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ENERGY SUPPLIES AND ENERGY MIX UNDER THE SPOTLIGHT AT THE EGYPT PETROLEUM SHOW'S STRATEGIC CONFERENCE



The second and final day of the EGYPS Strategic Conference witnessed a number of relevant discussions on the region's oil and gas dynamics, including the successful alliance of North Africa and the Mediterranean countries to boost production to achieve mutual goals.

Keith Elliott, Senior Vice President Offshore at Noble Energy, reviewed recent changes, pointing out "a lot has happened since we met last year [at EGYPS 2018] and agreed to import meaningful and very significant quantities of gas into Egypt from neighbouring countries, and that provides the opportunity to realise the vision of the hub. Equally important, we created a pathway for that gas to move in by entering into agreements to acquire a pipeline excellency."

Panelists also tackled ways of reaching a Euro-Mediterranean cooperation era in order to develop the energy potential of the region and to fast-track oil and natural gas discoveries to make sure of having regional domestic supply and ensure international exports. "People talk about major gas discoveries in the area, but I think we have more gas to discover," Mathios Rigas, CEO of Energean, noted, signifying a more flourishing gas future to tap into.

Mahdjouba Belaifa, Head Gas Market Analysis Department (GMAD) at the Gas Exporting Countries Forum Secretariat (GECF), commented on the Euro Mediterranean relations saying "if we look at the two sides of the equation, we have to look at the bottom shelf and the assets of the Mediterranean and North African region, and on the other side of the equation we need to look at the European market behaviour."

"However, we have to bear in mind that the region still needs to satisfy its own energy requirements, so if we know that 47% of its consumption has been satisfied through imports, the first challenge for the region is to satisfy local market demand," Belaifa added.

Continued on page 1 >





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ENERGY SUPPLIES AND ENERGY MIX UNDER THE SPOTLIGHT AT THE EGYPT PETROLEUM SHOW'S STRATEGIC CONFERENCE

Continued from page 1

Egypt and Europe have significant gas relations. "Egypt has a number of options for increasing their gas production," Grady Ables, Senior Region Vice President at Apache, noted, adding that it has great feasibility for significant gas export and that "Europe is the obvious market for that."

Oil and gas experts also reflected on the existing competition in the market between countries seeking to become natural gas and liquefied natural gas (LNG) hubs. "I think as we talk about Egypt as an energy hub, having a deregulated big market at the back of this hub is quite a key success element," Gasser Hanter, Chairman and Vice President of Shell Egypt, said.

Discussing global energy demand, speakers highlighted that demand grew by 2.1% in 2017, compared to demand in 2016. The energy demand increased due to oil and natural gas consumption, and is expected to continue rising.

The Strategic Conference also addressed ways for bringing the partnerships of oil, natural gas and renewable energy sources together, as well as having a roadmap for a sustainable energy mix.

"The reason why oil and gas companies, and therefore the future of electricity will be definitely affected with solar, is that the marginal cost at the point of which it is emphasised is zero. It does not last forever, but it lasts longer than others," Nick Boyle, Group CEO of Lightsource BP, said. He also noted that "the price of solar panels today is 5% of what it was 10 years ago."

"For oil and gas to continue to be produced and with renewables coming to the market, we are going to come to a situation where energy is doable in many places on the earth, and I fundamentally believe that we as an industry need to be prepared for prices



genuinely drifting down. I don't think they are going the other way," Maria Moraeus Hanssen, CEO of DEA Deutsche Erodel AG, stated.

Panelists further discussed the priorities that should be set in order to achieve a highly cost advantaged position and to have a higher capital of productivity. "It is extremely important for governments and partners to be sure that cost efficiency is managed across the cycle," Ali Al Jarwan, CEO of Dragon Oil, stated.

Closing Remarks by Minister Tarek El Molla

EGYPS Strategic Conference was officially concluded with a closing panel with the Egyptian Minister of Petroleum and Mineral Resources, His Excellency Eng. Tarek El Molla. In his closing remarks, the minister commented on the bridge between East and West and how foundations for a sustainable future energy mix can be built.

El Molla also highlighted many of the successes achieved during the three days of EGYPS, which included the announcement of the Egyptian General Petroleum Corporation's (EGPC) and the Egyptian Natural Gas Holding Company (EGAS) bid round. "The way we announced the bid round this time is new, and this shows that the Egyptian oil and gas sector is seeking to become an international industry and an international oil and gas company," the minister said.

Among the companies awarded were the General Petroleum Company (GPC), Neptune Energy, Shell Egypt, ExxonMobil, BP, Total, Petronas, DEA, BG, and IEOC Production BV, and BG.

In addition to that, El Molla also mentioned the memorandum of understanding signed on the sidelines of the Show. "We have a very ambitious plan for growing our natural gas production. We reached self-sufficiency, we started to resume exports, and we plan to fully utilise our exports capacity," he noted.

"We are also very keen on continuing our discoveries, and we will not do that unless we have concession agreements in place. To demonstrate that, we will focus on the Red Sea. The year of 2019 will be for the Red Sea," the minister highlighted.

El Molla winded up the Strategic Session stating that "[EGYPS] is a great opportunity and a milestone for the local companies to showcase their work, their milestones, and achievements."





ASIAN GIANT PETRONAS CREATES ROOTS IN EGYPT: AN INTERVIEW WITH PETRONAS EGYPT COUNTRY HEAD, DATO' ABU FITRI B. A. JALIL

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HOW DO YOU SEE THE FUTURE OF THE EGYPTIAN LNG (ELNG) EXPORTS?

Egypt's economic growth shows potential in the near future. A recent report by Standard Chartered Bank forecasted Egypt's economy to surpass some of the world's largest economies like Russia, Germany and Japan by 2030, which places Egypt in 7th place in a top 10.

With the support and collaboration from His Excellency Eng. Tarek Molla, Egypt's Minister of Petroleum and Mineral Resources, as well as from the Egyptian General Petroleum Corporation (EGPC) and the Egyptian Natural Gas Holding Company (EGAS), there is an upswing in the overall gas supply-demand balance in Egypt that led to natural gas self-sufficiency. We expect ELNG to resume delivery of LNG and more gas reserves being developed. There is also an opportunity to look into the expansion of LNG plants in Egypt.

ELNG has been receiving a significantly higher feed-gas volume in 2018 compared to the last few years and the feed-gas outlook in the coming years is promising.

IN YOUR OPINION, HOW DOES EGYPT BENEFIT FROM THE ONGOING LIBERALISATION OF THE ENERGY SECTOR?

Liberalisation of the energy sector is a trend after the oil price collapse in 2015, where the government could no longer fully depend on oil and gas revenues to cover the energy subsidies.

This will provide a fair and competitive environment for supply and demand, which benefits all parties, encourage more growth in the energy sector and support alternative energy arowth.



HOW DO YOU SEE EGYPT'S INVESTMENT CLIMATE COMPARED TO OTHER COUNTRIES IN THE REGION?

Egypt is geopolitically stable and we have witnessed the measures that the government has taken to reform the county's economy in the last few years. These measures include new infrastructures, such as new highways, as well as the amendment and approval of necessary regulatory framework to promote investment in the country. Egypt has readily available talent, which is attracting investment into the country. Moreover, a recent World Bank report entitled 'A New Economy for the Middle East and North Africa' predicts the economic growth in Egypt to reach 5.8% in 2020. This is driven by the government's economic reform programme that has seen the liberalisation of the exchange rate and the rationalisation of energy subsidies, among others. Egypt is slated to top other oilimporters in the region, attributing its burst in growth to a recovery in consumption and private investment and a rebound in merchandise exports and tourism.

In addition, the vision of His Excellency Abdel Fattah El Sisi, President of the Arab Republic of Egypt, to foster good relationships and collaboration with neighbouring countries has been a great success. Minister Tarek El Molla has also successfully embarked on the idea of Egypt as an East Mediterranean gas hub and is getting the full support from neighbouring governments, such as Cyprus, plus oil and gas companies.

WHAT DOES PETRONAS EXPECT TO ACHIEVE IN EGYPT IN 2019?

Operationally, we have sanctioned Project Phase IXB in West Delta Deep Marine last year, and we expect the gas production to increase during 2019. Also, we expect more LNG cargoes being exported this year.

For business growth, we are glad for being among the companies nominated at the EGAS 2018 bid round, and we have planned to participate in the Red Sea bid round and the West Mediterranean bid round. For our downstream business, PETRONAS plans to expand its business in the petrochemical industry and also through PETRONAS Lubricant International (PLI)'s venture this year.

PETRONAS will also support the Ministry of Petroleum and Mineral Resource's Modernisation Project as well as other planned programmes this year.



WHY IS IT IMPORTANT FOR PETRONAS TO PARTICIPATE IN THE EGYPT PETROLEUM SHOW?

Operating in Egypt since 2001, PETRONAS is Malaysia's multinational oil and gas company. We are present in more than 50 countries across 6 continents. With over 40 years of experience across the integrated oil and gas value chain, we offer innovative solutions and game-changing technologies from upstream, midstream to downstream, to deliver efficient, reliable and sustainable energy to the world.

PETRONAS is at EGYPS for the first time this year. Our participation is a good opportunity to showcase our integrated, end-to-end capabilities and share energy solutions to the region.

PETRONAS also plans to expand further in North Africa and the Mediterranean, seeking opportunities for collaboration and partnerships across the energy value chain.

WE ARE GLAD FOR
BEING AMONG THE
COMPANIES NOMINATED AT
THE EGAS 2018 BID ROUND,
AND WE PLAN TO
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BID ROUND AND THE WEST
MEDITERRANEAN BID
ROUND.









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A POSITIVE SENTIMENT ACROSS THE OIL AND GAS INDUSTRY SURROUNDING EGYPS 2019

Another edition of the Egypt Petroleum Show (EGYPS) that depicts all the possibilities and potentials for the oil and gas industry is proving to be a great success. Over a 3 year period, it has quickly established itself as a platform for all local and international oil and gas companies to showcase their achievements which are; paving the way for economic growth, and ultimately, a country rich in prolific investments.

His Excellency Eng. Tarek El Molla, Egypt's Minister of Petroleum and Mineral Resources, shared glimpses of the ministry's efforts and ambitious plans, with EGYPS being a major catalyst for the country's success.

NEW MOUS AND BID ROUND ANNOUNCEMENTS

EGYPS 2019 also witnessed the signing of new memoranda of understanding (MoUs) and saw the announcement of the winners of the EGPC and EGAS bid rounds.

Minister Tarek El Molla was accompanied by the Egyptian General Petroleum Corporation (EGPC) CEO Abed Ezz El Regal, and the head of Egyptian Natural Gas Holding Company (EGAS), Osama El Bakly, and revealed that many foreign companies will pump more investments into the Egyptian petroleum sector. The new investment climate and political stability are encouraging more global companies, such as Eni, BP, Exxonmobil, and Shell to increase their investments in Egypt, El Molla stated.

New exploration areas include the Western Desert, Gulf of Suez, the Nile Delta, and the Mediterranean.

The General Petroleum Company (GPC) was awarded a \$5 million contract to drill 10 wells, while Neptune Energy obtained an \$11 million deal to drill three wells with a total volume of investments at \$34.5 million.

Shell Egypt won three bids, the first in the west of Faiyum for \$24.7 million to drill six wells, the second for five wells in the southern east of Horus for \$24.7 million, while the third is a \$7.8 million deal for three wells in Abu Sinan.

ExxonMobil, BP, Total, Shell, Petronas, DEA, BG, and IEOC Production BV, were awarded a number of contracts for concessions that are mainly near Alexandria and Siwa.

IEOC Production BV won the bid round for South East Siwa to drill four wells with \$17 million worth of investments and a \$1.15 million signing bonus.



Exxonmobil, BP, IEOC, Total, Shell and Petronas were awarded exploration rights in District number three in North East Amereya Offshore to drill two wells with financial commitment of \$100 million and a \$10 million signing bonus.

BG and PETRONAS won the bid round for District number four in Sidi Gaber Offshore area to drill one well and conduct a seismic survey on 1500 km2, with financial commitment of \$60 million and a \$10 million signing bonus.

The two companies further won the bid round for District number six in North Al Fanar Offshore to conduct a seismic survey on $2250\,\mathrm{km}2$ with a \$9 million financial commitment and a \$3 million signing bonus.

DEA won exploration rights for District number 10 in East Damanhour Onshore Concession to drill seven wells, with a \$28 million financial commitment and a \$11 million signing bonus.

IEOC and BP won the bid round for District number 11 West Sherbin Onshore to drill two wells, with an \$18 million financial commitment and a \$5 million signing bonus.

As for the MoUs, new agreements were signed between the Egyptian Petroleum Company (EPC) and Malaysia's Petronas to exploit surplus capacity at the oil complex in al-Ameriya. Both companies will establish a new company to market the quality of a new oil, which will be used in the local market and exported.

The ministry also signed a MoU with Apache Egypt, and another one with the American Chamber of Commerce – which was also supported by Apache. Both MoUs are related to capacity building.

"We know that for any industry to be successful, especially Egypt as it is going through an economic reform and transformation, one of the most important things is capacity building. We want to make sure that we educate people and develop the right skill set to make them productive," David Chi, Regional Vice President and General Manager of Apache Egypt, stated.

As Chi explained, the programmes developed under the MoUs focus on the sector's youth and middle management, "so we provide the tangible skills that they need." In these projects, Chi stated that the companies will receive the cooperation of universities both from the US and from Egypt.

The minister also witnessed the signing of an MoU between Schlumberger and the Egyptian Drilling Company (EDC). The MoU aims to better utilise the sector's human capital with a qualified and capable workforce, empower the young professionals through specific career programmes and boost leadership for sustaining the sector's vision by designing a customised training programme as part of the People Development pillar of the ministry's Modernisation Project. The training scope covers four target groups: university undergraduates, top fresh graduates, and the ministry's new hires and Middle Management programmes.

Commenting on the HSE front of the agreement, Karim Badawi, Managing Director Egypt and East Mediterranean at Schlumbeger, stated the company has



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worked with representatives of different companies, such as "EDC, Apache, BP, Eni, EGPC, Petrojet and HSE experts to put together the collective effort of how we can help the industry in terms of improving the culture of behaviour of HSE within the industry, and leveraging the best practices on the inclusion of safety performances and safety culture."

In addition, ENPI and SAP also signed a cooperation agreement to implement an integrated asset and resource management system for the downstream sector.

DISCOVERING THE YOUTH ENGAGEMENT PROGRAMME

This year, EGYPS launched its Youth Engagement Programme, designed to target high school students and encourage and direct them into engineering. "Mechanical engineering and geo science have a big gap and shortage of human resources in the oil and gas industry. Senior managers will be retiring, therefore, we will have a gap that we need to fill with the future generation and we would like to attract them into the industry," said Hanadi Aliwat, Project Manager at dmg events.

Mohamed Hazem Sadek, a Mechanical Engineer at Enppi, said, "The Youth Engagement Programme allows for educating young people, and raising their awareness if they were to choose a career in engineering through the interactive activities the event is presenting."

The programme welcomed students from École Oasis Internationale School to attract them into the oil and gas sector using new, creative methods. "I love building stuff, so this [programme] is giving me hands-on experience to what I would like to be doing. I dream of becoming an engineer when I grow up," said Kareem Mohammad, a grade 7 student attending the programme hosted on the exhibition floor

Daniel Wafiq, another very enthusiastic student said that this was a completely new experience to him as the games they played were multiplayer. "When we teamed up, I got the chance to do it with my friends and explore together how we can generate energy. It is making me realise my capabilities and the things I could do to help humanity and the world," he said.

Young girls were also joyfully participating in the oil and gas games. "I really enjoyed it because it is not something that I ever thought I would be doing. It is really fun and I have never done something like this before," Mariam El Rawakhawy said.

Meanwhile, another seventh grader, Farida Sameh said, "I really have not made up my mind yet on what I would like to be when I grow up, so this is keeping my options open. I really enjoyed this because I learned new things about the oil and gas industry that I had absolutely no idea about."

DELVING INTO THE DIGITALISATION ZONE

The Digitalisation In Energy Zone at EGYPS provides exposure for the newest solutions, such as the role super computers can play in the industry, especially for attendees who may not be familiar with these technologies and its capabilities, said Ashraf Hussien, a reservoir engineer at Schlumberger.

It also is clear that digitalisation represents the next step for the oil and gas industry to reach new horizons, especially for major projects such as the Zohr field, the exploration in the Red Sea, and the other projects Egypt is conducting with higher capacities thanks to modern solutions, according to Mohamed Hazem Sadek, a Mechanical Engineer at Enppi.

A STRONG GLOBAL PRESENCE PROVES THE RISING ROLE OF EGYPS ON THE GLOBAL OIL AND GAS **CALENDAR**

"EGYPS is a great platform to search for new opportunities, enhance exposure, and getting more people to know about their activities, which not many knew about in Egypt prior to the exhibition," said Eslam Essam, the Egypt Business Development Manager of HBP.

US Commercial Services Assistant Tarek Khodary said that the Show is clearly getting bigger and better, noting that it has definitely attracted more attention, especially compared to its launch year, in terms of the size of participating companies and the number of attendees and

We came to EGYPS to get to know more about the Egyptian market, where we would like to expand as we see very good opportunities for our specialty," said AIMAS Egypt Operations Manager Abdul-Rahman Sayed, who stressed that the company will also participate in the 2020 edition next year.

"We are participating for the second year in a row in EGYPS. Our attendance last year was supported by the Russian government, after President Vladimir Putin's visit to Cairo, and this year we decided to come again in order to present ourselves to the growing Egyptian market," Artem Viskov, Sales Manager of Rizur, explained. "I see a growing and serious business here in EGYPS, and we look forward to being here next year as well," he added.

A number of companies from the United Kingdom are also showcasing their newest solutions through EGYPS. "Process Vision is participating for the second year, and we can clearly see that the event is growing," said the company's Managing Director Paul Stockwell.

"We are yet to enter the Egyptian market, but we have a representation here, especially as Egypt is becoming a regional hub for natural gas, we see a great opportunity for our technologies," Stockwell added, noting that their output from EGYPS has improved year on year.

It is also the second time that Norway is joining the exhibition, but with more new companies. "We are here in EGYPS as we seek opportunities in Egypt, where there has been an increasing number of foreign investors. It is a very promising market that is at the centre stage of North Africa," explained Karsten Viste Sales and Marketing Representative of Innovar Solutions. "We have a representation in the UAE, but we are still studying whether to open a branch in Egypt or enter through another international or local partner," he explained.

ESTABLISHED GLOBAL PLAYERS SEEKING NEW OPPORTUNITIES IN **EGYPT**

Hempel Group is a stronghold name coming to EGYPS this time. "We are participating for the first time, and we are coming back next year. EGYPS is a very strong event with the market's biggest companies and we are looking forward to identify more opportunities for our business, said Mina Lawindy Sales Manager for Egypt, Libya, and

"I am seeing many deals being signed, and as part of our new marketing strategy, we are focused on events with such great prominence," said Sales Representative John El







Another company coming to EGYPS for the first time this year is Royal IHC, despite a strong presence in the Egyptian market and cooperation with the Suez Canal Authority. "We are displaying our achievements and dredging solutions here in EGYPS, we have had positive exchanges with more people and companies getting to know about our activities," said the company's Sales Manager Daan Uiterwaal.

LOCAL COMPANIES SETTING THE STAGE FOR GROWTH

Meanwhile, NEDCO is exhibiting in Egypt for the second consecutive year, with the goal of raising awareness of the company's activities, according to Sales Engineer Sarah El Badry. "This year I have seen much bigger crowds and that is a signal of the increasing importance of the Show," she

Similarly, GASTEC participated in the inaugural edition in 2017 and came back for the second time this year. "The event has noticeably expanded, we are looking forward to building a stronger network with all the exhibitors, discuss opportunities for cooperation, we believe EGYPS will have a direct positive effect on our business," said the company's Assistant General Manager for Sales, Khaled Fayed.



FINDING EFFECTIVE ENGINEERING

SOLUTIONS: AN INTERVIEW WITH COLBY FUSER, VICE PRESIDENT, EGYPT AND LIBYA AT HALLIBURTON

COULD YOU TELL US ABOUT HALLIBURTON'S CURRENT ACTIVITIES IN EGYPT?

Our portfolio comprises of offshore and onshore operations with numerous customers, including national and international oil companies (IOCs). Halliburton is aligned with Egypt's goal of self-sustainability and growth, delivering technologies, increasing drilling speeds, and optimising well interventions.

WHAT ELEMENTS OF THE EGYPTIAN **OIL AND GAS SECTOR MAKE** HALLIBURTON'S HISTORY IN THE **COUNTRY SUCCESSFUL?**

Halliburton has a long history and strong relationships with operators in Egypt. Our handson experience with the subsurface, the logistical challenges, and service execution is what sets us apart from our competitors. We are positive of the prospects for increased development and higher activity levels across the deep water, mature fields, and unconventional reservoirs. Moreover, our value proposition is to collaborate with customers to find effective engineering solutions that maximise their asset value. This means helping operators increase production and cut costs to ensure their reservoirs are profitable in the long term.

IN YOUR OPINION, HOW CAN **EGYPT OPTIMISE PRODUCTION** FROM MATURE FIELDS?

Mature fields can pose unique challenges such as maintaining economical production, water influx and well integrity issues. That is why it is essential that we deploy the right technologies. A great example of this is Halliburton's SPECTRUM Real-Time Coiled Tubing Services, which combines intervention and diagnostic services to help operators monitor and optimise job performance in real-time, resulting in greater efficiency, reliability and higher returns on investments. Spectrum services are conveyed across a coiled tubing unit where data is transmitted through a wireless signal to minimise uncertainty, assess reservoir performance and monitor wellbore conditions. This helps improve intervention operations and increase production significantly. The Acoustic Conformance Xaminer® (ACX™) is another technology driving results in Egypt. It identifies and pinpoints costly wellbore leaks by analysing sound waves that describe flow patterns in the formation and casing to boost production in mature fields.

In essence, mature fields have a different economical model and the ability to explore different commercial models, which is necessary for growing and sustaining mature field production.

WHAT IS YOUR MESSAGE FOR **COMPANIES WANTING TO ENTER** THE EGYPTIAN OIL AND GAS **SECTOR?**

Egypt is a very tough market. The reservoirs are challenging, the need for technology is high, and the right human capital is critical for successful operations. Many IOCs acquire new concessions, providing opportunities for Halliburton to deliver differentiated services and maximise asset value. Companies should understand the unique challenges that the Egyptian market presents and accordingly, collaborate with service providers who have a demonstrated track record of strong execution.

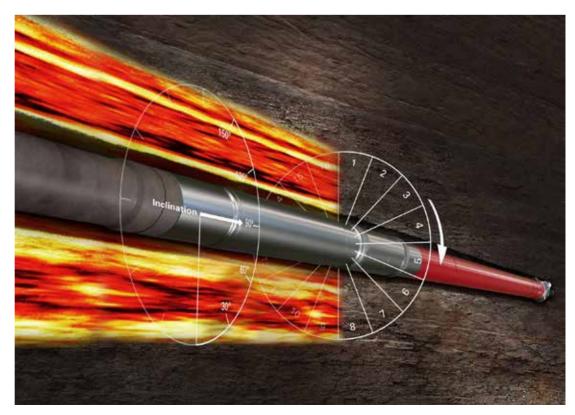
WHAT IS HALLIBURTON'S **EXPERIENCE OF THE EGYPT PETROLEUM SHOW?**

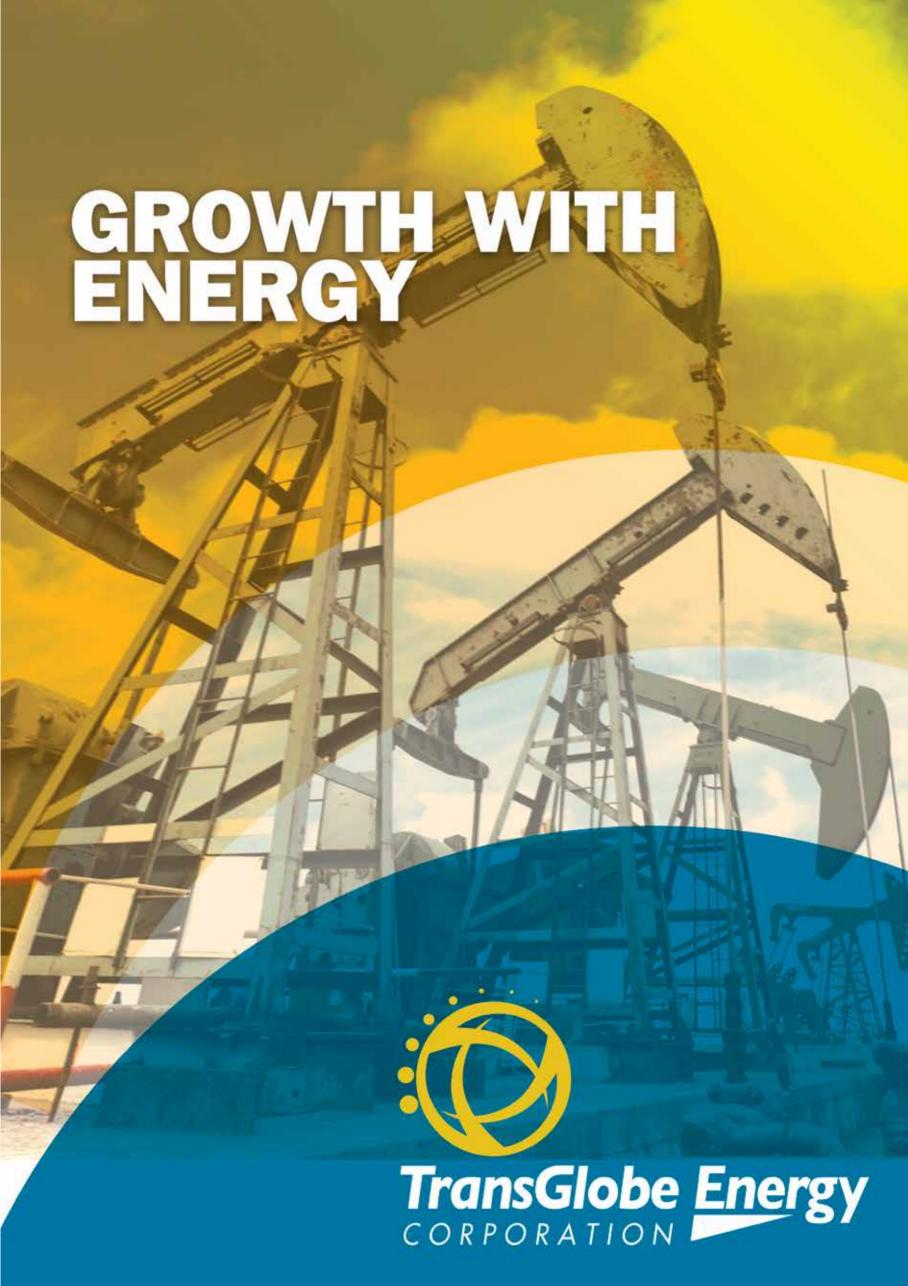
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EGYPS' FINANCE & INVESTMENT LUNCH BRIEFING, A DISCUSSION ON EGYPT'S FINANCING AND INVESTMENT CLIMATE



The petroleum sector is one of the main contributors to Egypt's economic growth, as a major attractor to both public and private investments. As the country reaches natural gas self-sufficiency, new projects and opportunities arise for oil and gas majors to tap into.

On the second day of the Egypt Petroleum Show (EGYPS), the Finance and Investment Lunch Briefing gathered state representatives, national oil companies (NOCs), international oil companies (IOCs), local operators, as well as local and international banks, and private equity firms. They discussed financing structure opportunities for mega projects throughout the value chain and the role of mergers and acquisitions (M&As), join ventures (JVs) and new financing methods.

The lunch started with a Keynote speech from the Ministry of Finance entitled "Egypt's Continuous Efforts in Developing Finance and Investment Opportunities that Create Economic Growth". The speech was delivered by Mohamed Ashour, an Economist at the Macro-Fiscal Policy Unit. Ashour discussed the government's economic reform programme to further regain investors' confidence, investment stability and securing strong economic indicators for the oil and gas industry.

"Egypt is now heading towards the second phase of its economic reform programme that focuses on the structural reforms, and as a result of the macroeconomic stability, better business environment and continuing fiscal consolidation, we have been able to meet our targets and objectives," Ashour stated.

He further explained that Egypt has achieved a real growth rate of 5.3% during fiscal year (FY) 2017/18compared to an average of 2.3% from 2011 to 2014; this sustained growth continued in the first half of FY 2018/19 to a record 5.5%.

Tackling the oil and gas sector's continuous reforms, Ashour further explained that "over the past few years, the government has shown commitment in implementing a comprehensive energy sector reform programme, which aims to improve the financial position of the sector and enhance its efficiency by phasing out fuel subsidies by the end of FY 2018/19. These efforts continue after fuel prices were increased by 44% on average in June2018."

Furthermore, he highlighted that "due to the aforementioned reforms, investments in the sector increased, which was reflected mainly in natural gas production, which increased to six billion cubic feet per day (bcf/d) by September 2018 compared to 4 bcf in 2015/16.

The second part of the briefing was a panel discussion titled "Unlocking Project Finance and Creating Investment Opportunities in the Global Oil and Gas Industry". The session mainly discussed the growing international demand for hydrocarbons and its impact on creating more investment opportunities in different countries all over the world, including Egypt.

"There is an increasing demand for energy around the world. We forecast that by 2040, energy demand will increase by one third. Part of that and meeting current demand has got to be met from oil and gas and therefore there is absolutely a need to invest," said Alan Haywood, CEO of Global Energy Trading

Moreover, the session focused on supporting growth and investment in global oil and gas fields and the projects that companies are interested in and how they are securing funds to help grow or develop these projects.

"The investment climate in terms of availability of loans for the sector remains extremely strong," according to Manav Futnani, the Regional Head of Export and Specialist Finance at HSBC.

As for Egypt, the Managing Director of Corporate Finance and Investor Relations at Carbon Holdings, Karim Helal, referred to the relative weight of investing in the sector. "If you look at the flow of foreign direct investment in Egypt over the last few years, 80% to 90% of it is in the oil and gas sector. That is a very clear indication."

Meanwhile, Tameer Nasser, the Chief Financial Officer (CFO) for North Africa at Baker Hughes, a GE company explained that "investing in Egypt now and in the future is an excellent opportunity. It is a growing market, and there is an opportunity for sustainable



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growth and for international investors to come and invest in Eavot."

"Most of the IOCs are already investing in Egypt and havebeen for a while and other important IOCs are coming very soon to the market as well under the umbrella of the natural gas hub, which is the vision for the future," he said.

The third part of the briefing was entitled "The Role M&As, JVs and Initial Public Offerings (IPOs) in Supporting the Oil and Gas Industry Quest for Development and Market Penetration". The panelists discussed investment decisions, and determining factors for initial public offerings (IPOs) as apath to succeed with this business strategy, create diversification of assets and secure portfolio optimisation.

Meanwhile, the Chief Financial Officer (CFO) of Energean, Panos Benos, linked IPOs to the oil price crisis, as a recovery method along with other funding programmes. Benos stressed on the importance of





having an accurate business plan to enable any public or private company to hold a real financial reform.

From his side, Alan Taylor, Partner at White & Case LLP, discussed the secret for a successful IPO for an energy and petroleum business. "The key role is commitment. You have got to understand why you are doing this, because you have to be all in for it." He further explained that choosing between M&As and IPOs "depends on the nature of the business and assets "

Discussing the African oil and gas market, Ibrahim Sagna, Director and Global Head Advisory and Capital Markets in Afreximbank mentioned that the context of oil and gas IPOs is growing in the continent. He further highlighted that there is an increasing trend for gas investments in Africa.

Meanwhile, Inderpal Singh, Senior Vice President for Mergers & Acquisitions at Mubadala Petroleum, talked about his company's investment strategy in Egypt. He noted that the company has been working intensively on M&A activities during 2018. As for the

key pillars of the strategy, Singh stated that it is mainly focusing on value creation, low cost oil, increasing focus on natural gas and partnerships that secures new market entries.

Artyom Sitnikov, Senior Banker in the Natural Resources Team at theEuropean Bank for Reconstruction and Development (EBRD), discussed the bank's support to the industry in Egypt in order to attract more private investments. "I think we have a role to play in Egypt," he indicated.

EXECUTE: IN THE SECTOR INCREASED. WHICH WAS REFLECTED MAINLY IN NATURAL GAS PRODUCTION, WHICH INCREASED TO 6 BCF/D BY SEPTEMBER 2018 COMPARED TO 4 BCF/D IN 2015/16. 99

MOHAMED ASHOUR

Economist at the Macro-Fiscal Policy Unit in Egypt's Ministry of Finance

10:00 - 11:30 FINANCE AND INVESTMENT BRUNCH BRIEFING

Running simultaneously, the CEO Finance and Investment Roundtables will focus on:

Roundtable 1: The ins and outs of Egypt's IPOs – overview and market opportunities



Said Hanafi Partner White & Case



Karim Helal Managing Director, Corporate Finance & Investor Relations **Carbon Holdings**

FOR 2019

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Roundtable 2: Review of Egypt's economic reform programme: restoring stability, confidence and boosting the country's growth and investment



Mohasen Adel CFO **General Authority for Investment & Free Zones** (GAFI)



Counselor Amr Noureldin Legal Advisor to the CEO **General Authority for Investment & Free Zones (GAFI)**

Roundtable 3: Attaining attractive project finance for smart growth and successful project delivery



Philip Stopford White & Case LLP



Karim Hefzy Managing Director of Project Finance
Carbon Holdings

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MCDERMOTT SEEKS STRONGER PRESENCE IN THE EGYPTIAN OIL AND GAS MARKET:

AN INTERVIEW WITH LINH AUSTIN, SENIOR VICE PRESIDENT, MIDDLE EAST AND NORTH AFRICA

WHAT MAKES EGYPT AN **ATTRACTIVE MARKET FOR MCDERMOTT?**

Following our merger with Chicago Bridge and Iron Company (CB&I), we took the opportunity to reshuffle how we organise our operating regions, and we were delighted to have Egypt become part of our operations in the Middle East and North Africa (MENA) region.

We firmly believe that with some renewed focus and new relationships with the key in-country stakeholders, McDermott can once again bring our industry leading onshore and offshore service technologies to the Egyptian market and be part of the ongoing development of its oil and gas sector.

Egypt's oil and gas sector and McDermott go back a long way, both onshore and offshore. We have great success stories in Egypt, and we hope to create many more going forward.

HOW DOES MCDERMOTT PLAN TO ESTABLISH A FOOTPRINT IN THE EGYPTIAN OIL AND GAS SECTOR?

One of the key reasons for our attendance at the Egypt Petroleum Show (EGYPS) is that it gives us the opportunity to meet with the full breadth of the oil and gas industry in Egypt, from government entities to operators and the entire supply chain.

We intend to use that opportunity to further develop our understanding of what clients and the industry want and need, so that we can work to develop fit-for-purpose solutions that increase added value.



We are open and keen to innovation, both technically and commercially, so that we can develop solutions, which drive the industry forward and bring operational and production benefits to the operators in Eavpt. As we have demonstrated elsewhere, McDermott is committed to localising its presence in all the markets where it operates.

ON WHICH SECTORS ARE YOU FOCUSING IN EGYPT?

McDermott is now an established provider of industry-leading petrochemical, refining, gasification, and gas processing technologies; we have skills and products that span the entire value chain from concept to commissioning.

There are opportunities for us in the upstream and downstream engineering, procurement, construction, and installation sectors in Egypt; whether in offshore or subsea production systems, liquefied natural gas (LNG), refining or petrochemical facilities, we will look at how we can take our proven technologies and experience into the country. We will purse and create a technical and commercial offering, which has mutual benefits for our clients and us.

WHAT CAN YOU OFFER TO THE **EGYPTIAN OFFSHORE MARKET?**

McDermott has a lot of experience working offshore in Egypt, and while it may have been a while since we operated in this domain, we believe that we still have much to offer in terms of our innovative approach and our excellent record in project delivery. We bring our clients in Egypt a competitive alternative Engineering Procurement Construction Installation (EPCI) solution, one that they can rely on and trust.

McDermott owns a fleet of dynamically positioned and conventionally moored heavy-lift, pipelay that uses S-Lay, Reel-Lay and J-Lay, flexible and umbilical installation, construction support and diving vessels. These assets give us the capability to deliver complex offshore oil and gas field developments worldwide, incorporating process facilities, pipelines, umbilicals, and subsea infrastructure from the bank to over 3,000-metre underwater depth.

Through significant investments in the last few years, McDermott has added several modern and state-of the-art dynamically positioned pipelay and construction vessels such as the flagship DLV-2000, launched in 2016, and the 2017 acquired Amazon, which will be a deep and ultra-deep-water game-changer upon completion.

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McDermott has evolved greatly while we have been away from Egypt. We returned with a range of solutions that can fit across the project life cycle, from early engagement in planning and technology, to asset lifetime extension, and ultimately decommissioning.

This puts us in a great position to be able to support the offshore sectors to maximise their value, as well as helping to develop the next wave of projects, which will support continued production.

WHAT DOES EGYPS MEAN FOR **MCDERMOTT?**

McDermott views EGYPS as a fantastic opportunity to better understand Egypt's market and customers. We attended EGYPS last year, but our presence this year is far larger. This year we have a bigger stand focusing on the entire McDermott portfolio, from onshore to offshore services, and we have sponsored the EGYPS conference delegate lunches.

C WE ARE OPEN TO INNOVATION, BOTH TECHNICALLY AND COMMERCIALLY, SO THAT WE CAN DEVELOP SOLUTIONS THAT DRIVE THE INDUSTRY FORWARD AND BRING OPERATIONAL AND PRODUCTION BENEFITS TO OPERATORS IN EGYPT. >>>









ITALIAN TECHNOLOGIES FOR OIL & GAS



























EGYPS 2019

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2H59 HALL2



TECHNICAL PRESENTATIONS BRING NEW TECHNOLOGICAL INSIGHTS

The second day of the EGYPS Technical Conference promoted new technical discussions and knowledge sharing during the sessions.

"I am very optimistic about what is happening in Egypt now, because we are starting to look at the industry from a standardised point of view, which is a new way in Egypt. We should benchmark and make gap-analysis. We should take the best standards and make a pilot and not be a copy-cat of others. We should adopt the new technologies in the market," said Hatem Rashed, Advisor- Mechanical, Performance and Reliability Department, Integrity and Quality Division in ADNOC, giving his opinion about the technical discussions.

"To develop the oil and gas sector in Egypt we need to ask ourselves: are we doing our best, normal or below standard. We know this through benchmarking and success stories. Did we meet the standards? Are we always challenging ourselves? We should use Key Performance Indicators (KPIs). In some cases there are actions that need to be taken to make the oil and gas industry better in Egypt," he added.

Mr. M. Amirulnizam Ahmad, Head - Production Planning at PETRONAS, spoke about production optimisation and ways to determine optimum production availability based on reliability and cost. "Low crude oil prices increase the reliability to 95%. This might increase the revenue by 5%," he said

Also commenting on the conference, Manolis Markakis, Oil Supply and Operations Senior Director at Hellenic Petroleum, stated that "EGYPS is a very good opportunity."

"I am a member of the technical committee that selected individuals for the conference's presentations, and we tried to select some of the very important ones," Markakis added, explaining that EGYPS brings the most important technology updates in the industry.

Walid Gebril, Quality Control General Manager at Egyptian General Petroleum Corporation (EGPC), stressed the role of new technologies clarifying that there is a huge increase happening in oil prices with limited crude oil reserves. "Therefore, alternative sources of energy like shale oil, natural gas, shale gas, and oil sand gained worldwide attention," Gebril said, which all require unconventional approaches.

Michael Papazoglou, Manager of Planning and Optimisation at Hellenic Petroleum, Greece, stressed that "planning is important in maximising refining profitability, and by profitability we mean the ability to make money from our business, which will lead to achieving sustainable profitability".

Abd El-Rahman Sayed Hassan, Department Manager of New Projects Studies, Egyptian Natural Gas Company (GASCO) also spoke during the conference and clarified that one of the main important challenges facing the Egyptian petroleum sector is the growing domestic consumption of petroleum products. On this issue, he said that converting natural gas into gas to liquid (GTL) is a feasible technical approach to be used in Egypt to amend the problem.

"Establishing the GTL industry will not only lead Egypt to deliver products to domestic demand, but also to become a regional supplier and GTL technology provider," Hassan said.

On downstream technology, Magdy Badr, Egypt 3P Supply Manager at ExxonMobil Egypt, introduced the Mobil Super Plus 95-Octane, which is "a new topic that was first introduced to the Egyptian market in February 2018 with a developing concept over time."

"The people got used to consuming the usual types of fuels that are provided in all stations, that is why, we decided to share this new alternative," he added. The Mobil Super Plus 95-Octane has been tested and approved in 12 countries and now is in Egypt.



Commenting on the event, Badr said EGYPS 2019 has a lot of enhancements compared to the previous editions. "I have attended the previous two editions of EGYPS, but this year's edition is even better organised ensuring great accessibility for all attendees," he said.

"Even if we could not apply the technologies shown in the Technical Conferences, we have to be updated with the latest available knowledge, and EGYPS provided that," Abeer El-Sherbiny, Section Head, Project Management Team at Suez Methanol Derivatives company (SMD), stated.

"Moreover, not all the technical issues provided during the sessions are about applied technologies, it also includes new information, case studies, and so on" Ahmed El-Kady, Section Head, Project Management Team at SMD, added.

TECHNICAL POSTER COMPETITION WINNER

STEVE SMITH, Baker Hughes, a GE Company LWD sampling application for oil in the offshore Nile Delta: a case study







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SECURITY IN ENERGY: A CORE VALUE FOR OIL AND GAS OPERATIONS

The second day of the Egypt Petroleum Show (EGYPS) brought an insightful conference to discuss security in the oil and gas sector. The discussions focused on partnerships as the basis for employee and critical assets security; cybersecurity threats in the value chain plus best practices in contingency and security planning.

PARTNERSHIPS FOR EMPLOYEE AND CRITICAL ASSETS SECURITY

Building effective partnerships and facilitating stakeholder engagement are important components for companies to ensure the protection of their employees and critical assets in the countries where they operate. Geopolitical shifts in MENA and the Mediterranean region, local, national, international, and transnational threats are constantly evolving. These realities present unique challenges and opportunities for oil and gas companies in developing effective strategies to protect their assets, people, and supply chains.

A necessary practice for creating partnerships, before ground-level operations take place, is to engage local stakeholders, environments, and communities. "It is important to know who the people are, [and] what's happening on the ground early. The idea is to be preventative and proactive versus being reactive to mitigate possible risks" said Bruce Basaraba, Head of HSSE at Dana Gas.

Local communities need to "understand the reason you are there, that what you are doing is not just for the benefit of you and your customers, but it also benefits them" said Sam Botros, Vice President and Chief Security Officer at Baker Hughes. Effective partnerships are important both for security and supply chains.

"We are only as strong as our supply chain" and depending on the status of the supply chain, "it could cause problems upstream, midstream and downstream" said Richard Reed, Head of Corporate Crisis and Continuity Management at Saudi Aramco.

Working with suppliers is an effective part of strategy if the company wants to maintain a reliable and resilient supply chain. Working with local governments is a crucial partnership to develop and maintain in this region. Scott Burney, Country Security Manager at Apache on working with the Egyptian government said that "working with joint ventures with our local nationals" is important to success and moving forward. He emphasised that in partnership building, "a lot of it is [based on] trust, it is about getting people around the table, [and] getting to know each other".

Building strategic partnerships with stakeholders is an important part of any oil, gas, and energy's security plan. "There is a need to include security risk and threat in simple activities' such [as]

environmental and social [activities]" said Bruce Basaraba and part of this includes stabilising relationships with local communities, local governments, and other relevant stakeholders.

CYBER SECURITY THREATS IN THE VALUE CHAIN

The second session of the conference focused on cyber security threats along various phases of the value chain. The need for deeper insights into how to make businesses better insulated from possible attacks was highlighted. Organisations are tasked with crafting sound security plans to respond to instances of attack to safeguard their companies and limit reputational and financial damage. Possible threats include attacks towards refineries, offshore infrastructure and headquarters through infection of industrial control systems, denial of service blocking information, ransomware attacks, or fishing campaigns.

Mr. Ahmed Khalifa, Cybersecurity Director, MENA at Siemens stressed the importance of using machine learning technology to mitigate attacks. He cited several costly instances of attack he witnessed in his career and affirmed the importance of having sound preventive measures in place before attacks occur. The rise in cyber-attacks comes alongside the era of digital transformation within industries.

This push within the oil and gas industry must







consider cyber security attacks. Hassan Hafez, Egypt Country, IT Manager at Total said "the challenge is that most of the business stakeholders and the top management concentrate on how to deliver a successful digital transformation without giving enough attention to cyber security" and stressed that the internal member of the team driving digitalisation must push for the importance of cyber security measures alongside the digitalisation shifts.

The panelists focused on preventative technology for the majority of the panel, but the angle of mitigation strategies shifted to a 'company culture', proactive approach by Jay Abdallah, Global Director of Cybersecurity Solutions at Schneider Electric. He stressed the importance of nurturing a culture of "enablement", with employers learning how to detect ransomware and fishing emails. Both proactive and reactive strategies are needed to mitigate risk, and although these may be time consuming and exorbitant financial investments, the cost of breach to a company is far more detrimental.

INTERACTIVE ROUNDTABLE ON CONTINGENCY PLANS AND CRISIS MANAGEMENT

An interactive Roundtable discussion enabled the sharing of experiences and best practices on contingency plans, crisis management and critical emergency responses. Led by Hossam Amr, Head of Security (Egypt, North, East Africa and Levant Cluster) at Schneider Electric in Egypt and Richard Reed, Head of Corporate Crisis and Continuity Management at Saudi Aramco.

The discussion started with Hossam Amr sharing his experience of the unrest that occurred in Egypt in 2011 which saw the operationalising of a crisis emergency plan. During the Egyptian revolution, "people were prevented from the ability to move power supplies, and expats had to be evacuated". This opened a discussion on best practices in developing effective contingency plans. It was acknowledged that a sound security system can certainly minimise vulnerability.

In addition, communication, flexibility, and training management need to be more aware, carefully choosing a team who can handle the pressures of a crisis, and well-built business continuity plans and recommended best practices. Key points were revisited on leveraging resources inside and outside of the organisation, especially with the local governments. Security experts and companies should know how to engage the internal and external resources in a positive way to strengthen protective measures in instances of a crisis.

When crafting contingency and crisis plans, proper risk and assessment should take place first; understanding where the risk is, knowing where the critical assets are, and intentional team selection was cited. There are no set rules for dealing with dynamic security issues that may range from a geopolitical unrest, to cyberattacks. However, the group discussed how contingency and crisis management plans should have a structured approach, framework and ¬¬¬methodology but must maintain a degree of elasticity and not paralyse the organisation.

Finally, relevant stakeholders should approach the formation of security plans understanding how different internal and external elements are interrelated and interdependent in order to craft a sound contingency and security plans.

THE FUTURE OF OIL AND GAS **SECURITY IN EGYPT, NORTH AFRICA** AND THE MEDITERRANEAN

Threats to the oil and gas industry in the region include volatile landscapes, changing conditions aeopolitical and increased sophisticated cyber security threats. Energy, oil and gas companies can leverage internal and external resources to protect their assets. The role of technology in providing security to the entire value chain is required but it must be balanced with a shift to empower employees to be aware of possible threats.

Mr. Alfio Rapisarda, Senior Vice President for Security at Eni stressed that "security is a process that must be put in place everywhere and must be implemented whether there is risk or not". Although risk may be minimised by risk assessment and security planning, it is virtually impossible to be prepared for every conceivable threat. Companies have a responsibility to develop security plans as thoroughly as possible,

as affirmed by Mr. Rapisarda who stated that "we are called to protect our people and our pipelines", echoing sentiment from the other

Security threats are increasing, from hacking to criminal networks, that tap pipelines illegally. In response to this, CEOs and managers are encouraged to foster a protective security culture to mitigate risk. It is everyone's responsibility to play a part in maintaining higher levels of security within the company.

Additionally, it was stressed to engage with the local governments. Localised attacks on pipelines needs the positive "intervention from us and the government" said Amr Elsherbini, CEO Security Assistant and the Egyptian General Petroleum Corporation. This point was reiterated by Ahmed Mohamed Farouk, Executive General Manager for Pipeline Integrity at GASCO who shared a best practice of working directly with local governments when "making risk assessment plans and determining high risk planning - as well as going through limitations".

Elsherbini cited experiences in Egypt wherein companies are actively working governments, police, and military as they operate across the country. He mentioned that depending on where operations are, companies must leverage different resources and different security apparatuses (i.e. working with local communities and/or integrated cyber-security security systems). Different vulnerabilities exist depending on operations; onshore versus offshore, that require alternative resources, and this should be developed in risk assessment plans. A balance must be struck between mitigation plans addressing physical ground level threats and cyber security threats.

Cyber security and advancements in technology are deeply woven into critical security concerns. While cyber security issues were managed by IT departments in the past, now it is essential that it is approached in a more holistic way by companies. Understanding where the risk is coming from and what is being targeted is a priority when assessing reactive and proactive security threats. "Technology is a component of a wider solution, it enables people to focus more strategically and may be made to work in a wider work setting" said Botan Osman, Managing Director at Restrata.

Crafting a water-tight security plan is impossible. However, Osman said that a good security plan starts at the beginning of the risk assessment process, and continuously introduced necessary iterations based geopolitical shifts, to the more localised threats, and anything in between. Concluding thoughts highlighted that it is good practice to have operational readiness and tools to access the maximum amount of data if a crisis situation arises.

OIL&GAS

UNRAVELLING THE ENERGY MARKET

WITH EDISON: AN INTERVIEW WITH NICOLAS KATCHAROV, GENERAL MANAGER EGYPT AND VICE PRESIDENT OPERATIONS MENA

COULD YOU TELL US ABOUT EDISON'S DRILLING ACTIVITIES IN THE EAST MEDITERRANEAN CONCESSIONS?

We are in the final phase of preparation for drilling three wells during 2019; two of which are in the deep-water blocks of the East Mediterranean, North Thekka and North East Hapy, and onshore in the South Idku concession in the Nile Delta. According to our agenda, we will drill them all, starting from July to December 2019. These are very promising prospects which have been studied carefully. The conclusion of all analysis is giving us great expectations for further discoveries, which can change the magnitude of our current position in Egypt.

WHAT ARE EDISON'S INVESTMENT PLANS IN EGYPT?

While preparing the exploratory drilling operations mentioned above, EDISON will initiate soon the development of our proven reserves in the North Idku and North East Almrea concessions, situated at West and North West of Abu Qir in the shallow Mediterranean waters. This is a \$200 million investment project in its first phase that aims to connect three gas reservoirs to the shore through the existing Abu Qir treatment and transportation infrastructure. Our plan is to deliver the first 50 million standard cubic feet per day (mscf/d) gas from these blocks in 2021. We believe that future exploration will provide more opportunities and that integration with Abu Qir fields will facilitate and extend our capacity

to recover the full mineral potential of the area. For this reason, we are developing these two concessions in close partnership with our joint venture (JV) EGPC Abu Qir Petroleum.

WHAT MAKES EGYPT AN ATTRACTIVE MARKET FOR IOCS?

First of all, Egypt is renowned for its geologic potential for discoveries. There is no doubt that today, after several major discoveries, the Eastern Mediterranean is enriched by hydrocarbons. In addition, the economic recovery and stabilisation of Egypt, after years of uncertainties, with the ambitious projects initiated in the last few years backed by increasing international confidence, are making the country an attractive target for growth. Egypt's disposition as an affluent market, with its abundant human resources, experience, and track record in the sector, is becoming a strong argument for serious investors interest.

HOW DO YOU SEE EGYPT BECOMING A REGIONAL ENERGY HUB?

In the short to middle term, Egypt's major role as regional energy hub seems to me guaranteed due to its gas transportation infrastructure and the possibility to take over the Mediterranean gas. In the long term, everything depends on international gas prices and further discoveries. In order to secure its leading regional role, Egypt should pursue to secure not only its position as an exit for local gas to international markets, but also the liberalisation of its internal market; giving it access and transparency to the gas resources,

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EGYPT'S DISPOSITION
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SERIOUS INVESTORS'
INTEREST.

nationally or internationally. In this case, based on its size and capacity to arbitrate between exportation and local use, the country could also become a gas price maker for the region; which is for me, the real sense of the word "gas hub". Beyond gas, there is also electricity. Egypt has today the potential to export electricity either from renewables or from the transformation of gas. In this case, I would set a more ambitious target to become a regional energy hub and not only a gas hub.

WHY IS IT IMPORTANT FOR EDISON TO PARTICIPATE IN THE EGYPT PETROLEUM SHOW (EGYPS)?

We are glad to have supported EGYPS since its very first edition, when, I am sure, no one was expecting such a great progress. We are also glad to support the Egyptian Ministry of Petroleum and Mineral Resources in this initiative which benefits above all the country's image and the oil and gas sector. It is also the perfect place and time to meet and exchange ideas and projects with our peers and partners. Being present is a must and a pleasure for us.







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The Egypt Petroleum Show Gala Dinner took place at the Dusit Thani Lakeview Hotel on Monday 12 February in the honourable presence of His Excellency Tarek El Molla, Egypt's Minister of Petroleum and Mineral Resources, and prominent figures in the oil and gas sector.

The Gala Dinner started with very warm speeches encouraging oil and gas leaders to push forward with what they have accomplished so far. It was a time to acknowledge everyone's efforts and commemorate the successes of the last year for the Egyptian Oil and Gas industry. "I am just going to tell you some words from my heart. I am really glad, pleased, and happy to be here tonight, because tonight we are celebrating what we accomplished during the day, for gathering all of you together for one event," El Molla said.

El Molla stressed the fact that this edition is unlike any previous, as it already has witnessed in its first day increased success, more participants, and more exhibitors coming from all over the world. ${\it "}$ If this tells us something, it tells us that we are all on the right track. We are building a new Egypt; we are building

the oil and gas sector, leading to a great future view for Egypt," he said.

Buhran Al Hashemi, Managing Director Marketing, Emirates National Oil Company (ENOC), thanked the Egyptian President Abdel Fatah El Sisi for his continuous guidance in establishing a fascinating culture of knowledge exchange by officials and industry experts from all around the globe, in order to continue the development and progress in the oil and gas sector

Engaging in a dialogue to help find energy solutions, Al Hashemi further said that industry experts and national and international oil companies have the power to change the world with digital transformation at their disposal. "With blockchain, artificial intelligence, digital information, Internet of Things (IoT), I believe the shape of energy will change in the next few years. For affordable and sustainable energy, we need to evolve continuously," he said.

"It is important to provide our philosophy to our partners. We hope to utilise this platform [EGYPS]

with partners and key stakeholders, to strengthen our relationships with our partners, and our presence in Egypt's oil and gas and energy markets," he continued.

Dragon Oil's CEO, Ali Al Jarwan, stated that although this time is a difficult period for the industry as a whole, tremendous opportunities of the oil and gas sector still prevail. He assured that events like these are the best way to seize such opportunities. "We will come through by being adaptive; by being keen to overcome any problem. I also recognise a great difference in this year's edition more than last year. So this is a promising future," he said.

In his closing speech, El Molla expressed his gratitude to every sponsor. "without your support and sponsorship, we would not have succeeded in having this Show for the third year," he said. This success is echoed not only in the Gala Dinner, but in the great attention the event has got from more international organisations and international oil companies (IOCs) that are participating.

NEW FOR 2019



11-13 February 2019 Egypt International Exhibition Centre



YOUTH ENGAGEMENT PROGRAMME

The EGYPS 2019 Youth Engagement Programme is an onsite learning platform engaging with high school students within the framework of STEM Education focusing on Science, Technology, Engineering and Mathematics to ultimately encourage students to pursue careers in the oil and gas industry.

RIGOT THE CHANCE TO EXPLORE WITH MY FRIENDS HOW WE CAN GENERATE ENERGY. IT IS MADE ME REALISE MY CAPABILITIES AND THE THINGS I COULD DO TO HELP HUMANITY AND THE WORLD. 🤧

REALLY ENJOYED THE YOUTH ENGAGEMENT PROGRAMME BECAUSE I LEARNED THINGS ABOUT THE OIL AND GAS INDUSTRY THAT I HAD ABSOLUTELY NO IDEA ABOUT. 🤧

EGYPS YOUTH **ENGAGEMENT PROGRAMME**

SPONSORED BY



DANIEL WAFIQ

Grade 7 student

FARIDA SAMEH

Grade 7 student

VISIT THE YOUTH ENGAGEMENT PROGRAMME IN HALL 1









DIGITALISATION IN ENERGY

NEW FOR 2019

SPONSORED BY



Fostering the digital transformation of the oil and gas sector, EGYPS 2019 provides a dedicated focus on digitalisation in energy with an allencompassing exhibition zone that provides the essential building blocks for the industry to embark on its transformation journey.

THE DIGITALISATION ZONE IN EGYPS PROVIDES EXPOSURE FOR THE NEWEST SOLUTIONS, ESPECIALLY FOR ATTENDEES WHO MAY NOT BE FAMILIAR WITH THESE TECHNOLOGIES AND ITS CAPABILITIES. "

ASHRAF HUSSIEN

Reservoir Engineer, Schlumberger

VISIT THE DIGITALISATION ZONE IN HALL 1

TIME	SESSION TITLE				
11:00 - 11:10	Applying a Digital Approach for More Efficient and Effective Wells Wael Koroosh, Senior Technical Consultant, Halliburton				
11:15 - 11:25	Digitisation of Oil & Gas Operations Using Integrated Production and Accounting Solutions – Production Solutions Praful Tallah, Director (Business Development), P2 Energy Solutions				
11:30 - 11:40	Crude Evaluation: New Developments in Technique Randy Bozarth, Vice President, Haverly Systems				
11:45 - 11:55	Cloud solution for enterprise level condition monitoring (under cloud computing/Cyber Security) Ibrahim Seydaliyev, Baker Hughes, a GE company				

TIME	SESSION TITLE			
	Securing Oil & Gas Operations Holistically Ahmed Abdallah, RSA Systems Engineer, RSA			
	Digital Oilfield Marwa Hassan, Production Marketing Manager, Schlumberger Egypt & East Mediterranean Region			
	DAAS (Drone As A Service) Oil & Gas Applications Ahmed Zidan / Ezzat Sabry, Chief Pilot /			

12:45 - 12:55	IDAS Conventional IP Network Eng. Yasser Soliman, General Manager, Mega Communication
	Digitisation of Oil and Gas Operations Using Integrated Production and Accounting Solutions – Oil & Gas Accounting for International Ventures Maher Ben Salem, P2 Energy Solutions
	Connected Digital Operations Mohamed Lamine Selmane, Industry Architect, Global Energy Practice, Dell EMC

SESSION TITLE

TIME	SESSION TITLE
	Successful Story Optimising ERC Business Malek El Masri, Business Development Manager, Haverly Systems
	Voice of the Oil Field Wael Koroosh, Senior Technical Consultant, Halliburton
	IDAS Conventional IP Network/Application Examples Eng.Yasser Soliman, General Manager, Mega Communication
15:30 - 15:40	

Wednesday 13 February 2019



WOMEN IN ENERGY

Created and developed as a platform to foster mentorship and sponsorship opportunities for women in the oil and gas sector, the EGYPS Women In Energy Conference will bring together empowered, successful leaders championing workplace diversity and inclusion to discuss the impact of diverse workforce on the bottom line and why diversity is the right way forward.

Date: Wednesday 13 February Location: Al Manara Cinema Hall



SPONSORED BY



12:45 Women In Energy: why the time is right for egypt, north africa & the mediterranean to capitalise on its biggest assets



Pakinam Kafafi CEO TAQA Arabia



Iman Hill
Chief Operating Officer
Energean Oil & Gas



Colby Fuser
Vice President for Egypt and Libya
Halliburton





Aida Araissi
Chief Executive Officer
Bilateral US-Arab
Chamber of Commerce

10:30 Attracting, retaining, advancing & sponsoring women: a nice to have or must have to achieving bottom line success?



Pam Darwin
President
ExxonMobil Exploration Africa



Laura Capra
Head of Reservoir Engineering
Dana Gas Egypt



Sara Mortada
Department Head, Petroleum Affairs
Ministry of Petroleum and Mineral
Resources
Arab Republic of Egypt



Layla El Hares
General Manager
Developments and Asset
Manager Egypt
Shall

MODERATOR



Linda Abdellatif
TV Presenter & Reporter
President's Activities
Nile TV International News

11:15 Digital fluency & gender parity: how are these interconnected & why does it matter?



Botan Osman Managing Director **Restrata**



Tamer Essam Human Resources Vice President North East Africa & Levant Schneider Electric



Janka O'Brien
MEA Strategic
Account Director - IOC
Emerson



Emad A. Elsebakhi Head of Data Science PETRONAS Research Sdn. Bhd.

MODERATOR



Mirna Arif
Regional Sales Director – Digital
Baker Hughes, a GE
Company

12:00 The middle management: a bridge between the present & the future



Eng Amira El Mazni Independent Oil & Gas Consultant



Hussein Fouad El Ghazzaway Independent Oil & Gas Consultant



Hussam Abu Seif Country General Manager Baker Hughes, a GE Company



Rasha Galal Fuel Cards Manager Total Egypt



Eng Sameh Sabry General Manager DEA

MODERATOR



Linda Abdellatif
TV Presenter & Reporter
President's Activities
Nile TV International News

14:00 The impact of culture on the workforce: analysing how cultural cognitive biases affect diversity, inclusion, wages, and mentorship within the business



Badria Khalfan HR Director Dragon Oil



Eng. Suzan El Gamal
General Manager - Follow-up of Consumption Plans
and Contract Implementation
Egyptian Natural Gas Company (GASCO)

MODERATO



Mohamed Fouad Managing Director & Partner Egypt Oil & Gas

14:30 The future is young: building and developing an agile, competent and diverse workforce of the future today



Leigh-Ann Russell Head of Global Procurement and Supply Chain Management BP



Salma Al Hajeri Director Reservoir Engineering, Asset Manager – Egypt Mubadala Petroleum



Leila Hamza HR Director – Wells **Schlumberger**



Mark Avery
Senior Manager, International
Human Resources and
Leadership Planning
Apache

ithne Treanor resenter

Presenter
EGYPS 2019 & CEO
E Treanor Media







AWARDS CEREMONY



Launched during EGYPS 2018 the Women In Energy Awards celebrate achievements of exceptional women in the Egypt, North Africa and Mediterranean oil and gas sectors. The Women In Energy Awards are led by a high-level and unbiased Regional Select Jury that evaluated over 114 entries that were received this year. Selecting top three finalists across each category was difficult as each entry that was submitted had an interesting story to tell.

Join us for an afternoon that truly celebrates persistence, hard work and dedication of women in the oil and gas sector, overcoming all odds to achieve and succeed in an industry that has always been considered ideal only for men.

OPENING KEYNOTE ADDRESS 15:30



Tarek El Molla Minister of Petroleum and Mineral Resources **Arab Republic of Egypt**

15:50 MINISTERIAL KEYNOTE ADDRESS



Dr Hala El Saeed Minister of Planning, Monitoring and Administrative Reform Arab Republic of Egypt

AWARDS CEREMONY 16:10

Announcing the category winners from the shortlisted finalists

WOMEN IN LEADERSHIP SHORTLISTED FINALISTS







Lilian Mahfouz North Middle Fast Workforce Lead Schlumberger



Mirna Arif Regional Sales Director Baker Hughes, a GE company



Azza Kamel Chairman Assistance for Exploration Wasco Pet. Co.



NEX-GEN FEMALE OF THE YEAR SHORTLISTED FINALISTS







Sara Mansour Instrumentation & Control Engineer Egyptian Natural Gas Company (GASCO)



Dina Gamal Lubrication Field Engineer ExxonMobil Egypt



Nihal Darraj Reservoir Geomechanics Engineer Advantek Waste Management LLC







STEM STAR OF THE YEAR NEW FOR 2019

THE WINNER WILL BE ANNOUNCED DURING THE CEREMONY







E%onMobil

Schlumberger



CLOSING OF THE WOMEN IN ENERGY CONFERENCE & AWARDS 17:00

2019 Regional Select Jury Members Include:



Eng Amira El Mazni Independent Oil & Gas Consultant



Public and Government Affairs Manager ExxonMobi



Eng Hussein Fouad El Ghazzaway Independent Oil & Gas



Hussam Abu Seif Country General Manager Baker Hughes, a GE Company



Director Reservoir Engineering, Asset Manager - Egypt Mubadala Petroleur



Dr Ghada Bassioni Associate Professor and Head of the Chemistry Department, Faculty of Engineering Ain Shams University, Cairo



Karim Badawi Vice President and Managing Schlumberger



Eng Gehad Nasr Country Chairman Chevron Egypt Lubricants



Karim Alaa General Manage BP Egypt



Dina Fouda Transformation Manager



EGYPT DIL&GAS

HSE IN ENERGY FORUM

We often hear that there should be no compromise when it comes to health and safety; however, what does it take to make it a reality? The new EGYPS 2019 HSE in Energy Forum will address the most pressing HSE issues from an international panel of industry experts, providing insights into smart digital solutions, future oil and gas scenarios and international best practices that help enhance healthier and safer working environments, and ensure more sustainable oil and gas operations.

Date: Wednesday 13 February Location: Al Manara Cinema Hall





09.30 - 10.20

PANEL DISCUSSION: Next generation HSE: achieving reduced incidents and reaching zero fatalities through company-wide safety cultures and effective safety management systems



Mohamed Elgharbawy Safety and Security Country Manager **ExxonMobil**



Anthony Brock Group Head of Safety and Operational Risk



Health, Safety and Security Director International Association of Oil Kuwait Energy Company and Gas Producers (IOGP)



Senior HSSE Manager



Tim Davenport Country Safety & Environment General Manager Shell

MODERATOR:



Ena Hussein Fouad El Ghazzawy Independent Oil & Gas Consultant

10:20 - 11:10

PANEL DISCUSSION: International best practices in creating healthier, safer and more sustainable working environments



Mohammed Bahatem Director, HSSF and Asset Integrity Management **Mubadala Petroleum**



Dennis Lynch Global Director HSE and Service Quality Halliburton



Ephraim Ebodaghe Acting Corporate **HSE Director Dragon Oil**



Blake Jared HSE Manager **Apache**



Project Engineer HSSE Officer **Cyprus Hydrocarbons** Company (CHC)

MODERATOR:



Ali Hegab Independent Oil and Gas Consultant

11:25 - 12:15

PANEL DISCUSSION: Disrupting oil and gas HSE processes with state of the art smart digital solutions



Vice President HSE Schlumberger



Senior Vice President, Safety, **Environment and Quality** Eni



HSE Director Middle East Asia Pacific **Baker Hughes** a GE Company



Ibrahim Abdel-Aal HSE and Energy Conservation General Manager GASCO

MODERATOR



Managing Director & Partner **Egypt Oil & Gas**

12:15 - 13:00

PANEL DISCUSSION: What is the future of oil and gas HSE in Egypt, the Middle East and the Mediterranean?



Head of HSSE and Sustainability **Dana Gas**



Jaap Klein Nagelvoort Managing Director Bapetco



CEO Assistant for HSE **Egyptian General Petroleum Corporation** (EGPC)



Modernisation Team Leader Research & Development Manager Oil & Gas Skills (OGS)



EGYPS 2019 & CFO E Treanor Media

13:00 - 14:00

Lunch and EGYPS 2019 HSE Excellence in Energy Award Ceremony



Official Publication



HSE EXCELLENCE IN ENERGY AWARD CEREMONY



The EGYPS 2019 HSE in Energy Forum will culminate with the inaugural EGYPS HSE Excellence in Energy Award presented by His Excellency Tarek El Molla, Minister of Petroleum and Mineral Resources, Arab Republic of Egypt.

The HSE Excellence in Energy Award recognises outstanding projects, case studies and strategies in health, safety or environmental protection (including environmental efforts of corporate social responsibility programmes) across all parts of the oil and gas value chain.

Open to NOCs, IOCs, EPC contractors, service providers, OEMs, technology and solution providers whose HSE initiatives have had a substantial impact in Egypt, North Africa and/or the Mediterranean - we would like to take this opportunity to thank everyone who took the time to enter and to the 8 Regional Select Jury members who reviewed 38 entries received from over 30 companies across 7 countries.

13:00 OPENING KEYNOTE ADDRESS

13:20 SHORTLISTED FINALISTS' PRESENTATIONS AND AWARD CEREMONY

Solid waste management pilot project

How company-wide environmental policy and strategic direction can contribute towards the impact and influence of sustainable development



HSE challenges of working in a mature field

Overcoming challenges and showcasing how small HSE actions when combined, can play a big role in well-functioning, working communities with safe working conditions



HSE interactive 3D training

How technology simulated training can replace traditional techniques to improve overall training efficiency and effectiveness through the power of real applications





14:00 CLOSING OF THE HSE IN ENERGY FORUM AND AWARD CEREMONY

2019 Regional Select Jury members include:



Ali Hegab **Environmental Services** Project Manager Africa and Middle East **ExxonMobil**



Blake Jared Manager Apache



Mohammed Bahatem Director, HSSE and Asset Integrity Management **Mubadala Petroleum**



Ramy Khallaf Senior **HSE** Manager Baker Hughes, a GE Company



Shahrul Nizar Northern Middle East (NME) Region HSE Manager Schlumberger



Stuart Shaw Vice President Operations Egypt**BP**



Wael Amin Senior HSSE Manager **Kuwait Energy Company**



Moataz Darwish Deputy Chairman Shell



NOBLE TARGETS CAPITALISING ON EGYPT AS A REGIONAL ENERGY HUB: AN INTERVIEW WITH KEITH ELLIOTT, SENIOR VICE PRESIDENT FOR GLOBAL **OFFSHORE**

Noble Energy is a leading independent energy company engaged in worldwide oil and natural gas exploration and production that is participating in the Egypt Petroleum Show (EGYPS) for the second consecutive year. We spoke to Keith Elliott, the company's Senior Vice President for Global Offshore to discuss the company's plans for investing in Egypt.

COULD YOU TELL US MORE ABOUT NOBLE ENERGY'S PORTFOLIO?

Noble Energy was founded in Oklahoma, in 1932. Since then, we have built a world-class capability in Exploration and Development (E&D), applying global experience to safely and responsibly create new opportunities. Noble has proven its ability to move from discovery to efficient execution of large-scale development projects.

Today, Noble Energy's portfolio consists of a leading U.S. unconventional business, complemented by global offshore assets. Each asset fills an important role in a portfolio that balances lower-risk development projects with high-potential prospects. Our onshore activities focus on three core areas, the DJ Basin in Colorado as well as the Permian Basin and Eagle Ford Shale in Texas.

Additionally, we have been active offshore West Africa since the early 90's. In 2005, we made our first operated discovery in the Alen field, located in the Douala Basin offshore Equatorial Guinea. We have repeated this success with the discovery of multiple oil and gas-condensate reservoirs. We've since converted two of those discoveries into producing fields and are advancing plans



to develop the next stage of those discoveries through the development of large-scale gas resources

Our discoveries in the Eastern Mediterranean offshore Cyprus and Israel are bringing economic, environmental, and cooperative benefits to the region, underpinning the Eastern Mediterranean's emerging role as a global gas hub. These assets are poised to transform the region and allow us to truly live Noble's purpose of Energising the World, Bettering Peoples' Lives®.

Our active exploration programme is an important component of Noble Energy's growth-

WHAT MAKES EGYPT AN **ATTRACTIVE MARKET FOR NOBLE ENERGY?**

Egypt has taken great steps to make itself the natural gas hub for the Eastern Mediterranean. It has pipeline infrastructure, LNG facilities, an active exploration programme, domestic reserves, growing local demand, the ability to export as well as the ability and desire to import from regional neighbours. Most importantly, it has a government that recognises the importance of energy in bettering the lives of its citizens and has taken action that lays the ground work for providing those benefits.

HOW DO YOU EXPECT TO ESTABLISH A FOOTPRINT IN THE EGYPTIAN OIL AND GAS MARKET?

We are initially looking at three areas for our entry into Egypt. First, we are very proud of our first gas sales transactions with our anchor customer, Dolphinus Holdings, for long-term gas imports and sales to local customers, which will utilise the existing position of Egypt as a natural gas hub infrastructure. Second, to facilitate the unlocking of this first gas sales transaction we have partnered with Egyptian companies to reactivate and reverse flows of the offshore EMG pipeline. Third, we are actively seeking opportunities to secure an upstream acreage position which allows us to bring our world class exploration and development programme home to Egypt.

HOW DO YOU SEE EGYPT BECOMING A REGIONAL ENERGY HUB?

Egypt has the right infrastructure, growing domestic demand and continued recognition by the government to be an important energy hub.

@EGYPSOfficial

BRONZE SPONSOR





In addition, the government has put in place the policies to support natural gas from around the region to flow into and through this infrastructure. Egypt is also playing a leadership role in bringing the countries of the Eastern Mediterranean together, creating the inter-governmental cooperation needed to support commercial investments and developments to go forward. The recent East Mediterranean Gas Forum is the perfect example of that.

WHAT DOES THE EGYPT PETROLEUM **SHOW REPRESENT TO NOBLE ENERGY?**

This is the second year in a row we that we have participated in EGYPS. For Noble Energy, this forum showcases not only Egyptian recognition of the importance of the industry, it highlights the oil and gas industry's recognition of the importance of Egypt as an integral part of the future of oil and gas, not just in Egypt but regionally and, in fact, globally.

WE ARE ACTIVELY SEEKING OPPORTUNITIES TO SECURE AN UPSTREAM ACREAGE POSITION WHICH ALLOWS US TO BRING OUR WORLD CLASS EXPLORATION AND DEVELOPMENT PROGRAMME HOME TO EGYPT. 🤧



TECHNICAL SESSIONS IN FOCUS

Having received over 700 abstracts from across the globe, the EGYPS 2019 Technical Conference will deliver 33 sessions across 11 technical categories, over 3 days at the Egypt International Exhibition Centre

The first day of the Technical Conference presents discussions within three different technical categories: Exploration and Production (E&P) Geoscience; Project Management, Engineering Technology and Implementation (PMETI); and Artificial Intelligence and Connected Performance Technology and Services (AICPTS).

Technical Conference Chairman

Returning to Cairo in February 2019, EGYPS continues to grow, becoming the largest and most influential Show not only in Egypt but also North Africa and the Mediterranean. We welcome and encourage technical experts from all sectors of the oil and gas value chain to join us and showcase their latest research, methodologies, solutions and technology, fostering synergy and cooperation across the oil and gas industry.



Deputy CEO for Production Egyptian General Petroleum Corporation (EGPC)



AGENDA

WEDNESDAY 13 FEBRUARY 2019

SESSION	SESSION TITLE	TIME	LOCATION
Session 22	Innovative techniques of drilling optimisation	10:00 - 11:30	Room 1, Plaza
Session 23	Reservoir characterisation and new technologies	10:00 - 11:30	Room 2, Plaza
Session 24	New developments in enhanced oil recovery	10:00 - 11:30	Room 3, Plaza
Session 25	Well construction and wellbore stability	11:30 - 13:00	Room 1, Plaza
Session 26	Advancements in seismic surveys and technology	11:30 - 13:00	Room 2, Plaza
Session 27	Reservoir evaluations - challenges and lessons learned	11:30 - 13:00	Room 3, Plaza
Session 28	Artificial lift and completion challenges	14:00 - 15:30	Room 1, Plaza
Session 29	R&D and gas processing enhancement	14:00 - 15:30	Room 2, Plaza
Session 30	Field surveillance and smart digital oil fields	14:00 - 15:30	Room 3, Plaza
Session 31	Production improvements and stimulation challenges	15:30 - 17:00	Room 1, Plaza
Session 32	Acid gas treatment and sulphur recovery	15:30 - 17:00	Room 2, Plaza
Session 33	Reservoir characterisation and integrated development plan- ning	15:30 - 17:00	Room 3, Plaza



SCHEDULE OF CONFERENCES





E&P Geoscience (GEO)



Gas Processing Technology and Operations (GPTO)



Gas to Power **Generation Technology** and Operations (PGTO)



Operational Excellence, Maintenance and HSE (OEMH)



Oil, Gas and **Unconventional Field** Developments (OGUFD)



Offshore Technology and Operations (OTO)



Downstream: Refining Technology, Operations and Marketing (DRTOM)



Drilling and Completions (DC)



Project Management, **Engineering Technology** and Implementation (PMETI)

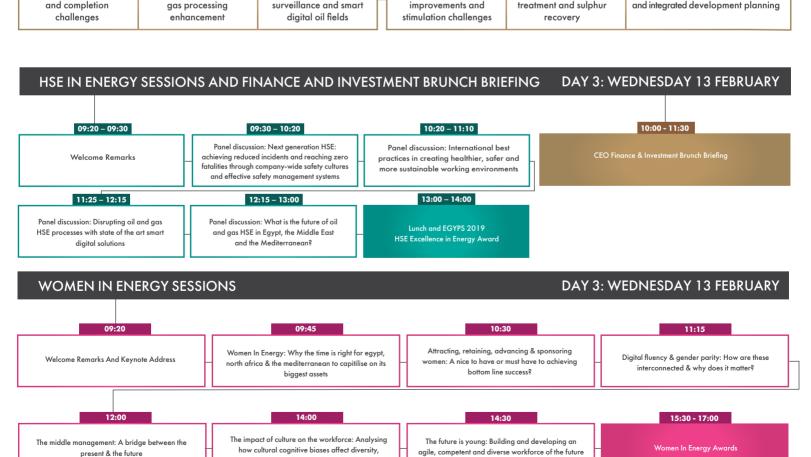


Downstream: Petrochemicals Technology, Operations (DPTO)



Artificial Intelligence and Connected Performance Technology and Services (AICPTS)

TECHNICAL SESSIONS DAY 3: WEDNESDAY 13 FEBRUARY 10:00 - 11:30 11:30 - 13:00 POOM 1 POOM 2 POOM 3 POOM 1 POOM 2 POOM 3 Session 23: Reservoir Session 25: Well Session 27: Reservoir evaluations -Session 22: Innovative Session 24: New Session 26: Advancements challenges and lessons learned techniques of drilling characterisation and new developments in construction and in seismic surveys and enhanced oil recovery optimisation technologies wellbore stability technology 14:00 - 15:30 15:30 - 17:00 ROOM 1 **ROOM 2** ROOM 3 ROOM 1 **ROOM 2** ROOM 3 Session 28: Artificial lift Session 29: R&D and Session 30: Field Session 31: Production Session 32: Acid gas Session 33: Reservoir characterisation gas processina and completion surveillance and smart improvements and treatment and sulphur



inclusion, wages, and mentorship within the business

today





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EGYPS 2020 EXHIBITION



33,000



17 International Oil Companies



25,000



10 National Oil Companies



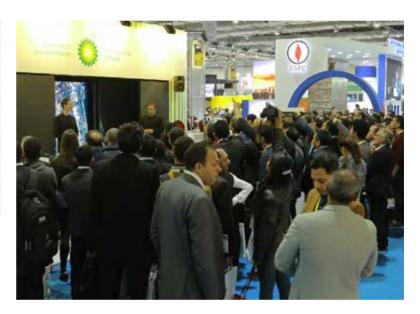
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14 Country Pavilions



VISIT STAND 3H50 IN HALL 3 TO BOOK YOUR STAND TODAY



EGYPS 2020 CONFERENCE



1,300+ Conference Delegates



Women In Energy Sessions and Awards Ceremony



230+ Expert Speakers



Security in Energy Sessions and Roundtables



36 Technical Posters



HSE in Energy Sessions and Award Ceremony



38 Technical Sessions



CEO Strategic Roundtables



14



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EXHIBITOR NEWS

EGYPT OIL&GAS

Egypt International Exhibition Centre

11-13 February 2019

DIPIETRO: SOLUTIONS FOR ANALYSER SYSTEMS

Dipietro is one of the main system integrators that are well known in the international market. We provide turn key solutions for all kind of analyser systems, including analysers shelter, cabinet with analysers and sample handling system, laboratory manual sampling systems, supply, installation, commissioning for laboratory arrangements and apparatus, workshop and machine automation. Our main customers are EPCs and end-users in chemical, oil and gas, power and water.

Our philosophy is: a long walk begins from the first step.



STAND NUMBER: 2H55 HALL2

T&T EXHIBITS LEADING MARINE SALVAGE AND OTHER SERVICES

Exhibiting for the first time at EGYPS 2019, T&T Salvage, a complete marine services company, is proud to showcase its leading marine salvage, emergency response and oil spill recovery services.

With offices and company-owned equipment strategically positioned around the globe, T&T is dedicated and committed to the emergency response and preparedness needs of the international maritime and energy sectors. For years, T&T has served as the primary salvage and marine firefighting provider for over 60% of the tanker market trading in US waters.

Most recently, T&T has adapted to the growing natural gas industry, leading the charge in LNG emergency preparedness. Conference attendees are encouraged to visit T&T's booth to learn more about our suite of specialised emergency response services and equipment including, fast response fire fighting systems, inert gas and nitrogen generators, high capacity dewatering pumps, ship-toship (STS) lightering systems, oil spill response, non-floating oil detection and recovery operations, incident and disaster management training, and more.

STAND NUMBER:

3D69

GPT PRESENTS ELECTROSTOP ISOLATION JOINTS

The Garlock family of companies is comprised of three businesses, Garlock Sealing Technologies, GPT and Rubber Fab, to provide high-performance fluid sealing and pipeline solutions with an emphasis on safety, longevity, and productivity.

GPT is the industry-leading manufacturer of criticalservice flange isolation systems, and corrosion protection equipment servicing the oil and gas industry across the globe. During EGYPS 2019, we will be showcasing our range of Pikotek Isolating Gaskets (VCS™, VCFS™, VCS-ID™ and VCXT™), recognised as the best-in-class solution for flange isolation, designed and constructed of premium materials and extensively tested in conditions that far exceed field service specifications. Our critical service isolation kits provide the dependability you need as failure is absolutely unacceptable.

In addition, we will present ElectroStop® monolithic isolation joints, which provide a leak-proof, maintenance-free and long-lasting block against the flow of electric current in all piping systems. The ElectroStop® eliminates short circuits and field assembly, factory assembled, permanent and maintenance-free weld-in electrical isolation joint-replacing flanged connections.

Garlock Sealing Technologies is a multinational manufacturer of high-performance fluid sealing. We work in partnership with our customers, industry associations, and governmental entities to understand their unique sealing challenges and respond with innovative solutions that keep people safe while increasing profitability and providing sealing solution for a breadth of industries and applications. Our solutions cover metallic, PTFE and fab gaskets, including the industry leading GYLON®, expansion joint, compression packings, hydraulic seals, oil and lip seals, bearing isolators, diaphragms and butterfly valves.

New for this year, Garlock will be displaying GYLON EPIX™. This next generation sealing solution, will provide superior functional performance by combining the traditional attributes of GYLON® with an innovative surface design. It offers a broader range of applications than traditional PTFE gaskets that are used in worn and pitted flanges. In addition, GYLON EPIX™ delivers the tight sealing and load retention properties of 1/16" (1.6mm) and the conformability of 1/8" (3.2 mm)

STAND NUMBER: 3D63 HALL 3



DAY 2 WINNER OF THE RAFFLE DRAW

MR. EHAB ABO EL AZM

Operations Manager Drilling Fluids Innovations

WATCH OUT FOR THE RAFFLE DRAW **DAILY AT 16:00** EGYPS STAND 3H50, HALL 3





AGGREKO PROVIDES POWER. **COOLING SOLUTIONS**

Aggreko is the world leader in providing temporary power and cooling solutions around the world. Having been in Egypt since 2009, we are determined to increase our brand awareness in the country. Participating in EGYPS 2019 and promoting ourselves via this platform is part of our brand strategy. Our key sectors in the Egyptian market are oil, gas, and petrochemicals. Whether you are a governmental organisation, an international oil company (IOC) or a joint venture partner, EPC contractor, we can provide you with temporary power whenever you need it.

Aggreko can, not only provide you with temporary power at any stage of your operation, upstream, midstream or downstream, whether it is on-shore or offshore, but also we specialise in renewables and flare gas recovery as well. Our gas technology power plants



are the best in class from an efficiency and reliability standpoint.

Our equipment is custom designed, built in modular containers at our own production facility in Scotland and are ISO certified. They can be moved quickly and efficiently within no time to your site. Whether you require 1 megawatt (MW) or a multi-megawatt package, 50 or 60 HZ options at Varied Voltage levels LV MV and EHV, we can provide you with a solution. Our fleet of generators are multi-fueled and can be selected to operate using diesel, gas or HFO whichever fuel is available to you.

To know more, visit us during EGYPS at our stand number 2G48 in Hall 2.

STAND NUMBER: 2G48 HALL 2

EL PANDA COMPANY SUPPLIES NEEDED MAINTENANCE TECHNOLOGY

El Panda company was founded in 1989. The company's main target is to supply all the industries with the best available technology of maintenance products in order to increase productivity, eliminate unplanned shutdowns, decrease the maintenance budget, and to keep our planet green.

Since then, the company achieved a huge success in fluid sealing products; such as mechanical seals, mechanical packing, gaskets, etc. In addition, the company succeeded in industrial chemicals; such as lubricants and cleaners. Furthermore, the company works in advanced ceramic coating products to repair tanks, pumps and

Continuing this success, we add to our portfolio a very respectful company, OIL-EX company from Germany, which we will be representing at the EGYPS 2019 exhibition.

This company is specialised in producing biodegradable absorbents, that can absorb oils,



fuels, and chemicals on the three types of surfaces; land, roads, and water.

It further produces hydrophobic material that does not absorb water and keep any fluid, that was mentioned, and can be absorbed.

For more information, please visit us at EGYPS 2019. Our booth will be in hall 1, stand number 1B30 (German Pavilion).

Our main concern is to satisfy our customers' needs. So, kindly let us know how we can satisfy yours.

STAND NUMBER: 1B30 HALL 1

METI DEVELOPS DIGITAL TRANSFORMATION SOLUTION

Micro Engineering Tech Incorporation (METI) was established in 2010, with over 50 years of experience in software development, energy, construction, geomatics, digital transformation, technology, and project management. Based in Calgary, Alberta, METI is a leader in sensors and system integration for high-precision engineering applications. Their innovative technological applications have earned them an Alberta Science and Technology Leadership (ASTech), a foundation award in applied technology. The company is a leader in providing digital transformation solutions for different industries, especially for oil and gas industry, and also for construction, and utilities. Their solution consists of three levels.

The first level is integrated asset modelling, which is the first and the most basic level of METI's service, which involves a trip to the oil and gas facilities so that everything can be digitalised, including pipes, pumps, machines, buildings, compressors, towers, and tanks. State-of-the-art laser scanning technology and HD cameras are used to scan everything. The captured data is then modelled in the industry-standard 3D modelling format of the client's choice. Once the models are complete, they are converted into smart models through the addition of specifications for the different parts. They are connected to the engineering workflow, the product P&ID, isometrics and more. The models are further enhanced with a complete realisation of the land and the area surrounding the site. The final product is an advanced smart city industrial model that is ready for integration with other industrial and non-industrial areas and facilities surrounding the modelled area and plant.

The second level is sensors and connectivity (advanced day-today operation monitoring). Simply, modelling an oil and gas site is not enough. The next step optimises the entire site to connect the smart 3D model with a variety of cloud-enabled sensors for real-time data collection. METI offers advanced energy-grade Internet of Things (IoT) services that can accept integrate old and new sensors in advanced, cloud-based services. Integrating the sensors and



maximising their usage through the model created in level one allows for workflow optimisation and an unprecedented level of safety. METI has the experience to fully utilise any sensors that are currently installed, and can recommend the best new sensors in any areas that could use an upgrade. An integrated sensor network can improve monitoring pipes, machines, and structures. Available sensor options include. but are not limited to, fiber optics, strain gauges, temperature sensors, vibration sensors, inclinometers, GNSS, INS, and accelerometers.

The third level is asset management, risk assessment, and maintenance prediction.

Online asset management, risk assessment, and maintenance prediction models are the heart of the third level of digitalisation. METI uses artificial intelligence (AI) and advanced data analytics systems to optimise the usage of digitalised solutions from the first two levels. Data that has been gathered from different sensors are modeled and incorporated into METI's engineering services. Historical data from site is used to train the AI model for use in maintenance prediction, risk assessment, and asset management. METI's AI and data analytics systems are ready to be integrated with any industry-standard third-party software package. Clients are welcomed to customise the system to meet their specific needs. Customised setups include an optimised workflow, minimal risk and cost to maximise return on investment.

METI's services are available in Canada, USA, Egypt, KSA, UAE, and Brunei. METI looks forward to working together with a growing list of partners and clients to face the challenges and the exciting technological advances of the future digital era.

STAND NUMBER: 3G33

HALL 3





EXHIBITOR NEWS

11-13 February 2019 Egypt International Exhibition Centre



ATEF H. RIZK & COMPANY: SERVING THE EGYPTIAN ECONOMY



Atef H. Rizk & Company, located in Cairo, was established in 1976. The company's main role is serving the Egyptian economy through supplying factories and companies with their needs in maintaining, expanding, growing, improving, and controlling their production range. In

addition, the company depends on using technology and know-how to complete activities, which enables local manufacturers to penetrate the international markets.

Our European and American sources are the leaders in their fields of activity. We have realised through these sources the optimum solutions needed for overcoming production problems, no matter what the difficulties are. Through our close global relations, we will provide several solutions in different fields including chemical and pharmaceutical industry, processing lines and machinery, QC and research instrumentation, and expanders/shrinkers.

Our services further serve special CNC milling machines; nondestructive testing equipment; oil and gas industry; process instrumentation; lab and research instruments; universities, research institutes and governmental organization; scientific instruments; QC instruments; and pilot plants.

Additionally, we offer solutions in the fields of wire and cable industry, wire drawing and standing machines; wire enameling machines and QC; instrumentation; drawing lubricants; as well as die grinding and polishing machines.

STAND NUMBER:

3D15 HALL 3

RESINEX: A LEADER OF MARINE EQUIPMENT INDUSTRY

Starting its activity in the 1960s, Resinex has become one of the world leaders in the Marine Equipment Industry thanks to the constant innovation. The company manufactures a wide range of marine technology products, which include the support and mooring buoys, pipe deployment floats, catamaran buoys, cable floats, elastic beacons, light buoys (navigational aids), ultradeep water buoys and much more. The range of Resinex products is customised, innovative, advanced and adaptable to all requests.

During EGYPS 2019, Resinex will showcase its main products manufactured for Egyptian projects during the last years, elastic beacons for the New Suez Canal, signalisations for the Mediterranean ports in Alexandria, Bernice and Abu Qir, deep-water floats and pipe deployment floats for the Zohr Field, mooring buoys for Port Said, just to name a few.

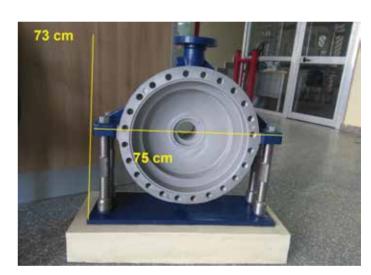
Resinex will exhibit its wide range of marine equipment that will be useful for current and future works and projects in the marine industry in Egypt and all over the world.

To know more about us and more about our services, we are waiting for your visit at our stand number 2F58



STAND NUMBER: 2F58 HALL 2

RUHRPUMPEN: OFFERS HIGH-ENGINEERED PUMPING SOLUTIONS



Ruhrpumpen is an innovative and efficient pump technology company that offers highly-engineered and standard pumping solutions to the oil and gas industry, power generation, industrial, chemical and water markets. We offer a broad range of centrifugal and reciprocating pumps that can meet and exceed the requirements of the most demanding quality specifications and industry standards such as API, ANSI, ISO and hydraulic institute. We are the leading manufacturer of pump systems around the world. Our strength lies in our ability to develop innovative, efficient and high-quality products that represent the driving force behind hundreds of industrial processes that move the world forward.

Ruhrpumpen offers a broad range of pumping technologies and solutions to meet and exceed the requirements of a large variety of applications within the oil and gas sector, chemical, power, water and industrial markets.

Our history began in 1950 in the city of Witten, Germany, where we developed until 1997, when corporation EG bought the company to become a global supplier of pumping technology. In EGYPS 2019, Ruhrpumpen will exhibit RP's centrifugal, reciprocating and specialty pumps that are compliant with the most demanding industry standards such as: ISO, API, hydraulic institute and ANSI/ASME. In addition, Ruhrpumpen will offer fire protection pumps and systems designed and manufactured to meet the latest NFPA standards

STAND NUMBER:

3D28

EXHIBITOR NEWS



ALWASAIL INDUSTRIAL COMPANY: OFFERING ADVANCED PIPE TECHNOLOGY

Alwasail Industrial Company is offering a technologically advanced pipe innovation for transporting natural gases in buried pipeline applications. In addition, the company is offering a high-performance solution with optimum joint integrity, as well as manufacturing gas pipes. We successfully started producing our own brand for electrofusion fittings. Polyethylene gas pipe is the preferred choice for distributing natural gas. With Alwasail, we offer a pipe that is flexible, lightweight, non-toxic and environmentally safe. Our products provide superior corrosion, chemical and abrasion resistance. They are available in coil lengths and are easy to install by using heat fusion or mechanical fittings. Alwasail has designed, researched, developed and manufactured the first coextruded, fully impregnated fiberglass RTP piping system. For a wide range of applications from crude oil flowlines, gas gathering lines, injection lines, and steam



injection lines.

Alwasail PetroFlex RTP reinforced thermoplastic piping systems, which is the first RTP with coextrusion polymer layer for temperature and permeation resistance. This allows Alwasail PetroFlex to operate at a variety of temperatures and zero permeation, less paraffin buildup, scaling as well as a long-term reduction in follow-up maintenance; such as hot oiling, pigging, and

inhibitor usage. It is manufactured according to API 15S for reinforced piping systems.

Moreover, Alwasail offers pipe lining, which involves pulling or inverting a new HDPE liner into an existing pipe, then applying heat and/or pressure to force the liner to expand and fill the pipe.

The benefits of trenchless technology include saving time and being more convenient as traditional digging methods take substantially longer than using trenchless technologies, making it more convenient and quicker to resolve problems associated with damaged pipelines.

Trenchless technology further saves money, because structural modification (i.e. taking out walls) is not required and less technicians are needed to complete the job faster. In addition, no heavy equipment is necessary, which in turn also reduces the clean-up costs.

The technology is a less intrusive and environmentally friendly alternative as no digging means minimal ecological damage because it eliminates the need to dig up the earth and affect surrounding landscapes.

In addition, more durability with HDPE liners as using an HDPE pipe line in trenchless technology helps protect the pipeline with greater resistance, add more durability and prevent further leakage and damage to be caused to the pipe.

STAND NUMBER: 3H45 HALL 3







PROCESS VISION DEVELOPS LINEVU TECHNOLOGY

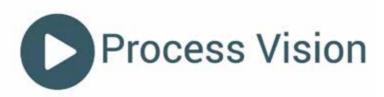
Process Vision is working on developing the latest technology that will be introduced with pride during EGYPS 2019. Our company is going to promote LineVu technology during the event.

LineVu is a camera system that is capable of providing a permanent video stream of pipeline activity, which is available to be viewed at any time. LineVu provides an alarm when liquid, hydrates, and foam contamination is detected.

Under normal dry gas conditions, the system will see no movement, even though the gas may be moving at around 30 mph. During contamination, image processing delivers an alarm, which offers a significant step forward in process assurance for critical applications.

LineVu is a very powerful tool for diagnostics, and provides evidence about events where tariff agreements have been broken and justification is needed to support a decision to temporarily stop the supply, or support a compensation claim from the gas

Using existing tapping points, LineVu



can be installed at custody transfer points, or at the entry to, or exit from, critical gas processing systems.

LineVu provides an indisputable evidence as greater process confidence is gained when operators can see events in high pressure systems. With LineVu, a live video feed of pipeline activity is available at any time via a standard web browser. An alarm is raised when contamination is detected, and LineVu automatically starts recording data at that point. It continues recording until no further contamination is detected. Time, date, and location are burnt onto the video image, so that, all relevant process data can be played-back alongside the video, providing a complete picture of the event to aid fault diagnosis.

Moreover, the LineVu technology represents a new way of thinking. It does not require sections of pipe to be removed, or pits to be dug. It is mounted above the pipeline, using existing 2" or 3" tapping points wherever possible, behind a double block and bleed valve. This standoff from the main pipeline avoids contamination of the optical windows. With a maximum working pressure of 200 Bar, LineVu is compatible with the majority of pipeline networks and gas processing plants.

Data may be stored in the rack-mount PC, or on the client's network. Still shots may be taken for entry into reports, or sent via SMS texts to interested parties. Video may be uploaded and become available for remote access, and for service engineers or customers to view in order to improve response to

LineVu is characterised by safety. It is permanently installed on a pipeline or high pressure vessel. Independent LOPA and FMEA studies confirm that the secondary containment system provides sufficient levels of safety for pipeline network installation.

The technology is enriched with many benefits. At custody transfer points, buvers can make better decisions. With firm evidence, they can decide the acceptability of the supply, correct flow meter readings for wet gas, make the supplier accountable, re-negotiate costs, and lower legal costs.

Furthermore, at gas export points, suppliers can reduce downtime. With better information, they can quickly determine the severity of the process failure, improve operational decisions, lower risk of financial penalties, and provide proof of dry gas.

With LineVu in place, asset integrity managers can lower the risk of hydrate blockages and decrease the requirement for pigging.

In order to find out more and more about our technologies, please meet us at stand number 2G42.

STAND NUMBER:

2G42

HALL 2

TIANJIN SINOGAS: FOCUSING ON TECHNICAL INNOVATION

Since crude oil prices shave been increasing in recent years, natural gas as an alternative energy source saw a rapidly growing market.

With natural gas compression station and liquefaction plant widely application, TIANJIN SINOGAS RePower Enenery Company LTD focuses on technological innovation. We devote ourselves to offer high efficiency, cost-effective, highly integrated natural gas distribution solution, distributing the natural gas to the areas that were not covered by the pipeline grid.

From upstream to downstream, our company provides entire project solution, including CNG mother compression station, skidmounted mini LNG plant, CNG trailer transportation, CNG marine transportation, LNG tank trailer, and LNG ISO tank container.

The project solutions provided further

include CNG pressure regulating station, LNG vaporising station, and LNG peak shaving, emergency gas supply system.

The company provides CNG refilling daughter station, CNG mobile refueling unit, LNG refilling station, and L-CNG station, as well as natural gas city gate station, and gas pressure regulating and metering

We serve natural gas users for residential, merchants and industrial utilisation through facility heating or cooling, gas power generation (such as biomass power generation, oil distributed generation), vehicle use or marine fuel, heat treatment furnaces, boilers, dryers and etc., and peak shaving, emergency gas supply.



Natural gas distribution chart

STAND NUMBER:

3H61

HALL 3



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PUBLISHING AND INFORMATION SERVICES











PANDUIT'S INDUSTRY: LEADING SOLUTIONS FOR OFFSHORE, REFINERY AND CONTROL ROOM APPLICATIONS

Panduit creates a leading-edge physical, electrical, network infrastructure, as well as AV solutions for enterprise-wide environments; from the control room to the telecom room, and from the desktop to the plant floor.

Panduit solutions are characterised by distinct engineering and performance advantages in oil and gas environments. With Panduit as a primary source partner, customers can maximise their uptime, enhance safety, increase reliability, and have a single point of contact for getting quick answers regarding product usage, installation, and availability.

The company provides solutions for harsh environments. Panduit conducts extensive testing to measure product performance, in terms of extreme heat, cold, vibration, corrosive agents, salt spray, and high winds. These solutions are designed for optimised installation and maintenance in harsh environments.

Panduit considers safety as a top priority. As drilling technologies become more complex and production goals are pushed higher, safety and preventive maintenance procedures have become even more critical. Panduit follow-up with the latest improvements to enhance safety, reliability, and

The services provided by the company can reduce installation time. Taking time out of the installation process has a great benefit, it will contribute to meeting aggressive construction schedules and project ROI goals. In remote locations, where weather windows can be very tight, even minor construction delay can result in scheduling penalties and delaying revenues. In head to head comparisons with competitive products contractors have found Panduit products to be significantly easier and faster

Panduit services have global reach and local delivery. More than other industries, oil and gas energy production is a global business dependent on a global supply chain. Panduit's extensive worldwide network of local distributors and regional warehouses allow us to deliver the right solutions when and where they are needed.

The company provides pan-steel® super heavy cross section self-locking stainless- steel cable tie, which is a lightweight, flexible alternative to cable cleats for fastening cable to cable tray. The selflocking design speeds installation because no tray modification is required. Total installation costs can be as much as 25% less versus traditional cleats. The smooth, rounded edge of pan-steel® cable ties is considerably safer for installers to handle and protect against abrasion of the cable jacket/insulation.

Panduit identification solutions are used with pipes, conduit, cables, and related equipment.

Available in many colors and configurations, these fire-resistant systems are manufactured for long-term use in the harsh environments of oil and gas operations. Panduit solutions are known for outstanding durability and legibility, which can be embossed, etched, or engraved prior to delivery.

Panduit® pan-steel® self-locking cable ties and the MS75 metal strapping system represents Panduit's cable cleat offering for robust cable management and short circuit protection up to 156kA. Available in different sizes, these solutions ensure that cables will remain contained in the event of a short circuit occurrence, minimise disruption and damage to personnel and property. Panduit's cable cleat products for short circuit protection are designed to perform in a wide range of harsh environments, including industries such as oil and gas, power generation, mining, and shipbuilding.

STAND NUMBER: 3060 HALL 3

RUTTER INC: INTRODUCES MARINE APPLICATION SIGMA S6

At EGYPS 2019, Rutter Incorporation, Canada pavilion will be exhibiting its suite of sigma \$6 enhanced marine radar applications. Rutter, headquartered in Newfoundland Canada, is a developer of radar and advanced radar signal processing technologies for the marine safety, security, and environmental protection industries.

Rutter's sigma S6 is a specialised radar systems include sigma S6 oil spill detection system; sigma S6 small target detection system; and sigma S6 WaMoS® II wave and ocean surface current monitoring system.

The sigma S6 systems provide highresolution radar imagery and use advanced processing functions to remove sea and weather clutter and other signal interference to increase target detection and tracking. They are ideally suited for demanding applications, such as oil spill detection, tracking and reporting; port and harbour security; coastal surveillance; anti-piracy; and surveillance, search and rescue.

Sigma S6 oil spill detection system can be supplied complete with the Rutter Radar-100S6 transceiver and antenna in horizontal or vertical polarisation; or it can also be connected to existing marine X-band radars in a slave configuration.

The system automatically detects, tracks, and outlines oil slicks in real-time across a range of visibility conditions and sea states. A complete oil spill response and management system is also available, integrating the sigma S6 oil spill detection system with an infrared camera that is capable of reporting relative thickness of an oil slick and provides chart overlay capability, remote oil spill confirmation, and additional management communications features valuable during clean-up

Sigma S6 small target detection system provides enhanced radar imagery and target detection and tracking capabilities. The system is a practical solution for search and rescue, marine traffic management, navigational safety, and surveillance applications; including oil platform and critical infrastructure security, as well as antipiracy. Rutter has also installed its sigma S6 small target detection system onboard, a

number of seismic survey vessels for the display of seismic streamers and detection of hazards to the seismic

Sigma S6 WaMoS® II is a proven radar-based wave and surface current monitoring system providing measurements up to four kilometres from a radar site. Connecting to most commercial X-Band radars, sigma S6 WaMoS® II measures and reports on all essential wave field parameters: 2D-directional wave spectrum, significant wave height (Hs), peak wave period (Tp), peak wavelength (Lp or p), and peak wave direction (p), as well as surface current speed (Us) and direction (Ud).

The system distinguishes between wind, sea, and swell, also it can automatically recognised up to three-different wave systems. Sigma S6 WaMoS® II provides higher fidelity information and comparable accuracy, at lower lifecycle costs than other wave and current measurement sensors. It is presently used in offshore construction, diver support, safe helideck operations, navigation support, and research facilities.

Rutter continues to innovate



and expand its product line and capabilities to address various challenges in the marine industries. Rutter's sigma S6 technology provides the real-time detection and tracking capability that is a key element in navigation safety and environmental protection.

In order to find out more about sigma S6, visit us during EGYPS 2019 at booth number 3F32.

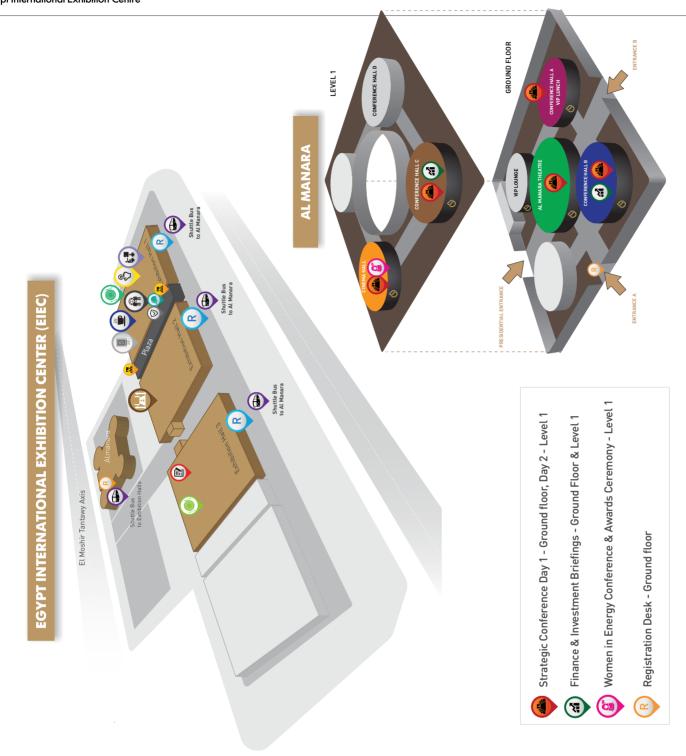
STAND NUMBER: 3F32

HALL 3











#EGYPS #EGYPS2019



Technical Conference Rooms - Plaza, Rooms 1, 2, 3

Youth Engagement Programme – Hall 1

13

Global Meetings Programme - Hall 1

Digitalisation Zone - Hall 1

HSE in Energy Forum & Award Ceremony - Plaza, Room 4

Security in Energy Forum - Plaza, Room 4

Technical Poster Display – Hall 1

EGYPS Petroleum Club - Hall 2

Conference Delegate Lunch - Hall 3 All Access and Strategic Delegates

Registration Area - Halls 1, 2 & 3

Conference Delegate Lunch - Hall 1

Shuttle Bus Drop-off Zone - Halls 1, 2, 3 & Al Manara

All Conferences Coffee Break - Hall 1

EGYPS 2020 Sales Stand



SHUTTLE BUS SCHEDULE



ZONE 1: 90 Street: Dusit Thani LakeView, Helnan Landmark

ZONE 2: Ring Road: Royal Maxim Kempinski, Renaissance Mirage City, JW Marriott

ZONE 3: Nasr City Zone: Intercontinental City Stars, Holiday Inn



SHUTTLE BUS FROM HOTELS TO THE VENUE

	Departure Time - Monday 11 February		Departure Times - Tuesday 12 & Wednesday 13 February				
	First Departure	Second Departure	Third Departure	First Departure	Second Departure	Third Departure	Fourth Departure
90 Street Zone							
Dusit Thani LakeView	12:45	13:00	13:30	08:45	09:00	09:15	09:30
Helnan Landmark	12:55	13:10	13:40	08:55	09:10	09:25	09:40
EIEC Arrival	13:15	13:30	14:00	09:15	09:30	09:45	10:00
Ring Road Zone							
Royal Maxim Kempinski	12:45	13:15	-	08:30	08:45	09:00	09:15
Renaissance Mirage City	13:00	13:30	-	08:45	09:00	09:15	09:30
JW Marriott	13:15	13:40	-	08:55	09:10	09:25	09:40
EIEC Arrival	13:30	14:00	-	09:15	09:30	09:45	10:00
Nasr City Zone							
Intercontinental City Stars	12:50	-	-	08:35	08:45	09:00	09:20
Holiday Inn	13:00	-	-	08:45	08:55	09:10	09:30
EIEC Arrival	13:30	-	-	09:15	09:30	09:45	10:00

DEPARTURE FROM VENUE TO HOTELS					
Monday 11 February	Tuesday 12 February	Wednesday 13 February			
19:15	19:15	19:00			
19:30	19:30	19:30			



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