

Pipeline

OIL & GAS MAGAZINE

ISSUE 227
MAY 2016



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Pipeline Oil & Gas Magazine

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تحت رعاية صاحب السمو الشيخ خليفة بن زايد آل نهيان رئيس دولة الإمارات العربية المتحدة
 UNDER THE PATRONAGE OF H.H. SHEIKH KHALIFA BIN ZAYED AL NAHYAN, PRESIDENT OF THE UNITED ARAB EMIRATES

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REGIONAL NEWSMAP

MAY 2016



MOROCCO

Eni signs FOA for Offshore Morocco project

Eni has signed a Farm-Out Agreement (FOA) with Chariot Oil & Gas to enter into the Rabat Deep Offshore exploration permits I-VI, located in the northern Atlantic Margin of Morocco. The completion of this FOA is subject to the authorisation of the Moroccan authorities.

The agreement provides the operatorship to Eni and a 40 per cent stake of the license as well as the exploration rights over an area of 10,780 sq-km. The water depth ranges from 150m to 3,500m. At completion of the agreement the license will include: Eni (40 per cent), Woodside (25 per cent), Chariot (10 per cent) and the Office National des Hydrocarbures et des Mines (25 per cent).



JORDAN

Jordan signs oil and gas exploration deal with IPG

Jordan's National Petroleum Company and British firm IPG have signed a production sharing agreement to search for oil and gas in the al-Safawi area in the east of the country.

In addition to exploring for hydrocarbons in al-Safawi, the agreement also covers increasing gas production levels at the al-Risheh field. The field currently produces around 12.5 million cubic feet per day but under the terms of the agreement IPG will ramp up production levels to 50 million cubic feet per day within 12 months.



IRAQ

Siemens signs energy cooperation agreement with Iraq

Siemens has signed a MoU with the government of Iraq aimed at strengthening collaboration with the Ministry of Energy and the Ministry of Oil & Gas for modernising the country's oil and gas sector.

Under the terms of the agreement, Siemens will develop an enhanced energy concept to advise the Iraqi government on the development and optimisation of the country's energy sector including power generation mix.



SAUDI ARABIA

Saudi Arabia and Kuwait to restart production in the neutral-zone

Kuwait and Saudi Arabia are set to recommence production at the jointly operated Khafji field, according to Kuwait's OPEC representative, Anas al-Saleh. The Khafji field is located in the shared neutral-zone and is

jointly operated by Saudi Arabia and Kuwait. The field has been closed since October 2014, when a disagreement over the renewal of operating licences led to a standoff between the two OPEC members.

The Khafji field is capable of producing around 300,000 barrels per day (bpd).



IRAN

Iran to pump 4 million bpd by March 2017

Iran says that its crude oil production levels will rise to 4 million barrels per day by March 2017.

"In the annual budget, the amount of oil export has been predicted around 2.25 mbpd. This means our production this (Iranian) year will reach four mbpd," Iran's oil minister Bijan Zanganeh told state TV.

International sanctions had capped Iran's oil exports to just 1 million barrels per day, leading to a huge loss of revenue for the Islamic Republic. However, since the lifting of sanctions earlier this year, Iran's crude exports have risen sharply.

"Fortunately Iran's oil export has increased since the lifting of sanctions," Zanganeh said.



KUWAIT

Kuwait discovers new oil and gas field

Kuwait has discovered a new oil and gas field, located in the west of the country, according to Kuwait Oil Company. The company said that the field would provide a "significant boost" to the country's energy sector.

The new field is located in Al-Jathatheel in western Kuwait, and is believed to contain significant reserves of light oil and gas.

KOC's chief executive officer, Jamal Abdelaziz Jaafar, told KUNA that preliminary scans of the reservoir suggest that the field is of high economic feasibility.

"[The new discovery will] enrich the Kuwaiti oil reserves and enable the country to pursue the crude oil production for decades to come," Jaafar said.

Kuwait currently produces around 2.8 million barrels of oil per day.



QATAR

QP delivers 500th LNG cargo to the UK

Qatar Petroleum has delivered its 500th liquefied natural gas cargo from its affiliate Qatar Liquefied Gas Company to the South Hook LNG Terminal in the United Kingdom.

Saad Sherida Al-Kaabi, president and CEO of Qatar Petroleum, described the delivery as "another significant achievement for Qatar's LNG industry."

"This milestone reaffirms the importance of Qatari LNG as a pillar for the energy industry and the security of global gas supplies. It also highlights Qatar Petroleum's commitment to the reliable supply of clean energy to its customers around the world".

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EDITOR'S COMMENT

What a month April has been for the global oil and gas industry with an early oil price rally to around the US\$40 range on the hopes that OPEC might have agreed an output freeze at a meeting in Doha that in the end proved a non-event. While Saudi Arabia finally unveiled an ambitious blueprint to wane itself off oil and confirmed its plans to sell of 5 per cent of the national oil giant Saudi Aramco.

We cover in greater detail the failed Doha meeting and Saudi Arabia's IPO plans for Saudi Aramco in our regional news pages (p10 and 12). Both these events have long-term impact not just for the Middle East region but global oil markets as well.

The collapse in oil prices to as low as US\$27 per barrel earlier in the year had created some common ground for producers to sit down and discuss an oil output freeze, and the earlier Doha meeting signalled a turning point for the oil market that since the end of February, has seen crude prices rise by 30 per cent.

However, the optimistic mood in the market soon evaporated when the second Doha meeting in mid-April saw OPEC and non-OPEC members to agree an oil output freeze, which saw the finger pointed largely by some oil producers and analysts on Saudi Arabia whose leadership clearly didn't want to cede market share and repeat what happened in the 1980s, when the oil-rich kingdom found it difficult to get the market share back.

Just before we went to press, the Saudi cabinet approved plans to try and move the country away from its reliance on oil by diversifying its economy. The new blueprint was unveiled in a TV address by its main orchestrator, Saudi Arabia's Deputy Crown Prince Mohammed bin Salman. Under the new plan, shares worth less than 5 per cent of the state-owned Aramco oil company will be sold, that could make it the biggest IPO in history.

A lot of the events in April have transpired due to the animosity between Saudi Arabia and Iran. The Shia state's re-emergence from international isolation in January this year and strong return to global oil markets has had Saudi at logger heads. We have an in-depth look (p24) at the impact of Iran post-sanctions on the region oil markets. We also have a legal perspective from Clyde and Co of how to take advantage of Iran's reinvigorated oil and gas sector.

Our cover story this month focuses on one of Abu Dhabi's rising stars the National Marine Dredging Company and I sat down with its CEO to hear about its two recent success stories, with ADNOC in Abu Dhabi and the exciting new Suez Canal project in Egypt.

Julian Walker
Editor-in-Chief

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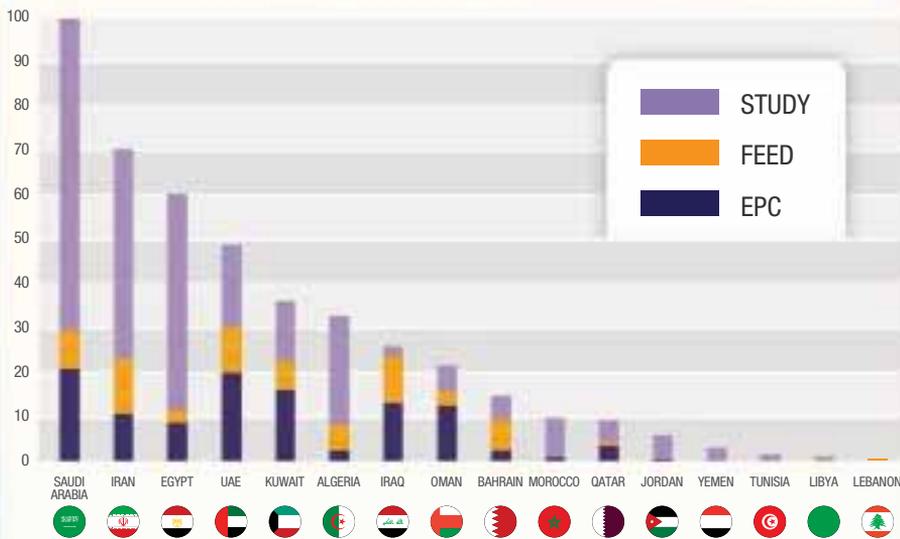
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Source: APICORP research

2016 will see the biggest decline in non-OPEC oil supply in 25 years, with almost 700,000 barrels per day being cut, according to the IEA.



7,000 Kuwaiti oil and gas workers went on strike in April, over plans to reform public sector pay.



Russia could 'in theory' increase oil production levels to 12 or 13 million bpd, according to the country's energy minister.



“ Accepting a production freeze would in practice amount to a

voluntary acceptance of sanctions by our country after years of effort to have them lifted. A freeze by Iran at January 2016 production levels would mean that sanctions are not lifted and Iran's exports would be stabilised at the sanctions level ”

BIJAN ZANGANEH, Iran's oil minister



“ The general conclusion was that we need more time to

consult among ourselves in OPEC and non-OPEC producers.... We respect their (Iran's) position... certainly a freeze will be more effective if major producers including Iran are included. That would help rebalance the market ”

MOHAMMED SALEH AL-SADA, Qatar's oil minister

IRAN'S KEY UPSTREAM PROJECTS

Field	Operator	Recoverable reserves	Production 2015	Initial Development target	Notes
		(Billion bbls)	(k bpd)	(k bpd)	
Yadavaran	Sinopec	3.2	20	185	Phase one targets 85k bpd by end - 2015, phase two 185 k bpd.
Yaran (N&S)	Pedco	1	5	90	Early production of 30k bpd seen in 2016.
Azadegan (N)	CNPC	5.6	0	150	Early production of 50k delayed to 2016.
Azadegan (S)	Pedco	5.2	50	170	Long term plateau target of 280k bpd.

Source: Arab Oil and Gas Journal



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No agreement at Doha oil producers' summit

Leaders from the world's key oil producing nations failed to agree on a deal to limit crude production levels following a meeting in Doha. Opec and non-OPEC producers gathered in the Qatari capital to discuss an agreement aimed at alleviating a global supply glut of around 1.5 million barrels per day (bpd).

"We concluded we all need time to consult further," Qatar's energy minister, Mohammed al-Sada, told reporters.

Many key producers had believed that the deal was agreed and ready to be signed, when they arrived in Doha. However, an eleventh hour dispute scuppered the deal.

The key sticking point is believed to have been raised by Saudi Arabia, who would not sign the deal unless regional rival Iran also signed up to it.

Iran is currently emerging from a sustained period of international sanctions, under which its production levels were decimated. Following the removal of the sanctions, Iran has been steadily ramping up its production



levels and has openly stated that it will not consider a production freeze until it is producing at least 4 million bpd. Iran is currently pumping around 3.5 million bpd. The Islamic Republic did not send oil minister, Bijan Zanganeh, to the talks in Doha.

Last week, Zanganeh said that other nations should not expect Iran to limit its production levels in the near future.

"If Iran freezes its oil production ... it cannot benefit from the lifting of sanctions," he said.

18 nations took part in the talks, including Russia, Venezuela, Qatar and Iraq in an attempt to reduce market over supply. The next round of talks is scheduled to take place in October, when the group are due to meet in Russia. Prior to that, OPEC will hold its annual meeting in June.

Iran and Oman agree gas pipeline route

Iran and Oman have agreed on the route of a proposed gas pipeline between the two countries, following a meeting in Tehran. The project will help Iran to realise its ambition of selling LNG shipments to international markets.

The pipeline will measure 175 kilometres in length and will cross the Arabian Gulf. The subsea section of the pipeline will run at a depth of 290 metres below sea level.

The Iranian Offshore Engineering and Construction Company will complete a study on the offshore section of the pipeline by September 2016, according to Fars News Agency.

South Korean EPC firm Korea Gas Corporation is



The pipeline will measure 175 kilometres in length and will cross the Arabian Gulf

said to be interested in undertaking work on the offshore section of the pipeline. Experts say that the project requires around US\$1.5 billion in investment.

Iran and Oman have signed an agreement whereby Iran

will export 28 million cubic metres of gas per day to Oman. Around a third of the gas will be turned into LNG for export at Oman's Qalhat plant, with the remaining 19 million cubic metres per day being distributed to buyers in the Gulf States.

NEWS IN BRIEF

SNC-Lavalin wins Saudi Arabia EPC contract

SNC-Lavalin has been awarded an engineering, procurement and construction contract by Saudi Aramco for the expansion of asphalt production facilities at its Ras Tanura Refinery in Saudi Arabia. Upon completion of the expansion, asphalt production capacity at the facility will increase from 22 thousand barrels per day to 42 thousand barrels per day.

The contract will be executed by SNC-Lavalin's in-kingdom entity, Saudi Arabian Kentz. The project is expected to be completed in approximately 18 months, and builds on the company's long-term working relationship with Saudi Aramco.

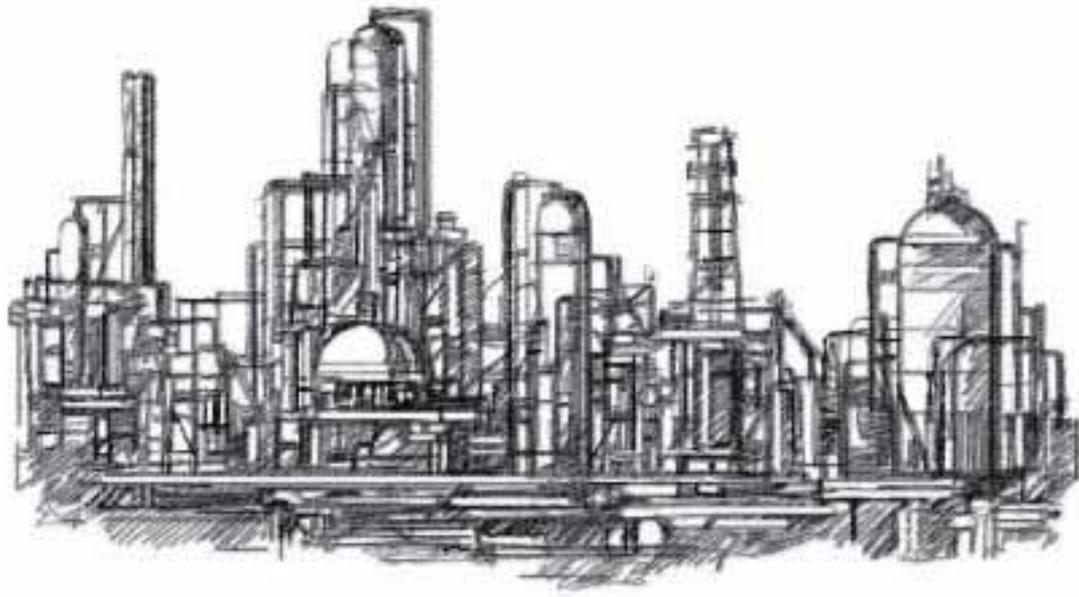
"We are delighted to build further on our recent experience of executing major EPC projects with Saudi Aramco," said Christian Brown, president, Oil & Gas, SNC-Lavalin. "Saudi Aramco is a key client for us and we have one of the largest dedicated engineering and construction teams in Saudi Arabia."



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Saudi Aramco set to be valued at above \$2 trillion



Saudi Arabia's Deputy Crown Prince Mohammed bin Salman confirmed that the government intends to sell a stake in its state oil giant Saudi Aramco, which is expected to be valued at more than US\$2 trillion.

The Deputy Crown Prince made the statements in a TV interview with Saudi-owned Arabiya television as the

government unveiled a long-term economic blueprint for the Kingdom.

The government plans to sell off around 5 per cent of Saudi Aramco that could make it the world's largest initial public offering. Aramco will become a holding company with subsidiaries listed via an IPO.

The sale is a key part of the government's "Saudi 2030 Vision" that

has set a road-map for the Kingdom to diversify its economy's reliance on the hydrocarbon industry.

Parts of the 15-year blueprint includes the creation of a \$2 trillion Saudi sovereign wealth fund, as well as strategic economic reforms called the National Transformation Programme.

Aramco's final valuation hasn't been completed but Prince Mohammed added in the interview that Aramco units will be offered in a second stage.

Amin H. Nasser, president and CEO of Saudi Aramco, commented on what Aramco's actions need to be to reach Saudi Vision 2030.

"The Kingdom's transformation vision demands innovation, technology and R&D to spur a new era of industrial growth. Saudi Aramco's continued leadership and investments in upstream and new investments in downstream expansion will help drive the widespread and rapid in-Kingdom development of a vibrant population of small and medium-sized Enterprises focused on producing high-value finished and semi-finished products in the petrochemicals conversion sector."

NEWS IN BRIEF

DNO gets further Tawke payment

Norway's DNO has received a US\$20.1 million payment from the Kurdistan Regional Government (KRG) for oil exports in March from the Tawke field in the Kurdistan region of Iraq.

Tawke deliveries for export in March averaged 74,546 barrels of oil per day (bpd), up from an average of 66,427 bpd in February. Export deliveries in March were impacted by the extended closure of the Turkish segment of the export pipeline during the first half of the month. Tawke deliveries to the local market in March averaged 4,446 bpd, down from 6,697 bpd a month earlier.

In a statement, DNO said that exports for April so far have averaged 117,256 bpd.

The funds are shared between DNO and partner Genel Energy.

Aramco: Jafurah gas field could be a game changer

A study of the Jafurah gas basin has yielded "promising" results and could be a game changer for gas production in the region, according to Saudi Aramco's president and CEO, Amin Nasser.

"Our exploration efforts have resulted in finding big volumes of shale gas in the Jafurah Basin close to Ahsa. They are highly promising quantities and economically feasible as they contain a high rate of liquids; activities to evaluate the reserves are ongoing," Amin Nasser told a conference.

The comments come as Saudi Aramco looks to ramp up its gas production at its

existing fields and boost exploration for new gas fields.

"The recent unconventional gas field in the nearby Jafurah basin is very promising, we are still assessing its potential but it could be a game changer for Al Ahsa in terms of creating more opportunities and new engines for growth," he added.

Jafurah is located southeast of the gargantuan Ghawar field. Saudi Arabia

has the fourth largest natural gas reserves in the world, with over 7.1 trillion cubic metres in proven reserves.



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INTERNATIONAL NEWSMAP

MAY 2016



US

ExxonMobil begins production at deepwater GoM field

US oil giant ExxonMobil has begun oil production ahead of schedule at the deepwater Julia oilfield in the Gulf of Mexico. The Julia development is located approximately 265 miles southwest of New Orleans in water depths of more than 7,000 feet. The initial development phase uses subsea tie-backs to the Chevron-operated Jack/St. Malo production facility. ExxonMobil is the operator, and Statoil Gulf of Mexico LLC each hold a 50 per cent interest in the Julia unit.



UK

Nexen awards Wood Group North Sea contract

Wood Group PSN (WGPSN) has been awarded a five year contract by Nexen, worth US\$150 million, to operate and maintain Nexen's North Sea offshore assets; the Buzzard, Scott and Golden Eagle platforms. The deal is an extension of an existing agreement that has been in place since April 2010. The new deal will secure 190 jobs. It is the third extension WGPSN has secured in the UKCS this year.

BRAZIL

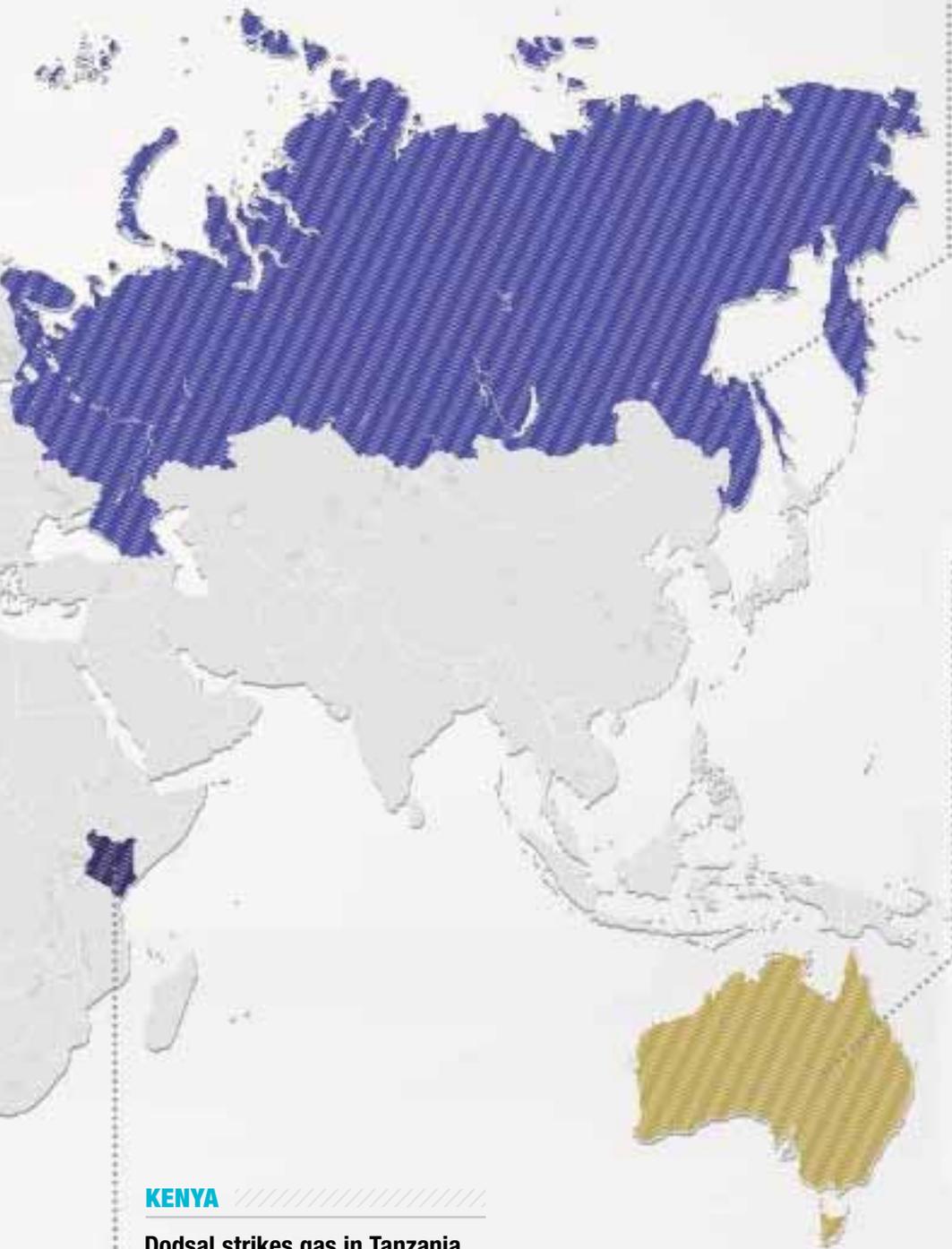
Statoil strikes oil off Brazil

Norway's Statoil and operator Repsol Sinopec and partner Petrobras have hit oil in a deepwater offshore block in the Campos basin in Brazil. The appraisal well, BM-C-33, encountered a hydrocarbon column of 175 metres and producing around 16 million standard cubic feet of gas and 4,000 barrels per day of oil. This is the fourth appraisal well in the licence, which comprises the Seat, Gavea and Pão de Açúcar (PdA) discoveries. In 2013-2015 the consortium drilled and tested the Seat-2, PdA-A1 and PdA-A2 appraisal wells.

ALBANIA

Saipem wins offshore Trans Adriatic Pipeline contract

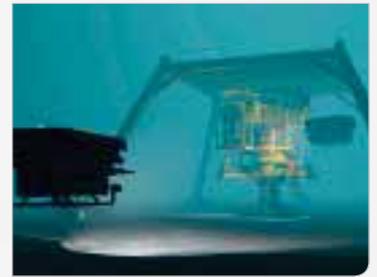
Italian oil and gas EPC firm Saipem has won a new contract for work on the offshore section of the Trans Adriatic Pipeline project. The contract has been awarded by Trans Adriatic Pipeline AG, a joint venture between BP, SOCAR, Snam S.p.A., Fluxys, Enagás and Axpo. The EPCI contract involves the installation of a gas pipeline between the coastlines of Albania and Italy, across the Adriatic Sea.



RUSSIA

Russian oil production hits thirty year high

Russia's oil production levels reached 10.91 million barrels per day in March, a thirty year high. Russia, along with Saudi Arabia, Qatar and Venezuela had previously pledged to keep its production levels below those seen in January 2016.



AUSTRALIA

Wood Group acquires Australian firm

UK's Wood Group has bought Australia-based SVT Engineering Consultants (SVT) that provides vibration, dynamics and noise engineering services. The privately-owned company based in Perth provides piping and rotating equipment vibration, noise, integrity engineering and asset integrity services.

KENYA

Dodsal strikes gas in Tanzania

Dubai-based Dodsal Group has announced that it has struck over 2.7 TCF natural gas deposits on their onshore concession in Tanzania. The Group marked its first natural gas discovery in July 2015 with an initial 2.17 TCF discovery in the Mambakofi and Mtini region. However, based on recent studies, this estimate has now been raised to 2.7 TCF with a potential upside of 3.8 TCF for the two wells. The gas found at the onshore concession is sweet gas. The Group has already invested privately US\$200 million to date, and plans to invest another US\$300 million in Tanzania over the next 24 months to support its exploration and production activities, including implementation of an Early Production System to bring gas to the market.

Total, KOGAS agree LNG MoU

France's Total has signed a memorandum of understanding (MoU) with Korea Gas Corporation (KOGAS) to reinforce mutual cooperation to explore opportunities throughout the LNG value chain.

The deal was agreed at the LNG 18 conference in Perth, Australia.

The agreement aims to jointly identify and pursue opportunities to develop the LNG market in Asia and in new importing countries and to cooperate in LNG trading and terminal optimisation.

"We are delighted to extend our long-standing cooperation with KOGAS, the world's largest LNG buyer and regasification terminal operator, along the entire LNG value chain. Our combined expertise will contribute to the generation of successful business opportunities in various LNG and



gas sectors," commented Laurent Vivier, president gas, Total.

Total is active in the main LNG markets and continues to develop its LNG business as a key component of its growth strategy. In February, Total inked LNG supply agreement to sell China's ENN LNG Trading 0.5 MTPA of LNG for 10 years.

NEWS IN BRIEF

Schlumberger buys Meta Downhole

Oil service giant Schlumberger has acquired UK-based Meta Downhole Limited that offers technology and expertise to provide downhole metal-to-metal isolation solutions in well integrity applications.

Olivier Le Peuch, president, Completions, Schlumberger said: "With Meta's unique proven technologies, we will take a quantum leap forward in advancing our downhole completions technology offering. When combined with their metal-to-metal isolation expertise and operational track record, we can offer our customers reliable and flexible solutions to address downhole isolation challenges."

Meta is headquartered in Aberdeen, Scotland, and has offices in three locations globally with 30 employees.



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With stocks in Dubai, Italy, Brazil, Singapore and now also the UK, Raccortubi is able to supply pipes, fittings and flanges in stainless steel and special

alloys, for both projects and maintenance operations, quickly and efficiently.

Over the course of the last three years, Raccortubi Group has undergone significant expansion, with the establishment of three stockholding subsidiaries in Dubai, Brazil and Singapore, the acquisition of a second butt weld fittings manufacturer in Italy, the opening of a branch office just outside London, and finally the acquisition of a renowned stockholder for offshore platforms in Aberdeen



Raccortubi stock of pipes, fittings and flanges

(Scotland). These investments have all been made to offer customers added value; a single Group which can fulfil requirements worldwide from both stock and production in the provision of complete packages, as well as single item necessities, to short timescales.

The Group's latest developments, including the recent acquisition of Norsk Alloys (now Raccortubi Norsk), have allowed Raccortubi to extend its distribution network and therefore its value-added service provision, cutting times

and costs for customers around the world.

In addition, the acquisition of Petrol Raccord at the end of 2014 has enabled Raccortubi Group to extend its butt weld fittings' manufacturing range from ½" to 56", with unlimited wall thicknesses and an increasing part of production dedicated to

special/customised fittings. Thanks to its integrated production facilities, Raccortubi Group is able to guarantee not only the quality of the final product, but also short lead times resulting from adaptive planning and flexibility. The quality control throughout production means that the highest standards are achieved and fully-certified products in accordance with the most stringent market requirements are available off-the-shelf from stocks around the world.



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NMDC SEES DREDGING PROMISE

The National Marine Dredging Company (NMDC) is entering its 40th year of operation and following two recent high profile projects in Abu Dhabi and Egypt the public shareholding company is shifting gears, according to its CEO, Yasser Zaghoul, allowing it to navigate the current severely challenging times.



The dredging sector is in the same boat as other industries serving the energy sector that have to come to terms with the new low oil price environment and meet these challenges. NMDC's CEO feels it is in a prime position to deal with the downturn, not only because of its history of being an Abu Dhabi based company with 40 years of experience, but also because of recent high profile projects for ADNOC in Abu Dhabi and the new important Suez Canal project in Egypt.

"It is tough days for the dredging sector but our order book is still reasonable for this year. We are also looking seriously at projects worldwide. We still see opportunities, and although the global energy market is down we feel optimistic about future projects in Abu Dhabi and the GCC," Zaghoul said.

2016 is an important milestone for NMDC as it marks its landmark 40th anniversary. The CEO touched on how the firm is looking to take the next step in its evolution.

"I am proud with what we have achieved over 40 years. Going forward we are looking at getting involved with more international projects. We are getting invitations from all over the world for dredging projects and I am very confident that soon we will start participating on global projects," he explained.

The company has around 3,000

employees and NMDC launched an employee recruitment campaign recently that has already proved successful, with a number of young Emiratis joining the firm.

"We have plans to have one dredger fully crewed by locals and we have succeeded so far on this on the operations side. With training, we aim to fulfil the engineering side in the future."

The low price environment has impacted on most companies working in the oil and gas sector. It is how a company reacts to the challenge that counts, Zaghoul believes.

"We will survive this challenging period.

I believe that true success comes from overcoming such challenges and when you do, it sets the foundation for future development," the CEO pointed out.

One of the ways NMDC has dealt with the new energy landscape is to become more efficient, which it has done by creating a streamlined company structure and management system.

"These new business processes have had a beneficial impact on our efficiency and we are always looking at ways to be as flexible as possible."

Over the last five to six years, NMDC has faced increased competition, but Zaghoul sees that as healthy, as it makes for a leaner and more efficient dredging market.

"In the MENA region we feel we have an advantage over our competitors as we are Abu Dhabi based, which gives us great clout around the region, as Abu Dhabi has such a strong reputation," he said.

NMDC believes in the importance of partnerships and the benefits that brings.

"Our philosophy is to work in partnership.

We are rooted in Abu Dhabi and we work with all our clients as if they are partners, and not just clients," he added.

The ADNOC effect

A game changer for the Abu Dhabi-based dredging company was its work with ADNOC's Zakum Development Company [ZADCO] on building four big artificial islands in the Upper Zakum field 80 km offshore Abu Dhabi to help increase production by 40 per cent to 750,000 bpd.

The Upper Zakum Project was an EPC contract which included the creation of four new artificial islands complete with port facilities. The artificial Islands are falcon-shaped, with dimensions of 710 meters or 650 meters by 480 meters for the satellite islands and 1,200 meters by 600 meters for the central island

Zaghoul explained: "The ADNOC project was a huge step forward for NMDC. We

Suez Canal ▶

- Dredged 210 million m³ of sand in just 10 months
- Dredging 40 million m³ of sand per month was a world record
- Used 26 cutter suction dredgers



competed for the project on the basis of an international tender and won. This is very significant for us. I feel that NMDC was revived by the successful completion of the ADNOC project. It has really expanded our energy dredging capabilities."

He added: "For the ADNOC project, we invested a lot of time and capital as it was a challenging project to take on but we had to do it, which we did. The job was classified as one of the most difficult dredging jobs in the world," he said.

The biggest challenge NMDC faced during the project was working on a live, producing oilfield.

"We had to come up with a bespoke traffic management system to get the barges around the working oilfield which

consisted of a whole network of pipelines. We defined a special route to get the vessels to the islands without crossing too many pipelines. It was a very understandable risk, as we couldn't allow disruption to any of Abu Dhabi's producing fields."

Another challenge NMDC faced was in the design of the islands, as it needed to demonstrate to ADNOC that the islands were safe and would be able to sustain natural disasters such as earthquakes.

"At the beginning we faced a steep learning curve, but we ended up creating a great working partnership with ADNOC. We were able to show our capabilities and win the confidence of ADNOC over the period of the project."

He added: "There was probably even

more pressure on us, as an established Abu Dhabi company, to do the job well. We could not cut any corners as we knew how important and prestigious this project was for the Abu Dhabi government. So completing it well has helped us build trust with the government who saw that a local company linked to the government itself won and completed a high profile operation."

New Suez Canal boost

NMDC's strong performance last year was all about the successful completion of the new Suez Canal project in August 2015.

"The success we had on building ADNOC's artificial islands and the overall satisfaction helped us in winning our biggest project to date, to build the new Suez Canal channel in a consortium that we led. The award of the project was crucial for us."

The President of Egypt announced at the start of the operation that the Suez Canal extension would be completed in a year, which was a mammoth undertaking.

"We were to be an international consortium of the biggest dredging companies all working under our leadership. With the global team we had, we were confident that we could meet the tight deadline," he said.

NMDC executed the biggest dredging project of the century in the project of new Suez Canal by leading an international consortium to dredge 210 million m³ of sand in just 10 months with 26 cutter suction dredgers. The dredging of 40 million m³ of sand per month is a world record.

"We had 57 nationalities working on the project, with around 2,000 employees and US\$5-6 billion in assets as we used the latest dredging equipment available. I feel we have set a new standard with the speed and efficiency of what we did on dredging the key extension of the iconic Suez Canal."

Prospects

Zaghloul sees a real opportunity for NMDC to grow its dredging portfolio on the energy side. In Abu Dhabi, the company is already working on various other projects for ADNOC.

"Our experience with ADNOC has meant we are pitching for more energy projects and we are utilising our knowledge for future tenders. We are now busy tendering for important energy projects in India and with Saudi Aramco in Saudi Arabia." 



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TAKING ADVANTAGE OF IRAN'S REINVIGORATED OIL AND GAS SECTOR: LESSONS FROM IRAQ

By Richard Devine Partner, Clyde & Co

Iran has loudly and publicly declared her desire to utilise international oil companies (IOCs) to reinvigorate her petroleum industry. Iran's strategy of engaging with IOCs to access greater capital, technology and marketing capabilities is well-rehearsed globally. The recent relaxation of sanctions under the Joint Comprehensive Plan of Action (JCPOA) now allows Iran to execute her plans.

For several decades, Middle Eastern oil producing countries have been restricting private sector participation in the upstream sector. Iran, on the other hand, has announced that it is adopting a different approach. Iran will be replacing the Buy-Back contract model so unloved by IOCs with a new Iranian Petroleum

Contract (IPC) that it promises will be much more investor friendly. This makes Iran an outlier, but not without parallel in the Middle-East. Iraq had also nationalised her upstream industry by the 1970s, but invited foreign companies back after the second Gulf War. Iran and Iraq's proven reserves are comparable and both enjoy relatively low production costs per barrel.

This article compares and contrasts the two countries' upstream legal and contractual regimes and considers what lessons Iran might learn from Iraq's experience.

Constitutional parameters

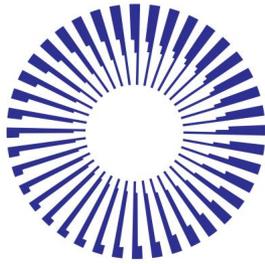
By virtue of her constitution, Iraq is a federal state and certain powers have

been devolved to the regions in Iraq. By contrast, political power in Iran is centralised.

Iran's constitution prohibits foreign or private ownership of oil in reservoirs. The 1987 Petroleum Law (Petroleum Law) is similarly restrictive, declaring foreign investment in the sector illegal. However, Iran's Petroleum Law does permit contracts between the Ministry, state companies and "local and foreign national persons and legal entities." This provision was used as the legal basis



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for the Buy-Back contracts and will, we assume, be the legal foundation for the IPC. Iraq's constitution does not include such prohibitions, but provides that oil and gas is owned by all of the people of Iraq. No modern Iraqi petroleum law exists, although a draft has been under discussion for almost ten years.

Oil and gas contracts

Both Iran and Iraq (other than the Kurdistan Regional Government) have eschewed the production sharing contract model in favour of a risk services contract model. The terms of the IPC have not been fully disclosed, but based on what has been reported, Iran and Iraq's contractual frameworks are

similar in many respects. Both contracts broadly provide that IOCs will undertake petroleum operations at their own risk and expense in return for a service fee. In Iraq, the IOCs must enter into a joint venture (JV) with a regional state owned oil company and carry the expenses of that entity. The IPC also requires IOCs to set up a JV with a local partner for any activity in the upstream sector (this may also apply to the downstream sector), although more detail has not been forthcoming.

The service fee under the Iraqi technical services contracts (TSCs) comprises an element of cost recovery and a remuneration fee per barrel of production. Payment is triggered by reaching and sustaining a specific production target. There is no connection between the oil price and the service fee in the TSCs. Accordingly, IOCs obtain no benefit from high oil prices and are insulated from low oil prices. Indeed, the service fee may seem more attractive in the present environment as it represents a larger proportion of the falling value of each barrel of oil. As a result, Iraq is currently negotiating with IOCs to



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cut costs and to lower production targets under the TSCs.

Iran is trying a different approach. Apparently the service fee under the IPC will be linked to the price of oil. This may ensure closer alignment between the government and the IOCs, but the precise mechanism will be subject to intense scrutiny. IOCs will willingly accept oil price risk, but only if the incentives are appropriate.

Another issue that requires clarification relates to the booking of reserves. Some Iranian officials have stated that the IPC will be structured so as to allow IOCs to "book reserves"; others have stated the IPC will not allow reserves to be booked. The ability to book reserves is prized by IOCs so it will be important to clarify this issue. It is understood that IOCs are booking reserves in Iraq.

Conclusion

Below ground risks in Iran and Iraq are very similar. Based on what we know today, the upstream legal and contractual models for Iran and Iraq also have much in common. There are, however, substantial differences

in the above ground risks.

Years of war have undermined the development of local industry in Iraq and security conditions remain challenging. Iran's oil and gas sector on the other hand, whilst isolated for long periods, has enjoyed much greater stability. Iran has learnt to sustain herself during the years of isolation and a number of highly-competent local oilfield services and EPC companies have developed as a result. Foreign investment will help to develop the infrastructure further.

Iraq's approach to attracting foreign investment, through its handling of the TSC auction process, was exemplary. Iraq was extremely disciplined in her approach, the tender process was transparent (some of the auctions were televised) and the biddable parameters were few, thereby limiting negotiations. Iraq also tendered her prize assets first in order to ensure that the bid rounds started successfully. This escalated competition between the IOCs and ensured that Iraq secured deals on very good terms.

Unfortunately, Iran cannot replicate the market conditions that existed during

Iraq's tender process. Iraq sought investment in a bullish oil market. Iran will be seeking bidders in a much lower oil price environment and will need to adjust her approach (and fiscal terms in particular) accordingly. It is clear from Iraq's experience, however, that risk services contracts can be deployed to great effect. Iraq has almost doubled production - from around 2.4 million barrels per day (mblpd) in 2009 to 4.775 mblpd in January 2016. A similar result would leave Iran very happy.



Richard leads Clyde & Co's MENA oil and gas group and has a track record of working in frontier markets. Richard has worked on projects relating to each of the Federal Government of Iraq's four licensing rounds and on several projects in the Kurdistan Region of Iraq.



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IRAN OIL POST-SANCTIONS: MARKET AND MENA IMPACTS

By: Mustafa Ansari and Ghassan Alakwaa, analysts at APICORP

Iran has put regaining its oil export market share at the heart of economic planning as the country emerges from years of international sanctions. The government has declared bold targets for the restart of shut-in production, a boost to oil investment and development, and a sharp increase in gas development, implying a new wave of condensate production and exports. Although some of these targets look overtly political and will be difficult to deliver, the trajectory of Iran's full re-entry to the global oil market will be closely watched for its impact on oil prices and neighbouring MENA oil producers.

Iran bullish on restart

Projecting an accurate trajectory for the Iranian oil restart is critical to understanding the potential price impact. Tehran has unsurprisingly been on the bullish side of projections, claiming it will deliver an additional 500k bpd of exports within six months and 1 million bpd of within a year of sanctions relief, taking total production to 3.8 million bpd as the country's prolific but ageing major oilfields ramp up.

The Iranian government's projection assumes that the sanctions-related shutdowns have not damaged production capacity at major fields and also assumes that development work, potentially with new

IOC partners, could be fast-tracked on the major new oil fields close to the Iraqi border in the southwest. The major new oilfields under development, including Azadegan and Yadavaran, would allow production to rise well above 4 million bpd within three years, according to petroleum ministry plans.

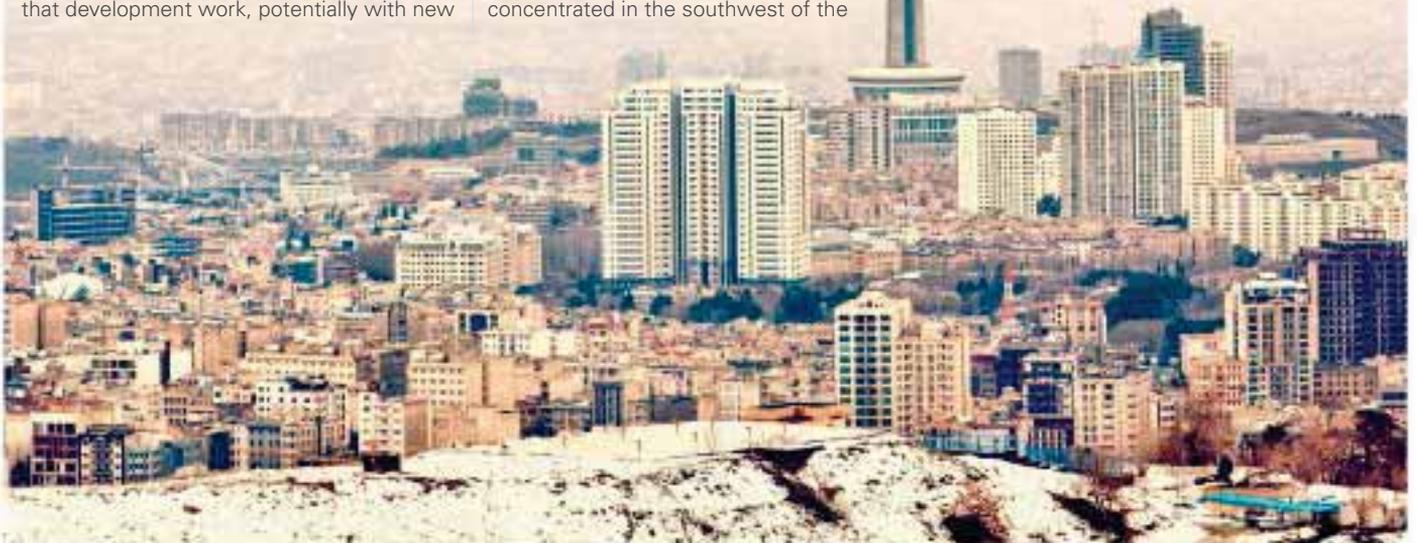
There are reasons to lend Iran's plans some credibility. The ministry has been preparing for a post-sanctions recovery since mid-2013. That programme has involved the optimisation of onshore oilfield surface facilities and well workovers and some new production drilling. The lifting of restrictions on the import of drilling equipment banned under the sanctions regime may also allow optimisation of existing production in a way that is difficult to foresee. The National Iranian Oil Company (NIOC) carried out a major refurbishment and de-bottlenecking programme on its surface facilities in 2012-14. This may have improved capacity at key pinch points, but is also unlikely to have been comprehensive given the sanctions restrictions.

Despite likely hold-ups, Tehran is demonstrating a political desire to match the pace of upstream development to Iran's huge resource base. Boasting the fourth-largest oil reserves in the world at 158 billion barrels, Iran has 10 per cent of global proven reserves, most of which are concentrated in the southwest of the

country. Gas reserves, mainly focused on the giant offshore South Pars field, are the largest globally at 34tn cubic metres, according to BP's 2015 Statistical Review of World Energy.

Bringing new fields on stream

The greatest potential comes from new onshore West Karun oil fields like Azadegan, west of Ahwaz and close to the Iraqi border. These projects are only producing 75k bpd now but are scheduled to add another 500k bpd over the next two to three years if development is on schedule. Azadegan South is already in early production but other phases could take this field to 280k bpd. Early production from a separate development of the northern extension is delayed but targets 75k bpd, with subsequent phases bringing output to 300k bpd by 2020. The Yadavaran field is another candidate for IOC investment and is programmed to hit a plateau of 300k bpd, but only by 2020, while Darquain is targeting a three-phase development with plateau at 230k bpd. Overall, we expect new upstream projects to bring some additions in 2016-18 but given that many of the projects have been facing delays and some contracts cancelled, the additions are likely to be only in the 200k-250k bpd range. This underpins



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our low case scenario.

Counterbalancing the onshore potential, Iran's offshore oilfields have struggled with high natural decline rates and stabilization will be the main objective. The increase in output from South Pars will partially compensate for decline rates in offshore fields, but this increase is mainly concentrated in condensates, in turn increasing the proportion of condensates to total output.

The big push in Iranian productive capacity will only come following the return of IOCs. This could prove to be a lengthy process and significant challenges face the IOCs. The shape of the new Iran Petroleum Contract (IPC) was revealed earlier this year. It replaced the unpopular buy-back contracts and is more competitive than those offered to IOCs in Iraq in the past decade. But upstream investment will be challenged by Iran's general weak business environment. New entrants will have to tolerate headwinds around regulation and dispute arbitration, both of which suffer from a lack of transparency, if they want to succeed.

Oil market impact: fresh uncertainty

Iran's plans to regain its place as OPEC's second-largest producer to Saudi Arabia will, in APICORP's view, take years not months. While Iran has a significant subsurface resource and a new, more

pragmatic leadership in the petroleum ministry, risks remain. Iran will need to maintain its commitments to the letter under the nuclear agreement to avoid the 'snap-back' of sanctions. Iran's internal political rivalries will need to be kept in check if the oil sector is to flourish.

Supply pressures have resulted in sustained stock-building, which forced OPEC as well as non-OPEC members to negotiate a potential production freeze or output cut. This is not straightforward, as Iran has repeatedly signalled its desire to recapture market share and that other

OPEC players should create the necessary space. The perception of a price war between OPEC's key producers can be bearish on the market.

Due to multiple hurdles, a slower trajectory and Iran's full re-entry to the oil market should help smooth the loss of new oil supply from non-OPEC producers after 2017. A rebalancing away from non-OPEC oil to MENA's low-cost reserve base, combined with resurgent price-driven demand growth, will, APICORP believes, help make room for at least some of Iran's additional barrels. 



Major Iran oilfields - impact of sanctions

Field	Gravity (API)	Oil in Place (Billion bbls)	Pre-sanctions production capacity (k bpd)	Production mid-2015 (k bpd)
Onshore				
Ahwaz	24-32	65.5	800	560
Gachsaran	31	53.0	530	300
Marun	32	46.7	510	380
Karanj	34	11.2	240	100
Rag-e-Safid	29	18.7	180	120
Mansuri	26	22.3	150	100
Agha Jari	34	30.2	120	30
Bibi Hakimeh	30	17.0	120	80
Parsi	34	12.7	90	50
Shadegan	36		60	40
Kupal	32	10.2	60	40
Pazanan	35	7.6	40	30
Ab Teymour	33	9.0	40	30
Sub total		304.1	2940	1860
Offshore				
Abuzar	26	3.3	180	100
Doroud	34	10.8	145	120
Soroush	18	13.2	110	35
Sirri	32	9.0	90	60
Nowruz	19	3.5	60	20
Salman	35	4.0	55	45
Foroozan	29	3.1	40	25
Sub total		46.9	680	405

Source: Arab Oil and Gas Journal, PPI, APICORP Energy Research



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From its headquarters in the Jumeirah Lake Towers (JLT) free zone, Dubai, Marine Assets Corporation strives to operate as the leading provider of marine vessels and specialised equipment.

The roots of the company dates back to 2006, when it was founded as Minnow Marine Projects Ltd (MMPL). Marine Assets Corporation (MAC) was formed during 2009 when MMPL was sold to the Stanford Marine Group (SMG) in Dubai. During the sale SMG did not acquire the rights to the MAC niche compact semi sub design (CSS), which formed part of the initial MAC service offering and remains as part of its portfolio.

Today MAC provides a comprehensive range of design and build, agency and offshore support services to clients throughout the marine industry, with an annual turnover of US\$100 million per annum.

"MAC's core business is the design and construction of both standard and specialist vessels for the oil and gas, offshore and renewable industry," explained CEO, Robin Reeves. "MAC seeks to acquire the latest technology and incorporate it into modern sophisticated designs, with a view to what the market will require in 24-36 month time with a focus on cost effective industry requirements, as opposed to minimum standards."

Incorporating close to a decade of industry experience and a tradition of providing innovative design options, MAC has a growing reputation for delivering market-leading and highly specialised vessels to the offshore industry. During November 2014 for example, it was announced that MAC had signed a contract with Nautilus Minerals Inc. for the build and delivery of a large offshore and construction vessel, which will be built at Fujian Mawei Shipbuilding. Commenting on the award of the contract Reeves elaborated: "MAC was successful in securing a contract with Nautilus Minerals for the world's first vessel to be purpose built for subsea mining activities.

The vessel is 227 metres in length and has a beam of 40 metres, it will have 32 Mw of installed power to support the vessel's power management for DP positioning and supply power to the deck mounted mining equipment. The vessel



The new vessel design that will be built at Fujian Mawei shipyard

will also include 199 beds to accommodate marine crew, hotel staff and operators for the mining equipment."

Core business

While MAC continues to develop innovative, new vessel designs, its core business is still in the niche design of its CSS accommodation and maintenance vessels. These are also built at the Fujian Mawei shipyard, with seven units currently contracted – three of which have been delivered, while the remaining four are still under construction.

"At MAC we strive to impart our extensive operating knowledge into our innovative designs. Our market differentiators are our compact and cost

effective designs," said Reeves.

The CSS design was developed to respond to the need for greater flexibility, coupled with the capacity to provide cost-effective solutions in the provision of accommodation and offshore support services. The CSS design allows for the provision of multiple services desired by oil and gas operators to improve production and reduce costs, with weather working capabilities which significantly exceed that of units of similar dimensions. Furthermore precise and fuel-efficient manoeuvring capabilities are achieved through the highest class of dynamic positioning system (DP3) and a diesel electric propulsion system.

As the company continues to adapt to the changing needs of the marine market, it will rely on its strong ties to its partner shipyard and its pioneering approach to vessel design. With the growing opportunities within the renewables, oil and gas plus the deep sea mining and sectors, MAC is set to remain an important market player well into the future, as Robin concluded: "Our strength lies with our close relationship with our partner shipyard, whereby we enjoy cost-effective building contracts with favourable payment terms. Most of our clients have returned for further vessels, and continue to utilise MAC as their provider going forward, which demonstrates our commitment to our clients throughout the vessel's life, not just the warranty period. MAC will continue with new building activity, having 26 vessels still under construction for delivery throughout 2016 and 2017. We will also seek to place new orders for targeted sectors where we can identify needs will be in the coming years."



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HUNTER can accommodate any type of turnaround or project, offering multiple lease options to meet project and financial demands.

The company was the first to design, construct and sell API (American Petroleum institute) compliant, blast-resistant modular buildings to the refining and petrochemical sector, as well as the



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first in the industry to submit buildings to actual physical blast testing.

HUNTER has a manufacturing facility located in Sharjah that provides it with high manufacturing capacity in the region and the ability to immediately deliver throughout the UAE, Saudi Arabia, Qatar, Kuwait and Oman.

The firm's buildings are built in accordance with ASCE (American Society of Civil Engineers), API, NFPA, US Department of State and International Building Codes to meet and exceed the most intense safety and blast specifications.

The firm said that its clients are assured that the engineering, physical testing and the know-how of manufacturing blast-resistant modules will ensure people and sensitive equipment will be protected in the event dangerous situations arise.

According to Hunter, the buildings can be used in a variety of different permanent or temporary applications including

but not limited to the following:

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- Labs
- Security buildings
- Restroom/locker room
- Remote instrument enclosures
- Forced entry ballistic resistant buildings

The company also states that its clients are guaranteed the best in customer service throughout the equipment rental/purchase process: from order to delivery, through installation and demobilisation, and back to one of the many HUNTER locations throughout the GCC.



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N-KOM SEES DEMAND FOR OFFSHORE ACCOMMODATION RISING

With the growing number of aging platforms in the region, N-KOM expects demand for offshore accommodation and maintenance work to increase and liftboats will be an essential part of the firm's strategy going forward

Nakilat-Keppel Offshore & Marine (N-KOM), the joint venture shipyard between Qatar's Nakilat and Keppel Offshore & Marine (Keppel O&M), has successfully delivered its first liftboat unit, Al Safliya, to Qatari rig operator Gulf Drilling International (GDI).

Al Safliya is the first liftboat to be wholly constructed in Qatar at the Erhama Bin Jaber Al Jalahma shipyard. The self-propelled and elevating unit has been customised for operations in the Middle East and North Africa (MENA) region in water depths of up to 65 metres.

With the opening up of the Iranian market and growing number of aging platforms in the region, N-KOM expects that the demand for offshore accommodation and maintenance work to increase and that's where they feel liftboats will come in handy, especially in this cost-cutting environment.

Nakilat managing director Eng. Abdullah Al Sulaiti said: "We have also completed more than 20 projects of repair, maintenance and modification projects for Gulf Drilling International (GDI). We look forward in the future to implement these projects, which contribute to strengthening the position of Qatar in the maritime industry around the world and is a step closer to the achievement of the Qatar National Vision 2030."

Mubarak Al Hajri, the managing director and chief executive officer of GDI stated: "GDI is pleased with the quality delivered by N-KOM for the liftboat Al Safliya. GDI is also proud of signing its first Liftboat Services contract with Dolphin Energy, we are determined to continue this success that has been achieved in order to support the expansion of GDI business, we have been seeking to develop the liftboat segment of the business for several years and it is



exciting to finally achieve this breakthrough."

Furthermore, Ebrahim Ahmad Al-Mannai, managing director, Gulf International Services commented: "We are looking forward for a positive impact on GDI financial position when contracting Al Safliya with the lower demand for drilling rig services, especially the offshore."

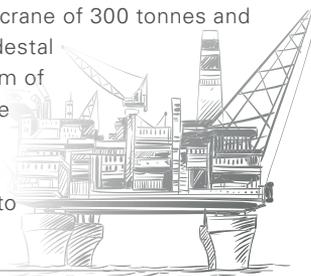
The ORCA-2500 Bennett design liftboat Al Safliya is equipped with four tubular legs, a unique 200 tonne leg encircling crane and a 50 tonne pedestal crane, a large open deck space of around 800 sqm, a helideck, and accommodation capacity for 130 persons. It can undertake a wide range of services such as well servicing, commissioning, maintenance and decommissioning of offshore platforms. The liftboat also allows for a specially designed gangway bridge to be

used for emergency and other safety purposes.

Liftboats have increasingly been shown to be a more efficient alternative to traditional non-self propelled and self-elevating units. Its ability to mobilise without the assistance of support vessels makes it versatile, cost-effective, and suitable for wide range of shallow water offshore operations. By customising liftboats with different tonnage cranes on deck, they can undertake the maintenance of most shallow water oil and gas fields, as well as various workover drilling operations and well intervention applications. The self-elevating feature of the liftboat also provides a stable, safe and efficient work environment by raising the working areas above the influence of wave action.

N-KOM has also developed two other liftboat designs – ORCA1500 and ORCA3500 - for shallow water and deep water operations.

Having an operating depth of 45 metres, the ORCA1500 design comes equipped with four tubular legs and an open deck space of 470 sqm. Other specifications can be customised according to the client's requirements, such as varying pedestal crane capacities between 20 tonnes -100 tonnes and accommodation capacity for up to 50 men. ORCA3500 on the other hand, was developed for deep-water operations up to 75 meters, and features four lattice legs, a helideck, a leg encircling crane of 300 tonnes and a 75 tonnes pedestal crane, 1,700 sqm of open deck space and as well as accommodation capacity for up to 300 men. 





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THE MIDDLE EAST'S DOWNSTREAM DESTINY

Chris Kelly sat down with Jose Alberich, partner, AT Kearney to discuss the Middle East's prospects in the international downstream market



How important is integration between the upstream and downstream sector in the Middle East's oil and gas industry?

It's very important. What we are now striving for in the region is to boost the production of higher value products. If you take the range of chemicals that you can produce in these crackers, they range from C1-C6. The further you go towards the C4-C6 range of products, the higher the value becomes.

What has happened in the region is that the industry has been predominantly gas based. With more refining capacity and new technologies coming onstream, you have the opportunity to produce more of the higher value products. What we are doing is developing and enabling this transition towards the production of higher value petrochemicals.

Traditionally the C1 and C2 products have made up the bulk of the region's export portfolio, as we move towards more liquid feeds, the higher value products start to come into play.

If you look at Europe, their petrochemicals industry is based on liquid cracking. Liquid cracking gives you a little

bit of ethylene, much more propylene than the gas based cracking, and lots of C4 and C6 chemicals. That is why Europe's petrochemical sector is more resilient because they have the added protection of those higher value products. Also because they are fully integrated facilities. Europe has the technology and the applications.

What impact is shale gas having on the global petrochemical market?

We started to see the impact of shale gas around five years ago. If you look at the exports and imports for the US, you will see that historically the US was importing a huge amount of naphtha from Europe, because Europe has traditionally been very high on naphtha, low on middle distillates.

With the shale gas, what we saw is that the US is importing much less naphtha and has actually begun to export LPG to European markets. And not just for use in heating, but for use in crackers. To the point where some of the European cracking companies revamped their crackers to be able to accept more LPG.

That brings us on to the topic of 'flexible feedstocks'. Companies in the US call it

molecular optimisation. So, because of the market conditions, crackers in Europe were reconfigured to accept and process more LPG.

Obviously switching to liquid feeds from gas feeds is something that would take a great deal of time and investment. Is this more of a long term trend, or something that producers are looking to execute in the near term?

It depends entirely upon the country. If we look at Oman, for them this would be a mid-term aspiration because their refineries are at quite an early stage. They have to put in place the basic capacity and from there they have to start looking to attract those joint venture partners and potential technology partners.

In other cases, like Sadara and PlasChem for example [in Saudi Arabia], they are already at a very advanced stage.

How is the GCC's petrochemical industry being affected by low crude oil prices?

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We don't see prices remaining this low in the long term – they have to go higher. It is not good for anybody. Investments in the upstream are being affected, basic petrochemicals are also being affected. The upside of that is that there is more incentive on companies to invest in their downstream operations, but still the current oil prices are not really good for anyone.

How much of a factor is the reintroduction of Iran in the regional petrochemical market?

They are certainly making progress and their Western Ethylene Pipeline has recently come onstream and they have already competed the second phase. That follows the model of industrial cities located along the length of the pipeline. Similar to what you find in Europe and the US where you have many facilities connected to that common piece of infrastructure. This will definitely help Iran to develop its petrochemical sector.

That being said, they have been around for years and are already an established producer. They are a key player in methanol

“We don't see prices remaining this low in the long term – they have to go higher. It is not good for anybody. Investments in the upstream are being affected, basic petrochemicals are also being affected”

production. Iran is either in the top 5 or top 6 [methanol] producers.

They have also announced another big cluster that is being developed by the private sector in the south east of the country. It is one more element in the equation.

What is the Middle East's role in the global downstream sector?

In terms of technologies and markets you have three distinct regions.



You have the west, which is comprised of the US, the Atlantic Basin and Europe. They are the ones providing the technology and the applications knowledge.

Then you have Asia, especially China, where all the demand is. They continue to be the market for basic and primary petrochemicals.

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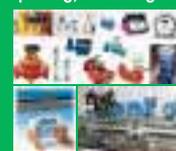
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Then you have the Middle East – which has a very positive role because geographically it is right in the middle of these two locations. It is attracting a significant amount of downstream change and for us we could really see the region acting as a kind of hinge. We want to see that the Middle East is evolving from a producer of basic petrochemicals, pumping out volumes to China and Europe, to become a balancing point [between Asia and the West].

How does the economic slowdown in China affect the Middle East’s petrochemical sector?

It does have a bearing on it. It is distorting the plans for the downstream sector. When you think about the slowdown in demand from manufacturers of final products, China used to take a lot of the resins that they used to produce wind turbines. Suddenly demand slows down and they have to start finding new markets for that product. That then creates challenges for Middle Eastern producers to carry on expanding capacity levels for those products.

There is also an impact on demand for the basic petrochemicals that are being produced in the Middle East and sold on to Asian markets. It affects both the price and volume cycle.

What can you tell us about technologies such as coal-to-olefins and methanol-to-olefins, particularly in China? Are they a threat to gas based production here in the Middle East?

With regard to coal-to-olefins and methanol-to-olefins technology, there are some additional capacities coming onstream. There is also another technology that is not being watched very carefully, which is Propane DeHydrogenisation (PDH) and that could be a game changer. We have already PDH capacity in Saudi Arabia, and I think that could be used to solve the problems of C3 products.

Compared to years ago when producers in the Middle East were relying on their joint venture partners to bring them the technology, we are seeing more and more that they are the ones leading the technological advancement. Particularly regarding basic chemicals. 

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SUCCESSFUL CONTROL SYSTEM CUTOVER AT THE WORLD'S LARGEST OIL PROCESSING PLANT

By: Majed Al-Khalis, Saudi Aramco Company, Control Systems Engineer in Abqaiq Plants Facility



With the capacity to produce over seven million barrels per day, Saudi Aramco Company Abqaiq plants comprise the largest oil processing and crude stabilisation facility in the world. Abqaiq is the main oil processing center for Arabian Extra Light (AXL) and Arabian Light (AL) crude oils and produces natural gas liquids (NGL) as a bi-product for Saudi Aramco's daily oil processing activities. To support both the oil and gas plants, Abqaiq Plants produce their own electrical power, steam, instrument air, and water.

For a complex of this size, an involuntary shutdown would mean great losses in production and would negatively impact the company. In 2008, Abqaiq Plants team recognised potential challenges were on the horizon. The plant's existing automation systems would experience obsolescence for distributed control system (DCS) controllers and emergency shutdown (ESD) processors and cards. In addition, these systems would no longer have technical support or training.

After some studies, it was determined

that an upgrade and migration cutover was needed of the plants automation system. Abqaiq Plants team began to plan the process of upgrading the existing Emerson PROVOX DCS, Triplex Regent ESD systems, and burner management systems to the latest release of Emerson's DeltaV DCS, SIS & BMS.

The team began the project in October, 2011 with a planned completion date of November, 2015. Although on-budget and on-schedule cutovers at a processing plant of this size do not happen often, the project team completed the cutover activities two months ahead of schedule by end of September, 2015.

Large complex plans for a hot cutover

Abqaiq Plants complex has three main divisions: oil, NGL, and utilities. As such Abqaiq plants are operated from three control rooms: North (north oil plants), South (south oil and NGL plants), and the UCR (utilities plants). The three control rooms interconnect with several process interface

buildings (PIBs) throughout the plants to monitor and control plant processes. The control rooms and PIBs represent the veins of all Abqaiq operations and consist of several networks and risk areas.

Distributed over 20 locations, the project included upgrades to 325 controllers, 105 workstations, and 42 network devices. The team divided the project into four upgrade phases: north oil plants, south oil plants, NGL plants, and utilities plants.

Success meant not having a single interruption to plant operations, and the team had to minimise the shutdown time for some of the risk areas that have tight operations. As a result of that, a hot cutover approach was chosen.

The project team capitalised on three factors to overcome project challenges and complete the project successfully with zero operation impact: human resource development, efficient testing procedures, and streamlined technologies.

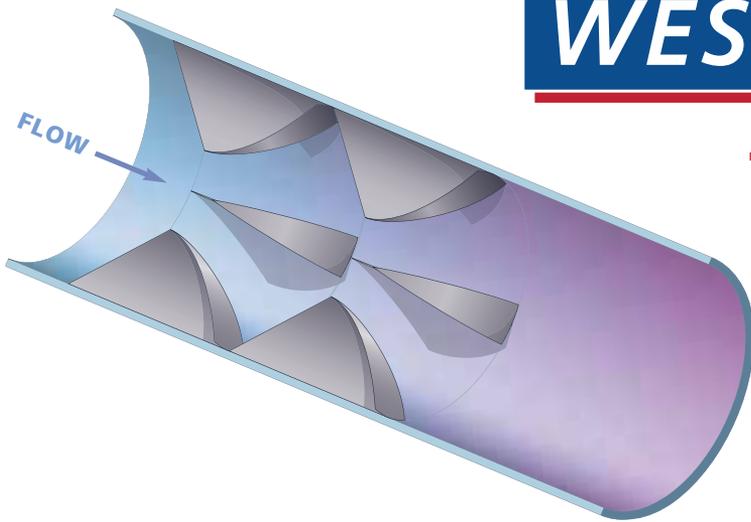
Human resource development

Before starting the project, Abqaiq Plants management took proactive steps to develop a qualified team that included a mix of experienced and new personnel across project disciplines including automation, process, electrical, and communication.

Several engineers, technicians, and operators were sent to vendor courses to increase their knowledge of the new systems. In addition, the project team simulated new systems process and operation scenarios in Abqaiq advanced technology center. The simulation helped to ensure new systems readiness and familiarised plants engineers and technicians with them.

Our team participated in several project activities and tests including factory acceptance tests (FAT) which increased the competency level of all team members.

WESTFALL



The Superior Mixer for a Gas Pipeline in Germany

US Patent
8,147,124B1

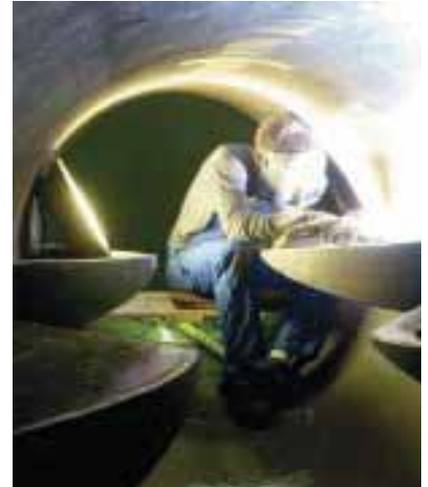
Westfall Manufacturing recently won a contract for a 1.22m (48") diameter Model 3050 Mixer for GASSCO in Germany. The purpose of the mixer was to thoroughly mix gas coming from two different North Sea pipelines having varying densities, compositions, temperatures and flow rates.

The reasons given for selecting the Westfall mixer included more professional calculation (CFD, FEA) support by Westfall, better calculated mechanical performance, superior documentation work by Westfall, and improved delivery time.

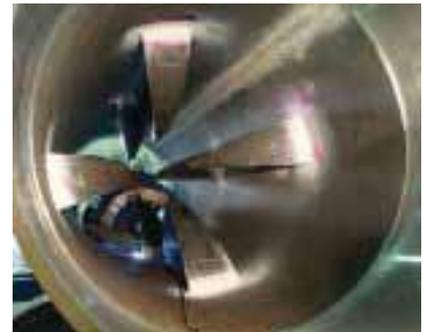
Westfall helped the customer save time and avoid prohibitive shipping costs, VAT and import duties by working with the rep to construct the mixer in Germany to Westfall specs under a one-time licensing agreement. Just one example of the innovative ways Westfall helps reduce costs while delivering superior performance and quality.



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To assure readiness and correctness of the new system and to achieve a smooth cutover, Abqaiq Plants experienced engineering and operation teams developed testing procedures.

Detailed cutover sequence and contingency plan documents were developed to manage cutover critical activities and predict all possible scenarios during cutover and restoration procedures. The team also developed a plan to relocate the old DCS to a temporary cabinet and keep it running to control the plant. This approach helped to optimise the shutdown period for critical risk areas such as AXL Shippers and Steam Production Plants from one week to two hours. It also enabled a fast fallback strategy to the old system, in case of new systems failure.



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THE PROJECT INCLUDED UPGRADES TO**



Streamlined technologies

The project team took advantage of the upgrade project to implement current technologies in the system network, monitoring, and security. These technologies simplified the cutover, project execution, and troubleshooting.

For example, zoning and subnets were used to segregate different control rooms' networks. This segregation of networks and systems into unique areas enhanced system security. It also helped to isolate traffic and errors for easier issue tracing and network troubleshooting. In addition,

a centralised management system was used to collect system events and key performance indicators.

Abqaiq Plants team came up with an innovative design to enhance the cutover period of some plant networks through installing a parallel connections to old and new systems' networks. The innovative idea enabled the team to test the new system while maintaining old system connections. This method decreased plant downtime period from a potential 72 hours to zero and allowed for better system testing and recovery. In addition, to stabilise the plant sooner on the new system, critical loops were tuned with the help of Emerson consultants.

The project team also implemented a centralised patch management system to install security patches and antivirus updates. The centralised patch management system enabled the use

of Guardian Support, which provided Emerson technology connections, and ensured project team would discover system issues if any arose. Not only did it help to mitigate Abqaiq system security and patch issues, but it also provided the team insights into what Emerson learned from other sites' projects.

Business results and lessons

By combining planning with methods and technology, the project finished ahead of schedule and under budget. The resulting reduction in man-hours led to cut costs and gave the team more time to observe the new system

and close some exception items.

Saudi Aramco employees, Emerson Engineers, and contractors worked together collaboratively with support of Abqaiq Plant management as one team to achieve the goals of the project safely with not a single negative impact on production.

In addition, the young plant employees have been empowered to lead critical activities. The education and resulting confidence delivered several innovations and noticeable cost avoidances. In essence, Abqaiq Plants management capitalised on the development of people to ensure present project success and prepare for future system support.

In the future, Abqaiq Plants will plan to upgrade PROVOX IO cards to those of the DeltaV system. In addition the plant team will work to enable several enhanced DeltaV features such as Advanced Process Control (APC). 



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By: Dr. Abdulwahab Al-Sadoun, GPCA

Those of us living in the GCC are familiar with the high number of road accidents in this region: over 10,000 people died on the road last year – that is approximately one person every 53 minutes. With over 650,000 registered trucks in the GCC and over 300 million kilometers driven for hydrocarbon and petrochemical product movement in the GCC per year, the safe transport of these products by road remains therefore a top priority for producers in the region.

Complementing the actions taken by national authorities and some national organisations towards increasing road safety, addressing such risk factors such as seat-belts and speed, the GCC petrochemical industry is supporting the capacity for road safety and supporting the implementation of good practice through close partnerships with national governments and logistics service providers in the region.

As the the body representing the industry, the Gulf Petrochemicals and Chemicals Association (GPCA) has launched an important Sustainability and Quality Assessment System (Gulf SQAS) initiative to evaluate the environment, health, safety, security and quality (EHSS&Q) performance of land based logistics service providers (LSPs). The system, an integral part of the global chemical industry's Responsible Care initiative, is widely acknowledged as a valuable tool for improving standards and is becoming widely recognised.

SQAS was initiated by Cefic, the European Chemical Industry Council during the late 1990's and launched in the Arabian Gulf region in 2014. Gulf SQAS utilises industry standardised modular questionnaires to assess LSP EHSS&Q performance in a uniform manner, with the assessments being carried out by independent assessors.

A Gulf SQAS assessment does not lead to a certificate, but offers a detailed factual report, which each chemical company utilises to evaluate each LSP according to its specific requirements. For the LSPs there is the benefit of avoiding multiple assessments by individual chemical companies and for chemical producers there is the advantage of providing a tool for selecting new LSPs and for evaluating continuous improvement of existing LSPs.

Assessments are carried out by professional assessors who work for certification bodies, and have recognised qualifications and experience in certification auditing. They have been selected, trained and accredited by the Gulf SQAS Committee for each type of assessment module.

Gulf SQAS is based on four modules, of which two have already been successfully launched in the region. The first, the Transport Service module, is intended as a 'catch-all' for all types of LSPs involved in, directly or indirectly, inbound and outbound transport operations. Just one year after

the launch, the average score of the assessments improved from an average score of 47 per cent to an average score of 68 per cent. The second module, the warehouse module, was launched in 2016 and assesses the storage and handling activities in packaged warehouses.

This year, we will roll out the third module focused on Tank Cleaning, with a pilot study being carried out in the first part of the year. The development of the fourth and last module, the Rail module, is still in the planning stage, but with investment in chemical rail transport high on the GCC agenda, we aim to launch this module in the not too distant future.

To further strengthen our commitment to the safe transportation of chemicals, GPCA is also evaluating an industry regional emergency response and technical support solution for logistics operations, which we plan on implementing later this year.

Perhaps the most significant development expected this year is that we are currently working on expanding Responsible Care to LSPs that are members of the association. Until now, Responsible Care has been reserved for chemical producers only.

It is our hope that the Gulf SQAS will contribute to making our roads safer, and eventually inspire other industries to follow suit by implementing similar programs for the safe transportation of their goods.



ARAMCO'S DRIVE TOWARDS LOCAL SUPPLY CHAINS

Regional and international oil giant Saudi Aramco has set itself the ambitious target of doubling its localisation levels in its supply chain activities to 70 per cent, according to the company's vice president of Procurement and Supply Chain Management, Abdulaziz Abdulkarim.

The initiative will see the firm invest around US\$300 billion in its supply chain systems between 2016 and 2021, as part of its In-Kingdom Total Value Add (IKTVA) programme.

Speaking at the 4th Saudi U.S. Business Opportunities Forum in Riyadh, Saudi Aramco's vice president of Procurement and Supply Chain Management, Abdulaziz Abdulkarim said: "Two critical objectives guide our new IKTVA localisation programme. First, we will double the percentage of locally-produced energy-related goods and services to 70 per cent by 2021, and second, our local energy goods and services industry will export 30 per cent of its output over the same period."

Through its IKTVA programme, Saudi Aramco hopes to generate around 500,000 jobs for Saudi nationals within its supply chain network. The hope is that the initiative will also help to entice manufacturers into The Kingdom.

"IKTVA is a win-win proposition for companies able to build a deep and lasting relationship with the Kingdom by setting-up shop here and investing in training and workforce development, to help capture their share of Saudi Aramco's future spend on materials and services."

Saudi Aramco launched its IKTVA programme in December 2015. The initiative represents the company's commitment to local content development that is now required across its domestic and international supply chains. It is also helping to drive investment, economic growth and diversification, job creation and work force development within the Kingdom.

Saudi Aramco's president and CEO, Amin H. Nasser, spoke of the importance of the company's IKTVA scheme at a recent event in The Kingdom.

"There is still a gap that needs to be closed – and that is local content. The Saudi



Abdulaziz Abdulkarim - Saudi Aramco vice president Procurement Supply Chain Management

business community has accomplished a lot from modest beginnings, and I am inspired by success stories of local companies being able to compete internationally. But the majority of our materials are manufactured elsewhere, and the majority of our services are provided from other countries. Consequently, our local content levels remain modest at just 35 per cent.

For something that is so strategically important, that is not good enough for our company, for your companies, or for the country where the business is.

So we are announcing a long overdue step-change in our commitment to local content levels. We are setting three critical objectives to guide our localisation programme," he said.

The first of these three goals will see Saudi Aramco double the percentage of locally-produced energy-related goods and services to 70 per cent by 2021.

The second will see the company's local energy goods and services industry exporting 30 per cent of its output over the same timeframe.

The third is to deliver half a million well-paid direct and indirect jobs for Saudi nationals.

"These are challenging targets, but I believe they are achievable if we work together," Nasser added.

IKTVA will need to provide an attractive framework for manufacturers to set up shop within The Kingdom, if it is to succeed in delivering a localisation rate of 70 per cent by 2020.

"We believe that IKTVA offers enormous opportunities to suppliers and service providers in its own right. I want to be absolutely clear about this: this is not about being charitable. We want IKTVA to be mutually beneficial, which means your investments making a reasonable rate of return. If they are not, IKTVA will not be the success we all want it to be. And companies that build a deep and lasting relationship with the Kingdom by setting up shop here and investing in workforce development will capture the major share of Saudi Aramco's spend on materials and services," he concluded.



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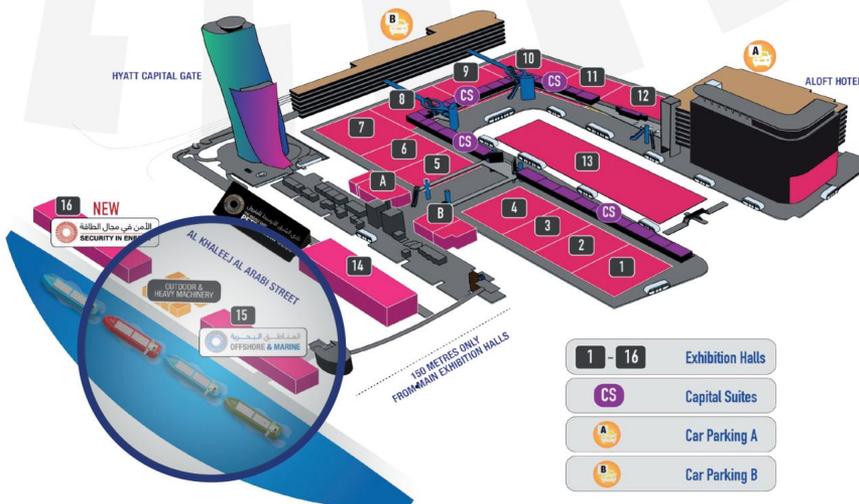
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2016: OMAN'S YEAR OF OPPORTUNITY

In March, Oman's Ministry of Oil and Gas opened its doors to the world's press for its annual media briefing day. Pipeline magazine was on site in Muscat to hear a range of insights into the Sultanates plans for 2016 and beyond

Despite the challenging global market conditions, 2015 was an extremely successful year for Oman's oil and gas industry. Operators in the sultanate increased the size of the country's proven reserves, raised production levels and green lighted a number of key projects in the upstream and downstream sectors.

This positive tone was reflected at the Ministry of Oil and Gas' Media Briefing day, held in Muscat. An impressive line up of government officials and oil professionals gave a fascinating insight into the prospects for Oman's oil and gas sector over the next twelve months.

During his welcoming address, Oman's Minister of Oil and Gas, His Excellency Dr Mohammed bin Hamad al-Rumhy, said that the Sultanate was working hand in hand with other producers to help rebalance oil prices and secure stable market conditions for the future.

"At both regional and international level, Oman has made attempts to return oil prices to an upward path. We have expressed our desire to strike a balance between fluctuating demand and supply pressures by reducing the Sultanate's oil and condensate production by around 5-10 per cent," he said.

Earlier in the session, undersecretary of the Ministry of Oil and Gas, His Excellency Salem bin Nasser Al-Aufi, confirmed that Oman's crude and condensate production levels had risen to 1.013 million barrels per

day in February, up from an average of 981,000 bpd in 2015.

H.E. Dr al-Rumhy said that any decision to cut Oman's production levels would be contingent upon other producers doing the same. When asked for a precise figure, the minister said that he expected the cut to be

"in the region of 90-100,000 barrels per day."

"I think we could easily find ways to cut production in the government controlled fields, through PDO, for example. This is the easiest of the obstacles to be overcome. I promise I will share with you details of how the cuts would be made, once an agreement is in place," he said.

Heavy oil projects

Dr al-Rumhy was also upbeat about the prospects of Oman's heavy oil projects.

"On the profitability of heavy oil, it's a complex question. I think that the operating costs are bearable at the moment, and my colleagues will correct me if I am misleading you. To launch a new [heavy oil] project in today's market would be extremely challenging, but for the projects that are already ongoing, you find that even at a \$30-40 scenario, they are still profitable and they still are making money."

These comments were corroborated by Robert Swain, senior vice president at Occidental Oman, who operate heavy oil projects in Oman's block 53.

Key fact: Oman's crude and condensate production levels had risen to 1.013 million barrels per day in February 2016



"I think that is a fair assessment. The challenge of course is how much additional capital investment we can expect to take place [at the current price of approximately \$30-40 per barrel]... we are all focused on prioritising efficiency, given the current market conditions," he said.

Occidental operates the Mukhaizna Field where it has implemented a major steam flooding project to extract the field's heavy oil. The project utilises some of the largest mechanical vapour compressors ever to be built. The project has elevated production levels to around 15 times higher than they were at the projects inception in 2005.

PDO – exceeding expectations

As the biggest operator in Oman, PDO has contributed hugely to the country's success. In his plenary speech, the company's managing director, Raoul Restucci, said that the company was surpassing its own projections and smashing production targets.

"We are well ahead of schedule at the moment. In January and February of this year we were pumping in excess of 600,000 barrels per day. Some of you may remember that last year we pledged to deliver 600,000 bpd by 2019. We have accelerated that by 3 years," he said.

Restucci said that the company would look to consolidate its production levels, now that they had reached 600,000 bpd.

"In 2010 we predicted that production would be plateauing at 450,000 barrels per day before declining. We have been able to extend that plateau to 600,000 bpd."

"In March we suffered a great deal as a result of the heavy rains, so our year to date 2016 average is hovering around 597,000 bpd. But we will build on that and start exceeding



Ministers and representatives from key oil firms met in Muscat

that figure of 600,000 bpd very soon."

PDO added around 1.2 billion barrels of oil to Oman's proven reserves in 2015, at a finding cost of US\$1.76 per barrel.

But 2015 was not just a successful year in terms of exploration and production. Restucci added that PDO was exceeding its own expectations across the board and that this would continue in 2016.

"Every single performance indicator at PDO this year is performing either as well as or better than planned. Whether you're talking about safety, production, exploration, reserves, project execution or localisation, every single performance indicator is in excess of what we predicted in 2014 when the price of oil was in excess of US\$100 per barrel."

Khazan update

President of BP Oman, Yousuf al-Ojaili, provided a full update on the Khazan project. Phase one

of the project alone will reportedly add an additional 30 per cent to Oman's total gas production figures. Khazan is the biggest project in Oman and expects to hit first gas by the end of 2017. As the project ramps up, it is forecasted to provide 1.5 billion cubic feet of gas and 25,000 barrels of condensate per day, by 2020. BP Oman carried out 2,800 kilometres of seismic evaluation, which showed around 100 trillion cubic feet of gas in the Khazan reservoir.

Al-Ojaili said that the project was currently around 65 per cent complete, and that the project would have a transformative effect on Oman's energy sector when it came onstream.

"BP Oman's work at Khazzan will make a huge contribution to Oman's energy supply, improving both energy security and the country's foundations for industrial diversification. The passing of 65 per cent completion milestone is a testament to our commitment and ability to achieve this," he said.



597,000 bpd



PDO's production average for 2016



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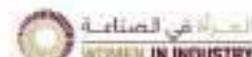
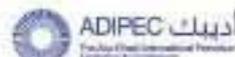
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The 2017 Egypt Petroleum Show will have a technical conference that will cover a wide range of technical and strategic topics



The 2017 Egypt Petroleum Show brings together Egyptian and global government representatives,

key project owners, NOCs and IOCs, international service providers, EPC contractors, consultants and financiers to address the evolving opportunities in the Egyptian and North African energy arena.

EGYPS 2017, held under the patronage of His Excellency Abdel Fatah El Sisi, President of The Arab Republic of Egypt, will help visitors gain insights into Egypt's future project requirements, the country's short and long term plans and strategic priorities.

Over the three days of EGYPS 2017

25+ technical and strategic sessions and over 200 prominent industry speakers from the entire upstream, midstream and downstream value chain will provide the opportunity to share both strategic industry experiences and technical expertise and knowledge exchange.

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8. Downstream: Refining, Petrochemicals and Fertilizers Technology and Operations (DRPFTO)
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Huge efforts are currently being put into Egypt's petroleum sector with special focus upon its most recent offshore gas find with plans to help alleviate growing domestic demand and create much needed feedstock for the downstream sector. The country is now gearing up for significant investments in field developments, pipelines and transportation, processing technologies and infrastructure requirements which are a must over the next 5-10 years.

"Egypt is clearly a growing market with huge opportunities, and EGYPS presents the first opportunity for local, regional and international players to come together and create a blueprint for the future energy security of Egypt. This inaugural Show will provide an opportunity for global buyers and sellers to display their products and services on the exhibition floor, and to establish alliances and partnerships. The conference represents an unparalleled opportunity for the global oil and gas industry to explore the opportunities and challenges of the exciting North African market," Christopher Hudson, President of dmgevents, Energy Division said.

To be part of the leading oil and gas gathering in Egypt, the submission deadline for abstracts is Thursday 12 May 2016.

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Halliburton's real-time coiled tubing services

Halliburton's Production Solutions business line has introduced Spectrum Real-Time Coiled Tubing Services that are designed to deliver more accurate, more complete downhole measurements, and reliability—leading to a higher return on investment for completion and intervention operations.

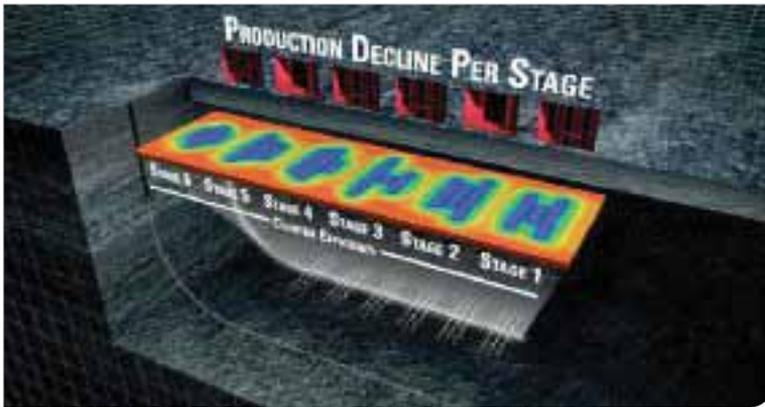
The service comprises two complementary offerings: Spectrum Diagnostic Services and Spectrum Intervention Services. These services integrate Halliburton's coiled tubing with down-hole measurement tools, fiber optic sensing and telemetry, to deliver complete, accurate real-time data. Operators are better able to minimise uncertainty, assess reservoir performance, and monitor wellbore conditions, helping them significantly improve well intervention operations and production.

Spectrum Diagnostic Services delivers fiber-optic distributed sensing through coiled tubing to assess well productivity and completions effectiveness by identifying fracture initiation points across the wellbore and profiling production. An alternative to traditional production logs, Spectrum Diagnostic Services can monitor a time series of data across the entire wellbore as opposed to single snapshots in time. Applications for Spectrum Diagnostic Services include determining stimulation cluster efficiency, fracture mapping, production profiling, leak detection and assessment of wellbore integrity.

"Spectrum Diagnostic Services is one of the first technologies to provide this detailed analysis on a per stage basis for the entire length of the wellbore," said Ahmed El Demerdash, vice president of Halliburton's Production Solutions business line.

Spectrum Intervention Services delivers real-time monitoring from a bottom-hole assembly, with modular sensors for measuring depth correlation with casing collar locator and gamma ray, internal and external pressure and temperature, tool inclination, torque, tension, and compression. Compared to standard operations where only surface parameters are available, downhole insight from Spectrum Intervention Services helps reduce operational risk and increase precision to deliver better wells. These services have multiple applications, including milling, wellbore cleanouts, fishing, perforating, stimulation, and completion equipment manipulation.

"In this economic environment, customers are evaluating the effectiveness of completion methods and looking to minimise the number of trips downhole," added El Demerdash.



SPECTRUM Diagnostic Services provides stimulation fluid distribution and production flow profiling in a single trip



SPECTRUM Intervention's sensing BHA sends real-time, subsurface data through fiber optics to optimise interventions

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New oil deposits are being found in ever more aggressive and remote environments.

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Eni awarded block in Ghana

Italy's ENI and its partners have been awarded an offshore block located in the prolific Tano basin, offshore Ghana after parliamentary approval.

The Cape Three Points Block 4, covers an area of 1,127 sq-km in water depths ranging from 100 to 1,200 meters and partially surrounds the Offshore Cape Three Points (OCTP) block also operated by Eni. The OCTP integrated project is a deep offshore development located approximately 60 km from the Ghanaian Western Region's coast.

If the drilling programme is successful, the block will benefit from the OCTP project infrastructures, currently under development.

The OCTP project, which involves the integration and synergic development of the various oil and gas discoveries (Sankofa Main, Sankofa East and Gye-Nyame). The project envisages the development of subsea wells tied-back to a FPSO which will be connected to shore via a gas transport line.

The OCTP oil production start-up is expected in 2017 while the gas production, which will supply the domestic market for power generation, is expected in 2018.



The consortium behind the block includes Eni Ghana (with 42.4 per cent stake) as operator, Vitol Upstream Tano (with 33.9 per cent stake), Ghana National Petroleum Corporation (GNPC with 10 per cent stake), Woodfields Upstream Ghana (9.5 per cent stake) and GNPC Exploration and Production Company (Explorco, 4 per cent stake).

ADNOC awards tubing contract to Vallourec

ADNOC has signed a contract with Vallourec to supply oil country tubular goods (OCTG) during the 2016-2018. Vallourec will provide services to ADMA-OPCO, ADCO and ZADCO.

The contract will see Vallourec supply the three adnoc subsidiaries with close to 100,000 tonnes of equipment. Under the terms of the agreement, Vallourec will supply ADNOC with a full range of standard API and premium OCTG. The

equipment will be for both onshore and offshore oilfields, to be used in both conventional and complex wells.

Didier Hornet, senior vice president, Eastern Hemisphere said: "Thanks to our worldwide presence, we are able to offer ADNOC a full range of products, from premium to API, from all of our mills, with competitive lead times and competitive prices. Together with VAM Field Services, we are able to support ADNOC with value added solutions from the mill to the rig"

The contract specifies that Vallourec will supply high torque VAM connections for extended reach drilling, in addition to corrosion resistant alloy steels for sour services. The UAE has some of the sourest gas fields in the world, with hydrogen sulphide content at the Shah and Bab fields often rising above 20 per cent.

Vallourec will also provide inspection services as part of the deal. OCTG will be manufactured in Vallourec's facilities in France, Germany, Brazil and China.



PROJECTS IN BRIEF

Petroceltic move towards first gas at Algeria's Ain Tsila field

Petroceltic has reported promising results from its drilling campaign in Algeria's Ain Tsila gas and condensate field.

Development well AT-10, the first well of the Ain Tsila development drilling campaign, is located in the north of the field approximately 3.4 km from the field discovery well AT-1, and 2.0 km from the appraisal well AT-8.

AT-10 is the first of up to 24 new development wells on Ain Tsila expected to be required to establish and maintain the currently approved annual average wet gas plateau rate of 355 MMscfpd.

The well began drilling on 21 February 2016 and on 31 March 2016 it reached a total depth of 2005m MD, with a planned 61m penetration of a fully gas and condensate bearing Ordovician formation.

Wireline logging results from the well indicate that reservoir quality is in line with the pre-drill prognosis, with an expected initial off-take rate comparable to AT-1 and AT-8 wells, each of which delivered flow rates in excess of 30 million standard cubic feet per day (MMscfpd) on test.

Aker Solutions awarded BP subsea contract

Norway's Aker Solutions has won a global contract to provide subsea engineering services for UK's BP-operated subsea oil and gas fields.

The five year contract cover subsea engineering services, asset integrity management and operations support. It has a proviso that the deal could be extended by two years.

Aker Solutions will execute the work through a global delivery model.

"We are delighted to partner with BP in finding cost-effective solutions to boost productivity and optimise the infrastructure of the company's subsea fields" said Luis Araujo, Aker Solutions' chief executive officer.

The value of the deal was not revealed.

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To find out more about the submission process, please email the conference content team on content@dmgevents.com. Or, visit our website: www.gastechevent.com/pipedmg2





Dow appoints new regional head of public affairs

The Dow Chemical Company has announced that Fadi Matar has been appointed to the position of Public & Government Affairs Director for India, Middle East, Africa and Turkey.

Within his new role, Matar will develop Dow's regional public and government affairs strategies and engage with key stakeholders to support the company's growing presence and business objectives across the region. Matar will be based at the Dow Chemical Middle East headquarters in Emaar Square, Dubai. "India, Middle East, Africa and Turkey are critical markets for us and public and government affairs play a key role in developing positive relationships with our stakeholders," said Markus Wildi, President Dow IMEAT. "We are very pleased to have Fadi lead that team and bring over 15 years of regional experience to benefit Dow and enhance our brand presence in the region." Prior to his new role, Matar was Public & Government Leader for the Middle East and North Africa region, having initially joined Dow in June 2014 as Public Affairs Leader – MENA. Matar served as the Corporate Communications director for Dow's joint venture in Kuwait, EQUATE Petrochemical Company before moving to Dow. There, he headed the Corporate Communications Group with responsibilities that included brand management and development, public relations, advertising, digital marketing, media and internal communications.

Chevron Corporation appoints corporate vice president of Strategic Planning

Chevron Corporation has named Mark A. Nelson as its corporate vice president of Strategic Planning, effective April 1, 2016.

"Mark is a proven leader whose breadth of international, corporate and operating experience will serve Chevron well as we actively shape the company for continued long-term success," said John S. Watson, Chevron's chairman and chief executive officer. "In his current role, he has been instrumental in transforming our refining and fuels-marketing business outside the Americas."

Nelson, currently president of International Products, replaces Joseph M. Naylor who was appointed vice president of Policy, Government & Public Affairs in February. In his new role, Nelson, 52, will be responsible for setting the strategic direction for the company, allocating capital and other resources, and determining operating unit performance measures and targets. He will report to Michael K. Wirth, executive vice president for Midstream and Development. Nelson joined Chevron in 1985 and over the course of his career has served in a variety of management positions in retail, marketing, operations and business planning. Prior to his current position, he served as president of Chevron Canada Limited, where he oversaw oil and gas exploration, production and marketing of crude oil, natural gas and natural gas liquids in Canada. In 2003, he was named president of Global Lubricants and while continuing to run the lubricants business he led the Unocal integration into Chevron in 2005.



Glasspoint appoints new senior vp for project development

GlassPoint Solar announced the appointment of energy finance expert Nazar Al Lawati as senior vice president of Project Development, International. Al Lawati, who most recently served as Chief Financial Officer of state owned Oman Oil Refineries and Petroleum Industries Company (Orpic), will lead GlassPoint's growth in the Middle East region. His mandate includes fostering partnerships with strategic and international partners to develop and finance large-scale solar enhanced oil recovery (EOR) projects.

"I am delighted to be part of an industry leader that is paving the way for solar deployment across the region," stated Nazar Al Lawati. "GlassPoint's technology offers significant economic and environmental benefits to the local economies where we operate. Using solar to produce steam for EOR can reduce an oilfield's gas requirements and corresponding carbon emissions by up to 80%. Significant value can be extracted from the saved gas through export or by using it to fuel industrial projects and provide feedstock to the petrochemical industry."

AL Lawati added: "By harnessing the sun's rays, the Sultanate and other countries

in the Middle East can recover heavy oil sustainably while also reducing production costs. GlassPoint's solution can produce steam for a lower cost than steam made from burning natural gas."

DNV GL appoints new Energy CEO

DNV GL has appointed Ditlev Engel as the new CEO of its Energy business area. Starting 4 April, Engel will succeed acting CEO Elisabeth Harstad and report to the Group President & CEO Remi Eriksen.

Ditlev Engel will join DNV GL as CEO of the group's Energy business area, which provides testing, certification and technical advisory services to the energy value chain including renewables, power grids, storage as well as energy use. He will be based at the DNV GL - Energy headquarters in Arnhem, The Netherlands and be a member of the Executive Committee for the DNV GL Group.

DNV GL Group president & CEO Remi Eriksen says; "I am very pleased to announce that Ditlev Engel has accepted the position as CEO of our Energy business area. He has extensive knowledge of the global energy industry, which will allow him to continue to develop our value proposition and services to our customers. In addition to his extensive experience building global businesses, he also brings impressive international leadership competence. I am confident that he will grow our business in wind and solar energy, transmission and distribution systems, and energy efficiency, while reinforcing our leadership position in independent testing of power system components, together with his 2,500 new colleagues in our Energy business area."

Gassco appoints new management team

Norwegian gas transportation firm Gassco has appointed a new management team include, with immediate effect.

The new team includes Øystein Rossebø, responsible for development and innovation, and Inghild Storesund, head of finance and improvement processes. In addition, Randi Viksund is in charge of safety and quality, Kristin Kinn Kaste heads system operation, Jonathan Alcock is responsible for asset management and Ingolf Voll heads HR and communication.

EVENTS 2016 / 2017

MAY

The Abu Dhabi International Downstream Summit
 May 8-10 May, 2016
 Abu Dhabi, UAE
www.adidownstream.com

Canada LNG Export Conference & Exhibition
dmg::events
global energy
 May 10 - 12, 2016
 Vancouver, Canada
www.canadalngexport.com

Iraq Petroleum 2016
 May 23 - 25, 2016
 London, UK
www.cwciraqpetroleum.com

Women in Industry Forum
dmg::events
global energy
 May 23, 2016
 St. Regis, Corniche, Abu Dhabi
www.womeninindustryforum.com

JUNE

23rd International Caspian Oil and Gas Exhibition
 June 1-4, 2016
 Baku, Azerbaijan
www.oilgas-events.com/caspian-OG-exhibition

International Refining and Petrochemical Conference (IRPC 2016)
 June 7-8, 2016
 Milan, Italy
www.cvent.com

Global Petroleum Show
dmg::events
global energy
 June 7 - 9, 2016
 Calgary, Alberta, Canada
www.globalpetroleumshow.com

Pacific LNG
dmg::events
global energy
 June 15 - 16, 2016
 Tokyo, Japan
www.pacificlngsummit.com

Atlantic Canada Petroleum Show
dmg::events
global energy
 June 22 - 23, 2016
 St. John's, Newfoundland & Labrador, Canada
www.atlanticcanadapetroleumshow.com

SEPTEMBER

Oil Sands Trade Show and Conference
dmg::events
global energy
 September 13 - 14, 2016
 Alberta, Canada
www.oilsandstradeshows.com

NOVEMBER

ADIPEC 2016
dmg::events
global energy
 November 7-10, 2016
 Abu Dhabi, UAE
www.adipec.com

2017

FEBRUARY

The 2017 Egypt Petroleum Show
dmg::events
global energy
 February 14 - 16, 2017
 CICEC, Cairo, Egypt
www.egyptpetroleumshow.com

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Saudi Arabia:	2x MABI Bingo 2 / 1x MABI Bingo 16-Z
Iran:	1x MABI Bingo 16-Z
Kuwait:	1x MABI Bingo 16-Z

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MANUFACTURER OF CHOICE FOR LAND RIG OPERATORS

Cory Marion, commercial operating officer at Top Oilfield Industries, explains how the Sharjah-based firm has become a leader in the field of land rig refurbishment, oilfield drilling equipment manufacture and repair



How long has your business provided services for the oil and gas sector?

With over two decades of service, Top Oilfield has achieved an impeccable record of oilfield equipment refurbishment, and prides itself on consistently producing work of the highest quality in a timely and cost effective manner. The company's commitment is that every piece of equipment that leaves its workshops has been overhauled to the highest industry standards, tested and will perform to its design specifications. We offer a 'one-stop-shop' concept, whereby drilling equipment, engines, electrical work and steel fabrication work are all undertaken in-house, by our own personnel.

Where are you located within the Middle East / GCC region?

Located in the Hamriyah Free Zone, Sharjah, for the past 22 years Top Oilfield Industries has been a consistent and reliable service centre for drilling contractors operating in the Middle East. Created by oil industry professionals, the company has expert knowledge of the environment, problems and demands within which drilling contractors operate. Top Oilfield has consistently offered a wide range of services and skills designed to ensure that clients could always be assured of a complete and excellent level of service.

What is the competitive advantage your business has over others providing similar services to the oil and gas industry?

As a result of its unyielding commitment to high quality production, Top Oilfield has grown to become a leader in the field of land rig refurbishment, oilfield drilling equipment manufacture, repair, overhaul and modification. Alongside this it also supplies mechanical, electrical and engineering field technicians throughout the Middle East and beyond, who undertake vital repair and maintenance projects in support of its clients. Top Oilfield Industries is proudly an ISO, API (4F, 7K & 16D) and BMTRADA certified company.

Have you got any major launches coming up in the next year?

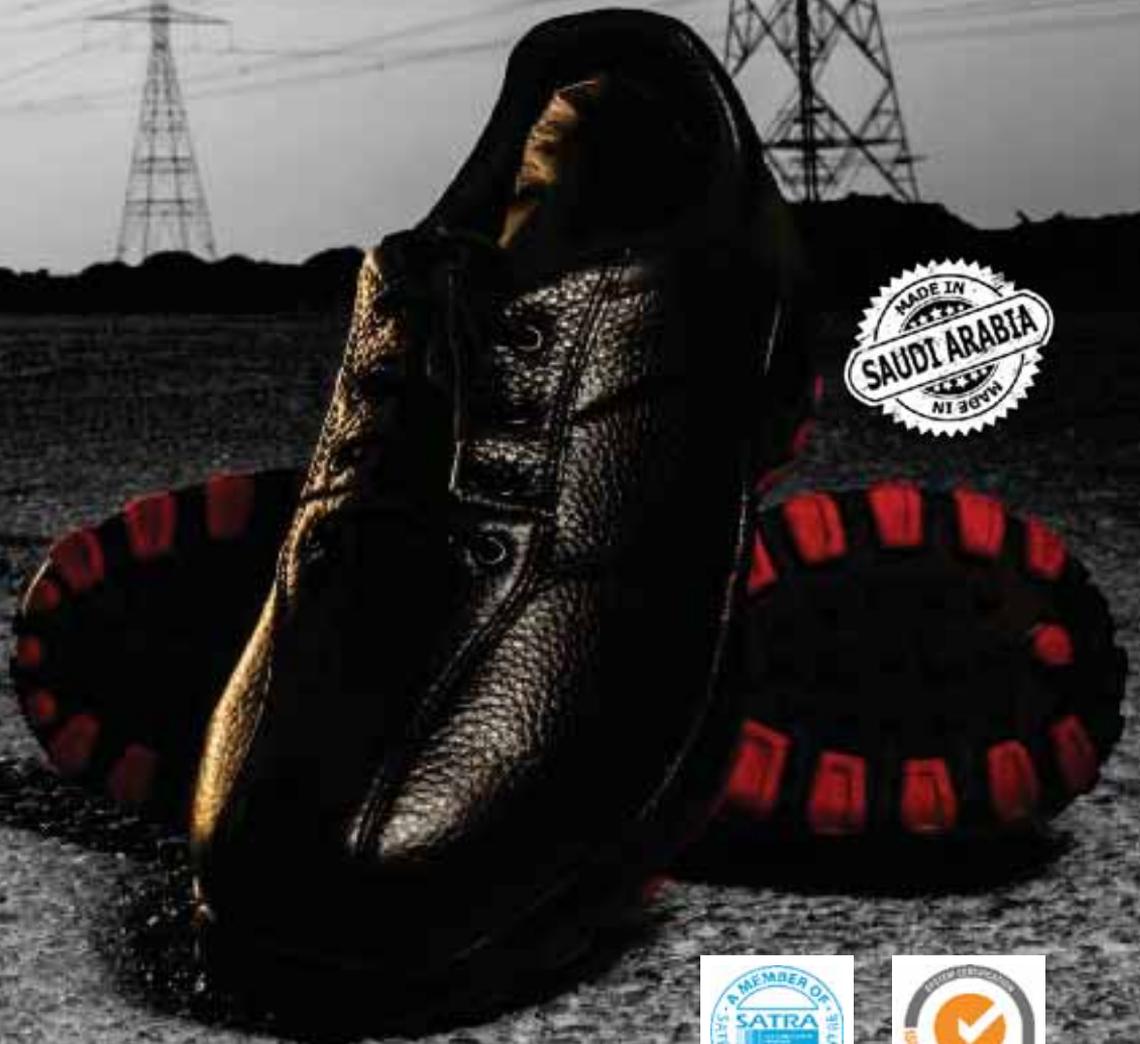
We have been commissioned to build two fast moving rigs for completion in 2016, which are designed for desert operations, and because our field engineers and maintenance personnel are available throughout the Middle East, our clients are assured of full after sales support. Top Oilfield are dedicated and on course to complete these new build land rigs, our focus is to ensure that they are manufactured to the highest standards available anywhere in the world and provide highly reliable performance and service for our customers for many years.

What are you most excited about for the coming year, in terms of your business outlook?

Alongside the work undertaken on new contracts, 2015 has also been a period of growth and settling in for the relatively new Top Oilfield Rentals Division that was set up only a year ago. Top Oilfield Rentals provides highly reliable, high performance equipment drilling equipment, engines/generators and service equipment on a rental or lease purchase basis. These products are available throughout the Middle East and include BOP control units, independently driven mud pumps, engine/generator sets and batch mixers, cementing units and so forth. This Division provides an opportunity for Top Oilfield to demonstrate the high reliability and performance of the equipment it manufactures. Equipment available for rental includes a 7 station accumulator, a skid mounted 15k pumping unit and a twin 75BBL batch mixer.

Looking ahead and building on this new business, Top Oilfield aims to become the manufacturer of choice for land rig operators both in the Middle East and globally. By ensuring that its drilling rigs are manufactured to highest available standards, are built on time and are priced in accordance with Top Oilfield's 'fair pricing policy', I am confident that they will be in high demand. 

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