

# Offshore Keppel Marine

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**Offshore  
Drydocking of  
Saipem 7000**

**Strike steel for  
ENSCO 8503**

**Marine  
Sea Kiowa is  
christened**



**Six million man-hours without LTI  
for FPSO Saxi Batuque**



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Contributors  
**Alan I. Claveria, Andrew Ong, Lisandra Favilla, Quek Mong Song, Ivana Chua, Lee Yin Chiin, Roy Tan**

OffshoreMarine is a bi-monthly publication of Keppel Offshore & Marine Ltd  
50 Gul Road, Singapore 629351  
Tel: (65) 6863 7200  
Fax: (65) 6261 7719/6265 1927

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# Three's a charm for PetroVietnam

**K**eppel FELS will build a third KFELS B Class jackup drilling rig for PetroVietnam Drilling & Well Services Corp's (PV Drilling) subsidiary, PetroVietnam Drilling Investment Corp (PVD Invest).

This latest unit and PVD Invest's second rig *PV Drilling II* are scheduled for delivery in Q4 2009. The order for *PV Drilling II*, which is already under construction, was placed shortly after Keppel FELS delivered the first jackup rig *PV Drilling I* to PVD Invest two months ahead of schedule.

"It is estimated that there will be some 900 exploration wells in Vietnam over the next 15 years. We want to position ourselves to capture this market for specialised oil and gas services with the support of a strong and reliable shipyard that can deliver projects punctually, on budget and without incidents," said Do Van Khanh, CEO of PV Drilling and Chairman of PVD Invest.

"We have found all these qualities in Keppel FELS. Having worked with them on several important projects, I am confident that they are the best people to help us build our highly specialised rig fleet," he added.

To meet the tight exploration schedule, PV Drilling intends to make capital investments of around VND 27.4 trillion (US\$ 1.7 billion) from now till 2025 to build and operate a strong fleet of 11 offshore and onshore rigs.

"We have built an enduring partnership with the PV Drilling Group on mutual understanding, teamwork and trust. We are honoured that PVD Invest has chosen Keppel FELS time and again for their milestone projects," said CH Tong MD/COO of Keppel O&M. "We are prepared to go the extra mile to help our partners meet the rapid demands of their market."

The latest KFELS B Class rig will be able to operate in water depths of 360 ft with a drilling depth of 30,000 ft. The rig's versatility has been further enhanced to broaden its range. It includes features like engines that meet more stringent emission standards and a lower spud can bearing pressure for operation



*PV Drilling I*, the first jackup rig constructed for PV Drilling was delivered by Keppel FELS two months ahead of schedule in March 2007

in areas with soft soil conditions. Its living quarters are designed to accommodate up to 110 men, in 1-men and 2-men cabins.

The Keppel Group has been involved in the Vietnamese offshore market for more than 20 years since Keppel FELS first completed the Hoang Sa 1,200-tonne floating crane in 1984. It also built Vietnam's first jackup rig, the *Tam Dao I* in 1988.



# Super and Safe deliveries

**K**eppel Batangas Shipyard and Keppel Cebu Shipyard have each successfully delivered a newly built 45-tonne bollard pull harbour tug to Keppel Smit Towage.

A joint venture of Keppel Shipyard with Smit, Singapore-based KST owns, manages, and operates tugs, providing marine support services in the Asia Pacific region.

“These new additions to Keppel Smit’s fleet will enhance our harbour towage

*KST Safe* smooth navigating along the Mactan Channel



service and address our clients’ growing needs. We thank the shipbuilding teams of both yards for completing the projects successfully,” said Ben Chew, KST’s General Manager.

The *KST Super* sailed off from Keppel Batangas to Singapore on 24 February 2008.

Sister ship *KST Safe* followed in its footsteps to Singapore, but set off from Keppel Cebu, a little over a week later on 4 March.

Fok Swee Yin, President of Keppel Cebu, said, “The delivery of *KST Safe* is a significant milestone as it represents our shipyard’s first newbuild delivery.”

“The two Keppel Philippine yards have already delivered five tugboats of international standard since they adopted a newbuilding strategy under the build-for-sale programme. We will continue to work hard to ensure our quality workmanship,” said

Toh Ko Lin, President of KPMI and Chairman of Keppel Cebu.

The 45-tonne bollard pull harbour tugs of the Azimuth Stern Drive (ASD) type are built with fire-fighting capabilities for worldwide service according to the requirements of Lloyd’s Register.

Based on a design by Marine Technology Development, Keppel Singmarine’s R&D arm, the vessels measure 27.9 m long and 9 m wide. Each tug has a service speed of up to 12 knots with two 1800 PS Niigata main engines driving its twin screw propulsion system.

KST and Maju Maritime Pte Ltd (Maju) merged operationally under the same management in 2000.

*KST Super* is the third vessel built by Keppel Batangas for KST and Maju. The shipyard had delivered *KST Solar* and *KST Solitaire* of similar design to the company in 2006.

Keppel Cebu is currently constructing two 50-tonne bollard pull ASD harbour tugs for the company.

*KST Super* shows her fire fighting capabilities during the sea trial in Batangas Bay



# Cut above the rest

**K**eppel Batangas Shipyard (Keppel Batangas) in the Philippines has cut to the chase with fabrication work on the ultra deepwater semisubmersible (semi) ENSCO 8503. Partners and clients of the shipyard witnessed the first steel sheet cut for the ultra-deepwater semi drilling rig at its strike steel ceremony on 26 February 2008.

Kok Boon Heng, President of Keppel Batangas, thanked Keppel FELS and the rig's Texas-based owner ENSCO International (ENSCO) for their vote of confidence, saying, "We're honoured to be chosen once again to fabricate the port and starboard pontoons, and lower hull columns for ENSCO's new rig."

When completed, these modules will be assembled with other parts of the semi at Keppel FELS in Singapore. Delivery is expected in 3Q 2010.

ENSCO 8503 is the latest of four ENSCO 8500 Series rigs being built by Keppel FELS. The first three are on track with expected deliveries between mid 2008 and late 2009.

ENSCO's Director of Capital Projects, Brian J. Higgins, praised Keppel Batangas' project team and management at the ceremony, saying, "I want you to know that ENSCO is deeply pleased to see not only the progress that you have made in the physical plant but also your ability to take Keppel Batangas to a different level in productivity and in safety."

"We look forward not only to the strike steel of ENSCO 8503 but hopefully for more rigs to come in the future. Again, ENSCO takes its hats off to you for a job well done."

Upon completion, ENSCO 8503 will be capable of dynamic positioning and drilling in water depths of up to 8,500 ft, and can readily be upgraded to 10,000 ft water-depth capability.

*ENSCO 8503 project team members strike a pose in Keppel Batangas*

Enhancements include a two million pound quad derrick, offline pipe handling capability, increased drilling capacity, greater variable deck load, and improved automatic station keeping ability, making the semi well-suited for challenging deepwaters.

"We would like to thank ENSCO for their trust and confidence in Keppel. We are fully committed to deliver the project on time without compromising safety and quality," said Tan Song Yang, Keppel FELS' Construction Manager.

Keppel Batangas is simultaneously working on the offshore blocks for ENSCO, Maersk Contractors, QGOG and Floatel. The yard is adding two more block assembly areas to take advantage of the buoyant business in the offshore industry.

*Representatives from Deep Sea Drilling, American Bureau of Shipping, and Keppel FELS bear witness at the strike steel ceremony for ENSCO 8503*





# Bouquet for *West Prospero*

It could have been a driller's nightmare when *West Prospero* suffered a major punch-through off the coast of Terengganu, West Malaysia on 2 February 2008.

Thanks to its sturdy legs, this KFELS B Class jackup rig came out of the incident unscathed. The rig was delivered ahead of time in June 2007 to Seadrill, parent company of Integrated Petroleum Services.

After two Offshore Technology Development (OTD) engineers ran some tests on the rig, *West Prospero* was back in operation on 8 February 2008, the second day of the Lunar New Year.



*West Prospero* back in operation in West Malaysia



11 February 2008

OFFSHORE TECHNOLOGY DEVELOPMENT PTE LTD  
55 Gul Road Singapore 6293S3

Dear Teng KiatLim,

**LETTER OF COMMENDATION: SUCCESSFUL DEPLOYMENT OF SEADRILL 4 WEST PROSPERO DESPITE RAPID PENETRATION AMIDST CHALLENGING ENVIRONMENT**

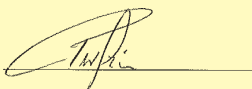
*West Prospero* is a KFELS B-Class jack up drilling rig designed by Keppel O&M subsidiary Offshore Technology Development Pte Ltd (OTD), and built by KeppelFELS in Singapore in 2007.

On 2<sup>nd</sup> February 2008, *West Prospero* moved to offshore Terengganu, West Malaysia for deployment in 183 feet water. The soil study had determined that this location had high punch through/rapid penetration potential. While preloading the rig following a preload plan, the Port leg experienced rapid penetration from 50ft to 70ft. When the rapid penetration stopped, the hull had an inclination of 3.5 degrees and counter the penetrations by lowering the hull at the same time on the high side into the water. The rising weather predictions during the period posed even greater challenges in recovering the rig. Preliminary inspection revealed that though the 20 feet rapid penetration was considered severe, the legs, guides and jacking system sustained no damage. This ensured that normal operation to recover the rig was possible.

Your two member team consisting of Mr Satish Menon and Mr Vinodh Jayaraman, both electrical engineers, arrived on board the *West Prospero* shortly after the incident. The combined good effort and team work between the SeaDrill crew and OTD team ensured that the rig was able to complete the full preload operation successfully, and jacked up to operating air gap on 8<sup>th</sup> February 2008.

This letter serves to commend Offshore Technology Development Pte Ltd for the invaluable support and services rendered to us throughout the incident.

Sincerely,



PETER GRIN  
RIG MANAGER



Saipem 7000 is the world's second largest crane vessel with lifting capabilities of up to 14,000 tonnes

# Entry by a hair's breath for Saipem 7000

**S**aipem 7000's entry into Keppel Verolme was taut with tension and excitement.

With only one and half metres in latitude separating the width of the world's second largest crane vessel and either sides of the dry dock, it was with great care that the 87 metre wide semisubmersible (semi) entered the 90 metre wide drydock.

There was a further challenge as, due to the critical draught, the crane and pipelaying semi could only enter the drydock at high tide.

These conditions made the entry one of the most challenging dry-docking operations carried out by the Nautical Department of Keppel Verolme.

The Herculean task was carried off smoothly due to the combined efforts of

the Keppel Verolme staff, the crew on board the semi, the operation teams with the Port of Rotterdam tugs, as well as traffic control. The clear December weather also aided the endeavour.

Just over three months later, on 14 March 2008, the semi was undocked in a reverse operation. The experience gained from the previous operation, however, made this a more straight forward affair.

Nevertheless, it was only after the unit was safely moored at a Keppel Verolme quay for final outfitting that all parties involved could congratulate each other for completing this special dry-docking operation successfully.

Senior Vice President Assets Marco Toninelli of Saipem complimented the Keppel Verolme Project team and workforce, saying, "We are very satisfied

with the safe and timely performance of the job and we thank all involved for the effort and dedication."

At 80,000 tonnes, Saipem 7000 has a lifting capability of up to 14,000 tonnes.

While in the drydock, Keppel Verolme carried out major maintenance works on all the vessel's underwater systems and thruster units. Some of these units were removed for overhaul in the machine workshop. The semi's hull received eight layers of high quality marine paint. Major parts of the semi's piping system were renewed and several steel damages to the steel columns and floaters were repaired.

The vessel left Keppel Verolme on 27 March 2008 for final trials in the deepwater area of the Port of Rotterdam before leaving for her next assignment in the North Sea.



# Farewell *Al-Zubarah*

As the last tow ropes from the tugboats were fastened to *Al-Zubarah*, members of the Keppel FELS and Gulf Drilling International (GDI) project teams bade the rig farewell as it began its journey to Doha, Qatar, where it will carry out its maiden drilling assignment.

Named after one of Qatar's most important economic centres, *Al-Zubarah* was delivered on 18 February and is the second KFELS B Class jackup rig Keppel FELS has completed for GDI on time and within budget.

The rig departed from Keppel FELS on 17 March amidst jubilation and heartening words from its owners. Yoichi Onoe, Chief Operating Officer of GDI said, "We would like to take this opportunity to extend our sincere appreciation and heartfelt thanks to Keppel FELS for the hard work to accomplish this project."

He added, "This would not have been possible without the support of all your subcontractors, vendors, suppliers and others involved as well."



## Safety sharing

To support group companies in learning more about safety practices, Keppel Corporation's Board Safety Secretariat invited Silas Sng, Deputy Director, Occupational Safety and Health Inspectorate, Ministry of Manpower, to talk with the senior management of the business units on 26 March 2008.

Silas accepted the offer with alacrity. He said "Safety is the responsibility of everyone. I am pleased to see such interest in safety from the Keppel Group and

through this talk, I hope to share with you, Keppel how decisions made at every level, from the management to the supervisor can affect safety."

He highlighted that the focus of his talk was not to provide solutions to technical problems but to provoke thinking and greater awareness towards factors that can contribute towards accidents and to learn from there.

He likened an organisation's defences against failure as a series of barriers,

represented as slices of Swiss cheese. Termed the "Swiss Cheese" model, the holes in the cheese slices represent individual weaknesses in individual parts of the system and a lapse in safety occurs when all the holes in the layers of defence align and a hazard passes through. Such an accident causation model is used in the risk analysis and risk management of human systems. Organisations, once they get a better understanding of where the holes in defence occur, can do their best to eradicate them at every level.

The presentation also included a question and answer session. Lively and robust, the session ended with many learning points on how the Keppel boards and senior management could help to improve safety.

The event was graced by Board Members of Group Companies, top management including Keppel Corporation's Executive Chairman Lim Chee Onn, CB Choo, Chairman and CEO of Keppel O&M, and safety champions from all the business units.



CB Choo, Lim Chee Onn, Executive Chairman of Keppel Corporation and Sven Bang Ullring, Independent Director of Keppel Corporation and member of the Board Safety Committee, having an animated discussion about safety



# Honouring an industry stalwart



CB Choo (right) is presented the Honorary Fellowship certificate by IMarEST President, Prof Choo Yoo Sang, at the IMarEST 105<sup>th</sup> Annual Dinner in London

organisation that has contributed to the marine, maritime and offshore industry.

“We are at the crossroads of major growth and development. My passion after 40 years in this industry is to attract more people of talent and ability, people who have a *Can Do!* spirit, to exploit opportunities and achieve breakthroughs in the areas of engineering, technology and the business of offshore and marine.”

A Colombo Plan Scholar and a Master of Science graduate in Naval Architecture from the University of Newcastle upon Tyne, CB Choo joined Keppel Shipyard in 1972. Under his stewardship, Keppel O&M, which is an integration of Keppel's offshore and marine businesses, has grown to become a world leader in offshore rigs, ship repair and conversion, and specialised shipbuilding.

A Senior Executive Director of Keppel Corporation, CB Choo is also Chairman of Singapore Petroleum Company (SPC) and SMRT Corporation (SMRT). Keppel Corporation, SPC and SMRT are SGX-listed companies recognised for their strong corporate governance and robust growth.

CB Choo was conferred the Public Service Star Award (BBM) in August 2004 and NTUC Medal of Commendation (Gold) Award in May 2007. He is Singapore's Non-Resident Ambassador to Brazil.

**C**hoo Chiau Beng (CB Choo), Chairman/CEO of Keppel O&M, was appointed Honorary Fellow of the Institute of Marine Engineering, Science and Technology (IMarEST) on 14 March 2008.

Three other gentlemen were also conferred the distinguished award. They are renowned Prof Costas Th. Grammenos OBE, DSc, Pro-Vice Chancellor and Deputy Dean (Head of Undergraduate School) of Cass Business School, City University in London; David Long, a long-time member of the IMarEST, directly engaged in the management, direction and development of the Institute; and Derek Lutyens, a former investment manager and presently a Trustee and Hon. Treasurer of IMarEST.

Based in the United Kingdom, IMarEST is an international professional membership body with a worldwide

network of 49 branches and 15,000 members. Formerly known as the Institute of Marine Engineers, it is also the first professional institute to bring together marine engineers, scientists and technologists.

The Institute has 18 Honorary Fellows, all by invitation, in recognition of their distinguished careers. Luminaries include HRH The Duke of Edinburgh.

Keith Read, Chief Executive of IMarEST, said, “We are delighted to award the Honorary Fellowship to Choo Chiau Beng for his contributions to the industry. He will benefit the institute with his international repute, professional eminence and broad, in-depth knowledge.”

CB Choo shared, “I am honoured by this appointment as an Honorary Fellow of the eminent fraternity of IMarEST, an

# Steely quality standards

The freshly framed ISO9001 certificate bestowed on Keppel Offshore & Marine's (Keppel O&M) joint venture with Mitsui & Co., Regency Steel Japan (Regency Steel), is the outcome of a fight hard won.

President of Regency Steel, Dr Yip Hee Yan, also Senior Programme Manager of Keppel O&M Technology Centre (KOMtech) since November 2007, sat on the management committee that oversaw the specialist steel maker's accreditation programme.

Recalling the company's strive to attain a pervasive quality culture that respects optimum working practices and management systems, he said, "We knew that in order to compete globally, Regency Steel's commitment to total quality of our products is as important as the price.



The Regency Steel Japan team in solidarity behind the quality standards of the ISO9001 certification

So, the company set about to attain the ISO9001 certification.

"Each and every staff member prepared, instituted and displayed full commitment to the quality process and systems. I am very proud that we achieved the international standard."

Regency Steel is a manufacturer of large, high-quality steel structures for international and domestic markets. It sources, fabricates and supplies specialised steel parts for the construction of high-strength structures, new steelmaking facilities and nuclear power plants.

Its rigorous qualification process for the ISO9001 involved five key performance areas: product and quality improvement, operation and maintenance standardisation, rule compliance assurance, introduction of control and sharing assurance, and staff motivation.

## Launching *Lashin 3*

Employees and customers of Keppel Kazakhstan gathered at the yard with a sense of anticipation on 20 March 2008.

*Lashin 3*, a transportation barge the size of <??> football fields, was getting ready to be launched. Thanks to good weather and a wealth of experience, the 7,000 tonne-barge slid gracefully into the water.

A.B. Lim, Assistant Director of Keppel Kazakhstan, said, "We are all pleased with the successful launch of *Lashin 3*, another milestone of this project being achieved."

*Lashin 3* is the fifth transportation barge being constructed for Agip-KCO. Sister barges *Lashin 1* and *Lashin 2* and AKKU 1 and AKKU 2 were delivered in June 2007.

Addressing the people after the launch, A.B. Lim emphasised on importance of working together as a team. "With our *Can Do!* attitude, we are looking forward

to the launching of the next two barges, *Lashin 4* and *Lashin 5*, in the months of April and May 2008 respectively."

Currently being constructed in Keppel Kazakhstan, *Lashin 4* and *Lashin 5* are the sixth and seventh barge belonging to the same owner.



*Lashin 3* slips into the sea



# Binding ties

**K**eppel O&M played host to a 23-strong delegation from the Nantong Municipal People's Government.

Led by Vice Mayor Shen Zhen Xin, the delegation was in Singapore to promote Nantong as an attractive destination for investment. They organised a seminar on the developments of Nantong's shipbuilding and marine supporting industries, as well as the benefits of investing in the municipality.

The seminar conducted on 26 March was part of the Asia Pacific Maritime 2008 exhibition held at the Singapore Expo.

As part of its collaborative efforts to boost Nantong's marine industry, Keppel supported the Nantong Municipal Government's efforts by co-organising the Seminar with International Enterprise (IE) Singapore and COSCO International.

The delegation also visited Keppel O&M and the Marina at Keppel Bay to learn more about Keppel's businesses. In addition, the delegation and Keppel O&M's senior management discussed plans to further enhance the government's partnerships with Keppel.

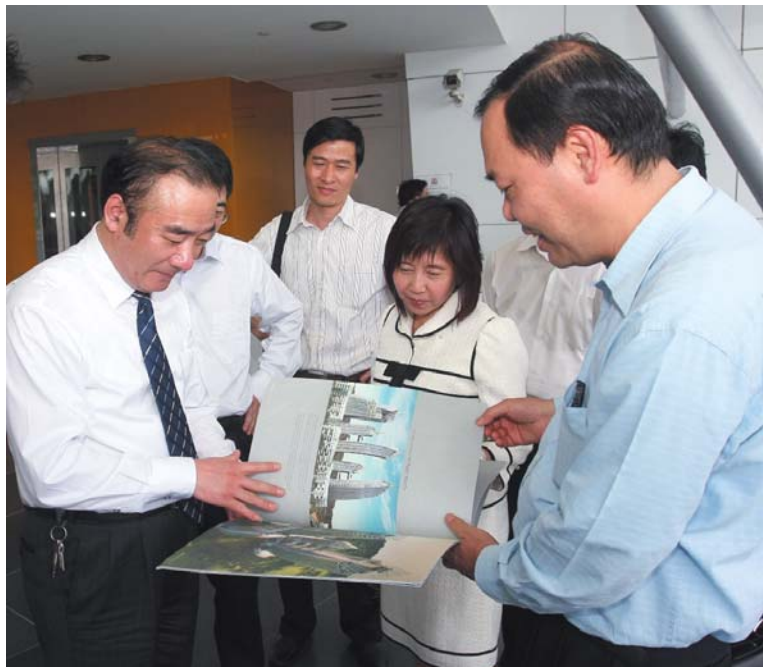
In a warm meeting with Keppel's senior management led by CH Tong, MD/COO of Keppel O&M, Mayor Shen said, "The establishment of Keppel Nantong has raised the benchmarks of our marine industry, and made Nantong famous for its maritime developments. We are convinced that Nantong can be transformed into a world-class shipbuilding valley. The Government will continue to provide a conducive environment for Keppel's developments in its expansion."

He also added that he is confident that with an even greater presence in the area, Keppel can develop and pioneer the marine industry of Nantong. Mayor Shen expressed hope that Keppel would, in the future, expand its investments in Nantong, vis-à-vis its Property and Infrastructure businesses.

CH Tong responded, "We have a good relationship with the government and we are very happy with the support that we have received for our projects in Nantong. We look forward to their continuous support for our future endeavours in the region."



CH Tong points out interesting facets of the yard to Mayor Shen



Mayor Shen takes a look at a brochure of Reflections at Keppel Bay

# A look at China's second Shanghai

Keppel Nantong Shipyard is located in an area commonly known as "the second Shanghai in the Yangtze Delta region". *OffshoreMarine* takes a look at this thriving metropolis which is home to Keppel O&M's first shipyard in China.



**T**he Municipal of Nantong is one of China's 14 coastal cities that have rapidly developed in the last decade. Also known as the "Pioneer City of Modern China" and the "first window on the Changjiang River", Nantong is a port, industrial, trade and tourist city in the lower reaches of the Changjiang River.

The versatile city is located in the east of China, and faces Shanghai, across the Changjiang River. It also has an unobstructed coastline along the Changjiang River and Yellow Sea.

With a Gross Domestic Product (GDP) of RMB 211 billion in 2007, Nantong is ranked 26<sup>th</sup> amongst the large and medium-sized cities of China. Its investment and development potential, as well as its lure as an exceptional place to live, have increased over the years.

Adding to its value are its wide expressway and railway network and infrastructure, as well as the completion of the world's first cable-stayed (suspended) bridge, the Sutong Bridge, and the three, Shanghai-Chongming-Jiangsu Passages.





Nantong is ideally situated to become a hub for China's maritime industry. It has the second largest harbour along Changjiang River and by sheer size, it ranks as the tenth largest harbour in the country.

With such natural attributes, it is no surprise that the marine industry plays a very important part towards Nantong's development. Nantong has over 200 shipbuilding and marine supporting enterprises. These enterprises account for two-thirds of the total shipbuilding tonnage of Jiangsu province, and almost 15% that of the entire country.

Nantong is continuing to focus on marine developments such as shipbuilding and offshore structure fabrication, large-scale high technology equipment, electronic and service industries. It has set a target of increasing its shipbuilding tonnage to 10 million dwt and its sales revenue to RMB 100 billion by 2012.

The city has also created a special industrial zone known as the Nantong Marine Supporting Industrial Concentration Zone to support its burgeoning marine industry. Covering more than 17 sq km, the Concentration Zone houses marine equipment manufacturing, steel structure fabrication, shiprepair and maintenance and other marine supporting enterprises.

Keppel Nantong Shipyard, Nantong Cosco KHI Shipyard and Cosco Shipyard, Yahua Shipyard, Hantong Shipyard and Mingde Shipyard are some of the established enterprises that are operating in and around the Concentration Zone.



# Grooming future leaders

**W**ith a footprint that spans 16 countries and a global workforce of 27,000, it is paramount that Keppel O&M integrate and align its talent management and human resources best practices with its vision to be the solutions provider of choice.

The Group inaugurated the Keppel O&M College in November last year to oversee Group-wide talent development programmes.

Through its wide spectrum of programmes, the College aims to groom employees with high potential to take on more senior positions in the Group. It propagates and instills an overarching Keppel culture that binds its 27,000 strong global workforce.

## Advancing management skills

The Global Advanced Management Programme (GAMP) was launched on 25 February 2008. It is the first global management programme under Keppel O&M College.

The College partnered the Nanyang Business School of Nanyang Technological University (NTU) for the new week-long course, especially tailored to heighten managers' key competencies, sharpen their business acumen, and hone their management skills.

Lyudmil Stoev, GM of Keppel FELS Baltech, completed the inaugural course (which) ended on 1 March 2008.

He shared, "I liken the Keppel Group to

an orchestra made up of people from different cultures and rhythms. This programme not only fine-tuned our skills, but also choreographed our differences to give depth and character, making the orchestra sound better."

During the week, 29 senior managers from the Group's business units worldwide attended classes taught by NTU lecturers. The subjects included corporate governance, enhancing shareholder value, and using Sun Tze's Art-of-War as business stratagems. The senior managers also had a workshop on Emotion Quotient (EQ) as well as individual executive coaching to help them in their personal and inter-personal mastery.

After completing the programme, the



Proud graduates of the inaugural Global Advanced Management Programme



## Meeting across borders, united by a single purpose: helping Keppel grow

participants were treated to a Gold-class screening of the movie 'Jumper,' where they were free to hit the call buttons on the plush recliner seats for concierge services.

## Reaching the APEX

The APEX for Cindy Lim, Senior Group Talent Manager of Keppel O&M Group Human Resources is: Achieving People Excellence.

She and her bevy of ladies organised the Group's first talent management symposium held in Singapore from 24 to 28 March 2008.

A total of 28 Human Resources leaders and professionals from 19 of the Group's local and overseas business units congregated for the sole mission of discussing ways in which Keppel O&M could best achieve people excellence.

Over a five-day period, the participants discussed ways that the Keppel O&M's Group Talent Management and Succession Management Framework could be cascaded to all the business units; how they could better leverage each of the business units' strengths; how to tap on each Human Resources practitioner's expertise in solving prevailing business units' challenges; and to brainstorm and craft out a set of best in-class HR practices toward achieving people excellence.

Gilbert Elizondo, VP (Human Resources), Keppel AmFELS, found the symposium very useful. He shared, "This has been a positive experience for me to share concepts, ideas and best practices with my colleagues across the Group.

"Our company is getting bigger while the world is getting smaller. Although we are a huge company, we must operate like a



## The ladies of the Keppel Offshore & Marine Group Human Resources tie the Group together

small one in terms of HR practices and we must get our work done efficiently."

Jules J King Yap Villarta, Chief Human Resources Officer, Keppel Cebu, enthused, "The programmes were both helpful and inspiring. Despite the tight schedule, learning was not compromised. I learnt that one has to think on a macro level but act on a micro level. I was especially motivated by the coaching skills session where I learnt that it is not how many steps of a ladder that you climb that counts but how many people you help along the way."

At the end of a rewarding week, the group presented their findings to CB Choo,

Chairman & CEO of Keppel O&M and other senior management.

The participants agreed that the symposium allowed them to learn about best-in-class practices and that they would be adapting what they had learnt over the past five days in their respective business units.

As CB Choo observed, "Talent Management is a very important part of the company. We have to hire and develop the right people and ensure that they are aligned with our core values. This will enable us to fulfill our aim of creating value for our stakeholders and customers."

# Innovation can be a breeze



Lee Chay Hoon (standing) animatedly presents her case on innovation at Pub by the Sea



Fellow researchers of KOMtech catch up over a drink



Charles Foo (left), Centre Director of KOMtech discussing the finer points of research with his staff

Who says research and development are held in laboratories and behind glass doors? In fact the most innovative ideas can come from a relaxed atmosphere by the sea.

This was what researchers from KOMtech (Keppel Offshore & Marine Technology Centre) were doing during their third KOMtech gathering on 29 February 2008 at the “discovery pub” in Raffles Marina. They interacted with colleagues from other business units and discussed ideas with fellow researchers.

Amidst the sea breeze, food and drinks, Lee Chay Hoon, GM (Organisation Development) of Keppel O&M shared her insights on promoting innovation within the company. “Innovation is key to a company’s long term success and KOMtech with all its talents and resources, is on track to spearhead innovation in Keppel O&M.”

Developing research through social interaction is part and parcel of KOMtech’s philosophy for learning. Held on a quarterly basis, the objective of the gathering is to encourage KOMtech researchers to share their thoughts and knowledge.

In the spirit of intellectual exchange, Tan Cheng Hui, GM (Engineering) of Keppel Singmarine gave a presentation on the successful January launch of the ice breakers by Keppel Singmarine.

Charles Foo, Centre Director of KOMtech said, “Research and development goes beyond the offices we work in. These regular gatherings allow the researchers to update each other on their respective projects. Furthermore, from these social networking sessions, new ideas may even develop as well as collaborations between the different Business Units.

“Most importantly, it is in a relaxed atmosphere such as this that we can look at things from new perspectives.”



# Bonus for Keppel Singmarine

Keppel Singmarine has delivered its third Anchor Handling Tug/Supply (AHTS) vessels ordered by its repeat customer, GulfMark Offshore, Inc. (GulfMark).

Like the previous two projects, Keppel Singmarine was presented a US\$10,000 bonus for its excellent performance and safety record.

Built to the in-house engineering design of the Marine Technology Development (MTD), *Sea Kiowa*, is the third in a series of six offshore support vessels (OSVs) ordered by GulfMark in November 2005.

The vessel was named by Lady Sponsor, Glenna Ellen Roberts, partner of Marshall Andrew Crowe, Director of GulfMark, at a naming ceremony held on 5 April 2008.

At the convivial naming ceremony, Gene Leech, Executive VP of GulfMark, said, "I am impressed by the quality of this vessel that Keppel Singmarine has built for us. The Keppel team has proven their expertise and capabilities in design, engineering and construction of offshore support vessels. The previous two AHTS vessels were also delivered on time to our full satisfaction.

"Timely deliveries are critical for us especially with the growing demand for OSVs as a result of the increasing global activities in exploration and development."

Hoe Eng Hock, ED of Keppel Singmarine, elaborated on the excellent sea trial of *Sea Kiowa*. "This third vessel, like the two previous ones, has exceeded its design and contractual bollard pull and speed during its sea trial performance. We are also proud to announce that our projects and construction have been on time and with zero lost-time incidents."

Delivered on 31 March 2008 for



Keppel Singmarine receives a well-deserved bonus from GulfMark



Lady Sponsor Glenna Ellen Roberts ensures that all systems are working on *Sea Kiowa*

deployment in South East Asia, *Sea Kiowa* will join GulfMark's fleet of more than 60 offshore support vessels.

Delivery of the remaining three vessels is expected between mid and end of 2008. Two of these vessels are being built at the Keppel Nantong Shipyard in China.

GulfMark and its subsidiaries provides marine transportation services to the energy industry through its fleet of sixty-two offshore support vessels, primarily in the North Sea, offshore Southeast Asia, and the Americas.



(Left): FPSO *Saxi Batuque* is named by Lady Sponsor, the Minister of Planning of the Republic of Angola, Ana Dias Lourenço  
(Right): CB Choo, Chairman and Chief Executive Officer, Keppel Offshore & Marine, presents Michael Flynn, Vice-President, ExxonMobil Development Company a plaque in appreciation of ExxonMobil's support of Keppel Shipyard's safety initiatives

## Striking the right note on safety

**K**eppel Shipyard has set another safety milestone with more than 11 million man-hours worked without lost-time incidents (LTI) on two Floating Production Storage and Offloading (FPSO) facilities.

The FPSOs have been converted for clients Single Buoy Moorings Inc (SBM) and Esso Exploration Angola (Block 15) Limited (ExxonMobil) for the Kizomba C project in Angola.

FPSO *Saxi Batuque*, which was named on 9 March 2008, achieved six million man-hours without LTI, while FPSO *Mondo* which was delivered in September last year, attained five million such man-hours.

The successful completion of these FPSOs is the culmination of seven years of safety partnership involving Keppel Shipyard, SBM and ExxonMobil.

ExxonMobil's contribution to Keppel's safety efforts goes far beyond the projects they work on. The oil major has been actively involved in the promotion of safety programmes at Keppel Shipyard throughout the seven-year period. ExxonMobil and SBM also play an

important role in Keppel Shipyard's Safety Steering Committee.

*Saxi Batuque's* delivery marks a new phase in ExxonMobil's strategic safety partnership with Keppel Shipyard to achieve its Safety Excellence 2010 plan. The programme will establish a roadmap for additional safety improvements to ensure that results are sustainable and can continue to grow in the future.

CB Choo, Chairman and CEO of Keppel O&M said at the naming ceremony, "The safety records of the SBM and ExxonMobil fleet of FPSO conversions exemplify the efforts we have taken through the years to foster a safety culture at Keppel Shipyard.

"We will continue to strive towards an incident-free environment with the support from our partners and the commitment of our workforce. I believe that the Safety Excellence 2010 initiative will bring us closer to our goal."

Over the last seven years, Keppel Shipyard's Accident Frequency Rate (AFR) has consistently been maintained at below industry levels. Its AFR of 0.24 accidents per million man-hours worked in 2007

is a marked improvement from 3.48 AFR in 2002.

At *Saxi Batuque's* naming ceremony, Michael Flynn, VP, ExxonMobil Development Company said, "The successes achieved on the *Mondo* and *Saxi Batuque* FPSOs are a direct result of the dedication of the entire team to our shared vision of 'Nobody Gets Hurt'. Safety and execution excellence require strong leadership skills and alignment to allow each company and worker to contribute uniquely to shared goals.

"SBM and Keppel have demonstrated their commitment by delivering the Kizomba C vessels on time with a safety record far exceeding previous levels. In addition, Keppel is pursuing their new 'Safety Excellence 2010' programme to help assure excellent performance in the future."

Francis Blanchelande, COO of SBM Offshore said, "We have a long working relationship with Keppel Shipyard that has proven very successful. Each project is always special and I would like to thank the project teams for the excellent work they have put in to complete this vessel with a fantastic safety record."





Thumbs up for safety! The Keppel Shipyard project team for *Saxi Batuque*

The vessel was named *Saxi Batuque* by the Minister of Planning of the Republic of Angola, Ana Dias Lourenço.

To be deployed in the *Saxi Batuque* Field, Block 15, offshore Angola, as part of the Kizomba C Development Project, FPSO *Saxi Batuque* will be capable of processing 100,000 barrels of oil per day (bopd) with a storage capacity for 1.6 million barrels of oil.

Keppel Shipyard has a strong track record of more than 70 FPSO and FSO conversion and repair projects.

SBM, Offshore NV, listed on Euronext in Amsterdam is the world's number one owner and operator of FPSO and FSO systems.

## The Saxi and the Batuque

Music is very important to Angolan society. To reflect the country's rich culture, oil wells in Block 15, offshore Angola are named after Angolan musical instruments.

SBM's latest FPSO for ExxonMobil is named after two musical instruments, the Saxi and the Batuque. The Batuque is a drum. It produces sound through a

membrane, usually made from goat or antelope skin. This membrane is placed at the opening of the resonance box, made from wood and resin.

The Saxi are made by drilling a few small holes in dried gourds and placing dried seeds or glass beads inside. Such percussion instruments can be found throughout Angola.

Michael Flynn,  
VP ExxonMobil  
Development  
Company  
presents a Saxi  
and a Batuque to  
Manuel Vicente,  
President of  
Sonangol



# Keppel Shipyard's journey towards safety excellence

A group of dedicated offshore and marine stalwarts came together for a workshop on Keppel Shipyard's safety practices.

This mini-conference was held on 2 and 3 April at the Fullerton Hotel.

Passion for the subject was the driving force behind this group consisting of the management from Keppel Shipyard, and senior representatives of ExxonMobil Development Company (ExxonMobil), Shell, Apache, BW Offshore, Frontier Drilling, Maersk Contractors, Murphy Oil, Prosafe Production, Single Buoy Mooring (SBM) and Woodsides, all clients of Keppel Shipyard. Many had travelled from countries like the United States and Monaco just to attend this workshop organised by Keppel Shipyard.

The commitment shown by all parties illustrated the conviction that safety entails the involvement and partnership of all stakeholders. Indeed, customers like ExxonMobil, Shell and SBM play an active part in Keppel Shipyard's safety policy as members of its Safety Steering Committee.

Yarami Peña, Construction Advisor of ExxonMobil, praised Keppel Shipyard's relentless focus on safety.

He highlighted, "There has been tremendous improvement in Keppel Shipyard's safety programmes over the years which have led to significant improvements in Keppel's safety performance.

ExxonMobil has been actively involved in the promotion of these safety programmes and the successes achieved on the *Mondo* and *Saxi Batuque* FPSOs are a direct result of the dedication of

the entire team to our shared vision of "Nobody Gets Hurt".

## Taking off with Falcon

Keppel Shipyard's management realised early that greater leaps in safety could only be achieved by having buy-in from clients and contractors.

They started engaging customers back to 2001 when the yard was carrying out the conversion of FPSO *Falcon*, its first floating production storage and offloading (FPSO) for ExxonMobil through SBM. The partners made safety the first priority not only for the project but for the entire yard.

By 2002, they formed a yard-wide Safety Steering Committee with ExxonMobil and SBM coming on board to lend full support in building a culture of safety at the shipyard. Their efforts saw the launch of the Safety Plus Programme in the year.

At the onset, Safety Plus Programme sought to raise general awareness of safety in the yard and to correct the unsafe work behaviours among its 14,000-strong multinational workforce which includes subcontractors' workers.

The Safety Plus Programme was further boosted with other initiatives such as the Safety Leadership Programme to train supervisors in observation and intervention skills, so as to groom safety leaders who would bridge the critical link between the management and all workers. More than 3,000 supervisors, foremen and managers were trained in 2007.

The empowerment of supervisory staff, both direct employees and those from subcontractors, allows potential risks to be identified and prevented at source. The yard's accident frequency rate (AFR) was reduced from 3.48 in 2002 to 0.24 in 2007. Key to this was the collaboration with ExxonMobil on several safety



Customers listen intently as the findings of the taskforce are presented





Safety Task Force made up of Keppel Shipyard and ExxonMobil management

initiatives under the Safety Plus Programme.

### Shaping a new Initiative

Though Safety Plus Programme accomplished laudable achievements, the yard's safety champions led by ED Nelson Yeo and Senior GM (Operations) Abu Bakar, were determined to raise safety standards even further to meet the goal of an "Incident Free Workplace".

Sensing the authenticity of Keppel Shipyard's resolve, Senior Project Manager Ken Larson of ExxonMobil, an enduring advocate of Keppel Shipyard's safety cause, decided to champion this ambitious new goal. In line with its interest to help lift the industry benchmark for workplace safety, ExxonMobil strengthened its support of the good cause.

In October 2007, with help from ExxonMobil, Keppel Shipyard formed a Safety Taskforce to explore new schemes to sustain its safety achievements. They recognised that this can only be attained when safety becomes second nature to everyone in the yard.

The efforts of the taskforce culminated in the Fullerton Workshop where new directions for workplace safety at Keppel Shipyard were discussed.

Eleven recommendations to further enhance the safety performance and safety culture at Keppel Shipyard were developed by the task force and presented to the workshop participants.

Ideas to better heartware and hardware were discussed. Building a more comprehensive training centre and empowering every worker to become a safety custodian were among the suggestions.

### All hands on deck

Wrapping up the workshop, Nelson challenged his team to halve 2007's Accident Frequency Rate (AFR) record for the yard.

ExxonMobil's contribution was not lost to Nelson who has been working tirelessly on this area.

Acknowledging the contributions of all its customers, Nelson said, "We appreciate

ExxonMobil's unconditional support and the energy they have put in helping us with our safety initiatives. We shall continue to work together with ExxonMobil and other customers to further enhance safety in the yard."

The Safety Excellence 2010 initiative aims to entrench its safety culture by promoting individual and collective ownership for workplace safety and health.

The focus of the initiative will be on workforce observation and intervention development, the enhancement of safety infrastructure and capabilities and incentive schemes so as to encourage everyone working in Keppel Shipyard to be responsible for their own, as well as their colleagues' safety.

Read more about this key initiative in the next issue of *OffshoreMarine*.

# One million safe man-hours on gas FPSO

**K**eppel Shipyard's conversion of the world's largest gas FPSO, *Cidade De São Mateus*, for Prosafe Production (Prosafe) has attained a safety milestone of one million man-hours worked without LTI.

At the same time, Keppel Shipyard and Prosafe celebrated the achievement of two million safe man-hours of another project, the Floating Drilling Production Storage and Offloading (FDPSO) facility, *Azurite*.

Despite the current heavy workload, the yard continues on its goal to send every worker home safely. This achievement demonstrates the safety consciousness and close collaboration between Keppel and Prosafe.

Their project teams, workers, and subcontractors' collective efforts on the *Cidade De Sao Mateus* have been recognised at a ceremony commemorating the safety milestone on 23 February 2008.

Lauding the team players, Roy Hallas, President of Prosafe said, "Congratulations Keppel, Prosafe project teams and Union

Representatives. You have done it again. It is extremely valuable that we have received four million man-hours on three vessels. What is impressive about Keppel Shipyard is its consistency in safety."

Roy added that attention to safety is highly regarded within the industry, saying, "When we bid for new projects, these safety results raise the profile of each project for the company and the individual. Protecting health and saving people's lives raises the company's profile."

Beyond a good brand name, the safe work environment has also kept Keppel Shipyard on track in converting the 276,000 dwt VLCC tanker into a Gas FPSO unit.

Abu Bakar, Senior GM (Operations) of Keppel Shipyard said, "Apart from protecting lives, there is a whole spectrum of rewards to maintaining a safe working environment. We are committed to deliver our projects safely and successfully."

However, keeping an eye on safety is not without challenges.

Stuart Brown, Prosafe's Construction Manager said, "The main challenge is that because many activities are happening at the same time, coordination between the different trades and different departments is crucial.

"This is the fifth FPSO conversion I've done. With each one, I see the excellent integration and the coordination getting better and better. I think the main reason has to do with our daily vessel safety coordination committee meetings where key points are brought up and resolved."

Some see the dedication and discipline it takes to have a safety mindset.

Best Supervisor award winner Tan Heng Woon said, "Safety is important and so we do checks frequently. *Take 5* is done every morning as it encourages the workers to look out for safety. We ensure that we check the materials, the tags, etc, every morning."

Hans Kristiansen, Prosafe's Senior VP of Projects agrees, saying, "I think the key to this is the workers' positive attitude, which I can see in the good housekeeping and a respect for the safety signs."

Raising the bar, he added, "I've been in Prosafe since October last year and this is the third safety achievement I've seen. We will follow up on what we have achieved today and aim for the next million and the next million."

**Keppel and Prosafe build on their partnership with yet another safety achievement**





# Keeping bird flu all cooped up



Keppel Cebu workers fall in step for rigorous temperature screening

**K**eppel Nantong and Keppel Cebu were the two latest yards to conduct an Avian flu containment exercise as part of Keppel O&M's Pandemic Preparedness roll-out.

These exercises prepare Avian flu

screening committees on proper procedures, as well as to familiarise and educate workers on the necessary steps to take in case a flu pandemic breaks out.

Workers entering Keppel Nantong's main gate on the morning of 1 February 2008 had their temperatures taken. Those found or suspected with fever were transferred to quarantine bays for monitoring. The temperature screening involving staff, workers, and subcontractors took over an hour.

Over in the Philippines, Keppel Cebu conducted a simulation drill for Avian flu on 23 November 2007. On their way to work at six in the morning, employees' temperatures were taken and suspected fever cases were brought to a designated

isolation area known as the "hot zone." Once there, they filled out a health declaration form before heading to the Keppel Cebu clinic for further medical check-ups.

Fok Swee Yin, President of Keppel Cebu said, "The bird flu exercise is part of Keppel's risk management strategy. We want to be prepared so that in the event of an outbreak, our workers can be safe and our yard operations can continue."

Such containment exercises were first held in Keppel's Singapore yards and then replicated in its yards worldwide. For example, Caspian Shipyard Company conducted its Avian flu exercise involving more than 50 workers in December last year.

## New Director in Engineering for FloaTEC LLC

**A** key industry veteran has been hired by FloaTec LLC to head up its engineering group and further strengthen its deepwater floating production (FPS), hull and mooring systems.

Edward Huang is well known in FPS circles, having played a key role in the development of the proprietary Extended TLP (ETLP®) design while at ABB. The design was subsequently acquired by J. Ray McDermott and Keppel FELS and has become one of the core solutions offered by FloaTEC LLC.

With over thirty years of experience in the ocean engineering field, Edward has



held key project engineering and management positions leading the detailed engineering design of Tension Leg Platforms, semisubmersibles, spars and FPSO floaters.

He holds numerous patents and has written several papers and articles on deepwater floating production systems. Edward has a strong technical background in global performance analysis, single and multi-body system analysis, global tendon fatigue, dry transportation, platform installation analysis and installation site support, software development, and model testing.

FloaTEC LLC is a joint venture of Keppel FELS and J. Ray McDermott. The company currently employs over 40 people and has recently executed a number of studies for deepwater and harsh environment projects in the Gulf of Mexico, Barents Sea, West of Shetlands and offshore Brazil.

# Nuts about NUTAS



Meeting new faces and catching up with familiar ones as Newcastle alumnus, CB Choo is introduced by Andrew Simpson to other NUTAS

For some, it may have been more than 20 years away from university, for others fewer, but that does not douse the enthusiasm of the Alumni of the Newcastle University upon Tyne (Newcastle) when they came together for their annual reunion here in Singapore.

They were excitedly swapping stories of their student years during their reunion at the Meritus Mandarin Singapore on 28 March 2008.

Sponsored and supported by Keppel O&M, the evening reception was hosted by Dr Andrew Simpson, Director of Executive Programmes and Senior Lecturer at the Newcastle University Business School.

CB Choo, Chairman/CEO of Keppel O&M, paid tribute to his alma mater saying, "Since the 1960s, Newcastle has been the cradle of some of the best and brightest in the Singapore offshore, marine and maritime sectors."

There are currently about 600 Singaporean alumni working in different sectors of the offshore and marine industry and that number looks set to grow.

Heralding this growth is the collaboration between Ngee Ann Polytechnic, Singapore Polytechnic and Newcastle. The two polytechnics have tied up with Newcastle to offer degree programmes in Naval Architecture with specialisations in Marine Engineering and Offshore Engineering.

With the buoyancy of the current offshore and marine industry, there is a need for more specialised manpower in Singapore. This degree programme provides significant increases in the technical expertise of the industry and Singapore will thus be fortified to boost its position in the global arena.

Referring to this collaboration, CB Choo added, "It gives me great satisfaction to note that in the coming years, our numbers will continue to swell. Newcastle, as you know, has an unparalleled reputation in both Naval Architecture and industry-based research."

He signalled Keppel O&M's ardent support of the programmes by mentioning that Keppel O&M will continue to send its employees on scholarships to study in the programmes.

Even as its alumnus reflects on its past with nostalgia, they look to the future by supporting the University's global initiatives and perhaps create a family of NUTAS, as the Newcastle alumni like to call themselves.

## Time to share

Some 880 digital watches have made their way to Grace Orchard School, Singapore Autism School, and Metta School, drawing squeals of delight from the students.

The timepieces were specially ordered and made for Keppel O&M in celebration of its fifth anniversary. They were distributed to the schools on 15 and 21 February 2008 in keeping with the Lunar New Year's festive spirit.

Amidst loud applause, the children received their watches from Keppel O&M Group HR officers, as well as representatives of Keppel Employees Union (KEU), Keppel FELS Employees Union (KFEU) and Shipbuilding and Marine Engineering Employees Union (SMEEU).



Union representatives from KEU, KFEU, and SMEEU bring cheer to students in homes during Lunar New Year celebrations



# Walking the innovation talk

Staying true to Keppel FELS' innovative spirit, Keppelites earned 11 awards – five gold and six silver – at this year's fourth annual National Innovation & Quality Circles (NIQC) Convention.

Ng Siam Gek, Senior Manager at the Ministry of Information, Communications and the Arts and a judge at the convention, said wise project selection and total commitment from both the Keppel IQC teams and senior management have produced such impressive results.

As the winning Keppelites competed, they were bearing out Keppel FELS' long tradition "to adopt, adapt and advance innovative solutions and ideas into practice."

CH Tong, MD/COO of Keppel O&M, congratulated the winning teams, saying, "To grow and thrive as a company, Keppelites must constantly adopt new work processes and technologies, as well as nurture an organisational culture that taps every employee's capability for greater innovation and productivity."

He also urged Keppelites to strive for the ultimate goal of making quality work and innovation a way of life, where everyone makes a difference.



Team Cradle-to-Grave members (in orange) talk about their Gold Award-winning project

Speaking on behalf of her SAF team, award recipient Chevron Jacqueline Lourdes said, "I'm very happy that we won a National Gold Award. My team mates and I had worked very hard on this project for six months last year. We feel good that our invention has benefited our division."

All winning Keppel teams received their certificates at an in-house awards ceremony on 15 February 2008.

## List of winners and projects

TEAM NAME / DEPT OR SECTION	PROJECT TITLE	AWARDS
Cradle to Grave Team / Production (Facility)	To reduce the frequent damage of luffing crane bus bar systems	GOLD
SAF Team / Production (Hull)	Block erection guides used in floating conditions	GOLD
Fusion Team / Production (Piping)	To improve the flat bar fitting process for leg jetting pipes fabrication	GOLD
TIME Team / Production (Electrical)	To reduce the difficulty in pulling big size cables	GOLD
MINDS Team / Engineering (CAD)	Innovatively combined bulkhead penetration to improve accuracy, clarity and reliability for effectiveness in global engineering operations	GOLD
Brainstormers Team / Engineering (Mechanical)	To improve the updating of weight control reports gleaned from arrangement drawings by using a central database	SILVER
Elite Team Human Resources	To improve communication of human resource policies and procedures to employees	SILVER
George 2 Team Security	Control of leftover marine paints, used oil and scrap metals in the Keppel FELS yards	SILVER
GS IV Team / Production Engineering & Planning	Standardisation of bracket and collar	SILVER
QUANTUM Team Quality Assurance	Monitoring of panel inspection status through Quality Record Management	SILVER
A.P.I. (Adept Pipers Invincible) Team / Engineering (Piping)	Enhance job quality and efficiency for new piping staff	SILVER



CB Choo gives Cote d'Ivoire Foreign Affairs Minister (CB Choo's right) and delegates an overview of the Keppel FELS yard



Nelson Yeo and Mark Albers on a tour of FPSO Saxe Batuque before its sailaway

# Host to the world

With more than 90% of its businesses coming from outside Singapore, Keppel O&M continues to play host to visitors from around the globe.

## Hailing from the ivory coast

**H**E Youssouf Bakayoko, the Foreign Affairs Minister of Cote d'Ivoire, paid a friendly visit to Keppel O&M.

The Minister and his delegation were in Singapore for two days from 6 March to explore trade opportunities and to seek bilateral economic cooperation. The visit was organised by Singapore's Foreign Affairs ministry.

Besides untapped oil resources, the West African Republic is also known for agricultural produces like coffee and cocoa.

The envoy exchanged ideas with senior management before touring the Keppel FELS Pioneer Yard, Keppel O&M's associate company. Singapore Petroleum Company, was also present to lend insights to its business.

## Oil majors in Keppel Shipyard

Keppel Shipyard was a flurry of activities in the month of March as the yard hosted visits from ExxonMobil, Petrobras and Statoil Hydro.

Mark Albers, the Senior Vice President (VP) of ExxonMobil Corporation, Chong Seng Kwa, Regional Director of ExxonMobil Asia Pacific and Steve Greenlee, Asia Pacific VP of ExxonMobil Exploration Company, called on Nelson Yeo, ED of Keppel Shipyard on 25 March and took a tour onboard the *FPSO Saxe Batuque* at the Anchorage prior to her sailaway.

*FPSO Saxe Batuque* completed her conversion at Keppel Shipyard and is being leased to ExxonMobil by Single Buoy Mooring (SBM). The FPSO also celebrated her naming ceremony on 9 March.

ExxonMobil has been very active in their support of the safety initiatives put in place by Keppel Shipyard and this visit

served as an opportunity to view first hand the results of our safety journey since the start of ExxonMobil's involvement from 2001.

Barely a week later, on 1 April 2008, senior officials of Petrobras visited Keppel Shipyard to learn more about the yard's activities and to tour projects which the yard is converting for its oil fields in Brazil. CB Choo, Chairman/CEO of Keppel O&M, welcomed the delegation.

The vessels which include *FPSO Cidade de Sao Mateus* being converted for Prosafe and *FPSO Espirito Santo* being converted for SBM and Shell are bound for offshore Brazil.

Chris Howell, Shell's FPSO Lead (TAMBABV Site office), gave a presentation on the capabilities of the *FPSO Espirito Santo* while Robert Mountjoy, Prosafe's Project Manager for *FPSO Cidade De Sao Mateus*, gave a technical report on his project. The team from Petrobras was then led around the yard and had a better look at the vessels up close.





## The Petrobras delegation catching up with Keppel Shipyard and Prosafe during their stopover in the yard

The next day, a delegation from Statoil Hydro (Statoil) called at Keppel Shipyard. Apart from visiting the yard, Statoil wanted to see first hand the progress of the FPSO *Maersk Ngujima-Yin*.

Maersk Contractor, the owner of *Ngujima-Yin*, has recently won a contract from Statoil to provide a converted FPSO for the Peregrino field in Brazil. This conversion will be carried out by Keppel Shipyard in the fourth quarter of 2008.

*Maersk Ngujima-Yin* was named on 2 February 2008 and is due to leave for the Woodside Vincent field in offshore Australia shortly. She is capable of handling 120,000 barrels of oil per day and has a storage capacity of 1.2 million barrels of crude.

### Norwegians southbound

Technology leadership matters and so do people. Keppel O&M holds these values dear as it establishes itself as a leader in its field. The company shared its philosophy and industry knowledge with visitors from the Norwegian University of Science and Technology (NTNU).

Over two days from 11 March 2008, 173 marine technology and mechanical engineering students and professors learnt about the rigbuilder's background, products, and research and development

efforts. They also toured Keppel's yards, gaining valuable insights to their operations.

The Norwegian university organises such trips for its third and fourth year students, who are on a five-year programme, to help them gain exposure to industries related to their field of study.

This visit was initiated by Keppel Norway, Keppel O&M's wholly-owned subsidiary which specialises in technology and engineering services with a focus on drilling systems and modular drilling units.



## Strengthening ties

CH Tong, MD/COO of Keppel O&M, and Yan Naing Myint, President of Caspian Shipyard Company (CSC) met with the President of State Oil Company of Azerbaijan (SOCAR), Rovnag Abdullayev and General Manager of Investments, Vagif Aliyev on 3rd March 2008. During the visit, CH Tong recounted the smooth 10-year relationship that CSC has enjoyed with SOCAR. He also thanked SOCAR for its help and support in providing CSC to deliver its projects on time and within budget.



With the new laundromat, residents do not have to depend on the weather to get clean clothes

The web is for everyone as residents take turns to get free access to the internet

# Facilities at Acacia Lodge improved for the benefit of residents

Residents of Keppel Housing's Acacia Lodge can now look forward to new amenities when they return home after a hard day's work.

Acacia Lodge has recently upgraded its facilities, which included a laundromat, a spanking new internet centre, a new gymnasium and new pool tables.

Mohammed Bazlurrahman from Bangladesh who has been a resident with Acacia Lodge since its opening, welcomed the upgrade. "It has helped to ease our chores after a long day at work. With the new washing machines and dryers we can send our clothes for washing and drying which is much faster than doing it ourselves and waiting for it to dry," he beamed.

The machine shop supervisor from Keppel Shipyard (Tuas) added, "The variety of meal options in the canteen has also increased. So while waiting for our clothes, we would eat our dinner at the canteen instead of cooking."

The canteen has also been spruced up, now boasting new food vendors and plasma televisions. Residents can catch their favourite programmes, such as the

ESPN Sports Channel whilst hanging out with their friends at the canteen.

Back in their rooms, residents have new furnishings such as lockers, dining tables and chairs, shelves and improved bed support.

Alangaram Jesu Savier, a hull shop technician from Keppel Shipyard (Gul) commented on the room upgrades, "The new lockers, shelves, table and chairs have made our home more comfortable. Also, the mini-mart is bigger now and we can buy a good variety of foodstuff from there."

Another useful service of the lodge is the English language classes that new residents have to attend. These lessons are conducted in the study and training rooms in the lodge. Qu Yuan Liang, a newcomer at Acacia Lodge said of the course, "These lessons are very helpful. My English is now better and I can talk better to my other colleagues in English."

In addition to the improved amenities, the lodge frequently hosts roadshows from telco companies to provide comprehensive services to its residents. For instance, M1 recently held its second roadshow at the lodge, attracting residents

with free gifts when they signed up with a mobile phone plan. The Salvation Army also runs a monthly bazaar at the lodge for the residents.

These activities are complemented by events held by the Ministry of Manpower and the Police. Recently, the team from the Acacia Foreign Resident on Patrol (AFR-OP) project, which has residents patrolling the neighbourhood with the police and Residents' Committee members, was awarded the SILVER award for the South West CDC Community Safety and Security Programme for 2008. The AFR-OP seeks to maintain order in the community ensuring that all residents adhere to the rules of Acacia Lodge.

Steven Lee, General Manager of Acacia Lodge said, "With these upgrades, we hope to improve the quality of life of our residents and enable Acacia Lodge to be more self-contained.

"From a wet market to a fully furnished gym to free internet access, I think there is something for everyone when they return home from work." Indeed, with the new and improved Acacia Lodge, residents will have even more things to do in their free time.



# More than the sum of its parts



The little red dot has produced the world leader in the offshore and marine industry. This was brought home to bear in the documentary “More than Mettle: The Keppel O&M Story” that aired over both Mediacorp Channel 5 and Channel NewsAsia-International in March 2008.

Fast-paced, taut and succinct, the documentary traced the phenomenal growth of Keppel O&M since it was created in 2002 through the integration of Keppel’s offshore and marine businesses. By focusing on technology and human capital development, Keppel O&M was able to ride on the rapid surge in the offshore and marine industry in recent years. From less than 10 projects over five years ago, the Group is today carrying out 43 major newbuildings and conversions.

As Hoe Eng Hock, ED of Keppel Singmarine observed, “The documentary shows very clearly the solid teamwork that we have in Keppel, and with classification societies, surveyors and customers. Our strong focus towards a common goal has

allowed us to build the impressive rigs and vessels seen in the show.”

Janna Low, Personal Assistant, Keppel O&M, agreed. “The documentary was very impressive. Seeing the breadth and scale of our operations from Singapore to Brazil is amazing. I am sure many people will be encouraged to join Keppel O&M.”

As Ang Lai Lee, Senior Executive, Group Corporate Communications, noted, “I learnt a lot about Keppel’s initiatives in technology. To see the tests on a 3-D model of the spudcan – the footing of a jackup rig – and to visually connect these tests with research that will go towards new jackup rig designs for Arctic oil exploration was extremely educational.”

The documentary went through the history of the three main companies that make up the Group: Keppel FELS, Keppel Shipyard and Keppel Singmarine. Together, they have a combined heritage of more than 200 years. It showed the resilience and survival instincts of Keppelites who persevered amid enormous challenges to grow its

businesses through both good and challenging times.

An amplification of such a spirit can be seen in the expansion of yard capacities in the course of its history. In 1982, Keppel Shipyard commissioned its 330,000 dwt Raffles Dock when shiprepair was facing a downturn. At the opening ceremony of Raffles Dock, the late Minister for Finance, Hon Sui Sen, captured the resilient spirit with these words, “Keppel’s new dock investment is an act of faith in her ability to win business in the fiercest competition at prices which will give an adequate return.”

Keppel FELS and Singmarine were to repeat this “act of faith”. In 1986, Keppel FELS acquired the former Mitsubishi yard while the offshore industry was in the doldrums. In 1989, Keppel Singmarine bought the former Marathon Letourneau yard.

This “faith” was strategy. Keppel’s disciplined approach to capital investments, even in challenging times, has positioned the Group to profitably meet future demand growth.

Senior Contracting Officer Yenley Beh, who has been working for two years in Keppel Shipyard, said, “I watched the documentary with my parents. To see the challenges that Keppel has overcome to achieve its current standing, has made me proud to be a member of this company.”

All in all, the documentary has effectively portrayed the grit and gumption displayed by Keppelites. It hopes to communicate that spirit to future Keppelites.

The TV documentary is loosely based on the book by the same title published by Editions Didier Millet and Keppel O&M in December 2007. The book is available on sale at major bookstores.

# Raising the bar



In-house Legal Counsel Tan Min Hui takes a proactive approach to handling Keppel O&M legal matters

**T**an Min Hui, Legal Counsel at Keppel O&M, won the International Bar Association (IBA) Corporate Counsel Forum Scholarship 2008.

The clinch follows her paper submission to IBA on a corporate counsel's role in

strengthening an enterprise. Competing against many other worldwide entries representing various jurisdictions, Min Hui's winning piece was selected based on legal argument, research, style, logic, originality, and overall content quality.

Min Hui said, "I am very honoured to receive this scholarship. As the first of its kind, the award reflects IBA's recognition of corporate counsels as important assets to organisations and a need for their professional development.

"This is in line with Attorney-General Chao Hick Tin's speech in March that the need for in-house lawyers would grow as the Government pushes towards making Singapore a choice location for multinationals."

The inaugural scholarship is aimed at fostering the professional development of lawyers working in-house. Previously, IBA

has only given out scholarships to lawyers in private practice.

"Participating in the scholarship was an excellent opportunity to put Singapore and Keppel on the map," Min Hui said.

The scholarship gives Min Hui full access to professional development opportunities by the IBA for two years, which included an all-expenses paid trip to the IBA Seventh Annual Corporate Counsel Conference in Frankfurt, Germany from 19 to 21 February 2008.

Established in 1947, the IBA is the world's leading organisation of international legal practitioners, bar associations and law societies. The association influences the development of international law reform and shapes the future of the legal profession throughout the world.

## MOSS Symposium

**W**hen the Centre for Offshore Research and Engineering (CORE) informed Keppel O&M that it was organising a symposium, the latter readily agreed to be a main sponsor for the event.

Entitled "Marine Operations Specialty Symposium" or MOSS for short, the event was held at the National University of Singapore (NUS) from 5 to 7 March 2008.

Jointly organised with ASME Ocean Offshore and Arctic Engineering (OOAE), the symposium covered offshore operation and installation related issues.

The symposium draw tremendous

interest from the industry and debate during the question and answer session was lively, with both professionals and academics offering suggestions and ideas on areas of improvement.

Participants found the symposium to be helpful and enlightening. Tan Cheng Hui, GM (Engineering) of Keppel Singmarine said "I think symposiums are a useful tool for interaction between industry and academia partners. These days, jobs are getting a lot more complex and no one organisation has all the resources or competency to carry out the job from start to end. This has resulted in many specialist companies doing different aspects of the job."

Cheng Hui elaborated, "For example, the Spar hull and topside could be fabricated on land by Keppel FELS whilst the transportation of the Spar components to the offshore field could be carried out by a company focusing on specialised heavy-lift transport vessels.

"The lifting operation of the topside to the floater is a very precise job normally carried out by companies such as Technip and J. Ray McDermott. Finally the installation of the risers could be done by yet another company such as Acergy. Thus, it is good for industry players to come together and discuss the various developments in the industry regularly."



# Keppel Cebu supports local road project

The residents of Barangay Looc have a lot to smile about these days thanks to a publicly funded diversion road that was opened to the public in January 2008. The new one kilometre road that cuts through the community was built by the Lapu-Lapu City government with the support of the local business community and individual land owners.

Private land owners, including Keppel Cebu Shipyard Land, Inc., owner of the property where Keppel Cebu Shipyard, Inc. (Keppel Cebu) operates, supported this worthy endeavour by participating in the government's expropriation proceedings on the affected land. Part of the diversion road was built on 110 square metres of unused shipyard property.

Fok Swee Yin, President of Keppel Cebu said, "Aside from providing employment to the Cebuanos, we are also committed to the improvement of community life by way of supporting government-led projects such as this."

Dolores P. Tampus, Keppel Cebu's Finance Manager and a long time resident of Lapu-Lapu City, added, "The road has also



Home is now easier for employees to get to as they use the newly opened road beside the yard

provided easy and safe access into the community especially by ambulances and fire trucks that need to respond to emergencies in the area."

"The new road is very convenient to the residents, especially those who go to work by public transport, since it greatly eases traffic and cuts the travel time from the house to the place of work," mused Manuel Adolfo, Keppel Cebu crane operator.

Prior to the opening of this new access road, commuters had to circumnavigate the barangay by using the traffic-choked main roads around the district.

## The benefits of co-operation



Business aside, members of the Keppel FELS Co-op shared an evening of fun and laughter

The Keppel FELS Multi-Purpose Co-operative Society (Keppel FELS Co-op), a non-profit organisation, that manages the canteens in Keppel FELS's yards, had a sterling year in 2007.

This was recognised and applauded at the

Co-ops 30th Annual General Meeting (AGM). Members of the Co-op also approved motions on the agenda which included recommendations on the allocation of funds during the meeting which was held at the Marina Mandarin on 4 April 2008.

But it was not all business as the evening unwound into a fun-filled one as attendees relished the good food, games, performances and lucky draw prizes.

The Keppel FELS Co-op has been serving its members through organising social events since its inception in 1978. It also finds diverse ways to enhance the quality of life of its members. Some of these include annual rebates, dividend payouts, bursary awards, bereavement grants, insurance coverage, retirement awards, free movie tickets and complimentary passes to the Singapore Zoological Gardens.

For membership, contact the Keppel FELS Co-op at 6863 7053.

# Around our yards

OffshoreMarine tracks works at various Keppel yards.

MAERSK KALMAR



Ocean LYNX



## Singapore

### Keppel Shipyard

Name : **MAERSK KALMAR**  
 Owner : Maersk Ship Management  
 Country : Holland  
 Type : Container Ship  
 DWT : 88,669  
 GRT : 80,942  
 Date : 24 March – 7 April 2008  
 Scope : Work included the full blasting of the vertical and flat bottom of the hull, the installation of a new oil-and-water separator and the renewal of the rudder pintle bush

Name : **Ocean LYNX**  
 Owner : Ocean Tankers Pte Ltd  
 Country : Singapore  
 Type : Tanker  
 DWT : 12,431  
 GRT : 7,354  
 Date : 21 January – 31 March 2008  
 Scope : Work included the conversion of the double hull; the installation of the thermal oil fired boiler and the thermal oil heating coil

the cargo tank. Drydock work took place and the gas detection and level gauge system was installed for ballast and cargo tanks.

## The Philippines

### Keppel Cebu Shipyard

Name : **CEC Courage**  
 Owner : MS Courage Sciffahrtsgesellschaft MbH  
 Country : Germany  
 Type : Cargo  
 DWT : 8,438  
 GRT : 6,714  
 Date : 27 January – 17 February 2008  
 Scope : Miscellaneous tank cleaning work took place. The external hull and hold were blasted and painted. Bow thruster repair and maintenance took place. Other work included electrical works and various motor overhauls, piping and valves works in the engine room and the repair

and maintenance of safety equipment.

Name : **Granada Carrier**  
 Owner : Norbulk Shipping UK Ltd.  
 Country : United Kingdom  
 Type : Reefer Cargo  
 DWT : 6,064  
 GRT : 4,830  
 Date : 3-11 March 2008  
 Scope : Work included cleaning of the cargo and bunker tank, blasting and painting of the hull, miscellaneous steel work, servicing of sea valves and repair of the hatch cover also took place

Name : **Concord**  
 Owner : Glory Ship Management  
 Country : Singapore  
 Type : Tanker  
 DWT : 37,642  
 GRT : 22,602  
 Date : Work in progress  
 Scope : The damaged bottom of the hull was repaired. Other work included the cleaning of the HFO tank and other normal drydocking work.





### Keppel Batangas Shipyard

Name : **Maritime Jingan**  
 Owner : MSI Ship Management Pte. Ltd.  
 Country : Singapore  
 Type : Chemical oil tanker  
 DWT : 44,418.60  
 GRT : 29,211  
 Date : 26 February – 3 April 2008  
 Scope : Cargo oil and slope tanks were gritblasted and painted. Power tooling and painting of the water ballast tank also took place. The hull was cleaned blasted and painted.

Name : **TIGRIS**  
 Owner : Niovis Shipping Co. S.A.  
 Country : Greece  
 Type : Bulk Carrier  
 DWT : 52,454  
 GRT : 30,057

Date : March 16-31 2008  
 Scope : The cargo hold was blasted and painted. The hull was cleaned and painted.

### Subic Shipyard and Engineering

Name : **MT QURTUBA**  
 Owner : Nordic Maritime Services AS  
 Country : Norway  
 Type : Chemical Carrier  
 DWT : 44,954  
 GRT : 28,981  
 Date : 11 February – 12 March 2008  
 Scope : Drydocking took place. The sea valves were overhauled and the stern tube and bush and intermediate shaft were renewed. Welding of the drip tray foundation in the main deck port/starboard

took place. The pipes in the engine room were renewed.

Name : **MV ONOE**  
 Owner : Hachiuma Steamship Co., Ltd.  
 Country : Japan  
 Type : Bulk Carrier  
 DWT : 172,549  
 GRT : 87,473  
 Date : 4-22 March 2008  
 Scope : Drydocking took place. Work included hull preservation and a survey of the tailshaft. The main engine turbocharger was overhauled and the air cooler was cleaned and pressure tested. The boiler was cleaned and the fire and general service /bilge pump suction pipe was renewed.

# Keppel Group Newsbytes

—●—

**Keppel Seghers Belgium N.V.** has secured a US\$54.2 million contract from Amotfors Energi of Sweden. The turnkey project is for the design and building of a Combined Heat and Power (CHP) waste-to-energy plant. When completed in 2010, the plant will process nearly 70,000 tonnes of waste per year to generate steam and electricity. With the exception of civil works, the CHP waste-to-energy plant will be entirely designed and built by Keppel Seghers. It will also ensure emissions surpass stringent EU requirements.

—●—

**Keppel Logistics** has been awarded a contract by fast moving consumer goods giant Unilever to provide cold-chain logistics services for its popular ice cream brands, Ben & Jerry's and Walls. To handle Unilever's increasing business in the region, Keppel Logistics has expanded its cold-chain capacity by 65%.

Keppel Logistics also won a contract from NTUC FairPrice to provide warehousing and distribution services for some products. Serving as an overflow facility, it has been NTUC Fairprice's logistics partner since 2001.

—●—

**Singapore Petroleum Company (SPC)** and SPH MediaBox Office (SPH MBO) are jointly introducing Out-of-Home digital advertising at SPC service stations across the island. The next time a car owner pays for his petrol or a shopper buys his groceries from a SPC service station, he will be greeted by a brand new advertising medium – SPH MBO plasma screen.

This is the first partnership between SPH MBO and a petrol retail chain, and is also the first time a major petrol retail chain is being used extensively as an advertising channel in Singapore. Besides the plasma screens, SPH MBO and SPC will be extending their partnership to develop other forms of outdoor media at SPC stations.

—●—

On 26 February, **Keppel Land** presented concept plans for future phases of Saigon Centre to distinguished Singapore and Vietnam delegates in Hanoi. The contingent was led by His Excellency S R Nathan, President of the Republic of Singapore and Vietnam's Deputy Prime

Minister Hoang Trung Hai. Saigon Centre is a mixed-use development strategically located along two hectares fronting Le Loi Boulevard, the epicentre of Ho Chih Min City's Central Business District.

Meanwhile, Keppel Land and local joint venture partner, Tan Truong Co. Ltd received from the Ho Chi Minh City People's Committee the investment certificate to build a waterfront residential development in District 7. The site is just 6.5 km away or a mere 15-minute drive from the City's Central Business District. This is the second investment certificate Keppel Land has received in Vietnam over the last 12 months.

Over in Indonesia, Keppel Land unveiled a township in *Jakarta City* in East Jakarta on 8 March. Spreading over 270 hectares, the township will be developed in phases over 10 to 15 years. The first phase, comprising four clusters of 994 land houses with modern facilities, is currently under construction.



Briefing the President on developments in Vietnam. (From left) Kevin Wong, Group CEO of Keppel Land; Lim Chee Onn, Executive Chairman of Keppel Corporation; Hoang Trung Hai, Deputy Prime Minister of Vietnam and HE S R Nathan, President of Singapore



# Global Reach

## **Keppel Offshore & Marine Ltd** (Head Office)

50 Gul Road Singapore 629351  
Tel: 65 6863 7200  
Fax: 65 6261 7719  
www.keppelom.com

## **SINGAPORE**

**Keppel FELS Limited**  
(Pioneer Yard 1 – Head Office)  
50 Gul Road Singapore 629351

(Pioneer Yard 2)  
55 Gul Road Singapore 629353

(Shipyard Road)  
31 Shipyard Road Singapore 628130

(Crescent Yard)  
60 Shipyard Road Singapore 628131

Tel: 65 6863 7200  
Fax: 65 6261 7719  
Email: marketing@keppelfels.com  
www.keppelfels.com  
Contact Persons: Michael Chia, Executive Director  
S Jaya Kumar, General Manager (Marketing)

## **Keppel Shipyard Limited** (Tuas Yard – Head Office)

51 Pioneer Sector 1 Singapore 628437  
Tel: 65 6861 4141  
Fax: 65 6861 7767

(Benoi Yard)  
15 Benoi Road Singapore 629888  
Tel: 65 6861 6622  
Fax: 65 6861 4393

(Gul Yard)  
55 Gul Road Singapore 629353  
Tel: 65 6861 3007  
Fax: 65 6862 3645/7

www.keppelshipyard.com  
Email: ks@keppelshipyard.com  
Contact Persons: Nelson Yeo, Executive Director  
Mah Chan Wah, General Manager (Commercial – Shiprepair)

## **Keppel Singmarine Pte Limited**

15 Benoi Road Singapore 629888  
Tel: 65 6861 6622  
Fax: 65 6862 1792  
Email: singmarine@keppelsingmarine.com  
www.keppelsingmarine.com

Contact Persons: Hoe Eng Hock, Executive Director  
Poon Tai Lum, Deputy General Manager (Commercial/Marketing)

## **Offshore Technology Development Pte Ltd**

55 Gul Road Singapore 629353  
Tel: 65 6863 7409  
Fax: 65 6862 3465  
Email: felsotd@pacific.net.sg  
Contact Person: Dr Foo Kok Seng, General Manager

## **Deepwater Technology Group Pte Ltd**

50 Gul Road Singapore 629351  
Tel: 65 6863 7163  
Fax: 65 6863 1739  
Email: aziz.merchant@keppelom.com  
Contact Person: Aziz Merchant, General Manager

## **Asian Lift Pte Ltd**

23 Gul Road Singapore 629356  
Tel: 65 6668 4222  
Fax: 65 6668 4333  
Email: asianlift@asianlift.com.sg  
Contact Person: John Chua, General Manager

## **Keppel Smit Towage Pte Ltd**

23 Gul Road Singapore 629356  
Tel: 65 6668 4222  
Fax: 65 6897 8056  
Email: kst@keppelsmit.com.sg  
Contact Person: Ben Chew, General Manager

## **AUSTRALIA**

### **Keppel Prince Engineering Pty Ltd**

Level 7, 3 Bowen Crescent  
Melbourne, Victoria 3004, Australia  
Tel: 61 3 9820 9033  
Fax: 61 3 9866 6110  
Email: echiam@ozemail.com.au  
Contact Person: Charles Chiam, Director

## **AZERBAIJAN**

### **Caspian Shipyard Company Ltd**

South Bay, KMNF Basin  
Baku AZ1023, Azerbaijan  
Tel: 994 12 449 9930  
Fax: 994 12 449 9931  
Email: csc@csc.az  
Contact Person: Yan Naing Myint, President

## **BRAZIL**

### **Keppel FELS Brasil SA**

Rua da Assembléia, n°10, 21° andar-sala 2113  
Centro, Rio de Janeiro, RJ, Brazil. CEP: 20011-00  
Tel: 55 21 2102 9400  
Fax: 55 21 2224 2248  
Email: daniel.chang@keppelfels.com  
www.kfclsbrasil.com.br  
Contact Person: Daniel Chang, President & CEO

## **BULGARIA**

### **Keppel FELS Baltech Ltd**

54 Debar Street, Varna 9000, Bulgaria  
Tel: 359 52 684 250/1  
Fax: 359 52 684 252 (Admin)  
Email: office@fels.bg  
Contact Person: Lyudmil Stoev, General Manager

## **CHINA/HONG KONG**

### **Keppel Nantong Shipyard Ltd**

No. 9 Yan Jiang Road, Nantong City, Jiangsu Province  
P.R. China 226005  
Tel: 86 513 8530 0000  
Fax: 86 513 8530 0011  
Email: taikeew.lee@keppelnantong.com  
Contact Person: Lee Tai Kwee, President

## **Keppel FELS Engineering Shenzhen Co., Ltd.**

3th Floor, Chiwan Petroleum Building  
Chiwan Road No. 5  
P.R. China 518068  
Tel: 86 755 26851902, 86 755 26851959,  
65 68637215 (Singapore Contact)  
Fax: 86 755 26851670  
Email(China): jongheng.ho@kfclshenzhen.com  
Email (Singapore): jongheng.ho@keppelfels.com  
Contact Person: Ho Jong Heng, General Manager

## **INDIA**

### **Keppel FELS Offshore and Engineering Services**

**Mumbai Pvt Ltd**  
Unit Number 3, 8th Floor, Prism Tower-A  
MindSpace, Link Road, Goregaon (West)  
Mumbai 400 062, India  
Tel: 91 22 4001 8888  
Fax: 91 22 4001 8898  
E-mail: anant.shukla@kfclsmumbai.com  
Contact Person: Anant Shukla, General Manager

## **INDONESIA**

### **Bintan Offshore**

Kampung Budi Mulia, RT.02/RW.01, Desa Sei Walang  
Kecamatan Bintan Timur, Kabupaten Bintan  
Propinsi Kepulauan Riau, Indonesia  
Tel: 62 771 462 2297  
Fax: 62 771 462 2298  
Email: kumchoon.leong@keppelfels.com  
Contact person: Leong Kum Choon, Deputy Shipyard Manager

## **JAPAN**

### **Regency Steel Japan Ltd**

46-59 Nakabaru, Tobata-ku  
Kitakyushu, Fukuoka 804-8505 Japan  
Tel: 81 93 861 3103  
Fax: 81 93 861 3114  
Email: hyyip@r-sj.com  
Contact person: Dr Yip Hee Yan, President

## **KAZAKHSTAN**

### **Keppel Kazakhstan LLP**

SEZ "Seaport Aktau", Aktau 130000, Mangistau Oblast  
Republic of Kazakhstan  
Tel: 7 3292 571 100  
HP: 7 300 528 4885  
Fax: 7 3292 571 110  
Email: pw.yick@kkl.kz  
Contact Person: Yick Ping Wong, General Director

## **NETHERLANDS**

### **Keppel Verolme BV**

Prof. Gerbrandyweg 25, 3199 KK Rotterdam-Boleek  
Harbour no. 4550, P O Box 1001, 3180 AA Rozenburg  
The Netherlands  
Tel: 31 181 234300  
Fax: 31 181 234346  
Email: mail@keppelverolme.nl  
www.keppelverolme.nl  
Contact Person: Harold W.M. Linssen, Managing Director

## **NORWAY**

### **Keppel Norway AS**

Strandgaten 147, P O Box 425  
4304 Sandnes, Norway  
Tel: 47 5160 2500  
Fax: 47 5160 2510  
Email: Inge.Oliversen@keppelnorway.com  
www.keppelnorway.com  
Contact Person: Inge Oliversen, President

## **PHILIPPINES**

### **Keppel Philippines Marine Inc**

Unit 3-B Country Space 1 Building  
Sen. Gil Puyat Avenue, Salcedo Village  
1200 Makati City, Philippines  
Tel: 63 2 892 1816  
Fax: 63 2 815 2581, 63 2 892 4604  
www.keppelphilippinesmarineinc.com  
Email: mhq@keppelpm.com /commercial@keppelpm.com  
Contact Person: Toh Ko Lin, President

## **Keppel Batangas Shipyard**

Barrio San Miguel, +201 Bauan, Batangas  
Philippines  
Tel: 63 43 7271532 to 36  
Fax: 63 43 7271453  
Email: kbs@keppelpm.com  
Contact Person: Kok Boon Heng, President

## **Keppel Cebu Shipyard Inc**

Dad Cleland Avenue, 6015 Lapu-Lapu City,  
Cebu, Philippines  
Tel: 63 32 340 0081 to 89  
Fax: 63 32 340 0068, 63 32 340 0096  
Email: marketing@keppelcebu.com.ph  
www.keppelcebu.com.ph  
Contact Person: Fok Swee Yin, President

## **Subic Shipyard and Engineering, Inc.**

Cabangaan Point, Cawag  
2209 Subic, Zambales, Philippines  
Tel: 63 47 232 2380  
Fax: 63 47 232 3350, 63 47 232 3883 to 84  
Email: all@subicship.com  
Contact Person: Mok Kim Whang, President

## **UNITED ARAB EMIRATES**

### **Arab Heavy Industries**

P O Box 529, Ajman, UAE  
Tel: 971 6 526 3232  
Fax: 971 6 526 3233  
Email: ahiaeme@emirates.net.ae  
www.ahi-uae.com  
Contact Person: Leong Yew Kong, Managing Director

## **USA**

### **Keppel AmFELS Inc.**

PO Box 3107, 20000 South Highway 48  
Brownsville, TX 78523, USA  
Cell: 1 956 592 6149  
Tel: 1 956 838 3187 Fax: 1 956 831 6220  
Email: g.tan@keppelamfels.com  
Contact Person: Tan Geok Seng, President & CEO

## **Keppel Offshore & Marine USA Inc.**

5177 Richmond Ave, Suite 1065  
Houston, TX 77056, USA  
Tel: 1 713 840 8811  
Fax: 1 713 840 1198  
Email: yewyuen.chow@keppelOM-usa.com  
Contact Person: Chow Yew Yuen, President

## **FloaTEC, LLC**

14701 St. Mary's Lane  
Suite 250, Houston, TX 77079  
Main Tel: +1 281 870 5200  
Main Fax: +1 281 870 5210  
Email: businessdevelopment@floatec.com  
Website: www.FloaTEC.com  
Contact Person: Eric H. Namtvedt, President  
Direct Tel: +1 281 870 5556  
Mobile: +1 281 381 2781  
Email: ehnamtvedt@floatec.com

## **Keppel Marine Agencies, Inc**

(Texas Office)  
5177 Richmond Ave, Suite 1065  
Houston, TX 77056, USA  
Tel: 1 713 840 1188  
Fax: 1 713 840 1960  
Email: mike.holcomb@kmaihouston.com /  
Contact Person: Michael Holcomb, President/Director  
john.bajor@kmaihouston.com  
Contact Person: John C Bajor, Marketing Manager

## **(New Jersey Office)**

15 Huddy Avenue, PO Box 417  
Highlands, New Jersey, USA  
Tel: 1 732 872 8800  
Fax: 1 732 872 8801  
Email: keppelnj@comcast.net  
Contact Person: John J. Bajor, Director

## **VIETNAM**

### **Keppel FELS Limited**

Petrovietnam Tower, Suite 150M  
9 Hoang Dieu Street, Ward 1, Vung Tau City  
S.R. Vietnam  
Tel: 84 64 850098  
Fax: 84 64 850089  
Email: john.chin@keppelfels.com  
Contact Person: John Chin, Country Manager

# Another first for Brazil with *P-51*



On 16 March, Keppel FELS Brasil, achieved yet another milestone. For the first time in Brazil, the flare tower was installed on the deckbox of a rig before the marine mating took place.

The operation, which took place on the *P-51*, a Floating Production Unit, took three hours and can be considered as a turning point in platform construction as the flare tower is usually installed after the mating.

According to José Pedro, *P-51* Project Director, to install the flare before the marine mating occurs, is unprecedented: “Until today this operation has never been done in Brazil. In order for the procedure to take place successfully, Technip’s engineering team did a detailed study.

“During the course of this study, it was observed, through effort calculus, and structural reinforcement, that it would be possible to install the flare at this stage of the job. The procedure was done successfully. We have already decided that the same operation will be done for *P-56*.”

With the successful completion of this project, 85% of the *P-51* has been completed. 66% of national content was used to build the *P-51*.

Unlike its sister vessel *P-52*, whose lower hull was built in Singapore and the upper hull in Brazil, the construction of *P-51* is completely undertaken in Brazil, except for the four 1,000-tonne column nodes, which were completed by Keppel FELS in Singapore in December 2005.

**The *P-51* sets another milestone for Brazil**