To Be a Joint Venture or Not to Be?

BETTER TOGETHER: JOINT VENTURES IN OIL AND GAS

INVESTMENTS IN EGYPT YIELD IMMEDIATE RETURN

NIGERIA: TOWARDS INCORPORATED JOINT VENTURES

APEX INTERNATIONAL ENERGY: READY TO MAKE A DIFFERENCE

Proudly Official Egyptian Media Partner
Egypt benefits greatly from the joint venture companies model in the oil and gas industry. In this issue, EOG explored structures, processes, and different perplexities of joint ventures.

In an exclusive interview with EGPC’s Deputy CEO of Production, we looked at the framework of JVs’ activities in the country. We also present a brief analysis of the model. In an overview article, we focus on the question how JVs help Egypt to maintain its status as a major player in the current low oil price market.

Looking at the benefits of creating a JV, we explore how these benefits can be shared between both partners. The author of the article concludes that foreign investors and EGPC profit from their ongoing partnership in continually reforming operations within the sector and enhancing performance. Hence, the suitability of JV model for upstream projects and of contractual regimes for JVs are two important subject matters that we paid a special attention to.

An inspirational model for JVs in Egypt has emerged in Nigeria. The country has been considering converting to a new Incorporated Joint Ventures model to resolve its funding gaps. According to the author, it may provide a useful modification to the current status of JV partnerships, for Egypt and other regional countries.

Last but not least, EOG had a pleasure of speaking with four directors of a new player in the Egyptian oil and gas market, Apex International Energy. In an exclusive interview, we present the company’s business strategy, plans, aspirations, and its potential contribution to the Egyptian hydrocarbon production. We hope that you will enjoy reading this issue.

And we thank you for your continuous support.
Gateway To Egypt's New Oil & Gas Opportunities
14 - 16 February 2017, CICEC, Cairo
www.egyps.com

HAVE YOU REGISTERED FOR NORTH AFRICA'S LARGEST OIL & GAS CONFERENCE?
UPSTREAM, MIDSTREAM, DOWNSTREAM TOPICS IN FOCUS

3 DEDICATED CONFERENCE TRACKS

STATEGIC
3 Days of unparalleled knowledge exchange

TECHNICAL
7 Strategic sessions 8 Women In Energy sessions 28 Technical sessions 150 Industry expert speakers

WOMEN IN ENERGY

10 TECHNICAL CATEGORIES INCLUDE:

- E&P Geoscience (GEO)
- Oil, Gas and Unconventional Field Developments (OGUFD)
- Project Management, Engineering Technology and Implementation (PMETI)
- Drilling and Completions (DC)
- Operational Excellence, Maintenance and HSE (OEMH)
- Gas Processing Technology and Operations (GPTO)
- Downstream: Refining, Petrochemicals and Fertilizers Technology and Operations (DRPFTO)
- Power Generation Technology and Operations (PGTO)
- Offshore Technology and Operations (OTO)
- Marketing & Distribution of Refined Products (MDRP)

SPECIAL GROUP BOOKING DISCOUNTS AVAILABLE
Register before Thursday 17 November for Early Bird Rates

INTERESTED TO EXHIBIT OR SPONSOR EGYPs 2017?
Meet the EGYPS team at ADIPEC stand CN53

Supported by
- EPGC
- EGAS
- Diamond Sponsor
- Platinum Sponsor
- Gold Sponsor
- Silver Sponsor
- Bronze Sponsor

Official Hotel
- EgerMobi
- Schlumberger
- HALLOWEY LLC
- Baker Hughes

Official Publication
- Pipeline Magazine
- dmg events magazine
- Eni

EGYPS Co-organised By
- NOVEMBER
Eni Drilled 6th Well at Zohr

Italian Eni finished the drilling processes for the sixth well at Egypt’s Zohr field in the deep water offshore the Mediterranean Sea. An official with the company stated that the well’s production tests will start late October and will take roughly ten days to complete, reported Egypt Oil & Gas.

Production tests on the fifth well had confirmed that the field’s reserves have increased to 30Tcf of gas. Furthermore, in an exclusive interview with Egypt Oil & Gas, the Egyptian General Petroleum Corporation’s Deputy CEO of Production, Diaa Eldin M. Kassem, stated that Zohr field’s production will come online during the second half of 2017.

According to the project’s development report, the drilling operations along with establishing a gas treatment plant and processing marine pipelines to connect them to the Shorouk concession area are currently being executed. Eni’s official added that drilling one well in the deep water at Zohr field takes roughly 40 days and costs about $100m. Accordingly, the first phase of the project, which is planned to be completed by December 2017, will cost $5b in investments. Total investments at Zohr are expected to range between $12-16b over the project’s lifecycle, with production peaking at 2.7bcf/d by the end of 2019.

Furthermore, Petrobel’s CEO, Atef Hassan, stated that plans for Zohr include the drilling and continuation of 20 wells and the installation of 20 deep wellheads underwater, reported Al Watan. Hassan added that three electro-hydraulic control cables have been installed at the field.

Hassan’s comments came during Petrobel’s meeting with civil societies associated with the location of Zohr field. He stated that the importance of complying with global and local environmental regulations during the project in order to mitigate any negative impacts the project might have on the surrounding ecosystems is being taken into account.

The Egyptian government continues its support for the giant discovery, with special focus from the President, Abd El Fatah El Sisi, and the Minister of Petroleum, Tarek El Molla.

Edison to Drill Three Gas Wells in Egypt

Edison’s Commercial Manager, Tarek Shalaby, had stated that the Italian firm will start drilling three new wells in its concessions in Egypt including South Edco, Abu Qir, and North West El Gendy during January 2017, reported Al Borsa News. In addition, Edison will start enhancing North Abu Qir-3 by December 2016 to produce 80mcf/d of gas and 3500b/d of condensates, with investments worth $220m.

Furthermore, Edison and Al Qalaa Holdings Company were negotiating with the Egyptian Ministry of Electricity over the construction of a power plant in Abu Qir with a capacity of 180MW. Edison has since been collaborating with global and local environmental regulations with the Ministry of Petroleum to provide gas for the power plant through Edison’s Abu Qir field. Furthermore, they were also in talks with the Egyptian General Petroleum Corporation (EGPC) about agreements to provide the required lands for the project.

The company had contracted with Al Qalaa Holdings to construct the Abu Qir power plant and sell production directly to investors. The new power plant is estimated to cost around $112m, with Edison and Al Qalaa Holdings providing equal funding.

SDX Revealed South Disouq’s Seismic Results

SDX Energy Inc, an Egyptian focused oil and gas company, revealed that the quality of the 115 sq mile 3D seismic data, acquired over the South Disouq concession, surpassed expectations, reported Rigzone. SDX explained that the initial analysis of the seismic data set identified large prospects in the Abu Midian section and Kafr El Sheikh formation. These prospects and leads are located in traps similar to those identified in the offset areas. Additionally, early stage analysis has identified deeper oil-bearing potential in both the Abu Roash and AEB horizons, which are oil producers in the Western Desert region of Egypt, according to Your Oil and Gas News.

Shell, BP Bid on Egypt’s Petroleum Tender

Shell and BP submitted bids in Egypt’s petroleum tender, reported Al Mal News. An official with the Egyptian General Petroleum Corporation (EGPC) stated that Shell requested to obtain concessions in Western Desert, while BP requested to work at the Gulf of Suez. Those proposals came in response to EGPC’s tender in regards to 11 concessions. Five areas are in the Gulf of Suez region, which are North-East of October, North-East of Am Badir, North-East of Ramadan, North Alamein and North Legislative. In addition, six areas in the Western Desert are North-West Razak, South-East Maleha, North Um Baraka, South Alam Al Shweesh, West Badr Ed-din, and South-East Siwa.

China to Invest in Egypt’s Petchen

The General Authority for Investment and Free Zones (GAFI)’s Chairperson, Mohamed Khudair, stated that China’s Beijing Enterprises Group is expected to pump investments into Egypt under the government’s framework of Sustainable Development Strategy, reported Daily News Egypt. Officials with the Chinese firm presented their work in the fields of petrochemicals, fertilizers, propylene, urea, natural gas, water treatment, solid waste, power generation, as well as the construction of smart industrial cities. Yet, Khudair added that Egypt is mostly interested in the investment opportunities that will serve its strategy in the areas of infrastructure, water desalination plants, and power generation from solid waste.

Egypt to Not Import Iranian Oil

The Egyptian Ministry of Petroleum Spokesperson, Hamdi Abdel Aziz, stated to Egypt Oil&Gas that Egypt is not in negotiations with Iran on crude oil imports. Abdel Aziz confirmed that the agreement with Saudi Aramco is still valid. His comments came in response to reports that Egypt was considering Iran as an alternative oil source to meet market demand after Saudi Aramco halted October oil shipment. Abdel Aziz further added that the Arab Petroleum Pipelines Company (SUMED) has stopped transporting Iranian oil for a while. Accordingly, a source with SUMED stated that the company’s investors, namely the United Arab Emirates (UAE), Kuwait, and Saudi Arabia, had decided against transporting Iranian petroleum derivatives.

East-Med Summit Concluded in Cairo

The fourth trilateral summit between Egypt, Greece, and Cyprus covered discussions on economic zones in the Mediterranean and methods to increase joint projects among the countries, reported World Bulletin. The three nations held talks also on trilateral cooperation in the field of energy by transferring natural gas from Egyptian fields to Europe. Summit participants reflected on cross-border collaboration in the development of renewable energy and sea ports, as well as methods to engage investors in the east Mediterranean region, according to Daily News Egypt.
Egypt to Sign Nuclear Deal in 2016

An Egyptian governmental source stated that Russian Rosatom will complete surveying the location and data analysis for the construction of the Dabaa nuclear power plant within November to pave the way for the contract signing in December, reported Al Borsa.

The source added that Russia has finalized all financial and legal aspects of the agreement. Furthermore, a detailed report of current discussions with Rosatom and the contract terms were presented to the Egyptian President, Abdel Fattah El Sisi. The commercial contract addressed four dimensions, including the construction agreement, fuel purchasing terms, knowledge sharing and operational support, and lastly the development of fuel tankers.

Al Dabaa’s Operational Consultant, Yassin Ibrahim, said that Rosatom will start designing the power plant after the contract is signed, then the firm will present the designs to the nuclear regulatory and the environmental regulatory authority in Egypt. Accordingly, the Egyptian Nuclear Power Authority provided a list that contains 20 local companies to Rosatom as suggestions for the Egyptian partner in the project. The list includes Orascom Construction, Sewedy Electric, Hassan Allam, Petrojet, and the Arab Contractors (El-Mokawloon El-Abar).

A source from the Egyptian Ministry of Electricity and Renewables had previously affirmed that the State Council had ratified the final draft for the country’s first nuclear power plant in Al Dabaa, in association with Russian state nuclear energy corporation, Rosatom, Daily News Egypt reported. This came as Egyptian President, Abdel Fattah El Sisi, gave the green light to proceed with the project, after meeting with Rosatom’s CEO, Sergei Kiriyenko, in Cairo to discuss the final technical and financial aspects of the project. Contracts are expected to be signed by the beginning of 2017 in the presence of El Sisi, and his Russian counterpart, Vladimir Putin, according to Al Mal News.

The nuclear power plant will have a 4,800MW power production capacity and will cost an estimated $23b fund via Russian loans over 13 years. Local participation in the project’s initial phase is reported at 20%, and is expected to gradually increase across subsequent phases. Egypt’s new energy mix expands on nuclear energy use, as well as other fossil fuels, which raised concerns among environmentalists.

Egypt to Reimburse FIT Payments

Sources with the Egyptian Ministry of Electricity and Renewable Energy stated that the New and Renewable Energy Authority (NREA) was going to pay $750,000 to each company that withdrew from Phase I of the energy purchasing Feed-in-Tariff (FIT) program. These companies include Abdul Latif Jameel, Enel Green, and Orascom Telecom Media and Technology Holding (OTMT). Payments were planned to start mid to late October 2016, reported Al Borsa. Meanwhile, the Egyptian Ministry of Electricity announced that it was ready to sign power purchasing agreements (PPA) under the terms of Phase I of the country’s Feed-in Tariff (FIT) program. Accordingly, the ministry invited eight companies to sign the deal, reported Al Borsa.

Power Plants Consumed 3.4bcf/d of Gas

The Egyptian Ministry of Petroleum announced that the gas consumption of electricity power plants decreased from 3.7bcf/d to 3.4bcf/d, as a result of moderate temperatures during September, reported Al Borsa. Furthermore, Mазут consumption of electricity power plants also decreased from 30,000t/d to 28,000t/d, while diesel consumption reached 3,000t/d. Egypt Oil&Gas previously reported that a source from the Egyptian Ministry of Petroleum and Mineral Resources stated that Egypt had reached its maximum importation capacity of 1.3bcf/d of gas in August through Floating Storage Regasification Units (FSRU) stationed at Ain Sokhna Port and a pipeline with Jordan.

IOCs Invest $550m in Egypt

Total’s Senior Vice President for Africa, Stanislas Mittleman, stated that the company will invest $100m in Egypt within the upcoming five years. The company will also invest additional amounts on filling stations as it aims to open ten facilities per year, reported Al Mal News.

Mittleman added that Total invested large amounts lately in Borg El Arab factory for lubricant and exported part of its production to Jordan, Lebanon, and African countries. Furthermore, Mittleman had met with the Egyptian Minister of Petroleum, Tarek El Molla, along with Total's Managing Director in Egypt, Ian Lepetit, to overview the company’s projects in Egypt.

In addition, Minister, El Molla, also met with Shell’s Executive Manager of Exploration and Production, Andy Brown, during his visit to Egypt. They discussed possible methods of supporting investments in exploration and discovery, as well as producing oil and gas in Egypt. They also reviewed the progress of Shell’s projects in Egypt.

Egypt Received Oil Cargo

In a press release to Egypt Oil&Gas, the Egyptian Ministry of Petroleum spokesman, Hamdi Abdel Aziz, stated that Egypt has received oil cargos, after Saudi Aramco informed that it will not be able to provide October 700,000 shipment. He added that the ministry aims to meet local demands and maintain strategic reserves of petroleum derivatives. According to Al Borsa, the received oil shipments pertain to the tenders issued by the Egyptian General Petroleum Corporation (EGPC) to buy 132,000t of gasoline and 560,000t of gasoil for October arrival. Later on, Abdel Aziz confirmed that the agreement with Saudi Aramco is still valid.

BP Bought Egypt’s Rosetta Gas Plant

UK’s BP acquired Royal Dutch Shell’s Rosetta gas treatment plant in Egypt, for $128m. BP received the plant in April 2016 to prepare it to be linked to the production of Giza and Fayoum gas fields in northern Alexandria, reported Al Borsa News. A source in the petroleum sector stated that the maximum capacity of the Rosetta plant is estimated at 425mcf/d of gas, with 420mcf produced from Giza and Fayoum fields planned to be linked to the station by 2015, reported Arab Finance. After completing the deal with BR, Shell transferred production from the Rosetta field to the Burullus processing plant.

IMF Board to Review Egypt's Loan

International Monetary Fund’s (IMF) Director for the Middle East and Central Asia, Masood Ahmed, announced the $2.5b first tranche of the IMF’s $12b loan will be made available to Egypt after the IMF’s executive board reviews the program, reported Daily News Egypt. He added that Egypt’s funding package was expected to be presented to the fund’s executive board by the end of October or early November.

The IMF is working to secure the necessary funding to close the gap ranges between $5b and $6b of the first year, in addition to obtaining the approval of the fund’s executive board. He added that talks with Saudi Arabia and China are ongoing in this regard.

Egypt almost completed the required forms of the Egyptian government, “as per the agreement. Furthermore, a detailed report of current discussions with Rosatom and the contract terms were presented to the Egyptian President, Abdel Fattah El Sisi. The commercial contract addressed four dimensions, including the construction agreement, fuel purchasing terms, knowledge sharing and operational support, and lastly the development of fuel tankers.

Accordingly, IMF’s Managing Director, Christine Lagarde, stated that “the IMF needs to evaluate the economic reforms of the Egyptian government,” as Egypt almost completed the required measures for the loan, yet some actions related to the exchange rate and subsidies are still pending. Lagarde comments are aligned with Ahmed’s explanation that Egypt is facing several problems, particularly unemployment, the exchange rate, and the rising volume of dues.

Upon completion, the executive board will meet to approve the second tranche of the loan, informed Bloomberg.

El Molla stated that Shell is a leading company in oil and gas exploration and discovery with a long history in the country. Shell increased its investments in the country’s Western Desert concession by 15% to reach $450m in 2015. The company replaced BG in the Mediterranean concession and succeeded in producing shale gas for the first time in Egypt.

BP bought Egypt’s Rosetta gas plant in 2016. The company replaced BG in the Mediterranean concession and succeeded in producing shale gas for the first time in Egypt.
Egypt Owes EGP 200b to EGPC

A source from the Egyptian General Petroleum Corporation (EGPC) stated that the company has EGP 200b unpaid dues from government ministries and state-owned institutions for providing them with petroleum products and derivatives. The amount consists of EGP 145b that should be paid by the Ministry of Finance, EGP 5b by the national airlines Egypt Air, EGP 5b by the business sector and EGP 45b by the Ministry of Electricity, as reported Al Borsa.

EGPC is facing a liquidity crisis because of the unpaid dues by ministries and institutions, as the accumulated amounts are enough to cover EGPC's financial obligation towards banks and foreign companies for three years ahead.

Egypt Launched Sustainable Energy Strategy

The Egyptian Prime Minister, Sherif Ismail, signed off on the country's 2035 Sustainable Energy Strategy during a meeting with the Egyptian Supreme Council of Energy, reported Almaw Al Ghad. The strategy covers three segments, which included the restructuring of the gas sector, the promotion of energy efficiency, and combating global warming by lessening greenhouse gas emissions. Cabinet Spokesperson, Hossam Qawesh, stated that Ismail confirmed the necessity of reviewing the strategy every three years and reducing the consumption of fossil fuel represented in petroleum and coal, gradually from 96% to 81% of the fuel represented in petroleum and reducing the consumption of fossil fuel represented in petroleum and coal, gradually from 96% to 81% of the fuel represented in petroleum and reducing the consumption of fossil fuel represented in petroleum and coal, gradually from 96% to 81% of the fuel represented in petroleum.

QARUN
QARUN, a joint venture between EGPC and Apache, has completed drilling a new oil development well in its concession area in the Western Desert. The oil production rate of Qarun in September 2016 was 1,112,302 barrels of oil.

ASALA-71
The well was drilled at a depth of 5,800ft utilizing the EDC-64 rig. Investments surrounding the project are estimated at $1m.

BAPECO
BAPECO, a joint venture between EGPC and Shell, has completed drilling a new exploratory oil well in its concession area in the Western Desert. The oil production rate of BAPECO in September 2016 was 1,451,989 barrels of oil.

BED3 CD-1
The well was drilled at a depth of 11,775ft utilizing the EDC-52 rig. Investments surrounding the project are estimated at $2.313m.

JDT 1-05
The well was drilled at a depth of 4,350ft utilizing the EDC-66 rig. Investments surrounding the project are estimated at $1m.

KHALDA
KHALDA, a joint venture between EGPC and Apache, has completed drilling new oil well in its concession area in the Western Desert. The oil production rate of KHALDA in September 2016 was 4,566,937 barrels of oil.

WZKX-140
The well was drilled at a depth of 6,813ft utilizing the EDC-65 rig. Investments surrounding the project are estimated at $2m.

MRZK -130
The well was drilled at a depth of 7,360ft utilizing the EDC-66rig. Investments surrounding the project are estimated at $1.640m.

BP
BP, a British multinational research & exploration company, has completed drilling a new exploratory gas well in its concession area in the Mediterranean Sea.

LIBRA N-4
The well was drilled at a depth of 7,645ft utilizing the DISCOV-2 rig. Investments surrounding the project are estimated at $21.933m.

TAURUS 5-1
The well was drilled at a depth of 6,893ft utilizing the DISCOV-2 rig. Investments surrounding the project are estimated at $18.486m.

PETROBEL
PETROBEL, a joint venture company between EGPC and ENI, has completed drilling a new crude oil development well in its concession area in Sinai. The production rate of PETROBEL in September 2016 was 2,845,859 barrels of oil.

BLS-10
The well was drilled at a depth of 10,711ft utilizing the PD-104 rig. Investments surrounding the project are estimated at $3.456m.

ARM-27
The well was drilled at a depth of 13,268ft utilizing the ST-11 rig. Investments surrounding the project are estimated at $4.176m.

GPC
GPC, a public sector company, has completed drilling a new crude oil development well in its concession area in the Western Desert. The production rate of GPC in September 2016 was 1,452,480 barrels of oil.

HF-367B
The well was drilled at a depth of 7,513ft utilizing the ST-4 rig. Investments surrounding the project are estimated at $2m.

PETROSIHAN
PETROSIHAN, a joint venture company between EGPC and NAFTOAG, has completed drilling a new crude oil development well in its concession area in the Western Desert. The production rate of PETROSIHAN in September 2016 was 172,401 barrels of oil.

AES E6 1/10
The well was drilled at a depth of 6,775ft utilizing the SHAMS-2 rig. Investments surrounding the project are estimated at $1.049m.

PETROSILAH
PETROSILAH, a joint venture company between EGPC and MERLON international, has completed drilling a new crude oil development well in its concession area in the Western Desert. The production rate of PETROSILAH in September 2016 was 288,092 barrels of oil.

ASALA-71
The well was drilled at a depth of 6,775ft utilizing the SHAMS-2 rig. Investments surrounding the project are estimated at $1.433m.

NOPECO
NOPECO, a joint venture company between EGPC and SAHARI, has completed drilling a new crude oil development well in its concession area in the Western Desert. The production rate of NOPECO in September 2016 was 285,845 barrels of oil.

GAINA – 9
The well was drilled at a depth of 8,810ft utilizing the TANMIA-1 rig. Investments surrounding the project are estimated at $1.017m.
STRATEGIES FOR THE NEW ENERGY LANDSCAPE

TOP 5 REASONS TO VISIT

DO BUSINESS
ADIPEC represents a global opportunity for you to connect with over 2,000+ exhibiting companies within the complete Oil and Gas supply chain. Discover new technologies and solutions that optimise costs and drive efficiencies.

NETWORK
Meet with existing clients to protect your market share and network with new clients to drive new business growth and opportunities – ADIPEC attracts an audience of over 95,000 visitors from 120 countries.

EXCHANGE KNOWLEDGE
Learn from world class industry experts through the 106 technical conference sessions, industry panel sessions, ministerial sessions, global business leaders sessions and from over 850 speakers making ADIPEC the largest Oil and Gas conference knowledge platform in the world today.

GENERATE QUALIFIED LEADS
Gain access to the people that matter, who shape the energy industry and influence the decision making process. Target key professionals with purchasing power looking for innovations and technical solutions in your sector.

OPTIMISE YOUR TRAVEL BUDGETS
Meet the industry’s leading companies under one roof across four days of high-level networking and business opportunities. Four days at ADIPEC could equal a year’s worth of travelling around the world, meeting with clients and prospects.

WHAT TO EXPECT DURING THE 4 DAYS OF ADIPEC?

95,000+ Attendees
2,000+ Exhibiting Companies
8,500+ Delegates
25 International Country Pavilions Exhibiting
15 National Oil Companies
15 International Oil Companies

REGISTRATION NOW OPEN
www.adipec.com/visreg

ONE GLOBAL INDUSTRY. ONE CITY. ONE MEETING PLACE.
Libya to Produce 900,000b/d of Oil

The Libyan National Oil Corporation’s (NOC) Chairman, Mustafa Sanalla, said that Libya’s oil production had passed 554,000b/d and was on track to hit the 900,000b/d mark by the end of 2016, Bloomberg reported.

Sanalla’s comments came while he was in Paris to meet with French oil firm Total and Italy’s Eni. He attempted to persuade Total to recommit to Libyan onshore exploration and production, according to Libya Herald. Both firms had offshore properties in Libya, yet in the wake of collapsing security, Total abandoned its onshore operations in 2013.

Meanwhile, Libya also has restarted production from the Waha fields bringing the country’s total output to 580,000b/d, reported Libya Herald. The Waha field, operated by the Waha Oil Co, is one of the main contributors to the major Es Sider export grade. It is the first Es Sider field to resume production at a rate of 50,000b/d of oil in mid-October. However, the output is partly being redirected to the Ras Lanuf export terminal, owing to limited storage of Es Sider, according to Reuters. The Waha field has a total capacity of around 350,000b/d.

In addition, Libya’s Zueitina oil terminal loaded its first cargo since 2015 with 800,000 barrels of oil for export to China. Ionic Anassa tanker departed the terminal in early October, reported Reuters. The reopening of Zueitina, among other terminals, has helped boost Libya’s oil production, which had been slashed to a fraction of the 1.6mb/d that the OPEC member was producing before its 2011 political unrest, according to The Digital Journal.

In steady steps towards boosting crude output, Libya’s Arabian Gulf Oil Company (AGOCO) has also increased its production to 290,000b/d of oil and hopes to reach 350,000b/d by the end of the year, reported Africa TVC News.

AGOCO, a subsidiary of the National Oil Corporation (NOC) that operates mainly in eastern Libya, has boosted its output from about 150,000b/d since military commander Khalifa Haftar took control of some of the country’s main oil terminals from a rival force during September, Reuters wrote in related news.

Tendrara to Pump Gas by 2019

Sound Energy Plc, the oil and gas exploration and production company announced that it has completed drilling of its second gas well TE-7 at Tendrara field in Morocco. The company expects the first commercial gas from the property during the first half of 2019, reported Proactive Investors.

The well came to a total measured depth of 3,459m corresponding to a vertical depth of 2,611m. Additionally, the company currently estimates a total vertical net gas pay of approximately 28 meters similar to TE-7 well, on a vertical basis, according to Your Project News. The near-term potential of the asset could be up to 3-4tcf of gas.

Sound Energy is planning to complete test drilling of a horizontal well at the onshore prospect by December following promising results from vertical well tests, which showed a flow rate of 481,000c/m3/d of gas, according to Morocco World News.

Furthermore, an extended well test will follow the rigless operations for approximately 70 days to confirm production sustainability and to aid comprehensive field development planning.

The group plans to drill its first outpost well at Tendrara, TE-8, with the objective of proving up significant additional volumes, in early 2017.

Turkey Expanding Its Gas Exports

The Russian Energy Minister, Alexander Novak, and his Turkish counterpart, Beṣrat Albayrak, signed a bilateral agreement to begin the TurkStream undersea gas pipeline, reported Reuters.

Russian Gazprom’s CEO, Alexei Miller, said that the deal includes the construction of two pipelines between Russia and Turkey, along the coast of the Black Sea by 2019. Each line has a capacity to carry 15.75bcm/y, according to France 24.

TurkStream is part of Russia’s plans to bypass Ukraine, which is the main route for energy supplies to Europe. In addition, Israel’s Minister of National Infrastructure, Energy, and Water Resources, Yuval Steinitz, said that Tel Aviv and Ankara have agreed to start intergovernmental consultations on the construction of a pipeline in the Mediterranean Sea to supply Israeli gas to Europe via Turkey, informed Sputnik.

Furthermore, Turkey benefited from an offer by the National Iranian Gas Company to invest in Turkish liquefied natural gas (LNG) projects in order to boost exports of Iranian gas to Turkey, reported Azer News. Currently, Iran supplies Turkey with 30mcm/d of gas, but it is planned to be increased by 6mcm/d using the existing infrastructure, according to Press TV that cited NNPC’s Managing Director, Hamidreza Araki, as saying.

In Abu Dhabi Combining Offshore Ventures

Abu Dhabi National Oil Company (Adnoc) is combining its two largest offshore ventures, the Zakum Development Company (Zadco) and the Abu Dhabi Marine Operating Company (Adma-Opco), which is operated with partners including BP and ExxonMobil, in order to cope with low oil price environment, reported Times of Oman. The total of Abu Dhabi’s offshore oil production is expected to reach 1.7mb/d in 2017. The reorganization of the two companies means they will be dissolved and their ownership combined into one NewCo. The current CEO of Adma-Opco, Yasser Saeed Al Mazrouei, will head both entities during the completion, according to The National.

Iran Signed First $2.5b IPC Deal

The National Iranian Oil Company (NIOC) signed a $2.5b contract with Persia Oil & Gas Industry Development Company (POGIDC), a domestic firm in Iran, to develop the second phase of Yaran field and improve oil recovery in Karaj oilfield, reported Reuters.

The deal is the first to comply with Iran’s long-awaited new Iran Petroleum Investment Company (IPC) contract worth $98.7m with JGC Gulf International, which is a subsidiary of Japan Gas Corporation (JGC), to construct an additional gas storage and pipeline facility by 2018, reported Nikkei Asian Review. This IPC contract forms the second part of the Bahrain Gas Plant project that will involve the installation of a new pipeline system, to be used to transport gas from the compressor stations to the new gas processing train, a pipeline system to return residue gas for re-injection, and a 21 km additional Butane pipeline to Sitra, according to Bahrain News Agency.

Bahrain Awarded $98.7m Gas Plant Deal to JGC

Bahrain National Gas Expansion Company (BNGEC) has signed an engineering, procurement, and construction (EPC) contract worth $98.7m with JGC Gulf International, which is a subsidiary of Japan Gas Corporation (JGC), to construct an additional gas storage and pipeline facility by 2018, reported Nikkei Asian Review. This IPC contract forms the second part of the Bahrain Gas Plant project that will involve the installation of a new pipeline system, to be used to transport gas from the compressor stations to the new gas processing train, a pipeline system to return residue gas for re-injection, and a 21 km additional Butane pipeline to Sitra, according to Bahrain News Agency.

Kuwait to Form Large Petchem Firm

The Kuwaiti Ministry of Commerce and Industry (MCI) approved a request from Kuwait Petroleum Corporation (KPC) to set a subsidiary under the name Kuwait Integrated Petrochemical Industries Company (KIPIC) with an estimated capital of about $5.94b, reported Kuwait Times. The newly founded company, what would become the largest oil company in Kuwait, is expected to run refining and petrochemical projects.

KIPIC will play a pivotal role in running the Az-Zour complex, which serves to process petrochemicals and is a liquefied natural gas (LNG) importing facility, according to Oil Price. Kuwaiti Mina Al-Ahmadi Refinery’s CEO, Ahmed Al Jameaz, said that the company’s production capacity will be up to about 615,000b/d.
**OPEC Approaches Oil Freeze Deal**

Efforts of the Organization of the Petroleum Exporting Countries (OPEC) to secure cooperation of non-members in a global deal to curb crude output took place in Istanbul in October via informal discussions, informed Reuters. The Istanbul discussions followed upon a September deal reached by OPEC to reduce oil output to 32.5mb/d, down from the then production levels of around 33.24mb/d, with global prices of oil jumping by more than 5% in response to the agreement, Reuters reported.

According to Bloomberg, the talks were positive and cooperation between members and other producers was now well established, said Qatar's Energy Minister, Mohammed Al Sada. Bloomberg further wrote that the official negotiations are scheduled to continue at an official OPEC meeting in Vienna in November, but with growing internal differences over sharing the burden of cuts. Nonetheless, Russia came on board following upon a scheduled meeting between the Russian Energy Minister, Alexander Novak, and OPEC’s Secretary General, Mohammed Sanusi Barkindo, in Istanbul, as TRT World reported. As a result, Moscow is now ready to participate in a “technical exchange” to set a road map for oil production levels. In line with the outcome of the September OPEC meeting, the Saudi Arabia's state oil giant Aramco cancelled a rare offering of prompt cargoes to buyers in Asia in October, ahead of the Istanbul talks. However, oil ministers of Iraq and Iran did not attend the debates in Turkey at all. Iraq disputed OPEC figures that peg the nation’s output at less than 4.2mb/d, while the country is currently producing above the proposed level. Furthermore, Iraq's Oil Minister, Jabar Al Luaibi, urged oil and natural gas producers operating in the country to continue increasing output in 2017, according to The Economic Times. On the other hand Iran, together with Nigeria and Libya, are the only nations currently exempt from the proposed production cuts. Meanwhile, OPEC crude oil output reached a new record of 33.64mb/d during September, causing crude oil prices to drop back down after reaching a 12-month high of above $53 per barrel, reported Financial Times. According to Oil Price, the combined monthly increase in OPEC's output during September stood at 160,000b/d. Supply from the organization was 900,000b/d higher than in September 2015. Nonetheless, the group’s production is expected to stabilize around September volumes until the November meeting at which OPEC is expected to set definite oil output targets under the terms of the production freeze.

**Algeria to Boost Gas Production**

Sonatrach, Algeria’s state energy company has awarded Japanese firm JGC Corporate a $1.4b contract to boost production at its largest gas field HassiRmel, Africa News reported. The engineering, procurement, and construction (EPC) contract includes the installation of equipment to enhance the HassiRmel gas field, which produces half of Algeria’s total gas output, informed Reuters. The HassiRmel gas field is located in the vicinity of HassiRmel village, 550km south of Algiers. The gas field extends 70km from north to south and 50km from east to west. Furthermore, the Algerian Energy Minister, Nourredine Bouterfa, has revealed that Algeria is presenting a bid for the supply of liquefied natural gas (LNG) to Jordan to cover part of its needs, reported Ennahar. Jordan considered importing LNG from Algeria, as part of the memorandum of understanding signed between the two countries in 2015, according to Petra. Jordan News Agency. Bouterfa said that the state-owned company, Sonatrach, will provide a quote for supplying the kingdom with LNGs to cover part of Jordan’s National Electric Power Company’s (NEPCO) demand. During their participation in the World Energy Congress held in Istanbul, the two countries further discussed bilateral energy cooperation.

**Qatar Sign New LNG Export Deals**

Qatargas signed a 20-year Liquefied Natural Gas (LNG) sale and purchase agreement (SPA) with Pakistan-based Global Energy Infrastructure Limited (GEIL). The first cargo is expected to be delivered to the country in 2018 by Qatargas-chartered Q-Flex vessels, reported Al-Bawaba. Under the terms of the agreement, the Qatari company is expected to supply GEIL with 1.3mt/y of LNG with provisions allowing the volume to increase to 2.3mt/y, according to Zawya. Additionally, the company signed a five-year sale and purchase agreement (SPA) with PetronasLNG, reported Reuters. Under the terms of the newly signed deal, which is an extension of the current five-year contract that is due to expire in 2018, Qatargas will deliver 1.1mt/y of LNG to the UK-based venture until the end of 2023, according to Qatar Gas News. The LNG will be supplied from Qatargas 4, a joint venture between Qatar Petroleum and Shell, which started production in January 2011. Furthermore, the gas will be carried on board Q-Flex LNG vessels to Dragon LNG terminal at Milford Haven in the UK. In related news, Nakilat Shipping Qatar Limited (NSQL) has signed an agreement with Shell International Trading and Shipping to begin the planned phased transition of the management of Nakilat’s liquefied natural gas (LNG) fleet from Shell to NSQL, reported Trade Arabia.

**Shell to Invest $350m in Iran Petchem**

The Director of Hamedan province’s Industry and Mine Department, Hamidreza Matin, stated that Royal Dutch Shell offered the technology for Iran’s IbnSina Petrochemical Complex worth $350m and signed a letter of intent with Iran’s National Petrochemical Company (NPC) Iran in early October to study the possibility of implementing further petrochemical projects in the country, reported Sha-

**ACWA to Build Wind Power Plant in Turkey**

Saudi Arabia-based power and water project developer, ACWA Power, will build a 340MW wind power plant in Turkey, Hurriyet Daily News reported. ACWA is currently building a 950MW gas power plant near the capital Ankara, due to be operational in the second quarter of 2017. The company is a new entrant to the burgeoning Turkish electricity market, where energy demand is growing up to 5% annually, according to Reuters. Turkey regularly allocates renewable power investment licenses, but companies are usually awarded less than they ask for, because investment demand outstrips government quotas.
**Nigeria Boosted Oil Output**

The Organization of Petroleum Exporting Countries (OPEC) showed that Nigeria's crude oil output rose by 280,700b/d to 1.385mb/d in September, Oil Price reported. Despite the increase in Nigeria's crude output, the country was unable to claim its position as Africa's top oil producer, a title currently held by Angola with 1.640mb/d of oil output in September, according to Naija247 News. The Nigerian National Petroleum Corporation (NNPC) cited attacks on the country's oil infrastructure earlier this year as the cause for a 700,000b/d drop in its oil production. Nevertheless, the country's Oil Minister, Emmanuel Ibe Kachikwu, said that Nigeria expects its oil production rate to grow by 22% by the end of 2016 to reach 2.2mb/d from current levels, Reuters reported.

Kachikwu's comments came as he was in India to meet with the Oil Minister, Dharmendra Pradhan, and discuss expanding energy ties between the two countries, with a focus on diversifying India's engagement into oil exploration and production, refinery building, and marketing in Nigeria. While in New Delhi, Kachikwu stated that Nigeria was likely to sign a cash-raising oil deal with India for $13b as an upfront payment for oil purchases, according to Ecofin Agency.

In related news, members of OPEC had meanwhile agreed to reduce their oil output to 32.5mb/d from the current production levels of around 33.24mb/d. OPEC had agreed to the outline of a deal that would cut production for the first time in eight years, surprising traders who had expected a continuation of the pump-at-will policy the group adopted in 2014 at the invitation of Saudi Arabia. However, OPEC allowed Nigeria a production window of 1.8mb to 2.2mb/d, despite the organization's push for a production freeze, and accordingly, the country will be able to boost production without violating OPEC's mandate.

OPEC's overall crude oil output averaged 33.39mb/d in September, an increase of 220,000b/d compared to the previous month. Nigeria was among the countries that helped boost production, together with Iraq and Libya. On the other hand, Saudi Arabia showed the largest drop.

**Mauritania Sings Oil, Gas Offshore Deal**

The Mauritanian government and Kosmos Energy Mauritania have entered into an exploration and production (E&P) contract, concerning Block C-6 located offshore northwest of Nouakchott, Ecofin Agency reported. The agreement was signed by the country's Minister of Energy, Mohamed Abdel Vatah, and Kosmos' CEO, Andrew Inglis. It comes under the government's initiative to revive the country's oil industry.

Kosmos operates three offshore licenses in Mauritania, which are C8, C12, and C13. Their results confirmed the presence of oil and gas condensate. To date, Kosmos has drilled three successful wells offshore Mauritania. The Tortue-1 and Ahmeiyim-2 were drilled in the southern part of block C8 and made important discoveries in the Greater Tortue area. Kosmos also made another major gas discovery in the northern part of block C8 when its Marsouin-1 exploration well encountered at least 70m of net gas pay, signifying a substantial play-extending find.

Mauritania began oil production in 2006. Initially the government had aimed for oil output capacity to reach 70,000b/d, yet actual production figures fell short of that objective. In 2015, Mauritania's oil production stabilized at 8,000b/d, earning the country close to $12m in foreign exchange cash inflows.

**BP to Buy LNG from Mozambique**

UK's British Petroleum (BP) has agreed to a 20-year deal with Italian Eni to buy liquefied natural gas (LNG) from a big new field off the coast of Mozambique, an important step in getting a long-delayed project off the ground, Financial Times reported. The BP contract clears the way for Eni and Mozambique to make the long-awaited final investment decision (FID) on a project to build a floating offshore platform with a capacity to produce 3.3mt/y of LNG from gas in the Coral South field. The project's FID is expected by the end of 2016, according to Reuters.

**Tanzania to Build Gas Plant by 2025**

Tanzania will commission a plant by 2025 to process as much as 11.1tcf of gas, Bloomberg reported. The East African country has at least 57tcf of natural gas reserves and plans to export at least 3.1tcf of natural gas to east and southern Africa. Additionally, the Project Manager for Tanzania's S42km gas pipeline from Mtwarara to Dar es Salaam, Allan Slow, said the pipeline’s lifespan will extend from 30 to 50 years, ESI Africa reported.

Previously, China Petroleum and Technology Development Company (CPTDC) and the Tanzania Petroleum Development Corporation (TPDC) undertook the mega $1.22bn pipeline and gas processing plants at Madimba and Songo Songo islands. The project is part of a plan to add about 2,000MW of new gas-fired electricity generating power by 2018 to increase Tanzania's generating capacity to 10,000MW by 2025.

Most new plants will be gas-fired, but Tanzania also wants to use coal resources and renewable resources such as wind and geothermal. Accordingly, Tanzania's Ministry of Energy projected that total demand will reach 32.5tcf of gas over three decades, with 8.8tcf going to power generation, informed Ecofin Agency.

Mauritania Sings Oil, Gas Offshore Deal

The Mauritanian government and Kosmos Energy Mauritania have entered into an exploration and production (E&P) contract, concerning Block C-6 located offshore northwest of Nouakchott, Ecofin Agency reported. The agreement was signed by the country’s Minister of Energy, Mohamed Abdel Vatah, and Kosmos’ CEO, Andrew Inglis. It comes under the government’s initiative to revive the country’s oil industry.

Kosmos operates three offshore licenses in Mauritania, which are C8, C12, and C13. Their results confirmed the presence of oil and gas condensate. To date, Kosmos has drilled three successful wells offshore Mauritania. The Tortue-1 and Ahmeiyim-2 were drilled in the southern part of block C8 and made important discoveries in the Greater Tortue area. Kosmos also made another major gas discovery in the northern part of block C8 when its Marsouin-1 exploration well encountered at least 70m of net gas pay, signifying a substantial play-extending find.

Mauritania began oil production in 2006. Initially the government had aimed for oil output capacity to reach 70,000b/d, yet actual production figures fell short of that objective. In 2015, Mauritania’s oil production stabilized at 8,000b/d, earning the country close to $12m in foreign exchange cash inflows.

**Uganda to License 3 Oil Blocks**

The Ugandan government is considering a new licensing round for three oil blocks in the Albertine Graben. The three blocks include the Taitai & Karuka oil block, the Mvule oil block in Mayo/Yumbe, and the Ngaji block between Rukungiri and Karungu, Ecofin Agency reported. The oil blocks were not taken up during the first licensing round issued by the government. A spokesperson for the country’s Energy Ministry, Ibrahim Kasita, stated that the Mvule block received only one bid from US-based Gliint Energy Limited. He added that the bid “was not evaluated as the company did not meet pre-requirement requirements,” according to All Africa.
Africa to Import 30m Tons of LNG by 2025

Africa could become a significant global market for imported liquefied natural gas (LNG) by 2025, with Egypt as the main driver, as more countries eye gas-to-power projects, Reuters reported.

Many African countries, particularly those that use hydropower, will turn to gas-fired power generation. Total’s Vice President of Gas and Power Development, Tom Earl, claimed that “it could be collectively a 20m to 30m tons per year market by 2025.” He added that Egypt could be importing between 15m-20m tons annually within a decade, although actual volumes would depend on the development of its huge Zohr gas field, which had an estimated 30tcf of gas, according to LNG World Shipping. Furthermore, experts predict that Sub-Saharan Africa will become “a niche LNG destination,” with Ivory Coast, Ghana, and Tanzania as the markets with the strongest import potential.

Accordingly, the Ivory Coast signed a partnership agreement to create a consortium headed by France’s Total to build an LNG import terminal that could begin receiving gas shipments by mid-2018, Reuters reported. The country’s Energy Minister, Adama Touré, said that the project aims to conceive, build, and operate a floating storage regasification unit (FSRU) with an initial capacity of 100mcf that would gradually be brought up to 500mcf. He added that the project will cost an estimated $200m, according to Maritime Executive.

Resorting to gas-fired power generation appears to be a global trend as cheap gas has prompted many countries to look at LNG imports, in some cases as a move towards cleaner-burning fuels and in many others to fuel remote electricity-producing plants for communities beyond the national power grid. Consequently, Poland opened its long-awaited deep-sea import terminal at Swinoujscie in June as part of a move to cut its dependence on piped gas from Russia. Moreover, Jamaica and Indonesia have chartered floating storage units (FSUs), off Montego Bay and Bali, respectively, to support gas-to-power projects. Barbados has started to import small quantities of LNG by barge from Florida in the US, and this autumn Finland opened a small-scale import terminal at Pori.

Libera to Drill First Offshore Well

ExxonMobil Corporation will start drilling its first exploratory oil well off the coast of Liberia in November. The company will drill Mesurado-1 deepwater exploration well on the Liberia-13 Block, located about 50 miles offshore of the country, Liberian Observer reported. Mesurado-1 would spud in Q4 2016, however, the exact timing would depend on rig availability and contractors’ ability to operate in the country. ExxonMobil Regional Public and Government Affairs Adviser, Matthew Scharf, said it was not known how much drilling would cost or how long it would take. Furthermore, Toronto and London listed Canadian Overseas Petroleum (COPPL), a junior partner in ExxonMobil’s Block LB-13 offshore Liberia, had earlier announced that it would continue exploring the oil block for another 18 months. Yet, it is too soon to tell if any finds of oil or gas will be discovered in either block, according to Reuters.

Liberia does not produce oil unlike its eastern neighbor, Ivory Coast, which produces about 53,000b/d, and Ghana, the next country along the West African coast, which pumps about 100,000b/d. Accordingly, the Deputy Chief of Staff to Liberia’s President, Clarence Momah, said: “This project will create jobs for Liberians and help the economy if they can find oil of commercial quality.”

Nigeria to Start Output from Otakikpo Oil Field

Africa-focused Lekoil was expected to begin commercial oil production from Nigeria’s Otakikpo marginal field, located in Oil Mining Lease (OML) 11 in Rivers State during October, following the completion of the Otakikpo-003 well, Ecofin Agency reported. The company was targeting a production rate of 10,000b/d of oil from Phase 1 of the Otakikpo field development plan. The short-term focus is exclusively on ramping up production from Otakikpo, so that cash flow can be subsequently used for further expansions and for the appraisal of the Ogo oil discovery, according to Proactive Investors.

As a result, the company has gathered about $12.4m to bring Nigeria’s Otakikpo field into commercial production. Lekoil raised the funds by placing new ordinary shares to institutional and other investors, and completed the placing through an accelerated book-build. Lekoil’s CEO, Lekan Akinyanni, said: “this placing, and our undrawn debt facility, gives us a cushion with which to bring Otakikpo into commercial production.”

In early September, Egypt Oil&Gas reported that Lekoil confirmed that the Otakikpo field had achieved first oil. Two intervals (out of four) in just one well yielded rates of 5,703 b/d, whereas two wells had been expected to flow at 6,000 b/d.

Nigeria Sold Aje First Oil

Oil and gas investing company MX Oil announced that PR Oil and Gas Limited, the holder of its investment in OML 113, has received $1.2m from the sale of the first production of oil from the Nigerian Aje Field, Rigzone reported. The Aje field started production in May 2016. MX revealed in July that it expected output from the field to be maintained at a restricted rate of approximately 7,000 to 8,000b/d of oil. Plans for phase 2 of the field’s development are underway, and aim to increase Cenomanian oil production, according to Ecofin Agency. Phase 3 is expected to target the development of the Turonian gas condensate reservoir.
Egypt Oil&Gas had an exclusive opportunity to speak with four directors of Apex International Energy in their new office in New Cairo: Roger Plank, Founder and CEO, Tom Maher, President and COO, Peder Bratt, Managing Director of Warburg Pincus, and Amr Diab, Independent Director. The Apex International Energy team (www.apexintl.com), referred to as Apex, with over 125 years of combined experience in Egypt and 275 years of industry knowledge, are rightly confident to be able to gain a strong foothold in Egypt and start writing a new success story.

Egypt becomes Apex’s Top Priority

In this particular time of industry development globally, the company has chosen to focus initially on Egypt as its top priority due to a number of reasons. As Roger Plank, Founder and CEO of Apex International Energy, put it: “It starts with geology. Egypt is a proven hydrocarbon province with significant oil and gas production from numerous basins. It is a good place to drill with abundant hydrocarbon resources remaining to be discovered and developed here.”

Furthermore, unlike some other players in the industry who voice concerns over possible political risks in Egypt, Apex does not shy away from the opportunity that Egypt offers. The company’s directors explain their presence in the country in a pragmatic way. Their rather down-to-earth reasoning is: “People talk about political risk, but there is political risk everywhere. Maybe here it is just a little bit fresher,” calmly added Roger Plank.

In contrast to political risks, what appears more relevant to the new player in the industry is “the sanctity of law” that the Egyptian state has been practicing. A feature that “one cannot find everywhere in the world,” as Apex’s Founder noted. With more than 20 years experience working in Egypt, which in his own words “left a good taste,” Plank praised the country for the fact that “it did not matter who the government was, they all honored their contracts.”

Therefore, for Apex, Egypt appears to have “all the right ingredients for building a meaningful business of scale. Proven hydrocarbons, sanctity of law and hard working, well educated people, all point to Egypt as a model country for us to do business in,” he added.

Timing Matters

There has been a scarcity of new investment announcements on a global scale due to the current low oil price environment. Energy companies have laid off thousands and thousands of employees, reduced their capital expenditures, halted investment plans, and paused or even cancelled exploration projects. But Apex is different. The company’s Founder Roger Plank gets comfort from the fact that the world uses more and more energy, with some 95 million barrels of oil consumed every day, regardless of how oil prices change. “It’s increasingly difficult to replace that much oil every day, which is why in the next few years we are likely to see higher prices, even so, we are not predating our business on that assumption.” Despite various expectations formulated by different oil and gas giants who wish to see oil prices rise fast, one simply “cannot count on prices being higher down the road,” reasonably explained Plank.

For Apex’s entrance into the market, it is the timing that matters most. “We entered when we did, because it ap-
pears to be a better time than when prices were $90 or $100 a barrel," Roger Plank stated. He believes that the oil and gas industry downturn is creating interesting investment opportunities. He further noted that while some companies are “cutting back on their capital expenditures and being forced to prioritize where to devote their capital, others are being forced to exit the business altogether.”

From Plank’s point of view, “from a competitive standpoint, that creates an interesting environment in which to launch a business.”

With this timing in mind, Apex appreciates the fact that Warburg Pincus, the company’s key investor, managed to “break the Gordian knot” of having either investment opportunities without funds or having capital without opportunities. “If you can enter business at a time like this with investors who understand and are willing to fund acquisition and drilling opportunities, then, hopefully, you’ve got the ingredients to be successful,” according to Plank.

**Investment Partnership**

Apex is delighted with the confidence that Warburg Pincus and other investors have shown in the company by agreeing to the initial funding commitment of up to $500 million.

The good news for Apex is that part of Warburg Pincus’s specialization is investments in the energy sector worldwide with decades of experience investing in oil and gas, and that the investor shares Apex’s optimism for doing business in Egypt. Warburg Pincus Managing Director, Peder Bratt, explained: “Egypt is an attractive place for oil & gas investments” that hides in itself a plethora of opportunities thanks to its favorable geology and other characteristics. And “if you can find enough attractive investment opportunities, there is capital available in the international market,” he convincingly added.

As it appears, at this moment, one of the challenges for Apex is therefore “to come up with the opportunities that we and other investors will be able to fund over the long term,” Peder Bratt affirmed, because “the major constraint for investment is not capital itself, it is finding the right opportunities.” Clearly, Apex International Energy is ready to do so.

**Apex’s First Steps**

Starting from scratch, Apex’s directors feel they “have teamed up with the best of the best,” as Roger Plank put it. They were therefore oozing with enthusiasm, as they explained their achievements to date. Following the formation of the partnership with Warburg Pincus, the company has taken its initial, but decisive footsteps that will set a path for the company’s future in Egypt.

“We’ve done a number of evaluations of smaller properties and companies at this stage. We recently participated in a bid round. We submitted bids on three different concessions and we are eagerly awaiting the outcome,” Apex’s Founder disclosed. He added further, “we are focusing initially on the Western Desert because of our experience there, but by no means are we limited to that. We are considering other areas as well.” These are the elements of Apex’s strategy and “we will see which ones play out first,” noted Plank.

**Joint Philosophy**

The fact that the company has managed to put together competitive concession bids with the Egyptian General Petroleum Corporation (EGPC) on such a short notice speaks eloquently of Apex’s flexibility and determination. And it all comes down to the alignment between Apex and its investor, Warburg Pincus, a global firm that specializes in private equity. As all directors agreed, the key to success is that both Apex and its investor share the same philosophy. The core of it is the commitment and dedication to create value.

“This team that Roger has put together can find the right opportunities that can create value, which we believe as an investor are opportunities where you invest capital into growth. It’s not ‘buy and hold it;’ it’s actually buy and work the assets, invest capital to have production and reserve growth. That’s beneficial to us and we think it’s beneficial to the host country,” according to Peder Bratt from Warburg Pincus. This joint vision translated itself into the company’s business strategy as a whole.

**Choosing an Apt Strategy**

In line with Apex’s philosophical principles, the company has opted for an acquisition strategy that would allow it to contribute to Egypt’s hydrocarbon production and create value that matters. In doing so, Apex has a strong preference to become an operator. Founder Roger Plank elaborated, saying: “We vastly prefer being an operator. If you can’t make things happen, you can’t add value. Part of it is buying at the right point of a cycle, but the biggest part is having control of operations so that you can drive results through well workovers and recompletions, increase development drilling, and exploration. Operatorship is key to that. That’s our priority.”

Additionally, for a new small company like Apex International Energy, while global oil prices may be out of the company’s control, costs are not, frankly added Plank. It is for that reason that Apex rationally chose to focus on onshore projects. “At this point in time, we’ve got a very substantial financial commitment, but we are still a very small company. Offshore projects are interesting, but they are meant for larger companies who can operate in deep water and fund the massive expense it takes to bring these projects on and also better weather the extended period of time it takes to deliver first production. For us, onshore Egypt makes a lot more sense.”

Bringing capital to Egypt means that a company understands the local market and country’s hydrocarbon composition with a large portion of mature onshore projects as well. “These are the elements of Apex’s strategy and “we will see which ones play out first,” noted Plank. Joint Philosophy

The fact that the company has managed to put together competitive concession bids with the Egyptian General Petroleum Corporation (EGPC) on such a short notice speaks eloquently of Apex’s flexibility and determination. And it all comes down to the alignment between Apex and its investor, Warburg Pincus, a global firm that specializes in private equity. As all directors agreed, the key to success is that both Apex and its investor share the same philosophy. The core of it is the commitment and dedication to create value.

“This team that Roger has put together can find the right opportunities that can create value, which we believe as an investor are opportunities where you invest capital into growth. It’s not ‘buy and hold it;’ it’s actually buy and work the assets, invest capital to have production and reserve growth. That’s beneficial to us and we think it’s beneficial to the host country,” according to Peder Bratt from Warburg Pincus. This joint vision translated itself into the company’s business strategy as a whole.

**Choosing an APT Strategy**

In line with Apex’s philosophical principles, the company has opted for an acquisition strategy that would allow it to contribute to Egypt’s hydrocarbon production and create value that matters. In doing so, Apex has a strong preference to become an operator. Founder Roger Plank elaborated, saying: “We vastly prefer being an operator. If you can’t make things happen, you can’t add value. Part of it is buying at the right point of a cycle, but the biggest part is having control of operations so that you can drive results through well workovers and recompletions, increase development drilling, and exploration. Operatorship is key to that. That’s our priority.”

Additionally, for a new small company like Apex International Energy, while global oil prices may be out of the company’s control, costs are not, frankly added Plank. It is for that reason that Apex rationally chose to focus on onshore projects. “At this point in time, we’ve got a very substantial financial commitment, but we are still a very small company. Offshore projects are interesting, but they are meant for larger companies who can operate in deep water and fund the massive expense it takes to bring these projects on and also better weather the extended period of time it takes to deliver first production. For us, onshore Egypt makes a lot more sense.”

Bringing capital to Egypt means that a company understands the local market and country’s hydrocarbon composition with a large portion of mature onshore projects as well. “These are the elements of Apex’s strategy and “we will see which ones play out first,” noted Plank.
Apex seems firm in their belief in success, which necessarily brings with itself a commitment to rapidly execute a pre-defined plan. “We are eager to get started and hopefully we will have that opportunity before long,” emphasized Roger Plank. While continuously expanding their team, Apex is ready to kick off immediately after an acquisition or obtaining a farmin or new concession.

Apex’s name is derived from a combination of Acquire, Produce, and Explore, and each element will be pursued as opportunities present themselves, explained Roger Plank. Apex’s skills and abilities to adjust the plan in a most flexible way possible will be decisive. Tom Maher, Apex’s COO agreed saying that in an ideal situation, for Apex to launch its operations, opportunities would come in the order Acquire, Produce, Explore.

Nonetheless, the company is “flexible enough” to modify its acquisition strategy. “We’ll go after the opportunities that best fit our business model when we are in the position to do so.” As Plank put it, “opportunities do not necessarily happen in the order that you lay them out, so part of what we are here to do is to be opportunistic.” He stressed that Apex possesses all needed qualities and capacity to achieve their goals.

While waiting for bid round results announcements, said Tom Maher, Apex is “working hard trying to identify other opportunities that fit our business model.”

Opportunities in Cooperation

One of the Apex business strategies is to forge contacts and build functioning cooperative relationships with other entities in the Egyptian oil and gas market. According to Roger Plank, Apex’s directors look forward to further developing relationships with Government of Egypt officials and industry peers, including EGPC. “I think they appreciate the idea of bringing new players into the mix.”

Cooperation strategy with other players in the country goes hand in hand in this business. Therefore, part of what Apex is aiming for “in addition to acquisitions and potential bid rounds success, is farm-ins of drilling opportunities from other companies,” revealed the company’s CEO. “And we’d like to think that we have something to offer as a good partner in that regard.”

Speaking about Apex’s vision in this area of interest, Tom Maher noted that Apex desires to be “a partner of choice” for others to consider in the future and establish a reputation for being “a fair dealer” for the government, IOCs, and local Egyptian companies.

Apex’s Advantageous Mix

There is no doubt that Apex has a lot to offer to its potential partners, according to the company’s directors. For Roger Plank the key element is “a combination of experience and other competitive advantages. “We are flexible. We are opportunistic. We have the right mindset to build a business and have the experience of having done just that. We also have a well capitalized investing partner who is committed to building something of value here in Egypt.”

Nonetheless, as Tom Maher noted, “it’s not just the capital.” It is rather a form of equal partnership with the investor who is willing to share its broad network of contacts and assist Apex in boosting cooperation. “We trust each other and work well together as partners.” Unlike other financial investors, Warburg Pincus is recognized as both a “financial partner and a strategic partner for Apex,” affirmed Amr Diab, the company’s Director.

But experience, capital, and partnerships are not all that Apex brings into the industry. Amr Diab pointed out that “it’s also about patience” and “a long-term vision.”

Challenges Buzz

Presenting a new player, introducing a new set of projects, building value requires a lot of perseverance. But no matter how strong a company is, it cannot avoid facing some major and minor challenges along the road.

For Apex, “the first challenge was to get the right team together, second was to find the right investor” stated company’s Founder with confidence that they have achieved both. As for the challenges of operating in Egypt, the company’s leaders are familiar with those related to “payment issues,” and “getting things done on a timely basis.”

The biggest challenge at hand is, however, for the company to find good opportunities to establish a foothold in Egypt and put the team to work as Apex anticipates. That means “acquiring and drilling in mature areas as well as exploring to deeper depths and in new areas,” explained Plank.

“We’ve got all the ingredients to be successful, but we still need our first barrel of oil!” Apex’s CEO added laughingly. Regardless of all the buzz that is cur-
rently surrounding industry challenges in Egypt, the directors are perfectly confident to be able to work through them as they move forward.

**Confident Projections**

It seems that prospects for Apex as a new player in the market are looking good at this initial stage. It remains to be seen how successfully the company’s heads’ enthusiasm and confidence will translate into tangible business achievements. There is no space and no time to be modest in those projections.

Apex’s management has a clear short-term and long-term vision. In five-years time, the company will want “to have a meaningful presence in Egypt” through “a combination of acquisitions and exploration.” “Hopefully, we will drill a lot of new wells and see our production go up and to the right,” outlines the company’s Founder.

In the long term, Apex aims at keeping Egypt as its priority and if successful, it also ponders expanding its business into other countries of the MENA region. Roger Plank shared his ideas in more details: “If all goes according to plan, we will grow over the next several years here in Egypt, starting in the Western Desert, and perhaps enter the Gulf of Suez or other areas. As we grow, we may also look beyond Egypt to other MENA countries.”

In a twenty-year projection, “Egypt will represent the core of the company with a few other countries as part of our balanced portfolio.” “The hope is that we will have made considerable progress and have grown large enough that we can take the company public even though this is a distant star on horizon at this point of time,” concluded Roger Plank.

**There Are No Small Dreams**

Apex’s business rationale is nurtured through the directors’ bigger imaginings. Roger Plank’s drive to make Apex a successful entity in the oil and gas market is to picture a company of larger proportions. In his dreams, Apex is to become “a substantial and profitable company. It will be a company with growing production that can make a difference both for its shareholders as well as for Egypt.”

And as he added, Apex has got “the right ingredients, the right people, the right investors; hopefully, all that comes together and we’ll realize our dream.”

Peder Bratt of Warburg Pincus outlined a dream as a success story for all involved actors: “There is nowhere in the world where capital is successful if you are not welcomed by the host country. And we won’t be welcome unless our capital has aligned interests with that host country.” As he said further, “we make our money from growth, and we think that production growth is of benefit to Egypt.”

Tom Maher also believes that “the Egyptian government will benefit from Apex coming in.” The reasons are clear. “It is not only an opportunity for the partners, Apex and Warburg Pincus, it’s also an opportunity for Egypt.”

Amr Diab, Independent Director

“We are confident.” The reasons are clear. “It is not only an opportunity for the partners, Apex and Warburg Pincus, it’s also an opportunity for Egypt, especially during this economically challenging time,” noted Amr Diab.

“Apex International Energy came to Egypt to build a company of scale and make a difference,” Roger Plank concluded. “Egypt is a great place to invest, we feel very welcome to do business here, and we are eager to get going.”

---

**WHEN VERSATILITY COUNTS...**

The Fugro Navigator is permanently equipped with a wide range of geophysical equipment for deep and shallow-water operations while ROV systems. Geotechnical and environmental equipment are mobilized to the vessel on a project-by-project basis. She has carried out an average of 25 survey projects each year since her introduction in early 2008, in water depths from as shallow as 10m to over 1300m. As a specialist survey vessel, the Navigator offers significant advantages over vessels of opportunity by offering:

- Reduced weather standby costs
- The ability to respond quicker to requests for projects
- Reduced turnaround time for reporting

Fugro SAE  Telephone: +20 (0) 2 2758 0299  Fax: +20 (0) 2 2758 0599  Email: enquiries@fugro-egypt.net

www.fugro-egypt.net

---

“Apex International Energy came to Egypt to build a company of scale and make a difference,” Roger Plank concluded. “Egypt is a great place to invest, we feel very welcome to do business here, and we are eager to get going.”
Investments in Egypt Yield Immediate Return

By Amira Badawey
“Investments in Egypt yield an immediate return therefore the biggest global companies are doing business here.”

““The Minister of Petroleum and Mineral Resources, Eng. Tarek El Molla, attends as many General Assemblies as his schedule permits to encourage our foreign partners to inject more funds into the development of Egypt’s petroleum resources.”

Egypt Oil&Gas sat down with Deputy CEO of Production at the Egyptian General Petroleum Corporation (EGPC), Diaa Eldin M. Kassem, in an exclusive interview to talk about the role of International Oil Companies within the Egyptian upstream market. Oil majors, otherwise known as International Oil Companies (IOCs), are able to operate in the Egyptian upstream market by entering into partnerships with the Egyptian General Petroleum Corporation (EGPC) to form a Joint Venture Company (JV). It is through this JV that exploration and petroleum production occurs and it represents the interest of both the foreign partner and Egyptian one in the allotted concessions.

The Role of IOCs in Exploration and Development

In the process of forming JVs, first, EGPC launches a bid round for the exploration and development for certain areas, within the government’s set framework and guidelines. IOCs have the opportunity to compete in these international tenders and put forward their proposals. During this phase, an investor can propose drilling one exploration well, while another might propose three, all of this is taken into consideration when evaluating the proposals until EGPC organizational structure is put in place in order to assign the roles of CEO, management board, and other titles that are sourced from both the IOC and Egyptian authorities. The JV has another role, which is to source equipment and services necessary to complete the agreed upon work. The JV has the authority to issue tenders and select suppliers accordingly. In these instances, EGPC assumes more of a regulatory role. The foreign investor submits a comprehensive budget that is reviewed by the JV’s General Assembly. Both partners must agree on the budget, which covers a defined time period, usually a year. The budget specifies the number of wells the JV will drill during the period, the type of these wells, whether exploratory or development, the number of workovers, in addition to the volume of annual production and overhead amounts.

Capital Considerations of Egypt’s Upstream Sector

Once the budget is approved, the foreign investor must inject money, capital, in order to complete the work. However, there are some instances where the foreign investor might refrain from providing huge funds, especially when global oil prices decline. Kassem stated that “this does not happen only in Egypt, but worldwide. The investor might choose to delay funding and route the money to another country that has a quicker or higher rate of return.” He added that “the Minister of Petroleum and Mineral Resources, Eng. Tarek El Molla, attends as many General Assemblies as his schedule permits to encourage our foreign partners to inject more funds into the development of Egypt’s petroleum resources.” Nevertheless, once foreign investors enter the Egyptian market, they tend to remain active in the country because they are able to generate good profits. Furthermore, they view Egypt as a stable and safe environment for business. Kassem concluded: “Everyone in the company [EGPC], starting with EGPC’s CEO, Eng. Tarek El Hadidi, spare no effort in reassuring foreign partners of Egypt’s positive investment climate, as well as asserting the various benefits of the country’s oil and gas sector.”

Egypt offers foreign investors quicker recovery rates for their capital expenditure. They can recover CAPEX within about four years, because under the terms of the production sharing agreements, foreign investors receive almost 45%-50% of oil and gas produced from their fields. This is quite beneficial from an investment standpoint, together with low production costs. Egypt is ranked amongst the countries with the lowest operating costs. For example in America, operating cost can reach $55 per barrel. Yet, in Egypt it reaches about $4 per barrel, according to Kassem.

Challenges for JVs in the Egyptian Market

As there are advantages to doing business in the Egyptian upstream market, there are also some challenges. Diaa Eldin Kassem stated that the biggest hurdle facing IOCs operating in Egypt is limited availability of USD. He added that “this is a crucial problem for all of Egypt, not just the petroleum sector. The minister himself is overseeing this issue.”

These outstanding arrears owed to IOCs do have an impact on investors’ sentiment about Egypt. EGPC has paid foreign partners their shares in profits, however, there are some share payments that are overdue. Kassem said that “we are doing our best to payoff these outstanding balances. We did pay back some of them, but some still remain open.” He reassured that there are no companies, which have halted operations due to unpaid arrears, adding that “they are profiting, but the problem is that their money is pending and they want to invest it. But nobody has stopped their investments. Our foreign partners have profited a lot from Egypt, they consider the money Egypt owes them as if placed in a bank without interest. Egypt will pay back the amounts, we are just waiting for the economy to recover, and we are expecting this recovery to occur within the coming two years after the addition of Zohr and Northern Alexandria gas discoveries.” He emphasized that, “we [EGPC] have a very respectable relationship with foreign investors. We don’t face any problems with the major IOCs, sometimes with smaller investors, because they cannot tolerate any delay in payments, even if we are talking about a couple of consumption. He said that “this will take some time we can improve these new and renewable sources of energy, whether from a technical point of view or financially.”

Given the efforts that the Egyptian government and Oil Ministry exert in order to sustain national economy, the country has promising outlook, Kassem affirmed that there is a tendency to position Egypt as a global energy center, after the successful exploration of Zohr, which is expected to come online some time mid 2017. “This discovery is one of the biggest worldwide, not only in the Middle East, but globally. This will help Egypt regain its global position within the gas market.” And with the existing capacity and potential that the country has, it is only a matter of a short period of time before this starts becoming a reality.

“We [EGPC] are doing our best to payoff these outstanding balances. We did pay back some of them, but some still remain open.”

“Edria gas discoveries. The addition of Zohr and Northern Alexandria gas discoveries occur within the coming two years after the addition of Zohr and Northern Alexandria gas discoveries.
TAQA Arabia is the largest private sector energy distribution company in Egypt with over 18 years of experience with diversified sources of energy, investing and operating energy infrastructure including gas transmission and distribution, power generation & distribution and marketing of petroleum products.

A World OF ENERGY
sells Petroleum products, including fuels and lubricants, through a retail network of service stations under TAQA brand name.

TAQA Gas
is the company’s largest business unit, comprising of several distribution companies delivering natural gas to domestic and industrial clients.

TAQA Power
has positioned itself in the market of power generation and distribution as a pioneering licensed developer and operator.

TAQA EPC
incorporates our engineering, procurement and construction services.
When the first joint venture was formed in Egypt in 1911, the oil and gas industry was in its infancy. Anglo-Egyptian Oilfields Company was a marriage of two private companies: Royal Dutch Shell and British Petroleum (BP). The company went on to be the major player in the industry for over fifty years, until it was nationalized in 1964 as the Egyptian General Petroleum Corporation (EGPC). As the oil and gas industry has expanded and shifted in the years since, joint ventures have played a significant role. In some ways, Egypt benefits greatly from the joint venture model in the oil and gas industry. However, as the world continues to suffer the effects of low oil prices, increased flexibility in the joint venture model may help Egypt to maintain its status as a major player in the current market.

Joint ventures (JVs) are partnerships between two companies or between a company and the government. In Egypt, all international investors in the oil and gas industry must partner with the government to form joint ventures for the exploration and extraction of natural resources. Hany Helmy, who has forty years of experience in the oil and gas industry working for BP, GUPCO, and now as a private consultant, describes the relationship between the national oil company and the international oil company (IOC) as a marriage. The government and the IOC take on the parental roles and together create their child: the JV. The government and company must work well together to allow the JV to thrive. If an investor leaves, then the JV is affected, just as children are affected by divorce. Just as parents remarry, a change of investor can affect the performance of a JV.

JVs are common in the oil and gas industry, because they provide many
The JV model also provides “a great conduit for the exchange of science, learning, and resources.”

Hiısham Refaat, Managing Director of Wauqad

tor IOCs to ensure proper extraction of those resources, according to Hiısham Refaat, Managing Director of Wauqad, an integrated service provider for the oil and gas industry.

In theory, the JV model also provides “a great conduit for the exchange of science, learning, and resources,” says Refaat, by creating jobs for Egyptians. JVs bring together a “cocktail” of nationals and expats, states Helmy, and their interactions can lead to valuable sharing of cultures and ideas. JVs provide crucial experience for many people who work in oil and gas, says Hany Helmy, which benefits the entire industry. One potential issue with this structure is a lack of understanding or conflict between people with different backgrounds and languages. However, Helmy recalls mostly positive interactions between Egyptians and expats during his years working for GUPCO, and he credits the welcoming attitude of Egyptians.

The exchange of technical skills is another way that the JV model benefits Egypt. Dr. Oraby notes that IOCs have the technical expertise to optimize resource extraction and reservoir management in Egypt. They can also train national engineers in technical skills. On the other side, Egyptians can share local geological and technical knowledge with the IOCs.

Industry Challenges

There are certainly many benefits to welcoming the extensive experience and resources of IOCs into Egypt. However, one significant challenge to the JV model is the differing salary and employment schemes of the government and private companies. As is common the world over, government employees are bound by the national pay system, whereas private companies can offer higher salaries and more opportunities for advancement and career development. The higher salaries at private companies often entice talented Egyptians to move to the private sector. Many Egyptians also end up moving abroad to gain more experience and skills, and the Egyptian oil and gas industry loses a valuable portion of its workforce.

Because job creation is a major goal in the JV model, these companies are heavily staffed on the national side.

Egypt, Dr. Oraby is optimistic. “New horizons of gas discoveries in the Mediterranean may open a chance for other investors to come in and drill,” he argued. When oil prices eventually rise, activity in the region should pick up. In regard to possible modifications to the current bid round to attract investors, Dr. Oraby said that it will benefit both Egypt and investors if Egypt builds a “Data Room” and makes it public, even with limited data. This will allow investors to study opportunities at all times and contact Egyptian authorities when the opportunities appear attractive.

While we wait for oil prices to stabilize, there are indications that the JV model in Egypt may be evolving. The Egyptian government recently tried a new approach with BP on a West Nile Delta concession. Under their agreement, BP will not recoup its exploration costs as in the traditional JV model. BP also has the freedom to drill wells independently and choose its own service companies, which saves the company money.

Refaat argues that entrepreneurial efforts in the oil and gas industry should be encouraged. Egyptians know oil and gas. There are many people with extensive knowledge in the industry who have gained experience working with the national companies and IOCs. Increasing support for small companies and individuals could help negate the "brain drain" Egypt currently experiences in the oil and gas industry.
Petroleum upstream projects in Egypt are considered a milestone in the growth of the Egyptian national economy and they are the main vehicle through which sustainable development may be achieved in the country. Petroleum production projects include two main phases, the exploration phase and the development and production phase. Subsequent to the announcement of a commercial discovery of oil and/or gas, the petroleum project moves to another stage which is the development of the discovered reservoir in terms of drilling new development wells, creating production facilities, and executing all other technical requirements in order to put the wells on production.

Moreover, production sharing agreements (PSAs) signed between the Egyptian government and the international oil companies (IOCs) include the creation of a joint operating company in order to perform development operations on behalf of the Egyptian General Petroleum Corporation (EGPC) and the contractor.

Compared to the legislation governing commercial companies in the Egyptian legal system, in particular law No.159 of 1981 concerning joint stock companies, partnership limited by shares and limited liability companies, Joint Operating Companies have a unique and particular legal framework, comprehensively described in the production sharing model agreement, which is usually promulgated by virtue of a private law.

Since 1973 the Egyptian government represented by the Egyptian Ministry of Petroleum and the state oil company (EGPC) have adopted PSAs for petroleum exploration and exploitation. The aforementioned model agreement indeed satisfies the Egyptian hopes to ideally exploit country’s hydrocarbon reservoirs despite the obstacles that may rise in conjunction with the implementation of this physical model agreement.

PSAs in Egypt are fair enough to achieve the win-win situation between the national oil company (NOC) and IOCs. In other words, one of the principal concerns of EGPC, on its capacity as a state oil company, is to maintain the governmental control over petroleum operations throughout project phases. The contractual regime adopted by EGPC for petroleum exploration and exploitation includes a strong governmental control at increasing the governmental control over the petroleum upstream operations, whether in exploration or development phases. The management of the foregoing operations is carried out through two main arms, the advisory committee and the Joint Operating Companies.

In exploration phase, a joint committee shall be established by EGPC and the contractor, subsequent to the agreement’s effective date, to review the exploration work program and budget. On the other hand, subsequent to the announcement of a commercial discovery, EGPC and IOC may form in the A.R.E an operating company. Such a company shall be a private sector company and shall be subject to the laws and regulations in force in Egypt to the extent that such laws and regulations are not inconsistent with the provisions of the PSA or the article of association of the operating company, which is considered an integral part of the PSA. Moreover, both EGPC and the contractor interfere in the management of the operating company through the board of directors, which is consisting of eight members, four of whom shall be designated by EGPC and the other four by the IOC. A chairman shall be designated by EGPC and shall also become a managing director.

Joint Operating Companies in the Egyptian petroleum sector have their particular status and private provisions that shall supersede any other legal provisions governing the activities of commercial companies in the country. The reason behind the unique regulatory framework for operating companies is that the petroleum sector regulator desires to keep the legal system governing Joint Operating Companies far from the applied provisions incorporated in the Egyptian corporate and civil law in order to facilitate the process of creating Joint Operating Companies and to streamline other strict processes required by the aforementioned legislation. For instance, the legislation requires at least a minimum number of two shareholders to create a joint stock company and the need to follow the mandatory publicity procedures set by the Egyptian commercial law.

We may highlight the most significant features of Joint Operating Companies in Egypt as follows:

1. The Joint Operating Company is a joint stock company, however the law of the concession agreement and the charter of the operating company exempt the latter from law No.159 of 1981, promulgating the law on joint stock companies, partnership limited by shares, and limited liability companies. To this end, the joint company is basically subject to the terms and conditions set out in the PSA.

2. The main target behind the creation of any commercial company is to achieve a profit, however, the object of the operating company is to act as an agency, through which EGPC and IOC carry out and conduct the development operations required in accordance with the provisions of the concluded PSA. Moreover, the operating company shall not own right, title, interest, or estate of any of the produced petroleum and shall not make any profit from any source whatsoever.

3. The general principle in respect to the creation of civil and commercial companies in Egypt is that they are subject to the publicity criteria set by the corporate and civil law. Article 502 of the Egyptian civil law does not consider the company valid unless it fulfills the publicity requirements. Furthermore, the Egyptian corporate law stipulates that “The company does not acquire the legal personality unless it satisfies the publicity requirements and is registered in the commercial registry, otherwise, it would be null and void.” Nevertheless, the operating companies in Egypt are exempted from such a procedure as the law of the contract acknowledges that the charter of the joint operating company shall take effect and the operating company shall automatically come into existence without any further procedures.

4. According to the Egyptian corporate law, the number of founder partners in shareholder companies should not be less than three with regard to commercial companies coming under the provisions of the law. If the number of partners is below the quota mentioned, the company will be considered legally dissolved unless it proceeds within the space of six months to complete the quota. The remaining partners will be responsible for the liabilities of the company during this interval, on all their assets. Despite the foregoing, the operating company may not match the aforementioned quota and remain valid.

The most important example of a successful Joint Operating Company in Egypt is Gulf of Suez Petroleum Company (GUPCO), which was formed on 31st July, 1965 after the discovery of El-Morgan offshore oil field. GUPCO’s mission, as defined by the concession agreement, is to carry out all oil and gas development and production operations in Egypt as a nonprofit Egyptian Operating Company, and as an agent whose activities add value to the principle shareholders, EGPC and Amoco-Egypt Oil. Amoco started operating in the Gulf of Suez (GOS) in 1964 before establishing GUPCO. In January 1999, a merger occurred between Amoco and British Petroleum Company producing one company named BP Amoco. In 2000, BP Amoco name changed to BP.

To date, around 142 operating companies have been established in Egypt to perform development activities in all petroleum areas in Egypt, whether offshore or onshore.
Pan Marine Group, a one stop service provider for Oil & Gas sector in Egypt, our group consists of:

- Pan Marine Petroleum Services FZ
- Pan Marine Shipping Services
- Pan Marine Logistics Services.

Our customers are our great asset that we aim to provide them with first class services in the most economical & efficient way understanding their needs, solving their problems and being a supportive consultant. We do our best to meet and exceed our clients expectations.

We are proud of past successes and will continue to strive into the future.

For more information visit: www.pan-marine.net

VROON OFFSHORE SERVICES provides a diverse range of services and solutions for key offshore-support needs, including platform supply, emergency response and rescue, anchor handling, walk to work and subsea support.

With a versatile fleet of more than 100 vessels and 2,500 skilled and dedicated colleagues, we are committed to providing safe, reliable and cost-effective services.

We have the fleet to meet your needs, the people to deliver and the determination to succeed.

ABERDEEN • DEN HELDER • GENOA • SINGAPORE
WWW.VROONOFFSHORE.COM

“TOGETHER, YOUR PARTNERS IN EGYPT”

WE SERVE YOU WHEREVER YOU ARE

Pan Marine Group a one stop service provider for Oil & Gas sector in Egypt, our group consists of:-

- Pan Marine Petroleum Services FZ
- Pan Marine Shipping Services
- Pan Marine Logistics Services.

Our customers are our great asset that we aim to provide them with first class services in the most economical & efficient way understanding their needs, solving their problems and being a supportive consultant. We do our best to meet and exceed our clients expectations.

We are proud of past successes and will continue to strive into the future.

For more information visit: www.pan-marine.net
TO BE A JOINT VENTURE OR NOT TO BE?

By Amira S. Badawy

Although Egypt’s oil and gas industry centers on national oil companies (NOC), the government encourages investment by international firms (IOC). Their involvement in the production of petroleum contributes to Egypt’s balance of payments with inflows for foreign direct investment (FDI) to finance projects and revenues from production. Additionally, there are also outflows of foreign exchange used to purchase capital goods and services sourced from abroad, as well as profit remittance. Accordingly, in Egypt’s upstream sector, production continues to be led by global organizations, with some 47 foreign companies involved in 100% of Egypt’s oil and gas production.

Foreign investments in Egypt’s upstream must take the form of a joint venture company (JV) with the Egyptian General Petroleum Corporation (EGPC). Under the terms of a production sharing agreement, which formally manages partners’ relationship for a specific exploration, these public-private JVs share the responsibility of operations, capital allocation, and project risks. While super majors have access to funds, resources, and necessary know-how, why would they choose to enter partnerships with EGPC, beyond the fact that it is a regulatory requirement to operate in Egypt? In other words, are the benefits of creating a JV also shared between both partners?

**Capital and Ownership Considerations for JVs**

All petroleum projects are capital intensive, with upstream activities carrying the biggest burden. Partnering with other organizations facilitates the accumulation of capital. Yet, in untested markets, partnering with the government offers additional incentives in recovering capital expenditures and sustaining forex flows.

In Egypt, EGPC does not provide financing for upstream projects. This, in turn, has lead to higher FDIs in the market. Moreover, JVs’ foreign investors receive a larger share of the oil and gas produced in order to offset their capital cost. Additionally, the state has shown willingness to adjust prices paid to purchase IOCs’ equity production in order to remain competitive. In early September 2016, the Egyptian Ministry of Petroleum agreed with Royal Dutch Shell to re-price gas produced in phase 9C from Burulus field to range between $2.5 and $5.88 per thermal unit. EGPC includes a model production sharing agreement in the company’s bid rounds for new discoveries. As a result, in the pre-JVC stage, foreign investors are made aware of the terms and conditions of the partnership with the Egyptian state. The model agreement clarifies, among other dimensions, timeframes associated with the commencement of commercial production, the relinquishment of concession areas, minimum work and financial obligations, amortization periods, and the disposition of production.Diaa Eldin M. Kassem, Deputy CEO of Production EGPC, explained that “the JV is only established after the foreign partner completes exploration wells and presents an acceptable Development and Production Plan.” This gives the IOC a chance to assess the viability of the concession under agreement, and to compare the prospective outcome to the costs associated with establishing the JV before deciding to move forward with the partnership.

Moreover, a report published by the Oxford Institute for Energy Studies, under the title Oil in Egypt, Oman, and Syria: Some Macroeconomic Implications, by Randa Alami, stated that a country’s macroeconomics factors play an important role in attracting international financing and creating favorable investment climates. The availability of funds improved when fiscal regimes enhanced the ability to cope with the instability of oil revenues and where financial systems were successfully reformed.

Accordingly, Egypt has been exerting much effort to reaffirm the country’s sovereignty in facing political turmoil and conveying the message that it is safe to do business in the country. Furthermore, the Ministry of Petroleum is working on reforming various aspects of the oil and gas market, starting with the liberalization of the mid-stream sector in the form of the New Gas Law, as well as the privatization of several entities operating in the downstream segment with the launch of initial public offerings for Enppi, MIDOR, and Ethydoc companies, among others. Yet, Kassem firmly declared that Egypt has no plans to cease government involvement in the upstream arena. He added that “without JVs with EGPC, there will be no control.” It is important to note that partnering with NOCs in terms of capital structures has some downsides. Ownership structures within the government are complex. They may include minis-
issues as risk appetite, disclosure and different views on critical governance private. The two classes of owners hold in important respects from those firms social governance challenges that differ.

Ahmed Moaaz, SDX Energy’s Country Manager in Egypt, stated that foreign investors need be eased into understanding how procedures are carried out in Egypt in order to grasp the cultural implications of doing business in the country. He added that current agreements “put no constraints on foreign investors. On the contrary, the text of the agreement states that the created JV operates in the best benefit of both partners, the IOC and EGPC.” Accordingly, each partner assigns a committee to partake in the management of the JV and to represent the partner’s interest. As is the case with many organizations, newly established JVs go through the normal stages of forming coherent teams. Therefore, time and effort should be allowed for organic synergies to develop between the two partners.

Ahmed Moaaz further noted that the JV’s overheads can erode the company’s profits. He said that “The Egyptian government is under a lot of pressure to address the country’s economic situation and unemployment. As a result, the JV’s G&A (General and Administrative Expenses) is overloaded with the cost of excessive staffing.” EGPC’s Deputy CEO of Production, Diaa Eldin M. Kassem, agreed as he stated that because EGPC is state-owned, it is governed by certain clauses under the labor law that grants government workers tenures. He added that “as a result upstream projects are burden with a large number of (blue-collar) workers, to the point that we have to cut back on hiring specialized engineers.” Additionally, employment and annual salary increases of government employees are secured under their tenure and cannot be rated according to their performance. While in private companies, employees are evaluated against predefined performance measures and are awarded annual bonuses based on their achievements.

Associated Operational Risks of JVs

Risk-taking is a fundamental driving force in business, with corporate governance ensuring that risks are properly managed without compromising the rights of business owners. Therefore, companies resort to JVs as a form of risk mitigation, since risks are shared among the partners and a JV is easier to unbundle. The involvement of EGPC, namely the Egyptian government, provides additional risk coverage in terms of access to mid-stream and down-stream sectors, as well as facilities when dealing with other governmental institutes.

Exploration concessions have certain performance standards, which are specified in each individual agreement and generally include the drilling of a specific number of wells. It is the responsibility of the foreign investor to meet these key performance indicators and address associated risks. Though, EGPC’s Kassem, noted that “the cost of production in Egypt is amongst the lowest globally, at about $4 per barrel. As a result, IOCs are able to recover their capital expenditure more rapidly than in other markets.”

SDX’s Country Manager, Ahmed Moaaz, agreed, he added that “this stands true of onshore exploration, yet the cost of offshore production is comparable with global markets.” However, Moaaz confirmed that IOCs are able to cut down costs because, “Egypt has an amazing network of infrastructure and service companies that is unprecedented anywhere else in the world. These service companies employ Egyptians and therefore can offer exceptional services at affordable prices.” Additionally, royalties and taxes for upstream activities are covered by EGPC.

However, the biggest risk associated with Egypt’s upstream market lies in the right to dispose of equity production. According to a model agreement posted on GANOPE’s website, priority is given to domestic demand. Therefore, IOCs are able to dispose of their equity production within the local market by selling it to EGPC, thus bypassing additional expenses associated with transporting oil and gas abroad and volatility of global markets. Yet, this in itself has brought on a new set of difficulties, as the government struggles to provide US$3 billion in arrears to IOCs. As of early October 2016, EGPC owed around US$3.5 billion, down from US$6.3 billion, in backdated arrears to IOCs, accumulated since 2011. Although the government continuously works to ensure that outstanding payments to IOCs do not further accumulate, with the Ministry of Petroleum paying $5.4 billion to cover all arrears for the fiscal year 2015/2016, many foreign companies have restricted their investments in Egypt, or halted them all together, until the government pays back the outstanding amounts. Therefore, delays in payments have led to delays in production. Accordingly, Kassem stated, “resolving outstanding arrears is in the best interest of everyone involved,” because EGPC understands the importance of partnering with major oil and gas companies.

“The cost of production in Egypt is amongst the lowest globally, at about $4 per barrel. As a result, IOCs are able to recover their capital expenditure more rapidly than in other markets.”

Diaa Eldin M. Kassem, Deputy CEO of Production at EGPC

Although the balance of risk sharing seems to tip in favor of EGPC, with the IOC bearing the majority, the Egyptian government is tasked with the burden of attracting foreign investors and keeping them interested in the market, while reassuring them that it is safe to continue operations in the country. In light of the high cost and risk of recent discoveries in Mediterranean deep-water, Egypt has taken positive steps towards reforms to improve the investment conditions underlying Egypt’s oil and gas industry. EGPC has put forward new models for production-sharing agreements to achieve appropriate revenues and encourage foreign investors to fund and accelerate production. The government efforts seemed to have yielded promising results. Egypt’s Investor Index for 2015, published in The Oil & Gas Year, stood at 85.2, just shy of Qatar, which demonstrates a strong confidence in the market. More than 90% of respondents participating in the Index rated business conditions in Egypt’s oil and gas industry as positive, and nearly 86% believe that conditions will continue to remain positive over the course of 12 months. In regard to reliability, over 71% of investors perceived Egypt’s political and economic climate as stable.

Foreign investors and EGPC profit from their ongoing relationship through established JVs. It is beneficial for both to work together on continually reforming operations within the sector and enhancing performance to lead to higher production levels, an objective on which both entities agree.
Joint Ventures’ Aptness for UPSTREAM Projects

By Sarah Samir
The notion of partnerships in the oil and gas industry is considered a key to success. It is no different in Egypt. There are different shapes of partnering in the hydrocarbon projects – joint ventures of a joint venture with the Egyptian government represented by the Egyptian General Petroleum Corporation (EGPC), according to ‘Oil and Gas Regulation in Egypt,’ an overview published by Practical Law. And the number of joint ventures that are currently working on the Egyptian upstream is 47, specified in an exclusive interview with Egypt Oil&Gas EGPC’s Deputy CEO of Production, Diaa Eldin M. Kassem.

And how do joint ventures stand out in Egypt? And in what way can the JV model be seen as a suitable business arrangement for the Egyptian upstream sector in particular?

**The Parties of JVs**

Almost 100% of the Egyptian upstream projects are handled through joint venture partnerships. JVs in Egypt have more than one joint stock company that is totally owned by one party, or they are formed by a group of Egyptian Projects Operations and Maintenance (EPROM), the shares are distributed with 50% held by EGPC, while Alexandria Petroleum Maintenance Company (Petromain), EMC, Engineering for the Petroleum and Process Industries (Enpipi), and the Petroleum Projects & Technical Consultations Company (Petrotex) each have 10%, and Alexandria Petroleum Company and Amrya Petroleum Refining Company own 5% of shares each. Having a 50% share in most of oil and gas companies, the Egyptian Ministry of Petroleum and Mineral Resources keeps a close surveillance of the country’s wealth, both through joint stock corporations and joint ventures. EGPC’s Deputy CEO, Kassem, explained the ways in which an exploration joint venture is formed: “A concession’s work first enters a bid round. According to the existing regulations, companies compete in tendering to explore the national oil and gas companies (IOCs), with the tender based on the best operational and financial plan. Subsequently, the IOC informs the EGPC and offers the development plan to be assessed by EGPC, and accordingly a joint venture agreement for a concession area is signed.” Through this process EGPC ensures that it is choosing its partners itself.

“[Joint ventures] play the role of an operator in the Egyptian concessions.”

Diaa Eldin M. Kassem, EGPC’s Deputy CEO of Production

“T

The number of joint ventures that are currently working on the Egyptian upstream is 47.”

Diaa Eldin M. Kassem, EGPC’s Deputy CEO of Production

there is a commercial discovery, a joint venture is established to be 50% for a contractor and 50% for EGPC or the Egyptian Natural Gas Holding Company (EGASH),” noted Shaikely & Sarhan’s Associate, Reham Eissa. “The percentage is neither a part of profit nor a part of production; it is a percentage of shares as the joint venture does not own anything. The production percentage is always agreed upon in an article in the concession agreement. The contracts specify that expenses of a project are meant to be covered by the IOC itself in the initial stage before a commercial discovery. Accordingly, the government is not burning money to invest in its own land, in return, it divides production between the country and the IOC.

In terms of the decision processes, the joint venture’s chairman is appointed from the local partner firm and the joint scheme’s board is divided between the two partners proportionally, yet, any decision taken by the joint venture should be approved by the Egyptian partner before it is processed, Reham Eissa further noted. This arrangement is based on the fact that the joint venture itself “plays (merely) the role of an operator in the JV partnership is further determined by projects. Every joint venture is established to work on one. An overview of EGPC’s joint projects, published by Funding Universe, draws attention to Eni’s subsidiary in Egypt, the Italian Egyptian Petroleum Company (IEOC), which runs two joint ventures with EGPC processing two different projects in the country. One of them is Agiba Petroleum, which was founded as an operating JV to be responsible for exploration in West Razzak area in the Western Desert. Second one is Belayim Petroleum Company (PETROBEL) to process the operation of the Belayim field in Sinai and Belayim Marine in the Gulf of Suez.

Even though the two joint ventures are both formed by EGPC and Eni’s subsidiary, each of them is designated to process only one project in a given timeframe. Governing Constraints

Joint ventures have some constraints that govern their operations on different levels. One relates to the government’s effort to supervise any action performed with the country’s hydrocarbon wealth. “A joint venture does not have the right to take any task or drill any well without referring to EGPC first,” Deputy CEO, Diaa Kassem stated. Similarly, while IOCs have flexibility in selling their stock, the supervision is implied. Diaa Kassem explained that “as the IOC finances the joint venture, sometimes it is unable to provide the needed capital or needs to invest his capital in a different country, and in that case it can give its shares in the joint venture to another company.” Hence, “IOCs have the right to sell their stocks in a joint venture to another partner, but it must be agreed by both parties,” he added. The government thus has the authority to inspect its partners and observe how their assets move. Under the same predisposition of government’s control of hydrocarbon production, “although a joint venture is to write its own agreements, yet those agreements should be approved by the Egyptian parliament before taking effect,” CEO, Kassem, said.

In similar veins, the Egyptian government wants to ensure that possible disputes within and without JVs structures are handled carefully, again for the purpose of rational, effective, and efficient exploitation of the country’s hydrocarbon wealth. Therefore, it offers its supervision over the legislative processes, which specifies the terms of dispute resolutions for JVs. In case of a dispute between the contractor and EGPC, it should be processed through arbitration in front of an Egyptian arbitration court. And disputes that start between the contractor and the Egyptian government are to be referred to the Egyptian judicial courts, such as the Cairo Court of Appeal.

These constraints are seen as the way to preserve the Egyptian wealth and establish good governance practices that would prevent undesirable ruptures in the industrial and business processes. Speaking of limitations, the issue of taxation necessarily comes into play.

Contractors are subject to Egyptian income tax law and must comply with the rules, where taxes such risks within a JV to prepare tax declarations for the tax authority within the required timeframe. The advantage for JVs refers to the practice in which EGPC pays income tax on behalf of the contractor out of EGPC’s share, thereby sharing the mechanisms of the concession agreement. According to an article - Guide to Doing Business in Egypt - prepared by Lex Mundi member firm and Shalakany Law Office, the profit its realized by oil exploration and production companies, are subject to a higher tax rate of 40.55%. Upon payment, EGPC provides the contractor with official receipts to confirm the transaction of IOC’s income tax within 30 days from receiving the following year’s tax declaration.

**Suitability of JV Model for Upstream Projects**

It is no secret that oil and gas upstream projects comprise of a variety of risks; geological, operational, financial. Therefore, when entering these ventures, any company’s market, to share profits, property, and assets, and to split risks. For Egypt, it is perceived as a mutually beneficial structure, which is helping the hydrocarbon industry to thrive.
The drastic slump in global oil prices and the continual militant attacks on Nigeria’s petroleum facilities rendered the market feeble and brought about financial problems for the country’s joint ventures. The situation had been grave even at a time when a lot of revenue was being made from crude oil as a result of high production and prices. Now that the crude oil production in Nigeria is at its lowest, the government has recently realized the importance of bringing up a solution for funding its oil sector.

Nigeria has been recently taking into consideration a possibility to convert joint ventures into Incorporated Joint Ventures, IJVs, in efforts to resolve the huge funding gaps between the government and the international oil companies. It is a truth that the lack of or inadequacy of finances is a big challenge for the realization of full potentials of the joint ventures. A source of fund flow can help impact positively the oil sector and the country’s entire economy. It, additionally, gets the finance burden off the government’s shoulder.

Former Special Advisor to the late President Umar Yar’Adua and former President Olusegun Obasanjo, Emmanuel Egbogah had previously proposed the conversion of all Joint Ventures (JVs) into Incorporated Joint Ventures (IJVs), which can obtain loans and resort to the capital market for funding. But IJVs were removed from the petroleum industry bill submitted to the National Assembly by the administration of former President, Goodluck Jonathan, in 2012. But in late August 2016, the administration of Nigerian President, Muhammadu Buhari, took a different approach. It has reintroduced the IJVs in the revised petroleum industry bill. The question stands as: What benefits do Incorporated Joint Ventures have for the country?

IJVs’ Benefits to Nigeria’s Economy

A Nigeria’s oil sector has been witnessing a period of drawbacks in the past years. Turning the existing joint ventures into incorporated business ventures can independently source funds from the open market for their operations. That way, the companies can operate without having to look into the government for financing. Thus, the federal government will be freed from directly funding the joint ventures from its dwindling finances, which will lessen the burden off Nigeria’s economy. Nonetheless, the government will not be left out from the processes in the oil industry. The suggested new approach implies that the government will be able to concern itself with regulating and supervising operations of the Incorporated Joint Ventures as well as enforcement of laws, regulations, and established standards.

In addition, incorporating the joint ventures will not have any adverse implications on the ownership of the businesses, according to the Guardian’s article - Nigeria’s Oil Industry and a Better Funding Alternative, published in August 2016. As proposed, the parties in the existing joint ventures will retain ownership of the new companies in the proportion to their existing shareholdings. This means that the federal government will still retain the lion share of 55-60%, while the oil companies will hold 40-45%.

IJVs’ approach may generate further advantages. Incorporating the already existing joint ventures will bring in more transparency and accountability in its management, especially as providers of funds will demand good corporate governance and best practices in the handling of affairs of the companies. In other words, an incorporated joint venture that fails to meet market requirements and demands will suffer the consequences on its own if it comes short of funds. By incorporating the joint ventures, the government will not be resorted to for funding the cash calls, which is not the case in the Nigerian joint venture business now. There is no doubt that the Nigerian National Oil Company (NNPC) would be the primary beneficiary for getting funding responsibilities off its shoulder by turning JVs into IJVs, especially that the NNPC has long failed to

**NIGERIA: TOWARDS INCORPORATED JOINT VENTURES**

*By Salma Essam*
meet financial demands. The Guardian explained that the NPNC was indebted to Shell, Chevron, Agip, Mobil, Total, and Pan Ocean, its six joint venture partners. In January 2015, the cash call hit a value of $5 billion. At the close of the year 2015, joint ventures funding had gulped more than 87% of the total proceeds the NPNC made from its export crude oil and gas trade. As of April 2016, NPNC’s indebtedness to its JV partners stood at $7 billion. Therefore, adopting the Incorporated Joint Venture model can shift the current situation of the Nigerian oil market into profitability and resolve the cash call issues that the government has long fallen short of. This will, additionally permit exploration and production activities to reach their real potentials.

Nigerian Energy Business Analyst and Member at Energy Institute, Afolabi Okunowo, argued that if Nigeria incorporated its joint ventures, several benefits would accrue. Incorporated Joint Ventures are registered with the Corporate Affairs Commission, which means the JV cannot be subject to any legal terminations. In addition, the JV model ensures transparency and accountability. In essence, Okunowo said in his analysis - Incorporating Joint Ventures, a Better Funding Alternative, published in late June 2016: "Incorporation permits more efficient operation by removing the layer of supervision done by National Petroleum Investment Management Services (NAPIMS)." It will also liberate JV partners from any funding uncertainties that frequently occur from the government as they are able to turn to other options such as the capital market.

Converting to IJVs

Funding the industry is as important as capital needs are to entrepreneurs and businesses. Yet, transforming joint ventures (IJVs) into a process that holds within several procedures that the Nigerian Development Petroleum Company (NPDC) and joint venture partners need to adopt. In his analysis - Two Options for Converting NPDC’s Unincorporated Joint Ventures to Incorporated Joint Ventures, published in October 2015, Okunowo, argued that if Nigeria incorporated its joint ventures, several benefits would accrue.

"Incorporation permits more efficient operation."

Afolabi Okunowo, Nigerian Energy Business Analyst and Member at Energy Institute

Nigerian Energy Lawyer and Odujinrin & Adefu's Energy Practice Team Partner, Adeoye Adefu, introduced two options to this process. The first one is the reverse takeover and the second is the company transfer.

The Reverse Takeover (RTO)

Adefulu explained that the reverse takeover option is not a typical RTO in its technical sense. In other words, it is not like the RTO where a private company takes over a dormant public company. Yet under this structure, the National Oil Company transfers its rights in the underlying Oil Mining Leases, OML, in exchange for shares in the indigenous company. The indigenous company would be required to substantially increase its share capital in order to allot the requisite shares to NPDC. This option, therefore, requires a thorough evaluation of the assets and the liabilities of the indigenous company as well as that of NPDC’s interest in order to determine the appropriate level of shareholding to be allocated.

This process is likely to lead to the situation in which NPDC would hold major- ity shares in the indigenous companies (hence the RTO) and where the shareholdings of the companies would be relatively fragmented. NPDC would be the largest shareholder by a significant margin. This may raise concerns from the existing shareholders in terms of their ability to influence the operations of the new entity. A number of these concerns may be dealt with by putting in place a robust shareholders’ agreement, which addresses voting rights, pass mark issues, and other minority protection mechanisms.

NPDC may also be concerned that at the end of this process, it would have only transferred assets and not achieved the capacity building objectives of this exercise. This concern may be ameliorated by allowing the process to accommodate the transfer of staff.

Company Transfer

A second option which may be utilized to achieve the JV structure is for both parties – NPDC and the indigenous companies, to transfer their assets and liabilities with respect to their OML to a newly created entity. In this scenario, the shareholders in the new company would be NPDC and the existing indig- enous company. The post-transaction shareholding structure should broadly reflect the current participating interest ratio on the assets between NPDC and the indigenous company. This may provide some level of comfort for the indig- enous shareholders as they may act as one block, reducing NPDC’s influence as the majority shareholder. It will still be necessary to put in place share- holders’ agreement, which addresses minority protection rights.

In adopting this structure, however, there may be concerns about the tax exposure of the shareholders of the indi- genous company. Under the current arrangements, the indigenous company pays Petroleum Profits Tax (PPT), after which its shareholders may take dividends from the remainder profit. The dividends are not subject to the payment of tax under Nigerian law, although the company which receives the dividends may be further subject to Companies’ Income Tax (CIT) on any profits it makes. The addition of another layer - through the establishment of this new company - may subject the current shareholders in the indigenous company to additional tax, potentially whittling down profits.

Both the RTO and the company transfer options hold within some regulatory concerns that should be taken into account. The transfer of assets from NPDC would require the consent of the Oil Minister, which is unlikely to be a problem, given that this initiative is being driven by the government. The process may also require the approval of the Secur- ities and Exchange Commission as it is likely to fall under the mergers and acquisitions rules of the Investments and Securities Act. However, the required increase in share capital by the indigenous companies would incur fees at the Corporate Affairs Commission and stamp duty fees. Banks and other lenders to the indigenous companies as well as those of the already existing shareholders may also need to approve the transaction under the terms of their existing loan arrangements.

Challenges Faced

In getting to realize the conversion, there are likely to be some challenges. First is getting the government to situate the suggestion in proper perspec- tive given the realities that the nation is currently facing.

Second is mustering the needed politi- cal will to cause the needed incorpo- ration of the joint ventures. In this case, the consent of the minister would be likely guaranteed. Incidentally, this is one change that should have taken place a long time ago. In that case, the government would have received much needed assistance in freeing its finan- cial resources and deploying them to other needy areas in the socio-econom- ic space.

Third, the subsisting laws will need to be looked into with a vision to affect amendments where necessary, so that all legal bottlenecks are removed. In this way, consideration must be given to the role that the legislature will play to ensure a smooth transition from joint ventures to Incorporated Joint Ventures. Even, in view of the fact that the lawmakers may perceive the move to result in limiting the scope of their oversight functions and accompanying benefits, it will be important to develop and implement effective strategies to- wards obtaining both their buy-in and their support.

Fourth, the challenge is ensuring that the incorporated companies can easi- ly source funds via the capital market. There will, most probably, be the issue of availability and adequacy of experi- enced human capital within the coun- try to successfully manage the incorpo- rated Joint Ventures.

Finally, the government will need to engage the joint ventures partners in necessary negotiations if it seriously considers embarking upon incorpo- rating the joint ventures. There is no doubt, however, that the oil companies will appreciate the essence of the incor- poration and support it, given their usual unpalatable experience with the government in funding cash calls.

Nigeria needs workable and positively impactful ideas that could push the oil sector forward. The country is in dire need of credible suggestions that can turn around the current low productivity and its associated socio-economic challenges, rather than criticisms.

The proposal for the incorporation of the joint ventures has been imple- mented for now, but it still requires further considerations. The government should, therefore, work closely with oil market experts to assess the efficiency of the IJVs and conduct a comparison between the oil market performance before and after the conversions. While further evaluation thereof should quickly be embarked upon, it is imperative that a detailed framework for its implementation be worked out. The earlier a decision is made, the better for the oil and gas sector and the Nigerian national economy.
Contractual Regimes for JVs

By Shaden Esam Aldine

Elements for the Continuation of Joint Venture Investments

Joint venture companies are the top priority for the Egyptian Ministry of Petroleum and other leaders in the oil and gas industry. Despite the state's support for foreign investments and the trust given to its joint partners, the challenge is to continue with a tough task ahead; in particular, when the economic feasibility of investments in the oil sector in Egypt is considered, after the announcement of the largest oil field in the world, Zohr field. Nonetheless, optimistic projections in favor of the new oil and gas fields in the Red Sea and the Mediterranean Sea.

International oil companies are the pillar of the Egyptian oil sector. These companies are able to achieve positive outcomes for the research and exploration and ensure rapid development in the discovered fields. This may significantly contribute to increasing reserves and Egypt's oil and gas production.

In order to achieve this, state officials have to improve investment conditions, whether local, regional, or international investment, in light of the steep decline of the global oil prices. This appears to be the toughest challenge for the joint venture companies not only in Egypt, but worldwide. It is difficult to overcome this, because the operations of these companies always depend on oil prices, an important factor for attracting new investments.

In Egypt, the joint venture companies are an essential element in attracting investments in favor of the state's treasury, even more so in the wake of halts that the industry and tourism sectors suffered. They are also the main players who help bring in the hard currency.

Egypt owns 108 joint venture companies between the oil sector and foreign, Arab, and Egyptian companies, in addition to 62 companies for research and exploration, coming in from 27 different countries. This reflects the strong economic ties with the companies working in Egypt and sends a trust message to the oil sector. Nonetheless, operations of these companies are associated with late debt payments.

Therefore, to finalize new projects for gas exploration and development, and explorations of gas in the Mediterranean Sea, the Delta for Zohr field, North Alexandria, and Atoll, which will start production in the second half of next year, will contribute immensely in filling the current gap between production and consumption.

If investments of the joint venture companies in Egypt remain flowing, we must cooperate with the directors of these companies to convince them how important it is to rationalize spending in the different production activities. They are then to strike a balance between maximizing reserves and production, while lowering production costs. This should take place under the integrated system that comprises standard procedures and applications for safety and environmental protection.

Will we make this happen? Or will there be new justifications for that some wells require huge amounts of money for safely extracting their production, whether oil or natural gas? This question will soon have an answer.

The Ministry of Petroleum, which represents the government, must implement its strategic plan for the oil sector in order to increase Egypt's oil and gas production and reserves. Egypt has thus signed 76 new oil agreements to its joint venture activities with oil and gas within the last three years, with investments worth roughly $15 billion.

---

T

here are many good busi-

ness reasons to participate in a Joint Venture (JV). One of these reasons is partnering with a business that has complementary abilities and resources. The issue that resonates across the oil and gas industry globally, however, is which legal framework can be more benefi-
cial to the parties involved.

A JV can be established between a host country (HC) or a National Oil Company (NOC) and an Interna-
tional Oil Company (IOC) through a Joint Operational Agreement (JOA). JOAs, that define the framework of JVs, can be classified into service contracts and production sharing contracts.

Service Contracts vs. Production Sharing Contracts

In order to attract and sustain IOCs for joint ventures in the MENA re-
gion, forms of agreements play a major role. The difference between service contracts (SC) and produc-
tion sharing contracts (PSC) define the issue of ownership of oil and gas resources, the extent of HC’s super-
vision over business processes and structures, control of operations and the nature of remuneration for involved IOCs, according to Val-
entine Ataka’s study on Features and Merits of PSC and SC.

Under the SC scheme, the HC has an absolute ownership of the oil through its NOC and supervises operations executed by IOCs. The IOC becomes a service contractor retained for its services and is paid a fixed fee. In some cases, the IOC’s payment is in the form of a priority to purchase oil at a discounted rate i.e. buy-back. On the other hand, according to PSC, the IOC is more of a partner in the venture for liabilities, transfer of oil output and controls operations. Remuneration is also different in the PSC regime. The IOC is entitled to a share in crude output. As the joint operating body e.g. the joint operating committee in which it is represent-
ed. This is likely to minimize govern-
ment’s interference and reduce con-
flicts over the interest of all parties involved in any oil and gas project. On the other hand, under the SC arrangement, the IOC has little or no control over its own operations; thereby it may jeopardize its techni-
cal integrity.

In this brief comparison, it appears that the PSC may be a safer invest-
ment structure. As positive senti-
ments over PSC emerged, some MENA countries sought to adopt this model for its investors. In the case of Libya, favorable terms of the country’s ESPAs were deemed suitable and therefore expanded, as opposed to the most recent situ-
ation in the country when only Wintershall enjoyed ESPA regime. Following the application of ESPAs on new actors, the Libyan National Oil Corporation’s Chairman, Mustafa Sanallah persuaded Total to recom-
mit to Libyan onshore exploration and production. However, it is worth mentioning that ESPAs were due to be reviewed on an industry-wide basis in 2014, but the Libya Dawn’s takeover of Tripoli halted such discus-
sions. The development in the North African country is therefore pending.

Joint Operating Agreement

When it comes down to JVs, so-called Joint Operating Agreements (JOA) shape JVs' activities in explo-
ration and production of oil and gas resources. The JOA provides a set of rules and regulations, which govern operations of involved par-
ties for the duration of the JV. The core interest of JOAs is to provide mechanisms that would protect the business project and minimize any threats to the stability and lon-
gevity of the joint venture projects. Conceptually, the JOA represents a ‘constitution’ or reference for joint venture for liabilities, transfer of interests, accounting procedures, dispute resolution, and withdrawal procedures.

in making the decision about a more beneficial contracting regime – SC or PSC – HC’s are seeking to attract technology and skill force into their country to boost their hydrocarbon production. Yet, currently, 37% of oil and gas companies have considered or are considering introducing Joint Operating Agreements into their business plan, as some statistics have revealed.

Perplexities of JOAs

Leaning towards a business mod-
el of IOC and HC/NOC partnership through JVs brings with it some per-
plexities, nonetheless.

It has been estimated that some 60% of JOAs, regardless of whether SC or PSC, fail to start or fade away within five years of their existence. There are many reasons for these failures, but a majority of agree-
ments fail when one party tries to command control,” Eng. Ahmed Saleh, Artificial Lift Senior Field Engineer at Schlumberger - REDA Production Systems, said in an in-
terview with Egypt Oil&Gas.

“However, unwanted consequenc-
es can be avoided by a well-drafted agreement, representing precisely the parties’ intentions, rights and duties,” he noted. The role of JOA is to have precisely this effect. “The job of the JOA is to ease the tension and use the voting rights to make decisions and keep the peace,” said Eng. Ahmed Saleh.

On a more positive tone, there are many examples of NOC-IOC partner-
ships that have delivered positive results and served to add value to all stakeholders in many areas of the industry e.g. E&P, transport, conver-
sion, and retail.

As the IOCs are always in search for a viable and sustainable investment framework, JVs under the PSC regime are seen as a viable tool to achieve this as it is more likely to result in bet-
ter returns, as opposed to SCs. Even though, there still remain crucial as-
psects to evaluate in considerations over the application of SCs or PSCs as a defining framework for JOAs. Coun-
tries in the MENA region are in need of swiftly amending these regulations regarding upstream JOAs, especially the issues of exploration and production sharing costs, cost recovery process, and energy market competition.
SARAYA... WITH THE ACCENT ON ‘FRENCH BISTRO’.

Nature’s finest and freshest produce finds the perfect home on the French ‘Bistro style’ menu at the re-born Saraya Gallery ... where the accent is on a welcoming, genial atmosphere.

Choose from light sandwiches and salads to Vichyssoise or Duck Foie Gras ... from Lobster Gratin to prime cuts of tenderloin and rack of lamb ... Steak Tartare the way you want it, created at the table.

Open your mind and be part of the new vision - c’est magnifique!

THE FRENCH ACCENT IS ON UPScale CASUAL
Achieving Stability in Joint Venture Relationships

By Mark Thurber, Board Member of the Middle East office of the Andrews Kurth Law Firm
Joint ventures, unincorporated or otherwise, are the most common structure to undertake projects in the energy and petrochemical industries. There are many reasons for seeking out a partner as there are projects, including gaining access to technical know-how, combining complementary lines of business, and obtaining entry into an unfamiliar region, cultural or commercial environment.

But the most common reason for joint venturing is to spread financial risk. Principally this is driven by the size or projects in these industries; even established players with a deep balance sheet have preferred to diversify their risk and stretch their capital by bringing in partners to share in the ups and downs of larger projects, thus expanding the number of projects a company can add to its portfolio. This is important not only for the obvious need to spread risk and offset possible losses. Individual companies also have CVs - the more projects they undertake the greater their savvy and experience; they become better companies.

Joint ventures are not usually short-term. Construction and development schedules for a major project are often measured in years. IRRs are usually more in the investment grade range rather than speculative, meaning that recovery of capital and obtaining targeted returns can stretch into decades. Accordingly, it is not surprising that joint ventures come with a high failure rate. Not only are the individuals who formed the enterprise long gone by the time their project matures, but the investment climate (dependent on myriad political and economic factors) will shift throughout the life of the project. The reality is that very few projects end up with the same original ownership, in fact many are designed with exit strategies. Having a realistic view of the need to prepare for the unknown, while planning for success, is a condition to establishing a stable joint venture relationship. Aside from the goal of reaching a benchmark return, the need to avoid cash-draining and debilitating litigation should be a central concern in the formation of any long-term business relationship. Accordingly, there are a number of factors to consider in structuring a large energy, infrastructure or industrial project to remain healthy throughout its planned life cycle. Following is a discussion of three primary factors that need to be done well if the joint venture is to remain healthy over the long term.

Partnering Correctly

The first factor is picking the correct partner. This is particularly crucial in an international setting where differences in culture, economic strength, and business acumen, to name a few, can lead to significantly disparate expectations, business practices, and appetite for risk. Obviously, any prospective joint venture partner should have the technical, financial and legal ability to perform its designated tasks in developing the project. Further, the partner's skill sets must not only be sufficient to carry out its side of the project, but should be complementary to the skill sets of the parties. In the partner's role, it's imperative to capitalize on the opportunity for continued progression towards completing the project. And in today's legal environment where authorities aggressively target improper business practices, it is ever more mandatory that any joint venture partner must possess impeccable ethical credentials.

Aside from these qualifications, which are essential, the partners must above all be compatible. It does no favor to either side to spend the considerable time and resources necessary to develop a modern energy or infrastructure project only to see the process bogged down in failed expectations and mistrust. Trust can only be developed through extensive face to face interaction. Prior to signing up, the partners must learn everything they can about each other. They must spend time together, and discuss the project endlessly from every perspective. Only a minor portion of a project is driven by its legal framework. Most of the day-to-day activities are conducted outside the context of any contractual overlay, relying on trust and a healthy working relationship. To a large extent, contracts are in place to record the parties' original intent and as an arbiter, in order to prevent litigation, of how a dispute is to be decided. In a successful joint venture the parties in many cases will rarely consult the underlying contracts as a guide to behavior. Trust in the ethics of the other party, comfort in working together, and confidence in the abilities and working style of the partner are both precursors to and requirements for success.

Governing Correctly

The second factor is voting rights. Investment levels are invariably given; primary weight and will usually control voting rights. A stable relationship depends on rewarding the providers of capital appropriately, but in the context of promoting long-term stability other factors should be considered. The most stable partnerships are those in which both parties bring roughly equivalent value to the table and are treated accordingly. Many business professionals will assume that in order to promote efficiency of project development and operation, one partner should be in charge: according to this view, taking advice from the minority partner, even direction on certain narrowly specified issues when needed is fine, but essentially at the end of the day a tie-breaker will be required. These assumptions have been shown through experience to not have universal application. In fact, though counterintuitive, too much of a partnership is often too much; even perfectly equal partners can be too, because their values, working style, business strategies and even natural lives. Projects that survive and avoid litigation will eventually threaten the ongoing viability of the project.

Where equal voting is instituted, consideration should be given to priority rights of one partner over the other in certain key aspects of the project’s development and operation. Where deference is to be given to one partner over another, those rights and expectations should be clearly defined; each partner should be accorded clear rights and direction as to its role in the project.

Withdrawal rights should be carefully considered so as to provide maximum flexibility to the partners while nevertheless protecting the viability of the project. Similarly, rights to compete or restrictions on competition should be clearly delineated, either expressly permitted or prohibited, with clearly defined geographical and time-based parameters.

Dispute resolution should be in a neutral forum that is equipped from a legal and traditional standpoint to address business disputes as opposed to personal issues. A well-drafted arbitration clause specifying a distant, expensive forum can often be an effective litigation deterrent.

At the end of the day, no joint venture will be perfect, and unexpected events will occur randomly throughout the project life. But through careful planning, striving for flexibility and anticipating problems, the parties can maximize their odds of achieving a long-lived, profitable venture.

| investor is a New York-based private equity fund, while the client is a Texas-based developer. They are different in almost every way, especially culturally. They have clashed from the beginning, disagreeing about almost everything. Nevertheless, despite not having been successful to date, they are still together, working through every decision on a 50/50 basis, still hoping to finish their first project. While the lure of being able to direct the key business decisions of the venture will push some companies into unequal partnerships, experience has shown that the more difficult equal partnership is the one that survives and avoids litigation. In some jurisdictions legal restrictions may prevent the investors from entering into a simple 50/50 relationship, but ventures can often be formed in a way that effectively implements the concept, while complying with local law.

Structuring Correctly

The third factor is the proper structuring of the joint venture to either facilitate easy exit - some developers are just that, they develop the project intending to turn it over to others - or to facilitate a stable and long-term operating environment for the project. Structuring viable exit ramps is a technical, legal exercise and emphasizes the need for development expertise (speed, capital, local know-how) over operating expertise (orientation to long-term returns, core business compatibility, and a continuing plan to develop deep local connections to ensure project longevity). Despite best-laid plans, however, it is a fact of life that people change, markets evolve, and companies cycle through their natural lives. Projects that survive must be structured to outlive the people and companies which initiate them, and even to outlive the governments and legal structures under which they were established.

Stated simply, the object of a joint venture participant, having found the perfect partner, should be to assume that after a few years, things will not be so perfect. The people running the project will have little or no knowledge of the dynamics that led to the project’s formation, nor even much care about the original expectations of the founding partners. Accordingly, the documents underlying the venture must plan for disagreements and unexpected developments that threaten the original assumptions of the project, and in some cases the project itself. They must attempt to anticipate, in a comprehensive fashion, the challenges that the project is likely to face through its lifetime and to prescribe appropriate courses of action for those eventualities. For instance:

• The partners’ know-how and other intellectual property should be protected, such that their property will retain value in the face of the certain but unknown changes that will eventually threaten the ongoing viability of the project.

• Tax structuring should answer the needs of both partners, yet remain flexible in an environment of changing law.

• Where equal voting is instituted, consideration should be given to priority rights of one partner over the other in certain key aspects of the project’s development and operation. Where deference is to be given to one partner over another, those rights and expectations should be clearly defined; each partner should be accorded clear rights and direction as to its role in the project.

• Withdrawal rights should be carefully considered so as to provide maximum flexibility to the partners while nevertheless protecting the viability of the project. Similarly, rights to compete or restrictions on competition should be clearly delineated, either expressly permitted or prohibited, with clearly defined geographical and time-based parameters.

• Dispute resolution should be in a neutral forum that is equipped from a legal and traditional standpoint to address business disputes as opposed to personal issues. A well-drafted arbitration clause specifying a distant, expensive forum can often be an effective litigation deterrent.

At the end of the day, no joint venture will be perfect, and unexpected events will occur randomly throughout the project life. But through careful planning, striving for flexibility and anticipating problems, the parties can maximize their odds of achieving a long-lived, profitable venture.

November 2016 - ISSUE 119
www.egyptoil-gas.com
Subsea Awareness Course
11th to 15th December, 2016
Dusit Thani Hotel - Cairo - Egypt

Objectives

- This five-day Course has been designed to be suitable for contractors, engineers, operators and those new to the offshore industry, those transferring from other disciplines within the industry and those who have worked in subsea previously but would benefit from a refresher course and exposure to the latest technology.

- Whilst most of the course will be presented in a ‘classroom’ environment, the sessions will be interactive, with the opportunity to ask questions and discuss what has been learnt. In particular, hands-on and visual components have been included wherever possible to enable delegates to view software models and products designed for subsea service.

Sponsored By

Sponsors

Speakers

For Registration & More Information
Please Contact:
Ms. Ireen Helmy
Mob.: +2 01123222219
Fax: +2 26147261
E-mail: imagdy@ogs.com.eg

Official Media Sponsor

bp Energia Enppi Subsea 7 Eni PhPC
DeepShield Deepwater Subsurface Safety Valve
Install fail-safe protection in deepwater completions

The Baker Hughes DeepShield™ deepwater subsurface safety valve delivers fail-safe performance in completions that require low operating pressures due to control system limitations. The patented DeepShield operating system provides simple and reliable operation in the most critical applications.

The DeepShield safety valve is the industry’s first V1-validated valve as defined in API SPEC 14A Specification for Subsurface Safety Valve Equipment, Twelfth Edition. Per this specification, subsurface safety valves must now undergo more stringent prototype testing than was previously required. With only minor modifications, the Baker Hughes subsurface safety valve prototype test program was able to accommodate the new V1-validation specifications, and continues to exceed the requirements set forth by API.

The DeepShield safety valve uses an integrated nitrogen-charged system that opposes the hydrostatic pressure acting on top of the piston. Balancing the hydrostatic pressures ensures low operating pressures, even in deepwater applications. The dynamic seal configuration used for the operating piston represents a significant engineering achievement that uses reliable, field-proven sealing technology designed for nitrogen-charged safety valves. The valve features a patented operating system capable of closing in all applications, even if primary nitrogen chamber pressure is lost.

To ensure long-term nitrogen containment, the DeepShield valve includes an enhanced dynamic seal configuration, upgraded dynamic seal materials, increased volume in the secondary chamber, internal alignment enhancements, redundant seals in the fail-safe piston, reduced leak path in primary nitrogen coils, and upgraded materials for low-pressure sealing performance of the check seats in fill ports. An energized scraper ring minimizes ingress of debris in harsh environments, and a stronger power spring is also available for higher closing force in heavy debris applications.

Applications
- Completions requiring low operating pressures due to control system limitations
- Remote subsea wells
- Deepset wells in dry-tree applications
- Completions requiring a V1-validated safety valve

Features and Benefits
- Field-adjustable primary nitrogen chamber
  - Enables last-minute adjustments to match changing well conditions
- Two independent, patented operating systems
  - Offer redundancy to maintain dependable valve operation
  - Ensure fail-safe operation in critical applications
- Same moving parts as a conventional tubing-retrievable subsurface safety valve
  - Simplifies operation
  - Increases certainty
- Piston wear bearing and scraper ring
  - Minimizes ingress of debris
  - Maintains functionality in harsh, debris-laden environments
- Low operating pressure at any setting depth
  - Reduces operating system cost
- Baker Hughes RST metal-to-metal thread technology
  - Provides gas-tight sealing in harsh environments
  - Enables high tensile rating
- Optional integral control line
  - Offers clean and trouble-free operation