During the year, longstanding customer Perforadora Central SA de CV (Perforadora Central) awarded Keppel AmFELS its fifth jackup order since 2004. This followed the successful delivery of the third jackup rig, Papaloapan, to the same client in 2Q 2013. Perforadora Central's fourth jackup rig with Keppel AmFELS is progressing well with expected delivery in mid-2014.

The yard also won several repair contracts, including the repair of jackup Noble John Sandifer for Noble Drilling.

As drilling activities in the Gulf of Mexico rebound to pre-Macondo levels, Keppel AmFELS is well-positioned to capture repair, upgrade and newbuild work from the market.

KEPPEL FELS BRASIL

Keppel FELS Brasil won a contract in early 2013 from repeat customer MODEC and Toyo Offshore Production Systems Pte Ltd (MTOPS) to integrate the topside modules of an FPSO unit. The yard was also entrusted by Diamond Offshore Netherlands B.V. (Diamond Offshore) to upgrade and repair the semi, Ocean Quest. With its trademark quality service and quick turnaround, Keppel FELS Brasil's yard in Angra dos Reis (Rio de Janeiro), BrasFELS, completed the repair in around three months.

This was achieved even amidst high activity levels at BrasFELS. There were several major deliveries in 2013, including the delivery of its portion of work on the P-61 Tension Leg Wellhead Platform (TLWP). The lower hull of P-61 was built at BrasFELS to fulfill local content requirements while the topsides were constructed at Keppel FELS and transported to BrasFELS, where the components were then integrated. P-61 is the first TLWP designed and constructed for Brazil and was deployed in early 2014 at the Papa Terra field, in the Campos Basin, located near Rio de Janeiro.

Another successful project was the conversion of FPSO Cidade de Paraty, with the marine conversion done in Keppel Shipyard and the remaining work in BrasFELS. The FPSO left BrasFELS in April 2013 for the Lula field in Santos Basin, offshore Brazil, and struck first oil in June 2013. BrasFELS also completed the upgrading of drillship Noble Roger Eason for Noble Drilling in 2Q 2013.

- 1. The MOU between Keppel and PEMEX was signed at the Ministry of Foreign Affairs in Singapore.
- 2. Keppel AmFELS had a busy 2013. It delivered its third jackup rig to Perforadora Central and has another two jackups under construction for the company.
- 3. ARABDRILL 50 is the 45th KFELS B Class rig delivered since 2000.

Synergy in conversions

FPSO Cidade de Paraty was delivered by BrasFELS in April 2013 and its successful conversion is a demonstration of the synergy of Keppel O&M's global yards.

The vessel had arrived at BrasFELS in mid-2012 after first calling on Keppel Shipyard for marine conversion works. BrasFELS' workscope included the fabrication and installation of six process modules and a riser gantry as well as the installation and integration of another six process modules supplied by SBM Offshore.

The FPSO has a production capacity of 120,000 barrels of oil per day, and is able to compress five million cubic metres of natural gas per day. On charter to Petrobras for 20 years, it struck first oil in June 2013 in the Lula Nordeste development, in the pre-salt cluster of the Santos Basin.

Mr Jose Miranda Formigli, Director of Exploration and Production of Petrobras, said, "I want to recognise the critical role that BrasFELS played on this project, and its commitment to quality and schedule demonstrated throughout the entire conversion phase of the FPSO Cidade de Paraty."

Meanwhile, the second of six DSSTM 38E semis that BrasFELS is building for Sete Brasil has started construction, having struck steel in 2013. Work on the first semi is progressing well, with the hull having arrived in BrasFELS from Keppel FELS in January 2014 while BrasFELS' fabrication of the deck has been progressing well.

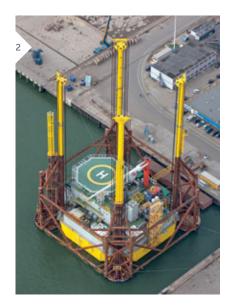
To enhance work flexibility and triple its lifting capacity, BrasFELS completed the assembly of a 2,000-tonne gantry crane in its yard. It has also leased a shipyard nearby to expand its operations.

CASPIAN SHIPYARD COMPANY

In land-locked Azerbaijan, Keppel is able to capitalise on the growing opportunities in the closed market through its Caspian Shipyard Company (CSC). The yard, in collaboration with Keppel FELS, signed a contract with Caspian Drilling Company to construct a semi drilling rig for State Oil Company of Azerbaijan Republic (SOCAR) in 2Q 2013. Construction of the rig started in December the same year.

During the year, CSC was also busy constructing a floating dock for sister yard, Baku Shipyard, and integrating a 31-year-old jackup, Prime Exerter, for Ezion Exerter Ltd. The floating dock was launched in August 2013 while CSC's scope of work on Prime Exerter is expected to be completed by 1Q 2014. Slated for deployment in Turkmenistan, Prime Exerter was first cut up at Keppel Verolme before being brought into the Caspian Sea through the narrow Volga-Don canal in smaller blocks to be integrated by CSC. Having already completed several successful integrations previously, this latest project further showcases the synergy of Keppel O&M's yards and the advantages of their locations to support drilling contractors and oil companies venturing into the Caspian region.

To improve the efficiency and safe execution of projects, CSC is installing a CNC Plasma Cutting Machine which will be ready in February 2014. The machine will reduce manual labour and improve the cutting





quality of steel plates. To improve capacity, the yard is also upgrading its blasting and painting halls to accommodate larger blocks.

KEPPEL VEROLME

In 2013, Keppel Verolme delivered and installed a first-of-its-kind floating, self-erecting substation platform for Global Tech 1, an offshore wind park in the German Exclusive Economic Zone in the North Sea. The substation platform contains transformers and high voltage switchgear integrated onto a Mobile Offshore Application Barge (MOAB) which was engineered and constructed by Keppel Verolme. The project showcases the yard's ability to offer pioneering solutions for the emerging European offshore wind energy sector.

In the course of the year, Keppel Verolme also delivered various rig and vessel upgrades and repairs for customers including Noble Drilling, Stena Drilling, North Sea Drilling, Heerema and Saipem.

Equipped with one of the largest drydocks in Europe, Keppel Verolme's proximity to the North Sea has seen it land a steady flow of repairs, upgrades and special periodic surveys (SPS) for a diverse range of vessels. In 2013, such jobs included the repair of semi Stena Spey for Stena Drilling, jackup

Noble Byron Welliver for Noble Drilling, FPSO Schiehallion for BP, a crane vessel for Dockwise, an accommodation semi for Prosafe, as well as the upgrade of semi Scarabeo 5 for Saipem.

Other ongoing jobs include repairs and upgrade of the jackup Rowan Gorilla VI for Rowan.

To meet the needs of decommissioning aged infrastructure as well as an old offshore rig fleet in the North Sea, Keppel Verolme has obtained a permit to undertake decommissioning work from the city of Rotterdam.

KEPPEL NANTONG HEAVY INDUSTRIES

The completion of Keppel Nantong Heavy Industries (KNHI) in 2013 will boost Keppel O&M's capacity in offshore work. Located next to Keppel Nantong, the yard's facilities such as panel line workshops, a 600-tonne Goliath Crane, a new slipway, load out jetty, piping and outfitting workshops, warehouses and dormitories were completed. Most notably, its load out jetty obtained preliminary government approval to be used as a public jetty and has already conducted load out operations.

With the completion of these facilities, KNHI is well prepared to support the offshore projects of the group, including the construction of jackups and semis.

- The delivery of FPSO Cidade de Paraty is another example of the synergy between Keppel O&M's network of yards to meet the needs of customers.
- Keppel Verolme successfully delivered and installed a floating, self-erecting substation platform for Global Tech 1, an offshore wind park in the German Exclusive Economic Zone in the North Sea on 13 May 2013.
- Singapore's Education Minister Heng Swee Keat (second from right) officiated the inauguration ceremony of Keppel Nantong Heavy Industry's new panel line workshop on 31 October 2013.



MARINE

KEPPEL SHIPYARD

Keppel Shipyard performed creditably in 2013, completing 383 vessel repairs in the year, compared to 298 vessels in 2012. It not only retained a majority of its existing customers but also won over new ones, doing work for a total of 161 customers. Repairs of tankers, container vessels, gas carriers, drilling vessels and offshore supply vessels were the main contributors to Keppel Shipyard's repair business.

The majority of the repair revenue came from repeat customers and companies with fleet agreements with Keppel Shipyard, providing a stable base-load for the repair segment. Keppel Shipyard also signed new repair fleet agreements with CGG Group and Western Geco, as well as

renewed existing fleet agreements with Mitsui O.S.K. Lines (MOL), JX Tanker Company, McDermott International and Nippon Yusen Kaisha (NYK).

Besides repairs, it also completed three FPSO and one FSO conversion/upgrading projects. At the end of 2013, there were eight FPSO conversion projects and three turret fabrication projects in progress. Keppel Shipyard is constantly developing innovative solutions for the market and in 2013 it concluded the Front-End Engineering and Design (FEED) study for the conversion of an existing Liquefied Natural Gas (LNG) carrier into an FLNG vessel for Golar LNG. It also completed a feasibility study on the conversion of an LNG Carrier into an Ethane Carrier for EDF Trading Singapore Pte Ltd, which is part of the EDF

- 1. Keppel Shipyard completed 383 vessel repairs in 2013, compared to 298 vessels in 2012.
- 2. Keppel Shipyard completed three FPSOs in 2013 including Perisai Kamelia.

Group headquartered in France, a leader in the international wholesale energy market.

In addition, Keppel Shipyard extended its innovation into a diverse range of solutions along the value chain to meet the latest market requirements. It completed the Ballast Water Treatment System installation for MOL's very large crude carrier (VLCC) Libra Trader as well as the Mewis Duct System installation for A.P Moller's tanker, Maersk Ingrid. With the demand for environmentally-friendly shipping growing, there are increasing enquiries for such solutions.

In terms of safety, Keppel Shipyard clocked a total of 50.3 million man-hours with zero lost time incidents (LTI). In recognition of its efforts and focus on safety, Keppel Shipyard garnered the Safety Award from Seatrade as well as the Lloyd's List Global Safety Award and the Lloyd's List Asia Safety Award. Eight of its major projects received SHARP Awards for excellent safety performance.

Keppel Shipyard further expanded its capabilities and capacity by widening and lengthening Raffles Dock and developing additional fabrication space in Tuas Yard. The newly expanded Raffles Dock, now measuring 400 metres by 64 metres, enables Keppel Shipyard to accommodate bigger vessels such as the new generation of ultra-large containerships. Mette Maersk, a container ship measuring 366 metres in length and owned by A.P. Moller-Maersk, was the first vessel to benefit from the expanded dock.

KEPPEL PHILIPPINES MARINE

2013 was a challenging year for the two shipyards under Keppel Philippines Marine, Inc. – Keppel Batangas and Keppel Subic. Amidst a recovering global economy, stiff competition and softening of demand for ship repair, both yards continued to configure their operations to capture a larger share of projects from the relatively buoyant offshore market.





Despite the challenging business environment, both yards completed repair projects for 108 vessels in 2013. Shipbuilding activities also provided additional sources of revenue, including the ongoing offshore fabrication project at Keppel Subic and the completion of newbuilding projects at Keppel Batangas.

Keppel Batangas completed the newbuild 4,000 dwt bulk ore/fuel carrier, FLY RESILIENCE, for Ok Tedi, while Keppel Subic was busy with projects such as the construction of the Malampaya Phase 3 (MP3) Depletion Compression Platform (DCP) from Shell Philippines Exploration (SPEX) and the building of the coal transshipper crane barge, Ratu Giok 5.

Both yards embarked on its respective yard development programmes to improve their capabilities, especially in fabricating offshore structures. Keppel Batangas upgraded its facilities and equipment with additional assembly areas, cutting machines, lifting equipment and

cranes, while Keppel Subic added fabrication areas for topside and substructures, assembly areas at the extended dock head, pipe shops, warehouses and additional cranes. The commissioning of a gantry crane with a 1,500-tonne lifting capacity is significant as it would provide Keppel Subic with added operational flexibilities to take on large-scale, offshore projects such as the ongoing MP3 DCP project.

ARAB HEAVY INDUSTRIES

Arab Heavy Industries (AHI) in Ajman, United Arab Emirates, was kept busy in 2013 with repair work for repeat customers. A total of 183 vessels were repaired, including those for repeat customers Van Oord ACZ, Boskalis Westminster, Swire Pacific Offshore, Al Jazeera Marine, Archirodon Dredging, Smit Lamnalco, Atlantic Marine Services, and IRSHAD (Abu Dhabi Petroleum Ports Operating Company). The yard also secured contracts from new customers including Hercules Offshore, Egon Oldendorff Logistics and Aurum Ship Management.

- Keppel Subic installed a massive 1,500-tonne crane, greatly enhancing its capabilities.
- 2. N-KOM completed repair works for the VLCC Janah Star, its 200th project since operations at the yard started three years ago.

Key projects undertaken by the yard in 2013 included the upgrading and mobilisation of three jackup lift boats for Hercules Offshore, major repairs and upgrade of a well-stimulation vessel for Halliburton Company, the conversion of a jackup rig to an accommodation work platform for Atlantic Marine Services and the conversion of an Anchor Handling Tug Supply (AHTS) vessel to a diving support vessel for SMIT International.

NAKILAT-KEPPEL OFFSHORE & MARINE

Since its inauguration in 2010, Nakilat-Keppel Offshore & Marine (N-KOM) has undertaken more than 200 projects for the marine, offshore and onshore industries and established its position as the Middle East's leading shipyard.

It continued to make headway as a leading gas carrier repair centre in 2013, having completed repairs for 80 gas carriers by the end of the year. The shipyard also has a strong presence in the regional offshore repair market, especially for jackup rig repairs, and expanded its services to include on-site servicing of offshore platforms. Through its Onshore and Industrial Engineering division, it completed the fabrication of land rig components like mudtanks as well as the refurbishment and rigging up of land rigs.

The yard's achievements were recognised when it won the 'Ship Repair/Shipyard' Award for the second consecutive year at Seatrade Middle East and Indian Subcontinent Awards 2013.



- Keppel Singmarine delivered FLY ALLIANCE, a container vessel, to OK Tedi Mining.
- Seaways 22, an AHTS, was delivered by Keppel Singmarine to repeat customer Seaways International.
- 3. Looking at a scale model at the inauguration ceremony of the new Baku Shipyard are (from L-R): Chairman of Keppel Corporation, Dr Lee Boon Yang; Singapore's Senior Minister of State for Trade and Industry, Mr Lee Yi Shyan; President of Azerbaijan, H.E. Ilham Aliyev; then-CEO of Keppel O&M, Mr Tong Chong Heong, and President of SOCAR, Mr Rovnag Abdullayev.

With major investments planned in the Arabian Gulf to revamp existing facilities and development of new fields, especially gas fields, N-KOM is positioning itself as the centre of excellence for gas carrier repairs and the choice provider for LNG solutions.

SPECIALISED SHIPBUILDING KEPPEL SINGMARINE

In 2013, Keppel Singmarine delivered four vessels with a perfect safety record and secured a Letter of Intent (LOI) for three more vessels.

The deliveries comprise a multi-purpose diving support vessel, SBM Installer, for SBM Offshore, a 65-tonne bollard pull anchor handling tug, Seaways 22, for repeat customer Seaways International and two vessels – a container vessel FLY ALLIANCE and a dual-purpose bulk carrier FLY PROSPERITY – for OK Tedi Mining.

The LOI is for the construction of three ice-class vessels for Bumi Armada. It was signed in late 2013 and converted into a firm contract in March 2014. Scheduled for delivery in September 2015, the vessels will be chartered to LUKOIL-Kalinigradmorneft (LUKOIL). This order strengthens Keppel Singmarine's track record in providing offshore support vessels

for the Arctic, having previously delivered four ice-class vessels and two icebreakers to LUKOIL.

To further boost yard productivity, Keppel Singmarine invested in an auto pipe dispenser and conveyor transfer system, robotic profile cutter and a T-bar robotic welding machine. The equipment will reduce production man-hours and improve the efficiency of profile cutting.

With the rising global demand for LNG and its supporting infrastructure such as LNG carriers and bunker ships, Keppel Singmarine has identified opportunities for growth in the industry. It has signed a Technical Assistance and License Agreement with France's Gaztransport & Technigaz (GTT) for the design and construction of LNG carriers using GTT's membrane containment systems.

GTT is a global leader in designing and building membrane containment systems and Keppel Singmarine is currently the only shipbuilder in Singapore with a license for GTT's design. Its strategic partnership with GTT places it ahead of its competitors to cater to the growing demand for optimised, high quality LNG carriers.





KEPPEL NANTONG

Keppel Nantong Shipyard delivered two 45-tonne bollard pull ASD tugs to Keppel Smit Towage in 2013. Other major projects carried out during the year include the construction of the 5,000-tonne sheerleg floating crane, Asian Hercules III, as well as the fabrication of upper hull blocks for Keppel FELS offshore rigs and a jib for Asian Hercules II.

The yard also secured orders for two 50-tonne bollard pull ASD tugs from Keppel Smit Towage's joint venture partner in Malaysia.

In December 2013, the shipyard received a contract to build two units of submersible barges, Giant 5 and Giant 6, for Smit Shipping Singapore. It is also ramping up its capacity and capabilities to better support Keppel O&M's operations in 2014.

KEPPEL SINGMARINE BRASIL

Projects at Keppel Singmarine Brasil continued apace as it delivered two SMIT Rebras 45-tonne bollard pull ASD harbour tugs in 2013. Another two units for SMIT Rebras were also launched and are undergoing completion works by the quayside. The yard is also focused on constructing two 4,500 DWT platform supply vessels for Guanabara Navegacao Ltda. The first unit was launched in 4Q 2013 while the second unit underwent block construction and erection on the slipway during the year.

The second phase of the yard development which comprises installation of a 10-tonne gantry crane, warehouse, steel stock area and an 80-metre panel line workshop were completed in 2013. Other ongoing facility enhancements include a blasting chamber, a 220-metre wharf and a new hull fabrication shop with mobile shelters.

BAKU SHIPYARD

The first phase of the 62-ha Baku Shipyard was inaugurated by Azerbaijan President H.E. Ilham Aliyev in September 2013. Managed and operated by Keppel O&M, the yard is the largest

Adding to Azerbaijan



Baku Shipyard, a new 62-ha yard in Azerbaijan jointly developed by Keppel O&M, State Oil Company of Azerbaijan Republic (SOCAR) and Azerbaijan Investment Company (AIC), was officially opened on 20 September 2013 by President of Azerbaijan, H.E. Ilham Aliyev, and Singapore's Senior Minister of State for Trade and Industry, Mr Lee Yi Shyan.

The shipyard will be able to undertake the construction of a wide range of specialised vessels and merchant ships including subsea vessels, anchor handling tug/supply vessels and multi-purpose offshore support vessels as well as tankers and cargo vessels. The yard also has ship repair and conversion capabilities.

Baku Shipyard adds to Keppel's existing footprint in Azerbaijan where we have been operating the Caspian Shipyard Company (CSC), also a joint venture between Keppel O&M and SOCAR, since 1997.

Baku Shipyard will also build upon CSC's experiences, and at the same time support CSC in its construction activities.

The new yard reinforces Keppel O&M's Near Market, Near Customer strategy and enables us to unlock synergy in our Caspian operations.

Mr Rovnag Abdullayev, President of SOCAR, said, "With the strong growth potential in Azerbaijan's oil and gas sector, we believe that Baku Shipyard is well placed to support this growth and contribute to the country's economic development."

When operating at full capacity, the yard is able to undertake up to 100 repairs and conversions per annum and is estimated to achieve an average annual steel output of 25,000 tons. Plans for Phase 2 include the construction of a graving dock with added facilities for offshore projects.



and most modern shipbuilding and repair facility in the Caspian region.

Shortly after the inauguration, the yard secured a contract from SOCAR Shipping to build five crew boats. This adds to its current projects which include the fabrication of the pontoons and columns for the SOCAR semi order won by CSC and Keppel FELS in 2013.

Baku Shipyard also delivered its maiden vessel, a 50-tonne bollard pull ASD tug, to SOCAR Shipping in December 2013. The tug was ordered before the yard's official inauguration and was constructed concurrently with the yard's development.

Investment in Azerbaijan's offshore and marine infrastructure is expected to increase in tandem with more oil and gas opportunities and Baku Shipyard will be able to leverage Keppel O&M's expertise and network of yards to meet this demand.

OTHER SERVICES

ASIAN LIFT

Riding on the high level of shipyard activities, Asian Lift's fleet of specialised marine heavy-lift sheerleg cranes recorded a healthy average fleet utilisation level of 73% in 2013, while lifting volume is expected to further pick up in 2014. With shipyards increasing their capabilities to construct rigs and FPSOs in larger and heavier modules, the demand for heavy lifting remains strong.

Asian Lift's 5,000-tonne sheerleg floating crane, Asian Hercules III, is expected to be operational in 2014, which will add to its capability for single lifts of up to 5,000 tonnes and tandem lifts of up to 7,000 tonnes. With an enhanced fleet, the company is poised to broaden its market coverage and pursue new opportunities, including offshore installation and decommissioning of offshore structures.

Keppel Singmarine successfully delivered SBM Installer, a prototype multi-purpose diving support construction vessel.

	Quarter	Type	Customer	Shipyard
Offshore				
Newbuild jackups				
Transocean Siam Driller	1Q	KFELS Super B Class	Transocean	Keppel FELS
Transocean Andaman	1Q	KFELS Super B Class	Transocean	Keppel FELS
Dynamic Vision	1Q	KFELS B Class	Vision Drilling	Keppel FELS
AOD I	1Q	KFELS B Class	Asia Offshore Drilling	Keppel FELS
UMW Naga 4	1Q	KFELS B Class	UMW Oil and Gas	Keppel FELS
Papaloapan	2Q	LeTourneau Super 116E design	Perforadora Central	Keppel AmFELS
AOD II	2Q	KFELS B Class	Asia Offshore Drilling	Keppel FELS
HerculesTriumph	2Q	KFELS Super A Class	Hercules Offshore	Keppel FELS
Laurus	2Q	KFELS B Class	Oro Negro	Keppel FELS
ArabDrill 50	2Q	KFELS B Class	Arabian Drilling Company	Keppel FELS
HAKURYU 11	2Q	KFELS Super B Class	Japan Drilling Company	Keppel FELS
AOD III	3Q	KFELS B Class	Asia Offshore Drilling	Keppel FELS
La Santa Maria	3Q	KFELS B Class	CP Latina	Keppel FELS
Transocean Ao Thai	3Q	KFELS Super B Class	Transocean	Keppel FELS
ENSCO 120	3Q	KFELS Super A Class	Ensco	Keppel FELS
B341	3Q	KFELS B Class	Gulf Drilling International	Keppel FELS
Hercules Resilience	4Q	KFELS Super A Class	Hercules Offshore	Keppel FELS
La Covadonga	4Q	KFELS B Class	CP Latina	Keppel FELS
ENSCO 121	4Q	KFELS Super A Class	Ensco	Keppel FELS
ArabDrill 60	4Q	KFELS B Class	Arabian Drilling Company	Keppel FELS
Newbuild semisubmersibles/ Tension Leg Platforms				
SapuraKencana Esperanza	2Q	KFELS SSDT™ 3600E	SapuraKencana	Keppel FELS
P-61	3Q	Tension Leg Welhead Platform	Petrobras/Chevron	Keppel FELS Brasil
Floatel Victory	4Q	KFELS SSAU™ 5000NG	Floatel	Keppel FELS
Marine				
FPSO/FSO conversions and upgrading				
FPSO Cidade de Paraty	1Q	FPSO Conversion	SBM Offshore	Keppel FELS Brasi
Perisai Kamelia	2Q	FPSO Upgrade	EMAS Offshore	Keppel Shipyard
Balai Mutiara	2Q	Early production vessel conversion	BC Petroleum	Keppel Shipyard
Mayumba	3Q	FSO Conversion	Perenco	Keppel Shipyard
FPSO OSX 2	3Q	FPSO Conversion	SBM Offshore	Keppel Shipyard
Specialised Shipbuilding				
Newbuild vessels	10		DT 11	1/ 1.6:
Semar 82	1Q	Tug	PT Humpuss	Keppel Singmarine
Semar 83 Smit Pataxo	1Q 2Q	Tug Tug	PT Humpuss Smit Rebras	Keppel Singmarine
ELV ALLIANICE	70	Container vessel	OV Todi	Brasil
FLY ALLIANCE	3Q 3Q	Container vessel	OK Tedi	Keppel Singmarine
Seaways 22		AHTS Diving support vessel	Seaways	Keppel Singmarine
SBM Installer FLY PROSPERITY	4Q 4Q	Bulk carrier	SBM Offshore OK Tedi	Keppel Singmarine
Smit Pareci	4Q 4Q	Tug	Smit Rebras	Keppel Singmarine
Major Upgrades/Repairs/Outfittings				Brasil
Sedco 707	1Q	Semisubmersible Upgrade	Transocean	Keppel AmFELS
Troll Solution	1Q	Semisubmersible Upgrade	North Sea Drilling	Keppel Verolme
Balder	1Q	Crane Vessel Repair	Heerema	Keppel Verolme
Noble Roger Eason	2Q	Drillship Upgrade	Noble Drilling	Keppel FELS Brasil
Ocean Quest	2Q	Semisubmersible Repair	Diamond Offshore	Keppel FELS Brasi
Noble Byron Welliver	2Q	Jackup Repair	Noble Drilling	Keppel Verolme
Stena Spey	3Q	Semisubmersible Repair	Stena Drilling	Keppel Verolme
Ocean Onyx	4Q	Semisubmersible Upgrade	Diamond Offshore	Keppel AmFELS
Scarabeo 5	4Q	Semisubmersible Upgrade	Saipem	Keppel Verolme



towage services that comply with the stringent demands of the oil & gas industry bode well for its continued growth.

REGENCY STEEL JAPAN

The strong demand for jackup rack and chord in 2013 saw Regency Steel Japan (RSJ) process a record 30,000 tonnes of steel for rack and chord production. From 2004 to 2013, RSJ achieved a total fabricated tonnage of about 126,000 tonnes. To meet the increased demand, it is improving its production flow to boost productivity, especially in terms of man-hours required to fabricate the racks and chords for rigs.

During the year, RSJ also increased its offerings to reach out to domestic customers requiring large and thick pipes for government public projects and big steel mill equipment such as converters.

KEPPEL SMIT TOWAGE/ MAJU MARITIME

Keppel Smit Towage operates a versatile fleet of 70 harbour and coastal tugs in Asia. With operations in Singapore, Malaysia, Indonesia, China, Taiwan, Brunei and Diego Garcia, Keppel Smit Towage is strategically positioned to provide towage solutions to berth, unberth and navigate ships safely in and out of ports and yards.

The main demand drivers of the towage industry are international trade and oil and gas activities. Supported by strong oil and gas activities, Keppel Smit Towage delivered a solid performance in 2013. It remains the market leader in its homeport of Singapore, as its fleet of quality tug boats and experienced crew continue to ensure that vessels calling at one of the world's busiest ports arrive and depart on schedule.

While Singapore represents more than half of the business of Keppel Smit Towage, its operations in the other Asian countries present opportunities for expansion and growth. Keppel Smit Towage's capability and track record in providing price-competitive

INDUSTRY OUTLOOK MARKET REVIEW

While the global economy showed signs of improvement in 2013, the recovery was weak and patchy. The US continued to report mixed economic data throughout 2013 and into early 2014. It remains to be seen whether the country will break out of its 2% GDP growth path. The global economic condition remains fragile, with escalating worries over the sustainability and strength of the growth, threat of higher global interest rates, deflation risks in the Eurozone and fear of the contagion impact of slower Chinese economic growth.

Nevertheless, oil prices were largely sustained in 2013, with Brent crude hovering around US\$100 bbl. In the near term, there is downward pressure on oil prices from a potential supply increase from non-OPEC members, although this could be partly offset by oil demand growth, which gradually gained momentum in late 2013. The International Energy Agency (IEA) expects oil demand to rise by 1.3 million barrels per day, reaching 92.5 million barrels per day in 2014.

- Keppel FELS delivered
 Floatel Victory, Floatel's third
 accommodation semi, and has
 another two accommodation
 semis on order.
- 2. Built to the KFELS Super A Class design for harsh environments, ENSCO 121 has been chartered for operations in the North Sea.

Global exploration and production (E&P) capital expenditure (capex) is expected to be robust, increasing 6% year-on-year, to reach a record US\$723 billion in 2014, according to a Barclays Capital survey. While oil majors remain cautious on capital spending, there is still room for budgets to grow in the longer-term as oil reserves are increasingly found in complex and more technologically challenging fields which require investments in higher-specification equipment.

E&P spending levels should also be partly spurred by national oil companies' ambitions to push ahead with their drilling programmes. Spending is also expected to shift from constructing large infrastructure towards drilling, evaluation and completion activities.

Prospects for harsh-environment markets including the Norwegian Continental Shelf (NCS) and Russian Arctic remain healthy. Wood Mackenzie forecasts Norwegian oil production to increase in 2014, the first time since 2001, ending a long period of decline. Ramping up of new field developments would play a key role in increasing Norway's oil production levels. With 40% of NCS-compliant rigs being 20 years or older, there would be a need for rig replacements. Older units require large investments to be NCS-compliant and could be mobilised or sold to other less-stringent regions. This bodes well for the demand for Keppel O&M's range of NCS-compliant rig designs.

Mexico is another bright spot for the offshore and marine industry, following the passing of landmark energy reform in December 2013, opening up the sector for participation from private enterprises. Keppel O&M has been actively supporting the country's oil and gas field development, with 20 projects delivered or on order for Mexico. The energy reform would open the doors to an inflow of capital and deepwater technology expertise from international oil companies. As a start, PEMEX, Mexico's national oil company, is already stepping up activities to

Debut of the KFELS Super A Class

Keppel FELS delivered its first harsh environment KFELS Super A Class jackups in 2013. A total of four such rigs were delivered to Ensco and Hercules Offshore.

ENSCO 120, which was delivered in September 2013, has been chartered by Nexen for deployment in the North Sea, while ENSCO 121, which was delivered in December 2013, has been contracted by Wintershall for work in the North Sea as well. Ensco has another two such rigs on order, ENSCO 122 and ENSCO 123. ENSCO 122 has already been contracted for multi-year terms in the North Sea.

Mr Dan Rabun, Chairman, President and CEO of Ensco, said, "The ENSCO 120 Series rigs are the most efficient and capable rigs of their class. They are ideal for ultra-deep well programmes in challenging shelf environments, and our customers who have now seen these rigs first-hand are impressed with how well the ENSCO 120 Series responds to their needs."

Keppel FELS also delivered two KFELS Super A Class jackups, Hercules Triumph and Hercules Resilience, to Hercules Offshore in April and November 2013 respectively.

Mr John T. Rynd, CEO of Hercules Offshore said, "These rigs are among the world's most elite jackup drilling rigs. The KFELS Super A Class rig provides higher variable load, better drilling capabilities and cantilever load performance as well as a larger deck space and superior accommodation complement. The initial contract for our first rig, Hercules Triumph, which is successfully working for Cairn India in the Indian Ocean drilling a high temperature, high pressure well, demonstrates worldwide versatility of the KFELS Super A design."





increase its oil production. With years of under-investment, this could boost demand for both deepwater and shallow water rigs significantly.

DRILLING RIGS

Jackup demand across most regions remains strong, particularly in the Middle East, Mexico, Southeast Asia and India markets. Pareto Securities expects continued strength in jackup dayrates through 2014, supported by a high global jackup fleet utilisation of 97% and a record fleet backlog. At the end of 2013, some 60% of the total world jackup fleet was over 25 years old. Over the past five years, jackup attrition has totalled around 40 rigs, indicating a replacement cycle that is underway, but still insufficient to replace the number of ageing rigs.

The floater market is facing headwinds in the short term as drilling campaigns have been pushed back and oil companies are holding back commitments into new deepwater exploration campaigns to ease nearterm cash flow. This is also on the back of a large number of newbuild deepwater rig deliveries which the market is gradually absorbing.

In spite of this, Douglas-Westwood still expects deepwater expenditure to total US\$260 billion from 2014 to 2018, an increase of 130% compared to the preceding five-year period. Africa is forecast to experience the greatest growth in deepwater activities, as East African natural gas developments begin production and become more prominent. The largest deepwater market will still be Latin America, with Brazil expecting more deepwater rig deliveries and Mexico requiring more of such assets. Increase in development drilling in the medium term should also tighten the market balance.

The offshore rig market remains positive in the longer term and Keppel O&M will continue to focus on developing differentiated rig

designs and delivering quality solutions which will value-add to the dynamic global offshore market.

SHIP REPAIR AND PRODUCTION UNITS

There is cautious optimism in the shipping industry as analysts forecast an improvement in overall freight rates in 2014. Nonetheless, the ship repair business environment will remain challenging with price competition, labour shortages and increasing costs. Shipyards which have a good understanding of market needs and are capable of delivering quick and quality turnarounds will be better poised to secure jobs.

Long-term prospects of the FPSO conversion segment remain healthy. As at end 2013, International Maritime Associates reported that 234 floating production projects are in various stages of planning. Of these, around 55% involve FPSOs, 25% involve liquefaction or re-gasification floaters and 5% involve storage/offloading floaters. Modification and redeployment of existing FPSOs will satisfy around only 20% of future FPSO requirements. Brazil, Africa and Southeast Asia remain the top deployment areas for production floaters.

SPECIALISED SHIPS

With rising offshore drilling activities and increasing production and decommissioning activities, a corresponding demand for Offshore Support Vessels is expected. Exploration activities are moving into the deeper waters of Brazil, Africa, Southeast Asia and the North Sea, with a requirement for more construction and subsea support vessels.

With a track record of some 400 newbuilds in the specialised vessels market, Keppel O&M is well placed to meet this demand by providing value-added propositions to customers.

NEW GROWTH AREAS

Keeping a keen eye on the world's evolving energy landscape, Keppel O&M continues to invest in R&D to meet the evolving needs of its global customers with cost-effective solutions.

As E&P moves further offshore and more of these fields enter the development phase, there is an industry need for vessels capable of performing development and completion drilling in addition to exploration drilling. To meet these needs, the Keppel CAN-DO drillship was developed with a large functional deck space to allow for the installation of third party equipment required for development and completion drilling. To fulfill more stringent post-Macondo safety requirements, the CAN-DO drillship also caters for a double blowout preventer stack. Since the launch of the design last year, there has been encouraging response from the market and we have proceeded to undertake the construction of the drillship.

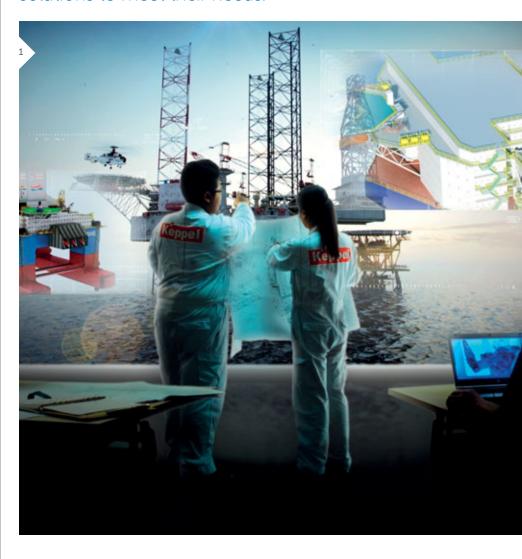
With an increasing number of oil and gas fields nearing their expected depletion date, there is also a demand for vessels capable of maintenance, well-intervention and decommissioning work. Keppel O&M, which is able to apply its jackup expertise and technology know-how to a variety of solutions, is well-positioned to capture opportunities in these areas. Seafox 5, a Multi-Purpose Self-Elevating Platform delivered in 2012 has successfully installed 80 monopiles for offshore wind turbines in the German Sector of the North Sea and will next be deployed for Maersk oil and Gas for accommodation and maintenance work. It exemplifies a proprietary solution able to support a broad range of offshore maintenance and construction services.

Another area of expertise for Keppel O&M is in the floating LNG market where it has completed a FEED study with Golar LNG. The market is quickly garnering increased interest in this cost-effective solution for offshore LNG liquefaction. Douglas-Westwood forecasts total expenditure on floating LNG to reach US\$64.4 billion from 2014-2020. Two-thirds of this spending will be attributed to liquefaction infrastructure, while the remaining is for import and regasification facilities such as LNG carriers. FLNG conversion is an efficient solution with good market potential and Keppel O&M is poised to provide quality solutions in this area.

^{1.} The offshore rig market remains positive in the longer term and Keppel O&M is able to deliver differentiated rig designs and quality solutions which will add value to the market.

Technology & Innovation

We work closely with customers and partners to further advance our technological capabilities, hone our competitive edge and develop innovative solutions to meet their needs.



In our relentless drive to maintain our position as a global leader in the offshore and marine industry, Keppel Offshore & Marine (Keppel O&M) constantly adapts and innovates to meet the needs of the industry and address its challenges.

Growing global demand for energy and competing energy resources such as shale oil and gas means that the search for oil and gas has to be done in a more cost-effective and safe manner, even as it moves into deeper, harsher and more

challenging environments. With our experience, expertise and infrastructure, we believe we have the design and engineering capabilities to deliver quality, innovative and value-added solutions to our customers.

The establishment of Keppel O&M's Technology Division in April 2012 continues to reap synergies from bringing together all of the Group's technology units and furthered the Group's focus on commercial viability in our innovations.

^{1.} Keppel O&M leverages the latest technology in the design and engineering of products.

In particular, Keppel Offshore & Marine Technology Centre (KOMtech) which engages in technology foresight, conceptualises solutions and selectively conducts R&D – collaborates with Offshore Technology Development (OTD), Deepwater Technology Group (DTG) and Marine Technology Development (MTD) - to create prototypes and work with early adopters before the designs are handed over to the Keppel O&M business units for commercialisation. The business units also aid in the innovation process by providing problem definitions based on customers' feedback.

In addition, our innovation and R&D efforts will be augmented by the formation of the Keppel-NUS Corporate Laboratory in November 2013. The Laboratory is a partnership between Keppel Corporation and the National University of Singapore (NUS) under Singapore's National Research Foundation (NRF) scheme. It will capitalise on Keppel's expertise in the offshore and marine industry and the research and technological capabilities that NUS has built over many years to drive technological breakthroughs.

AREAS OF COMPETENCY

Having the right people is important in spurring innovation and as at end-2013, KOMtech has a pool of 85 highly qualified and experienced employees, which include 32 Master of Science and 16 Doctorate degree holders.

KOMtech has been harnessing the strengths and talents from local and overseas R&D units to develop a number of areas of competencies in the pursuit of new or enhanced products.

DEEPWATER TECHNOLOGY/SUBSEA

As the number of shallow water fields mature, the strong potential of deepwater exploration and development projects has led to increased interest in high specification drillships by drilling companies. In anticipation of the demand and opportunities in this market, we consulted oil majors, drilling operators and vendors in the development of our own CAN-DO drillship design.

Keppel Offshore & Marine

KOMtech Areas of Competency

Deepwater Technology/Subsea



▶ Shallow Water/Arctic/Wind



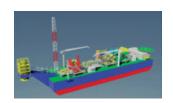
Drilling & Critical Equipment



Marine Technology



▶ LNG/FPSO



Environmental



Shipyard Technology



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Developed by KOMtech and its design partner GustoMSC, the CAN-DO drillship stands out from existing solutions in the market as it is capable of exploration, development and completion drilling. Having received strong indications from the market for such a drillship, Keppel FELS has embarked on its construction with completion expected in 2016.

Besides drillships, KOMtech continues to develop innovative deepwater technology designs such as the Semisubmersible Drilling Unit, SSDU5000, which has an open truss deck structure designed to maximise steel structure efficiency, making it a cost-effective mid-water depth semi capable of working in the harsh environment of the UK sector of the North Sea.

SHALLOW WATER/ARCTIC/WIND

In the shallow water market, we have been working on enhancing our current jackup designs to increase their efficiency and capabilities. These include the KFELS N Plus, which has a more efficient structural design compared to the original KFELS N Class design, and an enhanced version of the KFELS Super A Class design.

In designing vessels for exploration and production (E&P) in the Arctic, we work closely with oil and gas industry leaders.

KOMtech's collaboration with ConocoPhillips on the world's first-of-its-kind ice-worthy jackup rig reached its next phase in early 2013. With the initial design completed, the current focus of the project team is on the system supporting the Arctic jackup, with priorities in oil spill response and ice management.

Our collaborative efforts extend beyond industry players. KOMtech has been working with SPRING Singapore to enstate Singapore as a participating member in a new International Organisation for Standardisation (ISO)

technical committee that will allow Singapore to play a role in forming standards for operations in the Arctic region.

In the wind energy area, OTD's first jackup built to its multi-purpose self-elevating platform (MPSEP) design, Seafox 5, which was delivered in 2012, has performed excellently in the Dan Tysk wind farm. It is able to install and maintain heavy wind foundations such as the jacket and tripod types especially in deeper waters. Compared with existing wind turbine installation vessels, Seafox 5 can operate in some 45%-deeper waters, while reducing downtime even in extreme storm conditions, thus potentially providing a longer operational window.

DRILLING AND CRITICAL EQUIPMENT

We have also been working on the enhancement of our drilling and critical equipment designs to add value for our clients, and have ongoing patent applications for multi-direction cantilever skidding arrangements.

One of these arrangements is presently being developed further for costing and prototyping.

Other ongoing projects include designing an LNG Hose Offloading System and a well intervention vessel with Stena Drilling.

MARINE TECHNOLOGY

To support oil activities in the Arctic region, we are also developing a transporter which is capable of

carrying drilling rigs such as the KFELS Super A Class across the ice to the drilling location.

LNG/FPSO

As natural gas increases in importance as an energy resource globally, KOMtech is poised to benefit with R&D into products for the liquefied natural gas (LNG) market making good progress.

The Front-End Engineering and Design (FEED) study conducted by Keppel Shipyard on the conversion of a Floating LNG vessel utilising Golar LNG's existing Moss LNG Carriers was concluded in the latter half of 2013. Among the studies done was the technical evaluation of an LNG offloading system.

KOMtech is also designing an LNG cryogenic vaporiser test skid for LNG fueled systems. The findings from the test skid, which helps analyse the heat transfer process, will be used to design a commercial scale LNG fuel gas vaporiser for use on tugboats.

ENVIRONMENT

With increasing demand for sustainable development solutions, KOMtech has been developing innovative products that provide environmentally-friendly and fuel-efficient solutions.

It is currently developing an exhaust gas cleaning system (EGCS) for the removal of sulfur oxide, nitrogen oxide and particulate matter emissions from vessels in order to comply with the regulations of the International Maritime Organisation (IMO), and working on a wet scrubbing process for sulfur oxide removal using seawater with alkaline dosing to achieve consistent performance in all possible water conditions.

KOMtech has also teamed up with Keppel Shipyard to establish a one-stop knowledge hub for the group to receive market information on retrofitting Ballast Water Treatment Systems in vessels and the latest IMO regulations.

SHIPYARD TECHNOLOGY

KOMtech constantly works with Keppel O&M yards to increase productivity and improve quality and safety while minimising repetitive and hazardous jobs. Enhancements to yard processes are achieved with the use of more efficient production methods, and the design and development of automated systems.

- I. The CAN-DO drillship, with its large functional deck space and next generation 20,000 psi blowout preventers, is poised to be the frontrunner in deepwater exploration, development and completion drilling.
- 2, 3. Besides product innovation, Keppel O&M also undertakes environmental and shipyard R&D.





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EXPAND LIMITS OF CURRENT TECHNOLOGY



TECHNOLOGY FORESIGHT
& TRENDS

PRODUCT DIVERSIFICATION

LEVERAGING CAPABILITIES THROUGH COLLABORATIONS

Improvements made in 2013 include the use of a patented jackcase turning system to rotate jackcases more safely and effectively at Keppel FELS, the introduction of a grit blasting machine that comes with a grit absorption and removal system to Keppel FELS' Pioneer Yard, and the installation of an automated fit-up machine at Keppel FELS' pipe shop.

TECHNOLOGY STRATEGY

KOMtech employs four main strategies to systematically engage in R&D to produce innovative products and services that enhance Keppel O&M's competitive edge.

EXPAND LIMITS OF CURRENT TECHNOLOGY

KOMtech looks to build on current technology to come up with solutions for increasingly complex field developments.

In deepwater solutions, we have been working on the SSDU5000 and Smart-semisubmersible; in shallow water solutions, examples include the KFELS N Plus jackup, the Self Installing Platform and a Cantilever Skidding System.

TECHNOLOGY FORESIGHT & TRENDS

To anticipate and respond to the midand long-term development needs of the industry, we engage in technology foresight and monitoring of trends.

For instance, we recognise the trend of E&P moving into harsher, deeper and colder environments and our research efforts are invested accordingly in subsea technology development and the design and construction of more complex and robust vessels. Over the years, we have also grown our focus on the Arctic region.

In the wake of the Macondo well blowout incident in 2012, KOMtech keeps a close watch on the new safety and environmental regulations that rig operators face. To help operators meet future regulations that impose sulphur limits in Emission Control Areas, we have been working on products and services that help reduce emissions such as a marine exhaust gas desulfurisation system, emulsified fuel technology that helps vessels achieve fuel savings, and retrofitting vessels to enable them to run on LNG as an alternative fuel.



PRODUCT DIVERSIFICATION

By moving into adjacent or complementary markets and growing our product portfolio, we continually come up with new solutions that cater to the evolving needs of the oil and gas industry. Examples of products that we are diversifying into include:

- Drillship (CAN-DO drillship)
- Ice-worthy jackup (Gemini)
- Transporter for the Arctic region

BUILDING & LEVERAGING CAPABILITIES

On top of relying on the industrial knowledge and expertise of our own engineers and researchers, KOMtech also collaborates with educational and research institutes, government bodies and other industry players to draw on a wider pool of financial resources, facilities and knowledge.

Examples of research institutes that KOMtech works with include the Energy Research Institute @ NTU (ERI@N) which focuses on the areas of sustainable energy and energy efficiency/infrastructure, and the A*STAR Computational Resource Centre (A*CRC), which provides high performance computational resources and training courses in computational fluid dynamics simulations.

We also work closely with the Singapore Economic Development Board (EDB) and the Maritime and Port Authority of Singapore (MPA) on various incentive schemes.

Our latest collaboration with an educational institute was the setting up of a corporate laboratory with NUS under the National Research Foundation's (NRF's) Corp Lab @ University scheme.

There are three main research thrusts that the laboratory will pursue:

Future Systems

The research thrust on Future Systems will address the challenges in deepwater developments and focus on two main themes – deepwater technology and arctic technology.

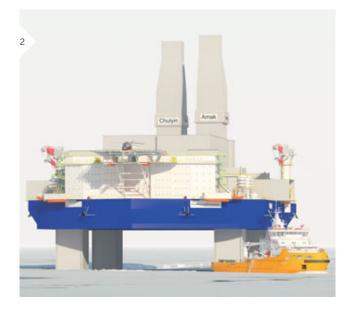
Future Yards

Future Yards will focus on "Productivity Enhancement of Yard Operations" to increase productivity and reduce reliance on manual labour in three main yard activities – welding, painting, and operations in confined spaces.

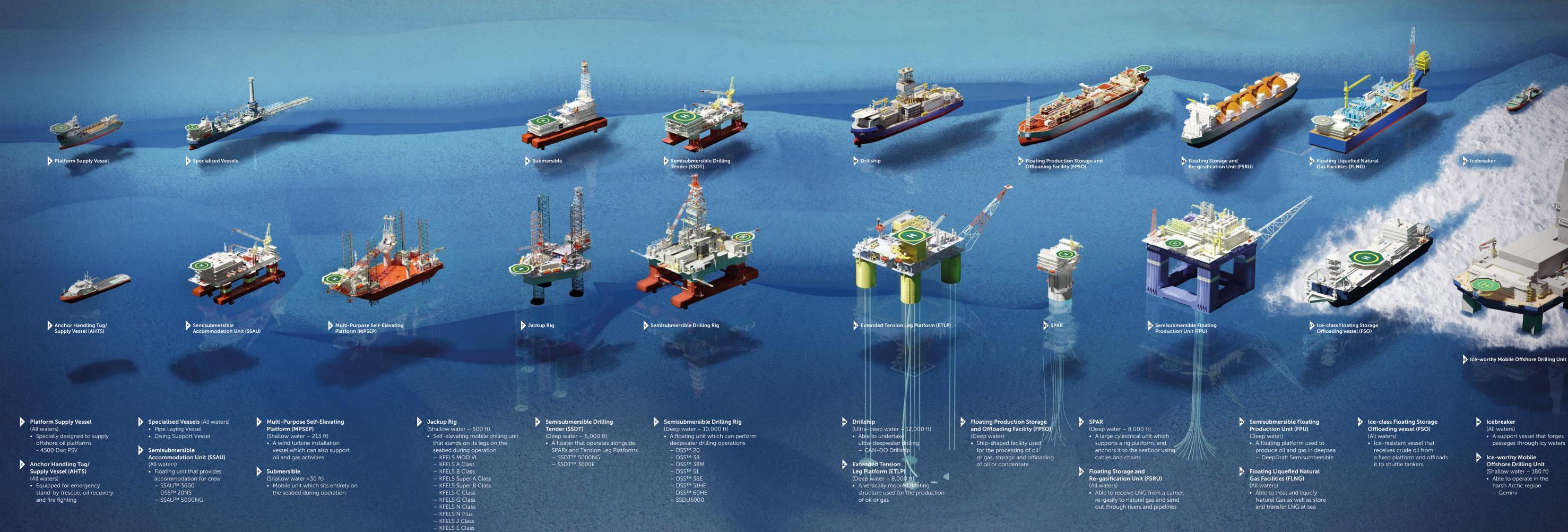
Future Resources

The research thrust on Future Resources will focus on "Deepsea Seabed Nodule Collection" to develop core competencies in environmental impact assessment and environmentally-benign exploration and collection of mineral resources in the deep ocean.

- Keppel Shipyard has completed the Front-End Engineering and Design (FEED) study on the conversion of a Floating LNG vessel utilising Golar LNG's existing Moss LNG Carriers.
- 2. The Gemini will be the first ice-worthy jackup of its kind in the world.
- Singapore's Deputy Prime Minister and Chairman of the NRF, Mr Teo Chee Hean (front row, third from right), discussed about future resources with Dr Lee Boon Yang (right), Chairman of Keppel Corporation, and the Keppel management.







Sustainability Report

In our drive for excellence, we are committed to operate our business in a sustainable and socially responsible manner which empowers our people, nurtures the community and protects the environment.

SUSTAINING GROWTH

The success of our business is underpinned by an unwavering focus on Health, Safety and Environment, meticulous project management as well as prudent risk management.

Through an ongoing process of optimising resources and increasing productivity, we continue to deliver innovative quality projects, creating value for customers worldwide.

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EMPOWERING LIVES

People are at the heart of our business. As an employer of choice, we are committed to grow and nurture our talent pool through continuous training and development to help our people reach their full potential.

We seek to develop a formidable and results-driven workforce with strong leaders imbued with our core values to take the company into the future.

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NURTURING COMMUNITIES

As a global citizen, we aim to contribute to communities wherever we operate in a variety of areas spanning knowledge building and education, social development and environmental protection.

We encourage employees to contribute actively as change agents to effect improvement in their surroundings and in the lives of those around them.

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SUSTAINING GROWTH

Productivity, Quality & Eco-consciousness

We sustain our competitiveness by continually improving our productivity and processes to deliver products of the highest quality, and in an environmentally-friendly manner.



Keppel Offshore & Marine (Keppel O&M) has built up a track record of delivering on time, on budget and without incidents. We have set up a system that continuously looks for ways to improve efficiency whether through enhancements to infrastructure and process or through increasing productivity, innovation and quality services. At the same time, we conduct our business with environmentally-friendly practices that we believe adds to our competitive edge.

OPTIMISING OPERATIONS

In 2013, we made significant upgrades to our infrastructure, equipment and information technology (IT) systems across our yards worldwide to improve the capabilities of the yards and sustain a high-performance work environment.

Our yards in the Philippines, Brazil and Singapore are adding newer and more powerful cranes to their facilities. Being able to lift heavier blocks adds flexibility and productivity to the construction processes. During the year, Keppel Subic inaugurated a 1,500-tonne crane, while BrasFELS and Keppel FELS continued with

the construction of a 2,000-tonne and 700-tonne crane respectively.

Keppel FELS has also been introducing greater automation to its engineering and production processes with enhanced design software and equipment. For instance, a new automated panel line system is being installed for enhanced efficiency.

Company-wide initiatives at Keppel FELS continued to be driven by its Process Excellence Department, which focuses on initiatives to bring about significant improvements in systems and productivity.

Meanwhile, Keppel Shipyard has widened and lengthened one of its docks, Raffles Dock, at its Tuas Yard in Singapore. The Raffles Dock now measures 400 metres by 64 metres, allowing Keppel Shipyard to accommodate bigger vessels such as the new generation ultra-large containerships.

To meet the needs of more projects at its Tuas Yard, Keppel Shipyard is also constructing a new office building to cater to the increase in employees and customers. The building is expected to be ready in 2Q 2014. Over at its Benoi facility, Keppel Shipyard is further developing its quay as well as building a new client office.

In addition, Keppel Shipyard further streamlined its safety, quality and productivity initiatives under the Operations Excellence Department (OED) for more concerted efforts. OED worked together with SPRING Singapore and our subcontractors to purchase the technologically-advanced Corsa II valves, which are used for grit blasting. With the valves, a grit blasting operation can be carried out in a shorter time with less grit.

In China, Keppel Nantong Heavy Industry (KNHI) inaugurated a new panel line workshop which can fabricate up to 25,000 tonnes of steel annually and adds to the yard's capabilities to take on larger and more sophisticated offshore projects.

Apart from optimising our operations directly, we also look to improve productivity at all stages of our supply chain. For example, we work closely with our subcontractors to explore technologies and processes that will improve the efficiencies of their services to us, positively impacting overall project schedule and quality.

For Keppel FELS and Keppel Shipyard, these partnerships with our subcontractors have been further deepened by the SPRING Singapore initiative, Partnerships for Capability Transformation (PACT) programme, which encourages large enterprises to support SMEs in their efforts to upgrade their competencies. Under PACT, Keppel Shipyard worked with its subcontractors to identify and test technologies for the removal of rust and dirt from ships.

In Brazil, Keppel FELS Brasil was honoured with the prestigious Premio Naval de Qualidade e Sustentabilidade award for its excellence in quality and sustainability in Brazil's offshore and naval industry. It is the second consecutive year Keppel FELS Brasil has received the award from Brazil's National Union of Naval Construction, Repair and Offshore industry (SINAVAL).

SPURRING INNOVATION

We actively encourage innovation through committees, programmes and various platforms to better our products and processes. These platforms also serve to showcase and share useful ideas at the company, industry and national levels.

KOMtech's Shipyard Technology Group looks into the design and development of technologies and methodologies



- Employees at all levels are encouraged to continuously review and enhance our processes and practices.
- 2. Raffles Dock, one of Keppel Shipyard's docks at Tuas yard, was widened and lengthened to take in ultra-large containerships.

SUSTAINING GROWTH

Productivity, Quality & Eco-consciousness

- BrasFELS is adding a 2,000-tonne crane to its facility, building up its capabilities for larger and heavier module fabrication.
- 2. The inaugural run of the Keppel O&M Innovation Awards highlighted the importance of innovation to the group's success over the years and recognised our key innovations and the people behind them.
- Keppel Verolme utilised to good effect the JUMP system, a new technology to access and work on the legs of jackups.
- 4. During a visit to Keppel FELS' automated pipeshop from the Research Innovation and Enterprise Council (RIEC) which advises the Singapore cabinet on R&D matters, Keppel management exchanged ideas with RIEC members on automation and mechanisation.

to improve Keppel O&M's operations. For example, in 2013, the Shipyard Technology Group together with Keppel FELS successfully developed a machine to rotate jackcases. Previously, the rotation of jackcases had to be done outdoors with two crawler cranes and required careful coordination between many riggers and workers. With the machine, the rotation of the jackcases can be carried out indoors with less time and manpower.

Keppel Verolme in the Netherlands introduced a new technology known as the JUMP (Jack-Up Maintenance Platform) system, for the maintenance and modification of jackup legs. It is an integrated solution involving telescopic cranes, aerial platforms, and supply and rescue platforms. It has proven to be a safe, reliable and efficient alternative to traditional methods of accessing rig legs and has an added benefit of allowing work to be done even in poor weather conditions.

The launch of the inaugural Keppel O&M Innovation Awards in 2013 was a significant milestone in recognising the efforts of our people who developed innovations that have significantly impacted the company. For this initiative, senior management from various business

units evaluated new and existing innovations over the years. There were a total of 29 winning projects that demonstrated alignment with Keppel O&M's objectives.

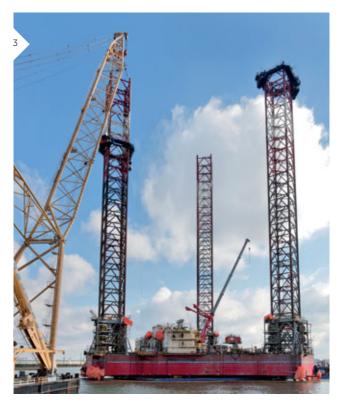
Besides product innovations like the KFELS B Class jackup and the SSDT™ 3600 semisubmersible designs, innovative construction techniques like the afloat 2C Joining Methodology which was used to join the lower hull of the P-52 semisubmersible, the Leg Fishing Operation which is now a standard operation in the installation of jackup legs, as well as processes like the Jackup Strip Method of Construction and the Steel Supply Chain Management system were also recognised.

Many ideas and devices for safer and more productive operations were showcased at Keppel Shipyard's annual Safety Innovation Convention. One winning project is the Thruster Lifting Jig, which helps to ensure the stability of the thrusters when they are being lifted and transported. Easy to use, and with substantial safety benefits, the project was conferred the Gold Award at the Association for Marine Industries (ASMI) Convention 2013.

At the National Innovation and Quality Circles (iQC) held in January 2014 to









assess the projects developed in 2013, Keppel FELS' submissions won three Star Awards, six Gold Awards and two Silver Awards.

Keppel FELS also emerged champion amongst 38 teams that participated in the International Exposition for Team Excellence (IETEX) 2013. The winning Keppel FELS team which comprised members from the Engineering, Production and Planning departments, had designed a structure which allows the transportation of rig components around the yard more efficiently.

Apart from assessments and competitions, Keppel also actively participates in knowledge-exchange activities. During the year, a team from Keppel FELS visited the Civil Aviation Authority of Singapore (CAAS) to learn more about how the company leveraged IT platforms to support the needs of operations, security and safety. Keppel FELS also visited Jurong Port for a better understanding of how it manages its logistics.

ENERGY SAVING INITIATIVES

Keppel O&M pursues energy-efficient practices and innovations for more environmentally-friendly and cost-effective operations.

We collaborated with equipment manufacturers and developed energy efficient blowers which are used in shipyard operations, as well as systems for cranes to convert kinetic energy into reusable power.

Keppel FELS designed an air-driven motor generator to harness the energies of compressed air from our yard operations to generate electricity for office lighting. This has led to energy savings of 13,000 kWh and reduced carbon emission levels by 6.26 tonnes per annum.

Over at Keppel Singmarine, non-powered exhaust extractors were installed in workshops to substitute exhaust fans. This initiative reduced carbon emission levels by 2.25 tonnes per annum.

Safety Excellence

We remain steadfast in our commitment to foster an incidentfree workplace by actively engaging all our stakeholders in protecting our people, property and the environment.



SHAPING OUR JOURNEY

A safe and conducive work environment makes for a more productive workforce and reduces risks for the business.

Through empowerment and training of our key stakeholders, we strive to foster a culture where everyone – from employees to subcontractors, vendors and customers – looks out for each other's safety. In 2013, we continued to invest in safety and spent around \$34 million on the enhancement of relevant infrastructure along with skills and knowledge development.

Our yards worldwide kept up their vigilance, ensuring that Keppel Offshore & Marine's (Keppel O&M) Accident Frequency Rate (AFR) for 2013 was 0.12 per million man hours worked, which maintains our 2012 AFR of 0.11. We reduced our Accident Severity Rate (ASR) to 67 man-days lost per million man-hours worked from 77 in 2012. Unfortunately, despite our efforts, we suffered two fall-related fatalities last year. We investigated the incidents and have put in place the lessons learnt across all our yards. In addition, we continuously review areas for improvement as we step up our efforts to inculcate a strong safety culture.

STRIVING FOR SAFETY EXCELLENCE

2013 saw Keppel O&M drive the next phase of Keppel Group's Workplace Safety and Health (WSH) 2018 strategy in the four focus areas of having an integrated WSH framework, implementing an effective management system, promoting safety ownership and enhancing partnerships across its yards and offices worldwide through various initiatives.

VISIBLE SAFETY LEADERSHIP

The Keppel O&M Board Safety Committee (BSC) formed in April 2012 has been instrumental in shaping our safety journey and setting guidelines for an integrated safety framework.

Meetings are held quarterly for in-depth discussions on lessons learnt to glean best practices to be implemented across Keppel O&M yards. Strategic directives set by the BSC to align safety standards worldwide guide us in achieving Health, Safety and Environment (HSE) excellence.

A Corporate HSE Policy was introduced in 2013 to strengthen and align the safety management system and standards across the Keppel Group. Business units have incorporated these new targets into their respective safety roadmaps.

At Keppel FELS and Keppel Shipyard, Managing Directors chair weekly safety review meetings with safety and operational personnel. Weekly safety management walkthoughs take place in both Singapore and overseas yards such as Keppel Subic and BrasFELS.

We contribute to the industry's safety landscape with several management staff sitting in various committees of the WSH Council and the Association of Singapore Marine Industries (ASMI). Mr Yong Chee Min, General Manager (HSE) of Keppel O&M and Secretary of Keppel O&M's BSC, is also Chairman of the ASMI WSH Committee. Both Mr Wong Kok Seng, Managing Director (Offshore), Keppel Offshore & Marine, and Managing Director of Keppel FELS, and Mr Chor How Jat, Managing Director, Keppel Shipyard, sit on the WSH Council (Marine Industries) Committee.

DRIVING OWNERSHIP AND INNOVATION

Safety ownership is not only driven from the top but across levels with the aim of building from the ground up. Programmes and campaigns are introduced throughout the year to imbue in the workforce a stronger sense of responsibility and ownership when it comes to working safely.

Keppel FELS held its annual HSE Excellence Campaign "Be Alert, Accidents Hurt" in July 2013 with strong support from its union. Keppel Shipyard also ran a safety campaign to emphasise the importance of material handling to avoid hand and finger injuries and reiterate the importance of practising the Buddy System.

In taking ownership of safety, everyone is encouraged to come up with innovative ideas or products to make their work safer. At Keppel Group's annual Safety Convention in 2013, 18 out of the 36 teams from across the Keppel Group that participated in the innovation segment were from Keppel O&M's yards. Innovative safety ideas included a cable stripping tool. a cable drum storage rack and an automatic hose installer that uses hydraulics to install hoses instead of manual hammering. Several entries competed at the national level garnering gold, silver and bronze awards.

EFFECTING PROCEDURES

Implementation and adherence to an integrated WSH framework and its comprehensive set of operational procedures and safety guidelines are key to its effectiveness – especially for the alignment of processes across Keppel O&M's yards.

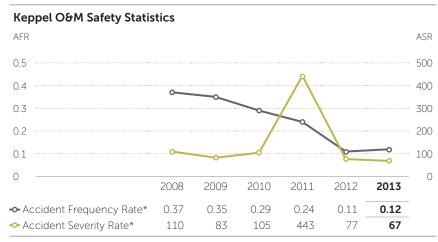
Our efforts in 2013 also included the further education and training of our workforce, learning from near misses and actual incidents, promoting awareness of High Impact Risk Activities (HIRA) and conducting safety audits.

While Keppel O&M has a dedicated safety training centre and established training programmes for its workforce, we are always looking to add more disciplines. Our HSE and Training Department established our own Transporter Training Programme which was endorsed by Singapore's Institute of Technical Education.

With 20 yards worldwide, the sharing of lessons learnt from near-miss incidents and high impact cases have proven to be valuable for the prevention of recurrences with the development of Safe Work Procedures (SWPs) guidelines for activities such as 'Transporter Operations', 'General Lifting and Crane Operations' and 'Cutting and Removal of Large Structures'. The SWPs equip all yards with a standardised way to carry out such work in a safe manner.

Another aspect of aligning the safety focus of yards in different countries is through the promotion of awareness of the six key HIRAs. For instance, an intensive focus on 'Working at Heights' safety was launched across all Keppel O&M's yards through sharing of good practices.

To ensure the safety discipline of all yards and facilitate cross-sharing and learning of good HSE practices, a safety audit exercise was carried out in Keppel O&M's overseas yards in 2013. Safety champions from respective business units audited the safety



^{*} per million man-hours worked

Regular safety briefings are held across all Keppel yards.

sustaining growth Safety Excellence

initiatives and practices applied in the core work processes of our global yards, including the maintenance of major equipment. Audits were conducted in China, Azerbaijan, Qatar, United Arab Emirates, the Philippines, the US, the Netherlands and Brazil.

At BrasFELS in Brazil, the yard completed its assessment programme with DuPont to improve its safety performance, implementing relevant procedures and programmes to plug the gaps identified by the assessment.

PROACTIVE COMMUNICATION

We recognise that for safety best practices to be effectively executed, we must proactively and regularly communicate our safety initiatives to our workforce in all our yards.

Mr Yong and other relevant HSE team members visited the yards regularly to share and encourage sharing of information and alignment to Keppel O&M's safety culture. During such visits, Mr Yong also conducted safety workshops for managers and supervisors, updated the yards on the group's latest HSE initiatives, and sought

to understand the unique challenges faced by our yards. In 2013, Mr Yong visited Keppel Nantong, Keppel Batangas and Keppel Subic shipyards.

In Singapore, we organised regular HSE sharing sessions at the various yards and our foreign workers' dormitories. Safety initiatives are also regularly communicated through online HSE Alerts or Safety Sharing sessions across the global yards.

Faced with a multicultural and multinational workforce with different definitions of safety, we developed a set of guidelines on inculcating safe habits for workers. Trainers from Keppel O&M were coached on how to impart safe work habits to new workers when they undergo skills training sessions at the Keppel O&M training centre before joining our workforce.

Other key communication channels for highlighting safety concerns to the workforce are the daily Take 5 or toolbox briefings. An 'Enhanced Take 5' programme was developed, providing guidelines for supervisors on conducting effective briefings.

Over at Brownsville, Texas, Keppel AmFELS introduced a Safety Awareness Programme comprising fortnightly sessions where yard and project personnel gather to discuss safety topics and incidents. All personnel are required to report near misses and recognition is given weekly to employees with excellent safety performance.

At BrasFELS, a programme was introduced to personnel in leadership positions to learn about risk perception and inculcate a safety culture in their workers.

PARTNERSHIP WITH STAKEHOLDERS

Keppel O&M works closely with our few hundred subcontractors to ensure that they are aligned and trained to our high standards of safety. Subcontract workers attend the same safety training as our own employees and we provide resources for our subcontractors to ensure their workers are up to our standards.

Keppel Shipyard trained over 17,790 direct and contract workers in safety core competencies, equipping them with the knowledge and skills in height





safety, electrical safety, confined space safety and material handling. At Keppel FELS, the Subcontractors Executive Council Safety Committee, comprising representatives from different trade sections, meets regularly to discuss safety concerns and initiatives.

As an industry leader, we work closely with Singapore's Ministry of Manpower (MOM) and WSH Council to implement initiatives to raise the industry's safety standards. This includes supporting our subcontractors in achieving safety certifications from WSH Council such as bizSAFE.

As bizSAFE partners, we provide incentives and tangible business leverages such as the imposition of minimum bizSAFE certification levels before work can be undertaken, to motivate our contractors to progress through the various levels of the bizSAFE programme.

Keppel O&M supported ASMI with a presentation on the topic of 'Crane Safety Best Practices in the Marine Industry' at an ASMI workshop for the Marine Industries.

In close partnership with our clients, a two-day Shell Senior Management Workshop was conducted for the Shell Stone project under Keppel Shipyard. It was attended by senior management from key project stakeholders. Mr Yong also represented Keppel O&M and presented on 'Best Practices on Felt Leadership in Safety & Leadership Engagement at Keppel' at the HSSE Leadership Safety Engagement organised by Shell in Houston in October 2013.

RECOGNISING GOOD PERFORMANCE

Keppel O&M had a commendable year in its safety performance and its achievements were recognised by the industry. We won 29 WSH Awards conferred by Singapore's WSH Council and MOM on 30 July 2013.

26 awards were in the Safety and Health Award Recognition for Projects (SHARP) category. Satya Ranjan Das Biswa Nath Das, a project supervisor from Keppel FELS, was recognised for his leadership in guiding workers under his charge. Keppel Singmarine took home the WSH Performance (Silver) award for their sound management

systems while Prime Steelkit won the WSH Risk Management Award.

At the Keppel Group Safety Convention held on 7 October 2013, Keppel Shipyard emerged as the winner of the Keppel Chairman Safety Challenge Trophy. Keppel Shipyard also received the Lloyd's List Global Safety Award held in London on 30 September 2013. In addition, they were also conferred Lloyd's List Asia Safety Award 2013 and Seatrade Asia Safety Award 2013.

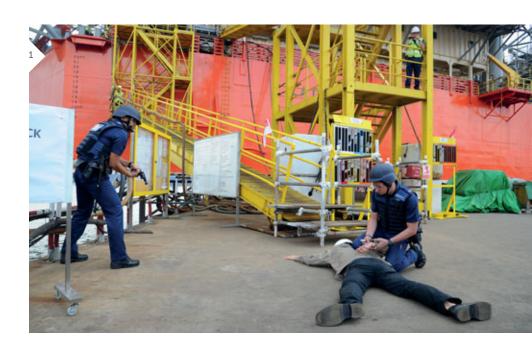
With the strong encouragement and support from the government and industry, we remain committed to achieving an incident-free workplace so that everyone in our yards and offices goes home safely at the end of the day.

- Keppel Offshore & Marine won 29 safety awards at the 2013 Workplace Safety & Health (WSH) Awards organised by Singapore's WSH Council and Ministry of Manpower.
- Apart from conducting safety workshops, Keppel O&M's HSE team also conducted walkabouts at Keppel Subic and Keppel Batangas.

SUSTAINING GROWTH

Business Continuity

We regularly review and enhance our robust risk management system to ensure the interests of our company and stakeholders are protected.



EMBEDDING RISK MANAGEMENT

Keppel Offshore & Marine's (Keppel O&M) Enterprise Risk Management (ERM) framework, which is based on Keppel Corporation's, provides a holistic and systematic process for identifying, analysing and managing risks. It prepares us to respond to uncertainties and leverage new business opportunities to maintain our competitive edge.

The Board of Directors, assisted by the Keppel O&M Audit Committee (AC), is responsible for overseeing ERM for Keppel O&M. The management team discusses Keppel O&M's key risks, significant project issues and mitigating actions with the Board and AC on a regular basis.

During the year, Keppel O&M adopted Keppel Corporation's risk tolerance guiding principles which serve to determine the nature and extent of the significant risks which the Board is willing to take to achieve Keppel O&M's strategic objectives.

These three risk tolerance guiding principles are:-

 Risk taken should be carefully evaluated, commensurate with rewards and in line with the company's core strengths and strategic objectives

- No risk arising from a single area of operation, investment or undertaking should be so huge as to endanger the entire group of Keppel O&M businesses
- The company adopts a zero tolerance policy towards safety incidents, non-compliance with laws and regulations, as well as acts such as fraud, bribery and corruption

PROACTIVE RISK MANAGEMENT

Keppel O&M is active in some of the most remote places around the world as our Near Market, Near Customer strategy brings us to the doorsteps of our customers and their markets. Through proactive risk management, we are able to effectively navigate the challenging business environment and capitalise on opportunities. Significant risks associated with value drivers to achieve corporate strategies are identified and reviewed regularly. Mitigating actions are then established and closely monitored.

All investment proposals include an assessment of key risk factors such as alignment with strategic objectives, operational controls, financial viability, potential contingent liabilities, specific country laws and regulations, technical competency and available resources. Risk-related policies and risk limits are

subjected to periodic reviews to ensure that they continue to support business objectives, address business risks effectively and take into consideration the prevailing operating environment within Keppel O&M.

Keppel O&M manages different types of risks which include intense competition, volatile market demand, relevance of technology, capital investment, challenging contractual terms, counterparty default, changes in laws and regulations, shortage of skilled workers and succession planning. We also take into account project execution issues like cost escalation, non-performance of suppliers and subcontractors, disruptions to supply chain and natural disasters, among others which have implications on project schedule, cost and quality.

MANAGING PROJECT RISKS

Many of our projects are spread over an extended period of time. We adopt a standardised risk assessment and monitoring process, to help manage the spectrum of key risks throughout the project stages.

During the pre-contract stage, the project evaluation team, comprising members from different functions, identifies and evaluates key risks concerning the market, customers,

engineering expertise and challenges, contractual terms, cost estimation, resource availability and other specific project structure and conditions. Mitigating actions are identified to address these potential risks. We believe with more rigorous scrutiny and thoughtful consideration in the earlier stages, project risks can be significantly reduced in the execution and completion phases.

At the execution stage, key risk areas involving costing, scheduling, planning, engineering, procurement, quality control, health, safety and environment (HSE) management are closely monitored to ensure that pre-emptive measures are taken and appropriately implemented. The aim is to ensure that projects are executed and completed on time, within budget, with standards of safety and quality that meet or exceed contractual specifications.

Emphasis is placed on inculcating safety awareness among all stakeholders, in particular employees and subcontractors. This is achieved through training and enforcement of safety standards at the work sites. The Board Safety Committee of Keppel O&M and Keppel Corporation provide oversight of the effectiveness of its safety management system.

SUSTAINING A STRONG RISK-CENTRIC CULTURE

Strong management commitment in developing ERM systems and processes over the years has enabled Keppel O&M to be well-equipped in managing risks in the dynamic business environment. Risk management is integrated into the day-to-day business operations to enable early risk detection and formulate prompt mitigating actions. To heighten risk awareness and build risk competencies, Keppel O&M emphasises continuous education and communications. New employees are briefed on risk management framework and practices as part of Keppel O&M's orientation programme.

Throughout the year, Keppel O&M's ERM Team conducts ERM training and risk assessment workshops for key operating units in Singapore and

overseas. These workshops served as good platforms for the promulgation of risk-management messages and in reinforcing ERM efforts throughout the Group.

Risk management is also embedded in the performance management system in Keppel O&M to reinforce accountability and ownership in the respective areas of work.

REINFORCING OPERATIONAL RESILIENCE

Business Continuity Management (BCM) is part of Keppel O&M's ERM initiatives to address and manage potential threats and minimise impact of a crisis on people, business operations and assets. The BCM Steering Committee oversees the implementation of Keppel O&M's BCM programme and provides the necessary guidance in establishing robust business continuity plans to ensure that key business operations can respond instantly to a broad spectrum of external events and resume key business operations within a pre-established target time frame.

On a half-yearly basis, the BCM Steering Committee reviews the potential threats and status of implementation of the BCM programme in its key business units in Singapore and overseas. Each business unit is responsible for the identification, assessment, and mitigation of threats and set up specific task forces to handle disruptive events such as epidemic outbreaks, natural calamities, terrorist attacks, critical facilities damage, loss of critical supporting infrastructure and key personnel. All Business Continuity Plans are required to be reviewed, tested and refined regularly to enhance Keppel O&M's overall operational resilience.

Some of the BCM exercises performed in 2013 include pandemic flu temperature checking and contact tracing procedures conducted in the Singapore and China yards; a joint security exercise in compliance with the International Ship and Port Security (ISPS) Code held together with Singapore Civil Defence Force, Jurong Division Police, Special Operations Command, and Police Coast Guard at our Singapore

yards; various fire and evacuation drills carried out across the Group's facilities; disaster recovery testing of critical Information technology application systems and operating systems supporting the business operations. A haze management plan was also established when Singapore experienced a high and prolonged haze level during the year. For overseas operations in the Philippines and USA, procedures on emergency preparation, evacuation and resumption of operation are also carried out yearly to address possible impacts caused by typhoons and hurricanes. For each test and drill, post-mortem analyses are performed to refine action plans.

CONTINUOUS IMPROVEMENT

Keppel O&M continues to review and refine its risk management systems and processes so as to have reasonable assurance that we have sufficient resilience to face potential risks and threats. During the year, we set up a BCM Assessment Committee to provide assessment on the level of BCM readiness in our key operating units, identify gaps for improvement, share on lessons learnt and provide BCM training across Keppel O&M.

Risk management is an integral part of the strategic, project and operational decision-making process at all levels of Keppel O&M. While we do our best to minimise risks, we recognise that risks can never be entirely eliminated, especially in an evolving landscape of uncertainties and vulnerabilities. Moreover, the cost of minimising these risks may also outweigh potential benefits. A robust and effective risk management system will strengthen Keppel O&M's operational resilience and equip us to respond to challenges and capitalise on growth opportunities.

 We held a joint security exercise with the Singapore Civil Defence Force, Jurong Division Police, Special Operations Command and Police Coast Guard at our yards in Singapore.

EMPOWERING LIVES

People Development

As an employer of choice, we create a conducive environment for our people to grow and actively nurture them through holistic training and development to be the next generation of leaders, capable of taking the company to greater heights.



At Keppel Offshore & Marine (Keppel O&M), our employees worldwide are guided by our eight core values of *Can-Do!*, Customer Focus, Commitment to Health, Safety and Environment (HSE), Accountability, Integrity, Innovation & Learning, Global Mindset and People & Teamwork.

This set of core values underpins our holistic approach in fortifying our human capital, nurturing and developing our people, enabling them to fulfill their potential and excel in their work.

CREATING A PLATFORM FOR GROWTH

Keppel O&M invests significantly in the training and development of our employees yearly. In 2013, approximately \$16.7 million was spent on the training of our global workforce of 36,000. This resulted in an average of 57.6 learning hours per employee.

In coming up with comprehensive and updated programmes to develop human capital, Keppel O&M's management convenes regularly to discuss succession planning,

compensation, development plans, and the overall capabilities of our organisation.

To align human resource (HR) initiatives and share best practices, the Keppel O&M HR Symposium in 2013 brought together over 30 HR professionals from 21 of Keppel O&M's local and overseas business units. The event focused on the importance of valuing the contribution from Keppel's key asset – our people - through fair rewards and opportunities for development.

GROOMING FUTURE LEADERS

Each year, a selected group of employees are rotated through various functions and business units. They are exposed to a wide cross-section of the company's businesses, equipping them with the necessary knowledge and skill-sets for future management and leadership roles.

The long-standing and successful Management Traineeship scheme has helped groom many of Keppel O&M's current management team. The scheme is effective in developing a pipeline of young and

talented new recruits with the potential to take on various management positions within Keppel O&M. Management Trainees undergo comprehensive and all-rounded training. The rigorous training in this two-year programme includes classroom lessons, experiential sharing, on-the-job attachment and skills training.

In 2013, 177 graduates participated in this prestigious programme.
Since the scheme's inception in 1986 to end-2013, 1472 Management
Trainees have benefited from it.
Dialogue sessions were also organised across all business units between Management Trainees and the senior management.

The Company's innovative graduate development and retention programmes were recognised at the 10th Annual HR Management Awards, where Keppel O&M clinched the coveted 'Best Graduate Development' award.

Annually, formal succession planning is conducted for all critical positions within each business unit. The identified successors undergo the relevant leadership development and deployment programmes to prepare them for future leadership roles.

Some of the development programmes include Keppel Global General Management Programme, Keppel Global Advanced Management Programme, and Executive Management programmes at renowned institutions.

ATTRACTING TALENT

Nurturing a strong pipeline of talent starts as early as recruitment and contributing to industry-wide educational programmes. We are always looking to attract the best and the brightest for long-term career growth with us.

Keppel O&M regularly holds recruitment drives, career fairs and road shows in the various education institutions to create brand awareness, educate and recruit talented young people to join the offshore and marine industry.

We offer scholarships to diverse and well-rounded individuals with excellent academic and co-curricular records, who not only demonstrate capability and commitment to excellence, but more importantly, a kinship to our core values.

CULTIVATING KEPPELITES

Keppel O&M employees with good work performance and growth potential are offered sponsorships to further their learning and development.

In 2013, sponsorships were awarded for studies in a range of fields, including Diploma in Engineering (Marine), Bachelor of Engineering (Offshore Engineering), Master of Science (Project Management) and Master of Science (Offshore Technology).

In addition, employees from the production departments were also sponsored to undergo our in-house National Institute of Technical Education Certificate (NITEC) programme.

Our employees continue to benefit from the training and development at the Keppel Group level. Keppel College is Keppel Group's flagship educational initiative for leadership and executive development. Its key programmes such as Keppel Global Leadership Impact and Outward Bound School are designed to develop the management skills of our future leaders.

Besides management courses, we seek to develop the technical skills of our employees. The Keppel O&M Training Centre, which conducts courses on technical and specialised skills, became the first Institute of Technical Education (ITE) – approved training centre in Singapore to offer the Higher NITEC in Marine Offshore Technology in May 2013.

1. 24 employees from Keppel O&M's overseas business units successfully completed a 14-week Diploma (Conversion) in a Marine & Offshore Technology course in Singapore.

EMPOWERING LIVES

People Development



- Employees gathered for Keppel O&M Family day and revelled in music and dance.
- 2. Mr Choo Chiau Beng (right), former Chairman of Keppel O&M and former CEO of Keppel Corporation, engaging Keppelites at a Learn and Lunch session on 19 December 2013. Mr Chee Jin Kiong (left), Executive Director, HR of Keppel O&M faciliated the Question & Answer session.

Apart from skills upgrading, the training centre also offers a comprehensive range of safety training programmes, which includes the Safety Core Competency Training, Safety Promoter Training and Safety Leadership Training.

Keppel O&M's training is also extended to overseas employees. In 2013, we partnered with Ngee Ann Polytechnic (NP) to conduct a 14-week Diploma (Conversion) in Marine & Offshore Technology (DCMOT) for high-performing staff from overseas business units. The five-module programme consists of a series of in-house structured training courses, an attachment, On-the-Job Training (OJT), a mentorship programme and a 'Meet the Management' session. 24 Keppelites from across Keppel O&M's overseas yards hailing from Brazil, China,

Azerbaijan, Qatar, the US and the Philippines were selected for this inaugural programme in Singapore.

To inculcate holistic learning, we also brought in motivational speakers like Fandi Ahmad, a Singapore football icon, to inspire young Keppelites.

RETAINING EXPERIENCE

Even as we develop our next generation of Keppelites, we also continue to tap on the wealth of experience of our long-serving and senior employees. They are an invaluable resource to the Company who help steady the ship and act as mentors. As such, we engage our retired employees to ensure that we continue to have a pool of experienced and knowledgeable employees to guide our younger counterparts. In Singapore, we rehired

105 employees who had reached retirement age in 2013.

Keppel O&M believes in long term career growth and is fortunate to have many employees who have remained with the company over the years.

Every year, business units present long service awards to employees to recognise their years of dedicated service to the company. In 2013, 277 employees in Singapore were honoured while at Keppel AmFELS in the United States, a total of 196 employees received awards.

Senior employees serve a crucial role as mentors to new employees, helping them to integrate into the Keppel culture and guiding them in all aspects of their career and personal development. Employees who are identified as mentors are sent for workshops to hone their coaching and mentoring skills.

Another platform for invited guests and senior management to share their career journey, expertise and job experiences with employees is the Keppel O&M Learn & Lunch series held during the company's one-hour lunch break.

CHAMPIONING WORKPLACE WELLNESS

Keppel O&M believes that a fit and healthy workforce is not only beneficial for employees but also boosts productivity.

We make substantial investments to promote the health and well-being of our workforce. A Workplace Health Programmes (WHP) committee organises various initiatives to reinforce the importance of personal health with strong support from senior management. The programmes are held across business units and receive active participation from all levels of the workforce.

A.C.T.I.V.E Day, which promotes physical exercise, reiterates Keppel's commitment to the well-being of its employees. 2013 was the 12th time the annual event was held

Gems of experience

In 2013, Keppel O&M organised Learn & Lunch sessions during which our senior management and board members shared their wisdom and insights.

Pioneers such as Mr Roger Leng, Yard Manager at Keppel FELS, whose career with Keppel started in 1972; Mr Yong Chee Min, General Manager (Projects & Health Safety & Environment), Keppel O&M who started out as an apprentice in 1969 and has risen through the ranks holding various key positions across the Keppel Group; Mr Lim Chin Leong, Director on Keppel O&M's Board and former Chairman of Asia, Shlumberger: Mr Choo Chiau Beng, Senior Advisor to Keppel Corporation's Board, former Chairman of Keppel O&M and former CEO of Keppel Corporation; and Mr Tong Chong Heong, Senior Advisor to Keppel O&M's Board and former CEO of Keppel O&M; elaborated on their work experiences and insights on career development at the various Learn & Lunch sessions.

The seasoned veterans shared candidly, providing interesting personal anecdotes to illustrate their points, while responding to questions from Keppelites who benefited greatly from the sessions.

Young Keppelites were given advice on topics ranging from working with passion, honing effective leadership and communication skills, to the importance of not being afraid to speak up, staying adaptable and cultivating relationships with stakeholders.



EMPOWERING LIVES

People Development



with more than 2,000 Keppelites participating in an energetic K-Pop Dance workout to the theme of "Active Mind, Active Body".

Other activities that promote wellness include health screening at the workplace, lunchtime exercise sessions such as Zumba and dance lessons as well as bazaars selling health supplements, snacks and fruits.

Keppel O&M organised regular health talks throughout the year on topics such as osteoporosis, colon health, HIV/AIDS, cancer and stress management. These programmes are aimed at increasing overall awareness on ways to keep fit and stay healthy.

With a global workforce, we also encourage our overseas yards

to implement regular workplace health programmes.

Keppel Batangas in the Philippines conducts regular health talks, free dental consultations and free eye checks for all employees. Keppel FELS Brasil's BrasFELS yard organised talks on dengue fever, hypertension, obesity and diabetes.

In Qatar, Nakilat-Keppel Offshore & Marine (N-KOM) held a weekly Joggers' Club and a five-month weight loss challenge. A sports day was also held to build camaraderie among employees.

Over in the Netherlands, Keppel Verolme started a health and vitality programme called "Go Fit, Go Healthy" for its employees. Under the guidance of a physiotherapist, two groups of

- A range of workshops were organised for the employees at BrasFELS to reinforce core values and empower employees with leadership skills.
- Playing important roles in the yard are the growing number of females who are contributing to the bottomline of the company.

12 employees exercise twice a week after work. They are also given advice by a dietician every three weeks.

In the US, Keppel AmFELS' employees were challenged to eat healthy and exercise during the "Biggest Loser" challenge period and the winners were rewarded with prizes.

Besides encouraging our employees to stay in shape, Keppel O&M also organises initiatives to promote a well-rounded family life.

The Keppel O&M Family Day which was held on 1 December 2013 at Tanjong Beach, Sentosa, is one of our many initiatives to foster a pro-family environment. The event allowed Keppelites to spend quality time with their families while getting to know their colleagues better.

Keppel AmFELS employees also enjoyed a walk and ride at Resaca De La Palma State Park with their family and friends which concluded with a health discussion. 893 of their employees and their families also attended the annual company Family Picnic at Schlitterbahn Water Park at South Padre Island

In Bulgaria, Keppel FELS Baltech organised the 19th anniversary Summer Annual Party for their employees and their children while Keppel Batangas organised an offsite company outing to Monte Vista, Pansol, Laguna for all employees and their family members.

In Indonesia, Bintan Offshore's 560 employees and their family members gathered at the Areca Water Park and enjoyed quality time during the third annual Family Gathering event.

As an affirmation of Keppel O&M's efforts to promote health and wellness through various initiatives, the company was awarded the 'Best Health & Wellbeing' award at the 10th Annual HR Management Awards.

Power of women

To create a better and a more conducive working environment for females at Keppel O&M, a staff engagement session with Keppel O&M senior management was held on 8 July 2013, attended by 140 female employees from the Production and Engineering departments across Keppel O&M. Four female employees were invited to share their experiences working in Keppel O&M. One of them was Ms Ong Keow Koon, Assistant Project Manager (Operations) at Keppel Shipyard, who shared on the opportunities she was given.

Participants also engaged senior management on pertinent issues such as ways to improve working conditions, and the Company's performance and strategic direction.

During the session, Mr Tong Chong Heong, former CEO of Keppel O&M, noted that more females have joined the Company in recent years and highlighted the important roles that they now play in driving Keppel O&M's growth.

Sterling examples include Ms Adeline Seah, the company's first female project manager who was in charge of an offshore wind turbine installation vessel and Ms Wong Xin Yi who was the first female project manager of a jackup drilling rig.

Another good example is project manager Ms Ng Shi Yun who started as a management trainee and has progressed through her eight years with Keppel FELS, learning the ropes in the production department and front-line operations, working both in and outside the yard.



EMPOWERING LIVES

People Development

- 1. Mr Tong Chong Heong, former CEO, Keppel O&M, received the Plaque of Commendation (Star) award from Mr Lim Swee Say, Secretary-General of the National Trades Union Congress, Prime Minister's Office, at the NTUC May Day Awards 2013.
- Well-sculpted participants of the Keppel Housing Bodybuilding Competition one of many activities organised to promote bonding among foreign workers.
- Singapore's football legend Fandi Ahmad shared on his inspirational life story and showed Keppel Offshore & Marine Technical Associates and Assistant Technical Associates football tricks and tips.

PARTNERING OUR UNIONS

A key priority for Keppel O&M in ensuring a motivated and productive workforce is active engagement with our unions. In 2013, we continued to maintain good relations with our unions through luncheons and regular dialogue sessions on a range of topics concerning the welfare of our employees, such as dormitory issues, the quality of food served in the yards' canteens and transport for workers.

Apart from dialogue sessions, our unions are actively involved in our employee welfare activities. For instance, they worked closely with our HR department for the 2013 Family Day held at Sentosa, providing the necessary manpower to ensure the event ran smoothly.

In Singapore, the managements of Keppel Shipyard and Keppel Singmarine, together with Keppel Employees Union (KEU) and Shipbuilding and Marine Engineering Employees' Union (SMEEU) signed a new Collective Agreement effective from 1 July 2013 to 30 June 2016.

At Keppel Employees Union's (KEU) 45th Annual Delegates' Conference, Guest of Honour Mr Heng Chee How, Senior Minister of State, Prime Minister's Office and Deputy Secretary-General, National Trades Union Congress (NTUC), commended Keppel management and KEU for their strong partnership with NTUC which would keep Singapore and Keppel ahead.

Keppel FELS was awarded the prestigious Plaque of Commendation (Star) award at the 2013 NTUC May Day Awards in recognition of Keppel FELS' efforts to promote strong industrial relations, worker welfare and workfare, and its unstinting support for NTUC's initiatives and programmes.

Our overseas business units are also focused on maintaining good industrial relations.

At Keppel Batangas, quarterly town hall meetings were held between management and permanent industrial workforce employees. Together with Keppel Subic, they renewed the Collective







Agreements for their workforce in 2013 while Keppel Verolme renewed its Collective Agreement with its unions till 1 May 2015.

INTEGRATING A MULTINATIONAL WORKFORCE

At Keppel O&M, we are committed to support the smooth integration of our foreign workers into their new living environment in Singapore.

Keppel O&M was the first company in Singapore to provide highly subsidised dormitories for our foreign workers, and we continue to improve the facilities in our dormitories to better meet their needs.

To date, we have developed and are managing five dormitories – Acacia Lodge, Juniper Lodge, Lantana Lodge, Kian Teck Dormitory and Cassia@Penjuru.

Our five dedicated dormitories offer modern amenities such as canteens, minimarts, barber shops and wet markets that cater to the daily needs and well-being of the residents. The dormitories are also equipped with a wide range of recreational facilities

such as multi-purpose halls, gymnasiums, basketball courts and computer facilities.

In addition, activities are organised regularly at the dormitories to promote harmonious living and bonding among foreign workers.

These include sports competitions, bazaars and safety road shows as well as road shows in collaboration with government agencies such as the National Environment Agency (NEA) and the National Council for Problem Gambling (NCPG).

Other than catering to their physical needs, Keppel O&M also ensures that the mental and emotional well-being of our foreign workers are taken care of. Keppel Housing provides counselling services, including a 24-hour emergency helpline, which is manned by trained counsellors.

Our management, union leaders and human resources representatives visit the various dormitories regularly to gather feedback from the workers to continually improve their living conditions.

NURTURING COMMUNITIES

Community Development

As a responsible corporate citizen, we believe in supporting the sustainable development of the communities we operate in, actively engaging in disaster relief efforts, knowledge-building and education, social development and environmental protection.



At Keppel Offshore & Marine (Keppel O&M), we always look to contribute to the community and promote the industry wherever we operate. In 2013, as part of Keppel Group's pledge to contribute 5,000 community service hours to society, Keppel O&M's global network of yards and offices engaged in numerous activities underlining our corporate social responsibility.

FORTIFYING OUR INDUSTRY

Keppel O&M actively participates in knowledge-building platforms such as conferences or research programmes to promote and engage the industry by sharing insights and experiences, exchanging ideas and stimulating innovation.

Over the years, there has been a sustained shortage of skilled personnel in the offshore and marine industry and we are committed to growing a pipeline of young talents through partnerships with educational institutes to provide scholarships, internships and advice on curriculums. Tapping on this pool will be essential for Keppel O&M's long-term growth.

GROWING THE KNOWLEDGE RESERVOIR

As a founding member of the National University of Singapore's (NUS) Centre

for Offshore, Research and Engineering, Keppel O&M continues to facilitate joint participation in research and development by the industry, academic institutions and government agencies.

In collaboration with the National Research Foundation, Prime Minister's Office and NUS, Keppel set up the Keppel-NUS Corporate Laboratory in November 2013. The Keppel-NUS Corporate Laboratory creates a synergistic industry-university partnership which aims to develop capabilities and technologies to maintain Singapore's position as a global leader in the offshore and marine industry.

A long-term initiative for knowledge building is the Keppel Professorship at NUS. This initiative brings together academics and industry professionals to share their insights and experiences, spur research projects, and encourage the development of new offshore and marine technologies. Under this initiative is the annual Keppel Offshore & Marine Lecture. Open to the public, our 11th lecture in 2013 was delivered by newly-appointed Keppel Chair Professor Chan Eng Soon, who presented on extreme waves and their forces on marine structures.

Another public lecture sponsored by Keppel is the Chua Chor Teck Memorial Lecture series organised by the Society of Naval Architects & Marine Engineers Singapore. The annual lectures seek to promote a multi-faceted understanding of the offshore and marine sector. More than 5,000 people have attended the lecture series since its inauguration in 1986.

In 2013, the Institute of Technical Education (ITE) and Keppel O&M jointly set up the Maritime Training Centre at ITE College Central for school leavers and industry participants.

DEVELOPING THE TALENT POOL

To cultivate young talents, we work with educational institutions and industry bodies to provide scholarships as well as book prizes and other academic awards.

In addition, Keppel O&M hosts regular yard tours, conducts industry and career talks in schools and offers internship opportunities to raise awareness of the industry's career prospects and attract them to join the company. In 2013,

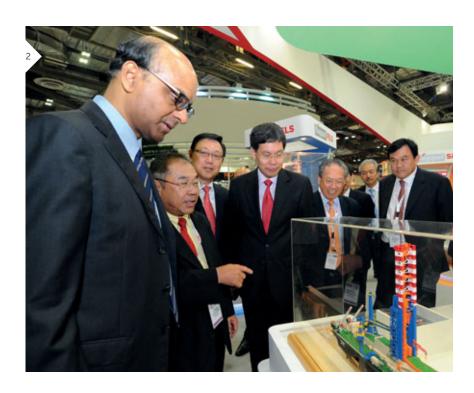
internships were offered to 274 students from both local and overseas institutions.

CONNECTING WORLDWIDE

As an industry thought leader, Keppel O&M regularly participates in trade and industry conventions and exhibitions around the world.

We had a strong presence at the annual Offshore Technology Conference (OTC) held in Houston, Texas, and the second OTC held in Rio de Janeiro, Brazil. Besides showcasing the capabilities of our global yards, our design expertise and delivery track record, we also invited customers and partners to cocktail networking receptions.

Events such as the 10th ASEAN Council of Petroleum (ASCOPE) conference and exhibition held in Vietnam and the 10th annual conference of The Academy of Medicine, Engineering and Science of Texas (TAMEST) held in Texas, United States help extend Keppel O&M's global reputation as a provider of choice and partner for solutions. The Group was also a top tier sponsor



- 1. Dr Lee Boon Yang (centre), Chairman of Keppel Corporation, and Mr Toh Ko Lin (left), President of Keppel Philippines Marine, interacted with the young residents of the Keppel-GK Eco Village at their pre-school within the compound.
- 2. With Singapore's
 Deputy Prime
 Minister, Mr Tharman
 Shanmugaratnam, as
 the Guest of Honour,
 government and industry
 officials, offshore and
 marine representatives,
 as well as media and
 analysts converged at
 the Keppel-sponsored
 Sea Asia 2013.

NURTURING COMMUNITIES Community Development





for the Latin Asia Business Forum 2013 organised in Singapore.

As principal sponsor and advisor, we were a key contributor to Asia's leading maritime conference and exhibition, Sea Asia 2013. At Pareto Securities' 20th Annual Oil & Offshore Conference and Nor-Shipping Conference and Exhibition, both held in Oslo, Norway, we presented on our broad range of capabilities and services to global offshore and marine players.

To help promote Singapore's offshore and marine sector, we sponsored the Amazing Maritime Adventure – a series of fun maritime-themed games organised as part of Singapore Maritime Week 2013. We were also a Silver Sponsor of the inaugural Africa Asia Oil and Gas Summit 2013 held in Singapore and the Platinum Sponsor of the Society of Naval Architects & Marine Engineers (SNAMES) 40th anniversary dinner.

Additionally, throughout the year, our yards facilitated knowledge exchange by welcoming international government, industry and business delegates who were keen to learn more about our operations.

ENRICHING OUR COMMUNITIES

Keppel O&M believes in sharing the fruits of our success and contributing to the communities we operate in. We encourage our employees worldwide to initiate and participate in community activities that benefit people from all walks of life, be it economically, socially, culturally or environmentally.

CARING FOR THE LESS FORTUNATE

In 2013, Keppel O&M gave monetary support and donations in kind to a wide range of social development and disaster relief programmes. Keppelites also embarked on various community outreach initiatives, helping to raise awareness for numerous causes and bringing cheer to the less fortunate.

In support of the Children's Cancer Foundation, 107 Keppel Shipyard staff and customers had their heads shaved for the Hair for Hope initiative, raising more than \$20,000 for the foundation.

- 1. 120 Keppelites participated in the Keppel-sponsored Amazing Maritime Adventure a series of fun maritime-themed games organised as part of Singapore Maritime Week 2013.
- 2. A Keppel Shipyard employee loses her locks for charity in support of Hair for Hope, a fundraising event by Children's Cancer Foundation.
- 3. A Keppel Nantong employee spending time with the children at Nantong Social Welfare Association Children's Home.

Separately, passionate volunteers from Keppel Singmarine collected close to \$3,500 for their adopted charity on Boys Town Flag Day.

Volunteers from Keppel Offshore & Marine Technology Centre (KOMtech) helped in the preparation, cooking and packing of meals at the Willing Hearts Soup Kitchen for the needy. They also conducted cleaning and maintenance works for Melrose Home, which provides care and shelter to disadvantaged children and youths.

Over in Brazil, BrasFELS volunteers spent a fun-filled day reading to underprivileged children from more than 150 books which were collected at a donation drive organised by Keppel FELS Brasil and BrasFELS.

In China, volunteers from Keppel Nantong Shipyard visited the Nantong Social Welfare Association Children's Home. Volunteers played games with the children and donated food supplies and a television set to the home.

In Azerbaijan, Caspian Shipyard Company (CSC) adopted the Special Boarding School for Children with Speech Impediment, and organised a fun-filled outing for the school's children. CSC also helped the school by providing new dining tables, refurbished chairs and new computers. Employees from CSC also helped repair corroded items and start up the school's boiler house during the winter season.

Keppel Verolme in the Netherlands sponsored two primary schools located in the yard's vicinity with a donation of €15,000 each and also refurbished the schools' compounds with new equipment.

In the United States, employees from Keppel AmFELS donated shoes and clothes to a homeless shelter. They also distributed turkeys to various charitable organisations on Thanksgiving Day and volunteered to serve lunch to the homeless at The Good Neighbour Settlement House. Throughout November and December, Keppel AmFELS' annual Toy Drive saw employees donating gifts for low income, abused or neglected children in Brownsville.

Additionally, three charities received U\$\$20,000 each from funds raised from the Keppel AmFELS Annual Charity Golf Tournament 2013. Including donations from 2013's edition, the event has contributed half a million dollars to the Brownsville community



NURTURING COMMUNITIES Community Development

- Keppel Verolme
 Managing Director
 Mr Harold Linssen,
 presented a cheque
 of €15,000 to
 De Regenboog
 School, making the
 refurbishment of the
 playground possible.
- Volunteers assisted the Philippines Red Cross by loading and unloading truckloads of donations that arrived at the relief operations centre.
- 3. Mr Kwok Kai Choong (left), President & CEO of BrasFELS, planted the first of 30 trees outside its BrasFELS Yard with Mayor Conceição Rabha (right).

since 2004. The yard continued its support for Brownsville's education sector with a donation of US\$50,000 to the University of Texas, Brownsville, adding to the existing Keppel AmFELS Endowment Scholarship.

In the Philippines, Keppel Subic employees participated in the annual Brigada Eskwela 2013 (National Maintenance Week) where volunteers conducted repairs, cleaning, painting and maintenance work in schools. Volunteers from Keppel Subic also visited seven day care centres, donating educational toys and sports equipment and giving the children gift bags containing stationery and other school materials.

At Keppel Batangas, the in-house doctor checked on the elderly residents of the Sagip Buhay Tahanan Foundation while volunteers serenaded them. To support local employment and education, 25 local youths were given the ALAB-Keppel scholarships to train at Keppel Batangas Training Center,

where they would receive job opportunities at the yard upon completion of the programme.

A number of natural disasters struck the Philippines in 2013 and Keppel was quick to support the disaster relief efforts. Employees from Keppel Subic volunteered through the night in rescue and retrieval operations in Barangay Wawandue, where a landslide caused by the heavy monsoon destroyed several houses. Volunteers delivered food and relief goods to the severely affected communities. Backhoes, payloaders, and dump trucks from the shipyard were mobilised to clear the mud and debris left by waist-deep flooding in the neighbourhood.

To alleviate the plight of Typhoon Haiyan's victims, Keppel made donations to the Phillipines Red Cross. In addition, Keppel Subic and Keppel Batangas delivered packs of relief goods to the Philippines Red Cross and sent volunteers to extend their help and support to relief operations.







Over in Qatar, Nakilat-Keppel Offshore & Marine (N-KOM) also embarked on a charity drive to help those affected by Typhoon Haiyan. To raise funds for the Al Shafallah Center for Children with Special Needs in Qatar, they organised a karaoke fundraising programme, held a charity flea market, hosted a fundraising dinner with their CEO and placed a donation box in their office lobby.

PROTECTING THE ENVIRONMENT

At Keppel O&M, we do our part to protect the environment through our continuous support of eco-friendly initiatives and promoting green awareness among employees.

Keppel FELS employees were Clean and Green Ambassadors for Singapore's National Day Parade 2013. Besides helping to clear litter, they reminded the audience to dispose of trash properly.

In Brazil, BrasFELS organised a tree planting by management and government representatives as part of its "BrasFELS for a Sustainable World" campaign. Tree saplings were donated to several schools in the city to encourage a sense of environmental stewardship in the younger generation.

In the Philippines, to mark the second anniversary of the Keppel-GK Eco Village housing project, tree saplings were planted and a clean-up drive was organised at Igiw Falls, a waterfall and stream near the village.

As many locals in Subic depend on fishing for their livelihood, volunteers from Keppel Subic participated in the River and Coastal Clean Up to aid fisherfolk in maintaining healthy fishing grounds. In addition, about 300 volunteers from Keppel Batangas and Keppel Subic scoured the shorelines and waterways to remove garbage on International Coastal Cleanup Day.

N-KOM in Qatar organised a beach clean-up drive at RLIC Northern Beach, where turtles breed every year, while over in United Arab Emirates, Arab Heavy Industries also conducted a beach clean-up at Ajman Beach.

SUPPORTING THE ARTS AND SPORTS

Keppel O&M is committed to promoting cultural appreciation and active lifestyles. Serving as platforms for social interaction, the arts and sporting events and activities help us build stronger ties with communities.

We were a main sponsor for Proms@the Park, where volunteers were paired with beneficiaries from MINDS-Napiri Training & Development Centre and spent a meaningful afternoon at the Singapore Botanic Gardens, having a picnic and watching live performances organised by YMCA. Keppel O&M was also a platinum sponsor of the Jurong Lake Run 2013, which is an annual sports fundraising event for various beneficiaries.

For the second consecutive year, we were the presenting sponsor of the annual Keppel Latin American Film Festival 2013 where the public could watch Latin American movies for free.

Keppel AmFELS sponsored the official poster of the Charro Days festival celebrated in Brownsville, Texas, United States. In recognition of our five-year sponsorship, Keppel AmFELS was presented with a special recognition plaque.

Also in the US, Keppel O&M sponsored Mr Michael Holcomb, President of Keppel Marine Agencies International, in BP's MS 150 charity biking event. The annual event is a two-day, 180-mile ride from Houston to Austin that raises funds for the research for a cure for multiple sclerosis.

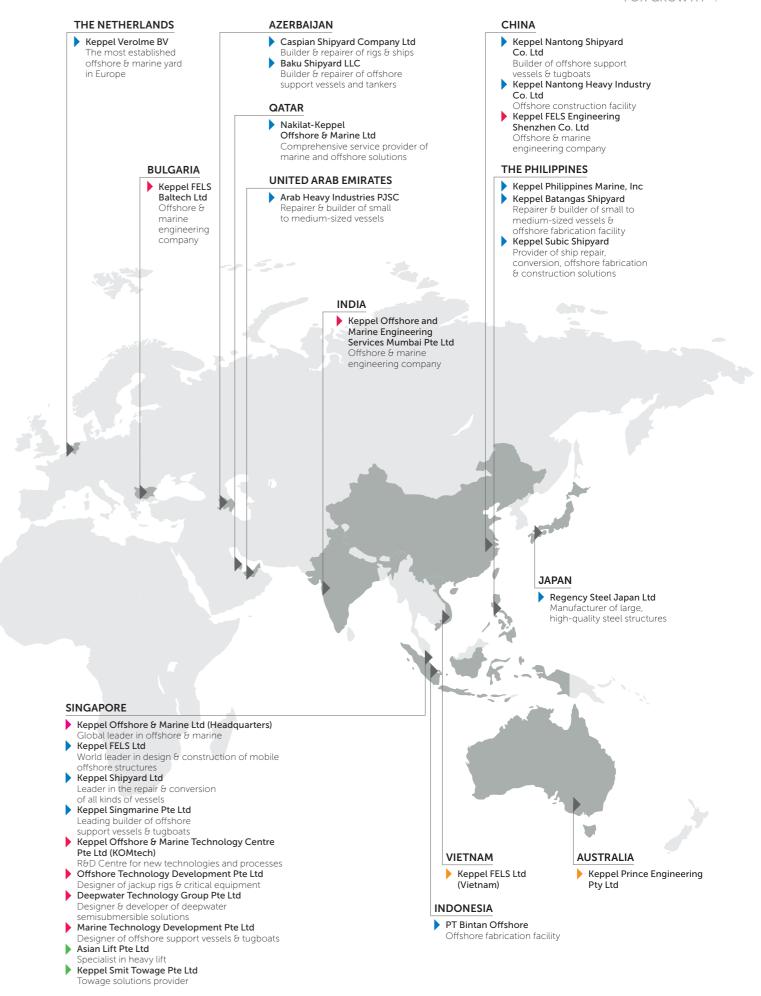
To promote volunteerism, employees from Keppel Subic joined the Philippines Red Cross' Million Volunteer Run, a nationwide "fun run".

Global Network

YARDS & OFFICES

Harnessing the synergy of 20 yards worldwide keeps us *Near Market, Near Customer*.





Global Network Facilities

	Total land area	Туре	Dock capacity	Berthage			Outfit quay		
	(square metres)		Capacity (dead weight tonnes)	Size (metres)	Length (metres)	Draft (metres)	Building berth (capacity)	Length (metres)	Depth (metres)
SINGAPORE					,	,,	(,	,,	, , , , , ,
KEPPEL FELS LTD (PIONEER)	284,292.3								
Admiral Dock		Drydock	400,000	380 x 80	380	13			
FELS CAN-DO		Semisubmersible Barge	30,000 lifting	138 x 78					
PIONEER YARD II	139,073	Berth space Berth space						1,400 350	8 – 10 4.5 – 6
SHIPYARD ROAD	88,289	Berth space						500	4.5
CRESCENT YARD	98,919	Berth space						740	6
TUAS SOUTH YARD	131,289	Outfit Quay						300	4 - 5
KEPPEL SHIPYARD LTD (TUAS)	443,423				2,507				
Tuas Dock		Drydock	360,000	350 x 66		6.6			
Raffles Dock		Drydock	400,000	400 x 64		6.6			
Temasek Dock Temasek Pier East		Drydock Berth space	150,000	301 x 52	280	7.4 7.2			
Finger Pier West		Berth space			350	9			
Finger Pier East		Berth space			370	8.5			
Raffles Pier West		Berth space			430	8.5			
Raffles Pier East		Berth space			230	6.1			
West Quay		Berth space			450	7.1			
South Quay		Berth space			177	8			
Raffles Dock Entrance	750 000	Berth space			220	7.1			
KEPPEL SHIPYARD LTD (BENOI)	350,000	Davido als	300,000	350 x 60	1,737	5.5			
Drydock No. 1 Drydock No. 2		Drydock Drydock	170,000	300 x 60		5.5			
No.1 Quay		Berth space	170,000		217				
No.2 Quay		Berth space			220	8			
No.2 Quay/Extension		Berth space			340	12			
No.3 Quay		Berth space			280	8			
No.4 Quay		Berth space			224	7			
No.5 Quay		Berth space			156	7			
Dock 1 Entrance		Berth space			200	8			
Landing Quay Building Berth		Berth space		230 x 70	100	5			
KEPPEL SHIPYARD LTD (GUL)	140,000	Slipway		230 X 70	530				
FD No. 1	140,000	Floating Dock	14,000 lifting	190 x 32	330				
FD No. 2		Floating Dock	5,000 lifting	114 x 27					
FD No. 3		Floating Dock	12,000 lifting	170 x 27					
North Quay 1		Berth space			177	6.5			
North Quay 2		Berth space			193	6.6			
North Quay 3	116701	Berth space			160	6.6			
Drydock in Benoi 5	146,794	Davido als	5,000	105 x 18.5		8.2			
Building Berth in Benoi 15		Drydock Slipway	3,000	225 x 70		0.2			
Building Berth in Benoi 5		Slipway		120 x 24					
Wharf in Benoi 5		Wharf			60	5			
Quay 5 in Benoi 15		Berths place			156	7			
AZERBAIJAN									
BAKU SHIPYARD LLC	47,000								
28 May Floating Dock Repair Slab		Floating dock Berth space	9,000 lifting 5,000 lifting for	168 x 40 250 x 140					7.5 7.5
Repair Stab		on Land	transfer mode	250 X 140					7.5
East Quay		Berth space	dansier mode		100				7.5
West Quay		Berth space			350				7.5
Finger Pier		Berth space			300				7.5
CASPIAN SHIPYARD COMPANY LTD	60,000								
Yusif Ibrahimov (Hull 901)		Floating Dock	15,000	128 x 74.5		6.5			
Floating Dock (Hull 953)		Floating Dock	5,000	128 x 21.7		6.5			
Floating Dock (Hull 806) Jetty 3		Floating Dock	4,500	102 x 20		6.5		280	6.5
Jetty 4								100	4.5
BRAZIL								100	1.0
KEPPEL FELS BRASIL SA	540,000								
(BRASFELS YARD)									
Drydock		Graving Dock		125 x 70					
FS1 Floating Dock		Floating Dock	22,000	120 x 57		10			
Slipway No. 1		Slipway	35,000	174 x 30					
Slipway No. 2		Slipway	150,000	310 x 45					
Slipway No. 3 Finger Pier East		Slipway Outfit Quay		185 x 70	357	12			
Finger Pier East Finger Pier West		Outfit Quay			357	11.5			
Outfit Pier East		Outfit Quay			300	6 – 7			
Outfit Pier West		Berth space			120	7 – 8			

	Total land area	Type	Dock capacity			Berthage		C	outfit qua
	(square metres)		Capacity (dead weight tonnes)	Size (metres)	Length (metres)	Draft (metres)	Building berth (capacity)	Length (metres)	Dept (metre
BRAZIL (cont'd)			weight tornies)	(ITIELIES)	(ITIELIES)	(ITIELIES)	(Capacity)	(ITIECIES)	(ITICLIC:
Slipway 2 Pier		Berth space			160	8 – 9			
Slipway 3 Pier 1		Outfit Quay			160	8 – 9			
Slipway 3 Pier 2		Outfit Quay			160	8 – 9			
KEPPEL SINGMARINE BRASIL LTDA	74,000								
Shipway No. 1		Slipway		130 x 28					
Quay No. 1		Berth space			89	6			
CHINA									
KEPPEL NANTONG SHIPYARD CO. LTD	160,000								
Slipway No. 1		Slipway	3,000	90 x 33					
Wharf No. 1		Wharf			200	7			
KEPPEL NANTONG HEAVY INDUSTRY CO. LTD	265,900								
Slipway No. 2		Slipway	24,000	140 x 84					
Wharf No. 2		Wharf			160	7			
THE PHILIPPINES KEPPEL SUBIC SHIPYARD, INC	666,933								
Pacific Dock		Graving Dock	550,000	550 x 65					
C Quay					279	9			
E1 Quay					351	9			
E2 Quay					312	9			
KEPPEL BATANGAS SHIPYARD	353,000								
President Dock		Graving Dock	50,000	200 x 38					
Ship Lift System		Lift Platform	20,000	172 x 28					
		Dry Berth: 8 off	Dry Berth: 8 off						
Pier No. K1					68 x 2	6			
Pier No. K2					83 x 2	6			
Pier Block No. 1					183	8			
Pier Block No. 2 Pier Block No. 3					160 70	8			
Pier Block No. 4					155	8			
THE NETHERLANDS					133				
KEPPEL VEROLME BV	554,000				1,600	9 – 12		400	9 – 1
Dock No. 5	33 1,000	Graving Dock	65,000	230 x 35.5	1,000	9.8		100	
Dock No. 6		Graving Dock	130,000	275 x 41		10.6			
Dock No. 7		Graving Dock	500,000	405 x 90		12.2			
QATAR									
NAKILAT-KEPPEL OFFSHORE & MARINE LTD	538,000				2,400				
Dry Dock No. 1		Drydock	350,000	360 x 66	360	11			
Dry Dock No. 2		Drydock	450,000	400 x 80	400	12			
l Quay					400				
l Quay					400				
Loading Quay					150				1
1 Pier					400				1
1 Pier					400				1
1 Pier					400				
1 Pier					400				1
UNITED ARAB EMIRATES	277.000								
ARAB HEAVY INDUSTRIES PJSC	273,000	<u> </u>	70,000	475 70		7			
Al Zora Drydock		Graving Dock	30,000	175 x 32 120 x 16		7			
Slipway No. 1 Slipway No. 2		Slipway Slipway	*1,500 *1,500	120 x 16		5			
Slipway No. 3		Slipway	*2,500	120 x 16					
Slipway No. 4		Slipway	*3,000	120 x 16		5			
Al Zora Wharf		Wharf		120 X 10	250	J			
East Wharf		Wharf			200				
West Wharf		Wharf			83				
USA		TYTIGIT			- 03				
KEPPEL AMFELS, LLC	554,000								
Floating Drydock		Floating Drydock	37,594	94 x 111		10			
Launching Way		. loading Drydock			380	9.14			
West Dock Quay					153	9.14		153	9.:
East Dock Quay					297	10.67		297	10.6

^{*} Light Displacement Tonnage

Global Network Facilities 89

Global Network Contacts

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