Vol. 17 Issue 23 **22 November 2018**

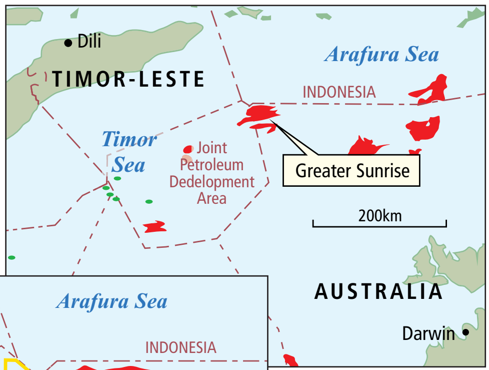
ASIA OIL AND GAS NEWSLETTER

BREAKING NEWS AND ANALYSIS FROM ACROSS ASIA

Shell sells Sunrise $300m stake

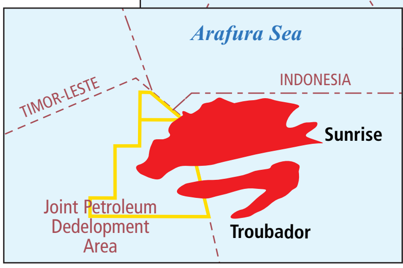
Shell has sold its stake in the **Greater Sunrise** gas project in the Timor Sea to the Timor-Leste government for US $300m.

Located 150km southeast of Timor-Leste and 450km northwest of Darwin, Australia, the Greater Sunrise field area has been undeveloped for years due to maritime border disputes between Australia and Timor Leste and differing ideas on how to develop the area.



The two options are an onshore LNG plant in Timor Leste or a Floating LNG project. Greater Sunrise is operated by Australia's Woodside.

The Greater Sunrise area holds the **Sunrise** and **Troubadour** gas and condensate fields. The fields were discovered in 1974 and hold around 145.33 Bcm (5.13 Tcf) of gas and 225.9m bbl of condensate.



The Timor-Leste government wants to develop the Greater Sunrise fields through a pipeline to the coast of Timor-Leste and an onshore LNG processing plant in Beaço.

Shell Australia's executive vice president, Zoe Yujnovich, said the deal would allow the Timor-Leste government and joint venture partners to develop the Greater Sunrise project.

"We respect the Timor-Leste government's determination to develop the Sunrise fields through an onshore LNG facility on its south coast. Although we formed different views about the optimal development scenario, we understand the priorities of the Timor-Leste government and wish it well in pursuing its aspirations to develop this important resource for the nation," Yujnovich said.

"This sale aligns with our global strategy to reshape Shell into a simpler and more resilient company. Our Australian portfolio remains strong as operator of both the QGC onshore natural gas project, **Prelude** FLNG and significant positions in the **Gorgon** and **North West Shelf** LNG projects," Yujnovich added.

Timor-Leste's Special Representative Xanana Gusmão said: "Timor-Leste appreciates Shell's willingness to sell its interests in the Greater Sunrise project. Shell's attitude throughout the negotiations shows that it is ready to consider not only its commercial interests but also the interests of small nations."

● In October, US major ConocoPhillips sold its equity in Greater Sunrise.

Sapura scoops $417m deals

Malaysia's Sapura Energy has won contracts in Malaysia and Mexico worth a total of US $417m (1.75 Bn ringgit).

Sapura said that the new contracts lifted the company's order book to $4.3 Bn (18 Bn ringgit), and total contract wins to-date for this financial year to $1.7 Bn (7 Bn ringgit).

Subsidiary Sapura Subsea Services will undertake the workload.

Sapura Subsea will provide underwater services, which include utilisation of its vessels, air and saturation diving, and remotely operated vehicles. The work scope will also cover inspection, maintenance and repair work to support the Petroleum Arrangement Contractors' agreement for subsea facilities offshore the east coast of Malaysia.

The contract is for a period of five years and work performed is based on a call-out basis. Works are expected to be completed by the third quarter of 2023.

In addition, Hokchi Energy handed Sapura Energy a deal in Mexico to undertake offshore engineering, procurement, transportation, installation and pre-commissioning and commissioning works for the Hokchi field development in the Gulf of Mexico (GoM).

The work scope will include fabrication and installation of a central wellhead platform and a satellite platform that will be connected to Hokchi Paraiso, an onshore processing facility.

Sapura Energy also won a contract from Eni Mexico to undertake engineering, transport, construction, installation, and pre-commissioning of sealine and onshore pipeline for the Offshore Block Area 1 in the GoM.

This work scope will involve fibre optic cabling and transportation and installation of the Mizton wellhead platform at water depths of around 40m (131ft).

INSIDE THIS WEEK

India's KG Basin has crucial role to play

At a time when production at traditional offshore assets on the west coast is set to decline over the next decade, the upcoming deepwater and ultra-deepwater projects in the Krishna-Godavari (KG) Basin at the Bay of Bengal "will play a crucial role in India's move towards a natural gas-based economy," say consultants GlobalData.

The company forecasts India's domestic natural gas production to grow by 67% to around 170.0 MMcm/d (6 Bcf/d) in 2023, of which the upcoming deepwater and ultra-deepwater projects in the KG Basin will account for 56.66 MMcm/d (2 Bcf/d).

Cao Chai, Oil and Gas analyst at GlobalData, said: "A number of factors is driving the growth of the deepwater sector in India. The government plans to move the country towards a natural gas-based economy. Therefore increasing domestic supply is crucial to meeting the rising energy demand. The government has also introduced a natural gas pricing policy to allow the marketing and pricing freedom for challenging high pressure/high temperature, deepwater and ultra-deepwater projects."

The price ceiling for these projects has been raised from US $6.17 per Mcf in 2016 when it was introduced to $6.62 per Mcf in 2018, allowing companies to make stronger investment cases for these complex developments. Gas price for other fields rose from $3.11 per Mcf to $5.43 per Mcf during the same period.

The commerciality of India's deepwater and ultra-deepwater developments has been positively affected by the continuing low costs in the service sector. Cheaper drilling contracts, subsea production systems, and associated facilities saw field development costs reduced by at least 20% compared to the initial estimation.

These cost reductions are not only opening up new exploration and development opportunities in a relatively underdeveloped region, but are also very important toward creating value from the projects.

"Success of the deepwater developments will establish the KG Basin as one of India's most important areas, a major shift from ONGC's traditional offshore assets on the west coast, where the production is set to decline over the next decade. Upcoming KG Basin projects are expected to address India's rising energy demand especially the natural gas needs and reduce the country's dependency on imports by 10% in 2023," added Chai.

Offshore activity rebound

Consultants Westwood are forecasting "a rebound in offshore activity", with subsea vessel operations and hardware expenditure expected to amount to US $152 Bn over the 2019-2023 period.

"The recovery in the subsea market is evident, with the positive sentiment seen in 2017 continued into 2018. This has significantly supported project sanctioning, with the number of greenfield projects passing the final investment decision stage in 2018 increasing by 154% compared with 2016, at the lowpoint of the downturn," said Westwood in a report.

This is supported by positive macro drivers in the near and long-term, albeit the recovery remains dependent on geopolitics and OPEC, the company added.

"Supply-chain conditions remain challenging, and despite the strength of free-cash flow to operators, this has not yet translated to an improved commercial environment for services and equipment. In addition to tight cost control and capital discipline, operators are also managing their risk exposure through phased developments and standardised solutions for equipment," noted Westwood.

The main conclusions of the report are:

• Over the forecast period, subsea hardware will account for 64% ($97.6 Bn) of expenditure, with subsea vessel operations accounting for the remaining 36% ($55.4 Bn) of forecast expenditure.

• Subsea tree installation, a key indicator of subsea activities, is forecast to grow at a 6% CAGR over the 2019-2023 period, driven by Petrobras' investments in the Santos Basin and Equinor's commitments to ongoing projects in the Barents Sea and North Sea.

• More than 18,482km of line pipes are expected to be installed over the forecast, amounting to $44.7 Bn in both material and installation costs – 29% of total expenditure between 2019 and 2023.

• Westwood expects a significant volume of inspection, maintenance and repair (IMR) activity to return to the market, with vessel-related IMR activity expenditure forecast to amount to $21 Bn over 2019-2023. This represents a 25% growth compared to the 2014-2018 period.

• Subsea vessel demand days are forecast to total more than 387,963 vessel days, representing a 12% growth compared to the hindcast. This will support an expected rise in vessel day rates in the latter years of the forecast, as the vessel supply-demand balance tightens due to low book-to-fleet ratio and an increase in retired vessels.

Gazprom-Sinopec are big spenders

Russia's Gazprom and state-owned China Petrochemical Corp (Sinopec) are the top global oil and gas company spenders, in terms of new-build capital expenditure (capex) to be spent on planned and announced projects across the oil and gas value chain during 2018-2025, according to analysts GlobalData.

The report, *H2 201 Top Global Oil and Gas Companies Planned Projects and Capital Expenditure Outlook*, found that Gazprom leads with an estimated capex of US $170.2 Bn expected to be spent on 93 oil and gas projects globally. Sinopec and Shell follow with capex of $88.9 Bn (69 projects) and $84.5 Bn (107 projects), respectively.

In the upstream sector, Shell leads among companies with an estimated capex of $60.6 Bn to be spent on 58 planned and announced production fields globally.

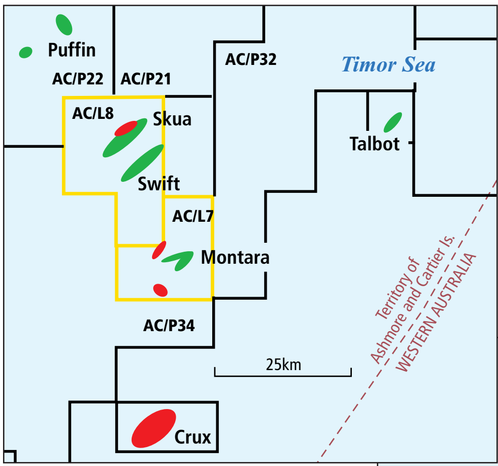
Gazprom follows with $43.6 Bn to be spent on 28 upstream projects and ExxonMobil is third with $42.2 Bn to be spent on 34 projects.

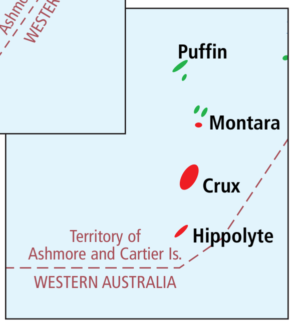
Soorya Tejomoortula, oil and gas analyst at GlobalData, said: "Gazprom's planned and announced projects portfolio is mainly focused on gas pipelines, upstream gas projects, and gas processing plants. This will help the company to ensure an uninterrupted supply of gas to Europe and foray in to new markets in Asia."

Montara maintenance work

Jadestone Energy has shut down the **Montara** oil field offshore Australia for maintenance and inspection work.

The Montara project is located in production licences **AC/L7** and **AC/L8** in the Timor Sea, around 690km west of Darwin, 630km north of Broome and 250km north-west from the Kimberley coastline of Western Australia. The project has a water depth of 77m (253ft).





Jadestone acquired a stake in the Montara field from Thailand's state-owned PTTEP in July 2018 and completed the acquisition in September.

Jadestone said that, since the completion of the acquisition of Montara, the company had been working closely with PTTEP, which remains the operator of Montara, during a transition period, in line with the normal regulatory approval process for operatorship transfer.

Jadestone and PTTEP had already scheduled a planned shutdown, but chose to accelerate this, in order to manage the maintenance work as efficiently as possible.

The decision has been supported by NOPSEMA, the Australian offshore regulator, and among the scope of work being executed are overdue inspections, regular maintenance, and three specific areas of remediation, which will address issues previously raised by NOPSEMA about the continued safe operation of the facility.

The company and PTTEP have also taken the decision to bring forward maintenance work planned for 2019 and the company now anticipates that following this shutdown event, further major planned maintenance shutdowns will not be required until at least the second half of 2020. This should enable the company to realise operational efficiencies and increase uptime through the course of next year and into 2020.

A restart of production is expected in early December.

FINANCE & INVESTMENT

362 upstream deals worth $80.9 Bn

A total of 362 deals with a combined value of US $80.9 Bn were registered in the upstream oil and gas industry in Q3 2018, according to analysts GlobalData.

Of the total value, US $44.5 Bn was registered in Mergers and Acquisitions (M&A) in Q3 2018, representing a significant increase of 77% from the $25.1 Bn in M&A deals announced in Q2 2018.

A total value of $36.5 Bn in capital raising was announced in the upstream sector in Q3 2018, an increase of 19% from the $30.7 Bn in capital raising announced in the previous quarter.

GlobalData's report, *Quarterly Upstream M&A and Capital Raising Deals Review Q3 2018*, showed that a total of 111 M&A deals, with a combined value of $13 Bn, were recorded in the conventional segment, and 88 deals, with a combined value of $31.5 Bn, were recorded in the unconventional segment, in the quarter.

Of the total M&A deals, 156 deals, with a combined value of $37.5 Bn, were domestic acquisitions and the remaining 43, with a combined value of $7 Bn, were cross-border transactions.

A quarter-on-quarter comparison shows a substantial increase in domestic transaction values in Q3 2018, compared to $17.6 Bn in Q2 2018. However, cross-border transaction values decreased by 7% in Q3 2018 compared to $7.5 Bn in Q2 2018.

Capital raising, through debt offerings, witnessed an increase of 20% in deal value, recording $32.4 Bn in Q3 2018, compared with $27.1 Bn in Q2 2018. However, the number of debt offering deals decreased by 10% from 60 in Q2 2018 to 54 deals in Q3 2018.

Capital raising, through equity offerings, registered a decrease of 3% in the number of deals and 8% in deal value with 98 deals, of a combined value of $2.4 Bn, in Q3 2018, compared with 101 deals, of a combined value of $2.6 Bn, in the previous quarter. Eleven private equity/venture capital deals, with a combined value of $1.7 Bn, were recorded in the upstream industry in Q3 2018, compared with 12 deals, with a combined value of $950.3m, in Q2 2018.

The Americas remained the frontrunner for M&A and capital raising, registering 132 M&A deals, with a total value of $32.6 Bn; and 68 capital raising transactions worth $20.6 Bn in Q3 2018.

The EMEA region registered 45 M&A deals of a combined value of $8.3 Bn, and 38 capital raising deals worth $13.4 Bn; while the Asia Pacific region registered 22 M&A deals of a combined value of $3.7 Bn and 57 capital raising deals worth $2.5 Bn in Q3 2018.

EXPLORATION

GoT Montha-1 well spudded

KrisEnergy reports that the *Mist* jack-up rig has spudded the **Montha-1** exploration well in **Block G10/48** in the Gulf of Thailand.

Montha-1 is located around 15km of the **Wassana** oil field. The well has a planned total depth of 3,187m (10,456ft).

Once this well is completed, the *Mist* rig will move to the Wassana production area on a charter to drill three firm infill wells, plus one contingent well.

KrisEnergy operates Block G10/48 with a 89% stake, while Palang Sophon holds the remaining 11%.

The 2013-built *Mist* jack-up rig is owned and operated by Borr Drilling Management, which acquired it from Transocean. The rig was previously called *Transocean Siam Driller*.

Block G10/48 covers 1,525sq km over the Southern Pattani Basin, with water depths of up to 60m (197ft).

Paus Biru-1 looks promising

The Ophir Energy-operated **Paus Biru-1** exploration well located in the **Sampang** PSC offshore Indonesia "continues to indicate hydrocarbon bearing zones."

Partner Cue Energy said that Ophir would undertake three Drill Stem Tests (DSTs) on the Paus Biru-1 well within the primary objective Mundu formation.

The results of the extensive wireline logging programme conducted over the last week showed "increased confidence in hydrocarbon presence in several zones within the formation," added Cue.

The joint venture is currently preparing to start the first of three DSTs to assess the extent and productive capacity of the potential hydrocarbon-bearing reservoirs seen during the logging campaign. The DSTs are expected to take two weeks to complete.

The Sampang PSC is operated by Ophir's subsidiary Santos Sampang with a 45% stake, while Singapore Petroleum Company holds 40% and Cue 15%.

ENGINEERING & CONSTRUCTION

Expro bags Baku workload

UK-based Expro has opened its new purpose-built facilities in Baku and landed a four-year contract extension for BP's **Shah Deniz Stage 2** project.

Under the extension, Expro will continue to provide subsea landing string equipment and services to the project in the South Caspian Sea.

In 2014, Expro secured a five-year contract for the project, providing its Landing String Assembly-High Pressure (ELSA-HP) 15k valves in conjunction with its Express electro hydraulic control systems.

These are designed to ensure the highest standards of safety and reliability for the most challenging deepwater market conditions, Expro said.

"To support this major contract and expand its portfolio in the region, Expro has invested in a new purpose-built facility.. The US $5m facility will house 30 employees, encompassing both office and workshop space over 8,500sq m. It will allow Expro to provide integrated subsea services to clients in the region, with the capacity to expand further core areas of the business," Expro noted.

Neil Sims, Expro's vice president for Europe CIS region, said: "The investment in our new facilities allows us to grow our presence and deliver the highest quality of subsea services to major clients, including BP. It also allows us to broaden our portfolio offering, leveraging our leading global expertise in well testing and intervention services."

SBM orders SWS hull

SBM Offshore has ordered an FPSO hull from China's SWS shipyard.

The move comes because SBM believes the FPSO industry is improving based on increased client interest.

The hull is the second FPSO hull ordered under SBM Offshore's Fast4Ward programme developed to standardise, speed up, and lower cost of an FPSO construction. The second hull is expected to be delivered in 24 to 30 months.

The Fast4Ward programme speeds up FPSO delivery by a year and could save US $500m per FPSO, said SBM.

The steel cutting for the first hull was held at the SWS yard in Shanghai, China in March 2018.

SBM's CEO Bruno Chabas said the FPSO market recovery was accelerating on the back of industry fundamentals.

He said the investment was required to secure future production, "and deepwater projects rank favourably in client project portfolios."

Chabas said that the company was tracking 45 potential FPSO projects in 25 countries, that could materialise in the coming two to three years.

"Some of them are Fast4Ward, some of them are not Fast4Ward. But it gives you the magnitude of the spread and the depth of the demand which is coming up in our segment of the industry," Chabas said.

SBM's chief financial officer, Philippe Barril, said many customers have shown an interest in the Fast4Ward programme, adding that SBM believes the programme will transform the FPSO industry.

"SBM Offshore is uniquely positioned to benefit from the current upturn. The most economically attractive deepwater developments require high production capacities, which can benefit most from shorter cycle time to first oil, combined with larger and more complex processing capacities. Fast4Ward facilitates this goal, lowering costs and providing a reliable execution plan," Chabas said.

"Fast4Ward, as a product offering, is maturing in the market. It forms the design basis for the second ExxonMobil Liza FPSO project, which is moving from concept to reality and predicated on our first Fast4Ward hull.

"On the basis of increased client interest and better demand visibility, SBM Offshore is pleased to confirm the commitment to build its second Fast4Ward hull with the SWS yard," Chabas added.

Santos-Shell win Australia block

A 50-50 joint venture between Santos and Shell has won the **PRL201718-2-5** permit in Queensland's Surat and Bowen Basins.

Santos is the operator of the acreage and said it "is delighted to be working in partnership with Shell to explore this exciting acreage."

The PLR201718-2-5 licence covers around 400sq km and is located 19km east of the town of Surat.

The acreage is immediately south of the Wallumbilla Hub, which means the Santos Shell joint venture can take advantage of existing infrastructure, lowering development costs and accelerating the delivery of natural gas to the domestic market.

Exploration in the new acreage will target natural gas in deep sandstone reservoirs of the Bowen Basin, beneath the Surat Basin, Santos added.

"If the results are positive, the Santos Shell joint venture will potentially unlock a material new gas supply source for the Australian east coast domestic gas market.

Santos is on track to supply about 1.88 Bcm (66.35 Bcf) of natural gas to the east coast domestic market in 2018, which is almost 13% of expected demand this year, said Santos.

"Santos has reduced connected well costs in Queensland by 84% and completed well costs in the Cooper Basin by 50% since 2015. This has enabled us to drill a record of around 300 **GLNG** (Gladstone LNG) wells in Queensland this year and around 90 wells in the Cooper Basin – the most wells in a year since 2014," added Santos.

"Drilling more wells and lowering production costs – extracting more gas for less money – is good for competition and good for consumers," Gallagher said. "Santos appreciates the support of the Queensland government for the gas industry, which is making Queensland communities stronger through jobs, small business opportunities, investment and economic growth."

VESSELS

PGS to sell *Ramform Sterling*

Norway's PGS has offered to sell the *Ramform Sterling* seismic vessel to Japan Oil, Gas and Metals National Corporation (Jogmec), an agency of Japan's Ministry of Economy Trade and Industry.

Jogmec is the preferred tenderer and negotiations would be initiated with the aim of concluding contracts, PGS said.

A final sale will only take place if and when all contracts have been concluded, which PGS thinks will happen during Q1 2019.

The tender process also includes up to 10-year service agreement with annual renewals. For this part of the tender PGS has formed a joint venture with Nippon Yusen Kabushiki Kaisha (NYK) and Hitachi. The joint venture will establish a special purpose company (SPC), which will aim to conclude final contracts with Jogmec. NYK will be responsible for vessel operation, Hitachi for data processing, and PGS will provide technical and operational services, support and training.

The vessel sale excludes the seismic streamer package. The SPC will conclude a separate lease contract with PGS on behalf of Jogmec. Subject to final agreements, Jogmec is due to take delivery of the 2009-built seismic acquisition vessel *Ramform Sterling* at the start of Q2 2019.

GAS

Woodside seals gas deal

Woodside Energy has entered into a long-term Gas Sale and Purchase Agreement (GSPA) with Perdaman Chemicals and Fertilisers for the supply of pipeline gas for a term of 20 years.

The GSPA is for around 3.36 MMcm/d (118.48 MMcf/d) of gas for use in Perdaman's proposed urea plant on the Burrup Peninsula. Gas will be supplied from Woodside's portfolio and primarily sourced from Woodside's proposed **Scarborough** development. The agreement is subject to a number of conditions and supply will start between 2023 and 2025.

Execution of the GSPA follows a Memorandum of Understanding (MoU) signed between Woodside and Perdaman in April 2018.

Woodside's CEO Peter Coleman said the GSPA finalisation showed the company's commitment to delivering domestic gas to further support investment in the Pilbara region and create local jobs.

"This is a significant domestic gas sale and represents another step towards the delivery of the proposed Burrup Hub. The realisation of our vision for the hub will ensure that the world-class **North West Shelf** and **Pluto** facilities on the Burrup Peninsula are positioned to meet both domestic gas and global LNG demand for decades to come," Coleman said.

News in Brief

Australia Sole pipeline progress

Cooper Energy reports the completion of installation and testing of the Sole pipeline in Australia.

The 65km pipeline will link the recently completed Sole production wells offshore Victoria to the Orbost Gas Plant. The pipeline has been laid on the seabed and is unconnected to the gas fields and not yet carrying hydrocarbons.

"Whilst conducting the acceptance pressure test of the pipeline with water (hydrotest) an anomaly was identified which has prevented the pipeline from holding internal pressure. The contractor subsequently identified a through wall thickness opening in the pipeline at one location. This opening has been observed in the pipe itself and not at a weld," said Cooper.

The contractor is assessing the damage to the pipeline and developing plans for repair, prior to completing the hydrotest.

"Advice at this stage indicates the time required for repair is not expected to impact the date of first commercial gas sales planned for July 2019," Cooper added.

Caspian Korchagin well wrapped

Russia's Lukoil has completed the construction of the second production well from the wellhead platform at the Yury Korchagin field in the Caspian Sea.

"The single-bore well with horizontal completion was drilled from a jack-up rig. The measured depth of the well is 3,736m (12,258ft). The well's initial flow rate is around 4,398 b/d of crude oil. Lukoil has already started drilling of the third production well at the eastern part of the field," Lukoil said.

"Lukoil applies a wide range of advanced technologies to ensure the development of the reserves in the most efficient way. In particular, an electro-hydraulic intelligent completion system was used for the first time at the new well."

Trio sign Papua LNG MoU

Total, ExxonMobil and Oil Search have signed a Memorandum of Understanding (MoU) with Papua New Guinea defining the key terms of the gas agreement for the **Papua LNG** project.

The proposed gas agreement is expected to be finalised by Q1 2019. The Papua LNG project will include two LNG trains of 2.7mtpa (million tonnes per annum) each and will be developed in synergy with the existing **PNG LNG** project facilities. The partners have agreed to launch the first phase of the engineering studies of this project.

"The MoU signed by the state of PNG and the partners of the Papua LNG project is an important step in all the parties' commitment to the project," said Patrick Pouyanné, chairman and CEO of Total. "Investing in LNG is a long term enterprise and our objective is to be able to make the project as competitive as possible. Total being the second-largest world private LNG player, we are fully committed to the success of the Papua LNG project, which benefits from a favourable geographical location close to Asian markets."

Total is the operator of the **Elk** and **Antelope** onshore fields – which will feed Papua LNG – and is the largest shareholder in **PRL-15** with a 31.1% stake. ExxonMobil holds 28.3% and Oil Search has 17.7%, post the state back-in right of 22.5%.

Australia top LNG exporter

Australia's recently developed offshore gas fields are in line to make the country the world's largest LNG exporters, according to a new report.

Australia is close to becoming the world's largest exporter of LNG on the back of the expected ramp-up of the Inpex-operated **Ichthys** offshore gas project. This is in addition to previously huge gas developments of **Wheatstone**, **Gorgon** and **Prelude**, said consultants EnergyQuest.

"With the milestone visit to Darwin by Japanese Prime Minister, Shinzo Abe, for the official opening of the US $40 Bn Inpex-operated Ichthys LNG project, it is that project that is set to drive Australia to the premier LNG export position," EnergyQuest added.

EnergyQuest's monthly LNG report for October said that total Australian LNG shipments were significantly higher in October at 6.4m tonnes – up 10.3% on 5.8m tonnes in September.

The increased export shipments were boosted in part by the start of production from the Ichthys plant, which saw its first LNG cargo depart Darwin on 22 October, followed by two further cargoes, the report said.

The Ichthys offshore facilities started first gas production in July and the first LNG shipment was sent in October.

EnergyQuest's chief executive, Dr Graeme Bethune, said that the higher October shipments were 76mpta (million tonnes per annum) on an annualised basis, prior to any significant production from Ichthys (annual capacity of 8.9mpta) and the start-up of Shell's **Prelude** project (3.6mpta).

"As Ichthys ramps up production in coming months we expect Australia's annualised production rate to overtake Qatar's nominal capacity of 77mpta, making us the world's biggest exporter," Bethune said. "Latest reports are for a further three Ichthys cargoes to load in November from the Darwin plant to be sold on the spot market."

Bethune said the October increase in Australian shipments reflected strong performance by west coast projects. East coast shipments were slightly below those in September, following agreement by east coast gas producers to offer uncontracted gas to the domestic market in the event of any shortfall.

Meanwhile, Bethune said that after passing Japan in April this year as the world's largest importer of natural gas (comprising both LNG and international pipeline gas), China's LNG imports are growing quickly, with September imports up 26% on a year earlier.

"Australia continues to be the largest LNG supplier to China, supplying 43% of Chinese LNG imports in September," he said. "Notwithstanding strong Chinese demand, Chinese LNG imports from the US have slumped, from 0.5m tonnes in January to only 0.1m tonnes in September. This reflects the China-US trade war, plus record LNG shipping costs, particularly charter rates, which disadvantage longer distance transport."

Calendar 2018

NOVEMBER

27-29 OSEA 2018
held alongside:
OGmTech & SUBSEA Asia
Singapore
www.osea-asia.com

2019

MARCH

5-7
Oil & Gas Tech Asia 2019
Ho Chi Minh City, Vietnam
info@phoenixtradefairs.com
Tel: (+84) 28 665 000 40
www.oilgastechasia.com

5-8
14th LNG Supplies for Asian Markets 2019 (LNGA 2019)
Singapore
alycia@cconnection.org
Tel: +65 6338 0064
www.lng-conference.com

APRIL

1-5
19th International Conference & Exhibition on Liquefied Natural Gas
Shanghai, China
Contact: info@lng2019
Tel: +44 20 7978 0775
http://www.lng2019.com

Asia leads LNG way

Asia is expected to be the major contributor to the growth of global LNG regasification capacity between 2018 and 2022, accounting for around 62% of the total global growth, say analysts GlobalData.

The company's *H2 2018 Global Capacity and Capital Expenditure Outlook for LNG Regasification Terminals* showed that the global LNG regasification capacity is expected to grow by 48% from 1.24 Tcm (43.7 Tcf) in 2018 to 1.83 Tcm (64.6 Tcf) by 2022.

Asia is expected to add around 351.3 Bcm (12.4 Tcf) of regasification capacity during the 2018-2022 period. Within the region, India plans to add the highest capacity of roughly 147.3 Bcm (5.2 Tcf) by 2022 with the help of 23 planned and announced LNG regasification terminals. Capital expenditure (capex) for these terminals totals US $6.8 Bn over the next four years.

China follows with a regasification capacity of 65.2 Bcm (2.3 Tcf) from 15 planned and announced terminals by 2022. China has the global highest capex of $18.5 Bn for the period 2018-2022.

Soorya Tejomoortula, Oil & Gas analyst at GlobalData, said: "Both India and China are driving the growth in global LNG regasification capacity due to their fast growing economies and thriving middle class population. The need to control growing pollution by replacing coal with natural gas is also driving natural gas demand in both countries, more so in China."

Keppel bags SJ upgrade

Singapore's Keppel Offshore & Marine has won a US $21.8m contract for the modification and upgrading of a production barge for SJ Production Barge.

Keppel's wholly owned subsidiary Keppel Shipyard landed the workload from SJ Production Barge, which is a wholly owned subsidiary of KrisEnergy.

Keppel Shipyard's scope of work on the production barge for KrisEnergy includes installation of a power generation module, electrical house, new accommodation units and other refurbishment works.

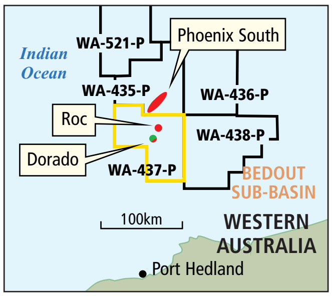
When completed around Q3 2019, the production barge will be capable of processing up to 30,000 b/d of fluid and equipped with gas, oil and water separation facilities. It will be deployed in the **Apsara** oil field, which lies in **Block A** in the Khmer Basin offshore Cambodia in the Gulf of Thailand. The Apsara field is Cambodia's first oil and gas development.

Block A covers an area of 3,083sq km and lies around 150km offshore Cambodia in water depths of between 50-80m (164-262ft).

KrisEnergy holds a 95% stake in Block A, while the remaining 5% is held by the government of Cambodia.

Phase 1A of the Apsara development consists of a single unmanned minimum facility 24-slot wellhead platform producing to a moored production barge. Crude oil will be sent via a 1.5km pipeline for storage to a permanently moored floating storage and offloading vessel.

Santos Quadrant buy approved



Australian regulators have approved Santos' proposed acquisition of fellow Australian player Quadrant Energy.

Under the proposed deal, which was announced in August, Santos will buy 100% of Quadrant Energy for around US $2.15 Bn, plus potential contingent payments related to resources from the recent **Dorado** offshore oil discovery.

The Australian Competition and Consumer Commission (ACCC) said it is unlikely that the proposed acquisition will result in "a substantial lessening of competition" in the supply of gas to domestic customers in Western Australia.

"The ACCC considers that a combined Santos/Quadrant will continue to face strong competition from a range of suppliers, including large LNG producers such as Chevron and Woodside," ACCC's chairman Rod Sims said.

"Most market participants believe the Western Australian domestic gas market is currently oversupplied. While the demand-supply balance could tighten in future, the ACCC considers that the proposed acquisition will not have a significant impact on future gas prices.

"In Western Australia, gas exporters are required to reserve 15% of their gas for the domestic market, so this should ensure that gas available for domestic customers continues to grow, and from a range of players," Sims added.

In addition, the ACCC approached the relevant Western Australia government departments and no concerns were expressed about the proposed acquisition.

Quadrant holds natural gas and oil production, near and medium-term development, appraisal and exploration assets across more than 52,000sq km of acreage, mainly in the Carnarvon Basin offshore Western Australia.

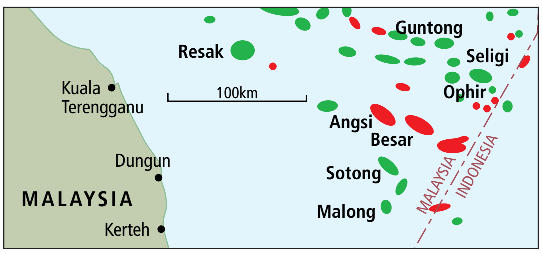
The company has recently made what is believed to be Western Australia's largest oil discovery in years with its **Dorado-1** exploration well.

Quadrant's conventional natural gas assets include significant portfolio overlap with Santos, providing an opportunity to realise material combination synergies estimated at $30m-50m per year, Santos said in August.

Santos managing director and CEO Kevin Gallagher said the Quadrant acquisition "delivers increased ownership and operatorship of a high quality portfolio of low cost, long life conventional Western Australian natural gas assets which are well known to Santos. It is materially value accretive for Santos shareholders and advances Santos' aim to be Australia's leading domestic natural gas supplier. We already have very significant growth projects across our five core assets, and Quadrant's recent oil discovery at Dorado is another exciting opportunity for us," Gallagher said.

Petronas takes Ophir reins

The partners in the **Ophir** field offshore Malaysia have handed over the project's wellhead platform, wells and pipeline to state-owned Petronas.



The move follows the partners' exit from the Ophir project due to economic cut-off.

The Ophir field was developed by Ophir Production Sdn Bhd (OPSB) under a Risk Service Contract (RSC). The RSC was entered into by OPSB as contractor, with Petronas, the resource owner, as principal.

Australia-based Octanex holds a 50% stake in OPSB and its joint venture partners are Scomi (30%) and Vestigo Petroleum (20%). Production at the Ophir field started in October 2017.

In April, a decision was made to suspend the wells at the Ophir field and OPSB started talks regarding termination of the Ophir RSC with Petronas.

In June, Octanex exercised its right to terminate the Ophir RSC following 'economic cut-off' in accordance with the terms of the RSC. Octanex said in June that this would result in Petronas taking full responsibility for the field.

On 19 November, Octanex said that, upon the field meeting the contractual 'economic cut-off' criteria, termination of the RSC was effected by OPSB. The RSC provided that following termination OPSB would be kept whole in respect to operating and capital costs for the project. OPSB has been carrying out negotiations in relation to these matters over several months.

The company added that that these negotiations had been concluded. Facilities (wellhead platform, wells, pipeline) have been handed over, reimbursement of costs has started and is expected to be completed in Q2 2019.

OPSB's focus is now on project close-out and company wind-down activities, including final operating quarter Petronas cost recovery audit, GST reimbursements and loan facility close-out steps.

Keppel settles newbuild contract

Singapore's Keppel has entered into a settlement agreement with an unnamed "international oil and gas services company" to terminate a contract for the integration and commissioning work of a newbuild asset.

Keppel said that the termination was settled through Keppel FELS, a wholly owned subsidiary of Keppel Offshore & Marine. Keppel added that the value of the deal was around US $120m.

The termination of the contract was mutually agreed with the customer after taking into consideration the customer's requirements and current market conditions, the company added.

Keppel FELS has received milestone payments for the project, which is around 30% complete, which covers its costs on the project.

The termination will not have any material impact on the net tangible assets and earnings per share of Keppel for the financial year ending 31 December 2018. It is not expected to result in any write-down.

LFH bags Asia pump work

LFH Engineering has won a US $128,540 (£100,000) contract from South Korea's STX Engine to supply several pumps for industrial projects in Asia.

STX specialises in engine production for large container ships, LNG vessels and oil tankers, as well as industrial engines, including engines for onshore plants, gas engines and those for railroad vehicles.

Les Hill, CEO of LFH, said: "International sales are a large part of our business and we are delighted to have secured a contract with STX Engine, which we hope will lead to more work with them in the future.

"Scheduled to be completed in December, our pumps will be witness tested and certified by Lloyd's Register to ensure the customer is satisfied with the high quality of work we provide," added Hill.

STRATEGY

Adnoc's Uzbekistan agreement

Abu Dhabi National Oil Company (Adnoc) has signed a framework agreement with state-owned Uzbekneftegaz, under which Adnoc will provide strategic advice on upstream and downstream operations in Uzbekistan.

Omar Suwaina Alsuwaidi, Adnoc's executive office director, said: "Adnoc has a 47-year successful track record of developing Abu Dhabi's oil and gas industry and creating the greatest value from maturing and new resources. We have built a large body of knowledge and expertise that can support Uzbekneftegaz's growth plans, as it seeks to maximise the value of the country's oil and gas resources."

Bakhrom Ashrafkhanov, chairman of Uzbekneftegaz, said: "Adnoc is leveraging all its resources, its partnerships, the skills of its people and, in particular, the latest technologies to deliver greater shareholder value. It has a proven track-record of solving complex upstream and downstream operational challenges and, we believe, its ongoing support will help accelerate our own plans to maximise returns from our gas resources."

The *BP Statistical Review of World Energy* puts Uzbekistan's proven gas reserves at 1.1 Tcm (38.83 Tcf) and oil reserves at 733m bbl.