EGYPT OIL&GAS NEWSPAPER

Egypt's Leading Oil And Gas Monthly Publication | August 2016 - 32 Pages - Issue 116 | www.egyptoil-gas.com

SOCIAL LICENSE AND OIL INDUSTRY NEXUS

CSR IN EGYPT: BALANCING ENVIRONMENTAL AND COMMUNAL NEEDS

Corporate Social Responsibility Offers Win-Win Scenario

WHERE ENVIRONMENTAL CSR AND PROFITABILITY INTERSECT

EDITOR'S NOTE

There is no doubt that the concept of corporate social responsibility (CSR) has become part and parcel of energy companies' strategy in recent years. However, the concept seems to have been reduced to a firm set of community practices that are as if enrooted within the firms' portfolios. Nonetheless, while community services, that the corporate sector supports, are important, almost indispensable, one can observe a discrepancy between what companies can offer and what they contribute to societies.
Therefore, in this issue, EOG team took upon itself a challenge to explore the CSR concept further looking into a series of notions hidden behind it.
In the following articles, we have identified the need for oil and gas companies to balance how various types of their CSR activities are implemented. In this regard, we show that while energy firms seek to maintain healthy relationship with all the stakeholder groups, and at the same time pursue the execution of interdisciplinary operations, they also try to navigate through CSR actions in a particular way. Energy players thus search for ways to strike a balance between their societal obligations and corporate interests. As we analyze, this can be a recipe for a win-win scenario if environmental concerns are somehow prioritized.
In line with this finding, in the article - Where Environmental CSR and Profitability Intersect – we further analyze how costly environmental CSR activities may play an important role in relation to companies' profit generation.
In order to successfully pursue the CSR environmental actions, the notion of social license, which has not been necessarily translated into a series of feasible tactics in many countries yet, is to be considered. The widely established notion of CSR strongly recognizes that the corporate sector, including energy firms, does not function in a social vacuum. A social license thus seems inevitable for oil and gas companies to succeed in their profit-maximizing business endeavor. A granted social license refers to the level of acceptance and approval by local communities to the operations of energy corporations.
In light of the above, CSR in Egypt seems to be facing a challenge as in how to overcome a gap between provided communal services and environmental needs of the country. While some companies have already undertaken the struggle, there are still many others that may be interested to become involved in alleviating the harmful effect of their operations by addressing all the major environmental concerns.
We thus hope that our creative approach to examining what CSR entails in conceptual and practical terms, and what opportunities it provides, will be inspiring.
And we also hope that you will enjoy reading about it.

EOG team thanks you for your readership and continuous support.

EDITOR IN CHIEF **NATAŠA KUBÍKOVÁ**
nkubikova@egyptoil-gas.com

inside this issue

Publisher **MOHAMED FOUAD**

This publication was founded by **Mohamed Fouad** and **Omar Donia**.

15B/1 Repeated, Extension El Laselky St. Behind USAID, New Maadi, Cairo, Egypt
Tel.: *+202 25164776* *+202 25172052* ***Fax***: *+202 25172053*
www.egyptoil-gas.com info@egyptoil-gas.com

EGYPT OIL&GAS NEWSPAPER

Eni, BP's South Baltim Field Holds 700bcf of Gas

After completing the drilling operations of their first well, Baltim SW-1, British Petroleum (BP) and Italy's Eni have estimated the reserves in their concession area in South Baltim to equal almost 700bcf of extractable gas. The exact quantities of gas will be confirmed after drilling the second well, reported Ecofin Agency.

President of BP's North Africa Division, Hesham Mekawi, has stated in an official press release that drilling the first well has penetrated a 62-meter-thick, high-quality gas reserving sandstone layer. According to a senior source in the oil industry, the drilling of each well requires a time period of 75 days.

The drilling of the Baltim SW-1 reached a depth of 4,000 meters, which included 25 meters of water. The new discovery is located in South Baltim, east of the Nile Delta, 12km away from the Noras field that was recently found by Eni, Daily News Egypt wrote. Mekawi added that the new discovery is comparable to the Noras field, found in July 2015, which is currently producing 65,000 boe/d.

The Baltim South Development lease stake is equally divided between BP and Eni; BP holds a 50% stake and Eni also holds a 50% stake through its subsidiary IEOC. The well was drilled by Petrobel, a joint venture between IEOC and the Egyptian General Petroleum Corporation (EGPC), according to Your Oil and Gas News.

BP and Eni initially announced the significant gas discovery at the Baltim South West well in June 2016. Eni's statement read: "Baltim South West discovery further confirms the significant potential of the so called Great Nooros Area, which is now estimated to hold 70-80bcm of gas in place," according to Ahram Online.

Egypt's total production of natural gas stands at 3.95bcf/d. Egypt also imports gas through two gasification ships at the port of Ain Sokhna.

Egypt Reduces its Debts to IOCs

Egypt has reduced the arrears it owes to foreign oil companies by $100m to $3.4b in 2015/2016, compared to the previous year, declared the Petroleum Minister, Tarek El Molla, according to Reuters.

The minister also said that Egypt received crude oil and natural gas from the foreign partners during 2015/16 worth $5.4b, while Egypt paid international oil companies (IOCs) the amount of $5.5b.

In related news, Daily News Egypt reported that the Ministry of Petroleum owes $400m to its German counterpart, RWE, a leading company in manufacturing coal and nuclear-based electricity generators in Europe. The amount accounts for the Essen-based company's stake in oil and gas from its concession areas in Egypt.

RWE demanded its accumulative dues by the Ministry of Petroleum in order to continue pursuing its development plans in Ras Gharib, Ras Badran, Disouq, and Gabal El-Zeit.

Similarly, Daily News Egypt informed that the total amount of dues that are owed by the Egyptian Ministry of Petroleum to British Gas (BG) and Shell, in return for their shares in the gas produced at El Borollos and Rasheed fields, have increased to $1.1b by mid July, up from $1b in April 2016.

The money owed by the Oil Ministry to BG represents more than 30% of the total government debt to foreign oil companies in Egypt.

Egypt and Israel Unite Over Energy Deals

The first Egyptian Foreign Minister to visit Israel in nine years, Sameh Shoukry, discussed with his Israeli counterparts the natural gas exports to Egypt and regional cooperation in building joint infrastructure for gas exports to Asia or Europe, according to Globes.

Globes added that letters of intent for exports of Israeli gas to Egypt have already been signed and there are a number of deals that will be carried out between the two countries. One deal includes expanding the development of the Tamar gas reservoir. Another business agreement includes facilitating the development of the Leviathan reservoir, as Egypt was regarded the anchor customer for the field.

Bloomberg wrote that it has been nearly forty years since the two countries signed a peace accord, Israel and Egypt are slowly turning a cool relationship into an alliance. They have tightened security cooperation to an unprecedented level and have been working on conducting the proper legal groundwork needed for signing a multi-billion-dollar energy contract, amid the big discoveries in the Mediterranean region.

Standing beside Israel's Prime Minister, Benjamin Netanyahu, at a press conference, Shoukry said: "My visit to Israel today is a continuation of Egypt's longstanding sense of responsibility towards peace for itself and all the peoples of the region, particularly the Palestinian-Israeli peoples."

EGAS Delivered Gas to 25 Governorates' Homes

According to a report issued by the Egyptian Natural Gas Holding Company (EGAS), Vice Chairman for Planning and Gas Projects, Gamal Hegazy, stated that the total gas aggregation for homes in the fiscal year (FY) 2015/2016 in 25 governorates in the country reached 715,000 housing units, out of which 130,000 housing units were in Upper Egypt, compared to 710,000 housing units last year. The total investment amounted to EGP 1.5b and was delivered by 14 companies, Egypt Oil&Gas reported based on a press release issued by the Oil Ministry.

TAQA Arabia Mulls New 50MW Power Plant

Egypt's largest private sector energy distribution company, TAQA Arabia, is considering establishing a new 50MW-capacity solar power plant, in addition to the existing 50MW solar power project that the company seeks to implement in Aswan worth $75m, according to Daily News Egypt. TAQA Arabia, a subsidiary of Qalaa Holdings in the energy sector, has announced in November 2015 that it has signed a contract with the Egyptian Electricity Transmission Company (EETC) and the New and Renewable Energy Authority (NREA) to split the EGP 40m cost of connecting solar energy facilities to the national electricity grid.

China, Egypt Start EETC Project Operations

The largest transmission lines project in Egypt's history, the Egyptian EETC 500kV Transmission Lines Project (EETC Project), a cooperative venture between China Electric Power Equipment and Technology Co. Ltd (CET) and Egypt, is currently under construction, according to New China. The over-$650m project, which is set to be completed in 18 months, aims to achieve technological breakthrough at the Nile Delta. The project includes upgrading some parts of the old grid and finishing the news towers along with the transmission lines. It will play a key role in improving the country's power system and boost economic development.

Egypt to Ink Dabaa Nuclear Plant Contract

The Egyptian Minister of Electricity and Renewable Energy, Mohamed Shaker, affirmed that the final binding contract for the Dabaa nuclear plant, which will remain in effect for 60 years, is to be inked soon. He said that the government has contracted a global legal advisory office to review the latest version of the Russian-Egyptian deal as merely a misplaced comma in the contract may become disastrous for the country. He added that President Abdel Fattah El Sisi has personally encouraged finalizing the paperwork for the Dabaa nuclear plant, according to Daily News Egypt.

Zohr Gas Reserves Estimates Rise to 32tcf

The discovery of a large gas-carrying layer at Zohr field's second well in the Mediterranean Sea, developed by Italian company Eni, has resulted in an increase of the field's total gas reserves to 32tcf, compared to a formerly estimated volume of 30tcf, according to Daily News Egypt.

According to the initial test results at the concession area of Egypt's territorial waters in the Mediterranean Sea, the field was estimated to produce 150mcf/d, but now the production will increase to 250mcf/d.

The first phase of the gas field's development includes drilling six developmental wells and adding them to the production line by the end of 2017. The expenses of drilling a single well are estimated to be $100m.

Veto cited Petrobel CEO, Atef Mohamed Hassan, who affirmed that Zohr has increased the nation's whole natural gas production rate to 70%.

In related news, the Egyptian Natural Gas Holding Company (EGAS) Chairman, Mohamed El Masry, has announced that the drilling of the fourth well in Zohr natural gas field was completed, according to Al Bawaba.

El Masry further noted that completing the drilling activities at the fourth well is set to accelerate the gas field's operational plans to start output in 2017 with a daily capacity of approximately 1bcf.

Further, Italy's offshore contractor Saipem has won an engineering, procurement, construction, and installation (EPCI) contract in the Zohr gas field offshore Egypt in the Mediterranean Sea. The contract, that is worth more than $1.77b, states that the operations will begin in July 2016 and are set to be completed by the end of 2017, according to Offshore Engineer.

The operations will include installing a 26-inch gas export trunkline along with 14- and 18- inch service trunklines. The contract also targets the deep-water field development of six wells and installing an umbilical system, reported Oil Price.

Saipem CEO, Stefano Cao, stated: "We will mobilize a fleet of vessels with last-generation capabilities, and leverage on our proven expertise and consolidated presence in the area, in order to ensure our clients achieve their targets."

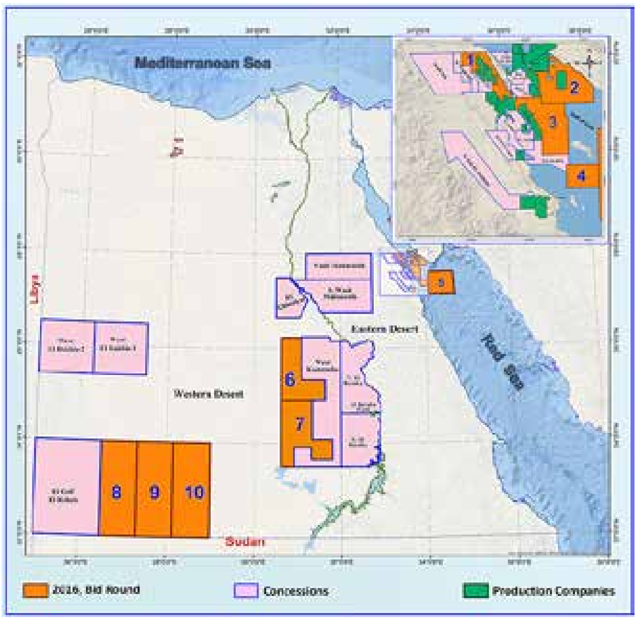
Egypt Marks $7.7b Oil Project Investments

Egypt's Ministry of Petroleum and Mineral Resources stated in a report that the current investments in new oil industry projects amount to roughly $7.7b, Egypt Oil&Gas reported, citing a ministry's press release. Minister of Petroleum and Mineral Resources, Tarek El Molla, affirmed that the implementation of the integral oil sector strategy includes investments in new refining projects and developing existing refining units. He added that these projects will contribute to raising efficiency and the refining capacity locally.

Currently, the projects that are being executed include a project for a new vapor recovery unit (VRU) of the Assiut Oil Refining Company (ASORC) for the production of 42,000 tons of butane gas and 356,000 tons of naphtha, annually, with investments worth $21m. A project for reforming naphtha using the catalytic reforming process and isomerisation to produce approximately 600,000 tons of gasoline and 40,000 tons of butane gas require investments of $350m, in addition to a project for the hydrocracking of diesel at ASORC.

The ASORC projects aim to produce 1.4m tons of diesel, 105,000 tons of butane gas, 389,000 tons of naphtha, 346,000 tons of coal, and 75,000 tons of sulphur, annually, with investments up to $1.6b.

Egypt Issues New International Oil, Gas Bid Rounds



In an effort to increase Foreign Direct Investment (FDI) in the oil and gas sector, Ganoub El-Wadi Holding company issued a new international tender for the exploration of ten areas including five sites within the southern region of the Suez Canal, Egypt Oil&Gas reported.

The launched tender includes ten sectors, five are located in the south of Gulf of Suez Gulf, west of Gebel El-Zeit, south-east of Ghara, east of Jesom, Taer El Bahr, and five sectors are located in the Western Dessert of Egypt in south of Al Kharga, east and west of Al Messaha, reported _ Al Borsa News.

According to a ministry's press release, Tarek El Molla, the Minister of Petroleum and Mineral Resources, stated that this is the second bid round of its kind issued in 2016. The minister stressed that these agreements with global companies will provide the country with the necessary momentum to achieve Egypt's strategic drive to ensure sustainable energy supplies, thus enabling economical and social development.

Dr. Sherif Sosa, the President of Ganoub El-Wadi, stated that this new bid round will boast exploration efforts within the regions of Southern Suez Canal and the Western Desert. Currently, Egypt has 20 exploration agreements with global and local companies, as well as other Arabic entities.

GE, Harbin to Build $8b Coal-Fired Plant

US's General Electric (GE) and China's Harbin Electric have agreed to establish an $8b coal-powered electricity station that will generate a total power of 6,510 MW in Egypt, according to Daily News Egypt.

The source added that according to the Egyptian Ministry of Electricity and Energy, the whole project will consist of launching six units; each will run at a capacity of 1,058 MW. Its location is yet to be determined. The ministry is currently awaiting the cabinet's approval to start executing the project. The agreement is expected to be signed within two months of the completion of the first phase.

Energy Egypt reported that the Chairperson of the Connecticut-based GE, Jeffrey Immelt, along with the Chairperson of GE Egypt, Ayman Khattab, have met with both the Egyptian President, Abdel Fattah El Sisi, and the Minister of the Minister of Electricity and Energy, Mohamed Shaker, in order to discuss further investments and cooperation with the Egyptian government in the energy sector.

GE currently manages the maintenance and development of a number of electricity production units in Ataka, El-Nubariya, and Benha. The company has plans to expand its investments in the Egypt's energy sector and transform Egypt into a center of the industry trade.

Egypt Adopts EU Twinning Project

In partnership with the Regulatory Authority for Energy of the Hellenic Republic (RAE) and the Italian Regulatory Authority for Electricity, Gas, and Water (AEEGSI), the Egyptian Electric Utility and Consumer Protection Regulatory Agency (EgyptERA) will launch the European Union (EU) Twinning project, according to a press release on the EU website. The project aims to offer technical support to develop Egypt's electricity and power sector under the auspices of the Ministry of Electricity and Renewable Energy and the support of the Association Agreement Program (SAAP). It will be implemented over 23 months with a budget of $1.35m.

Oil Ministry Eyes Midor's Refineries Expansion

The Egyptian Ministry of Petroleum and Mineral Resources seeks to invest $1.6b in a project that aims to expand the refining facilities of the Middle East Oil Refinery (Midor) in order to meet the domestic demand of petroleum products and reduce the imports bill that requires foreign currency, reports Egypt Oil&Gas.
The expansions are set to be completed during the first quarter of 2019. It is forecast that this project will increase the refining capacity to produce 160,000b/d from the current 100,000b/d. They project would also lead to an annual liquefied petroleum gas (LPG) production of 280,000 tons, compared to the current volume of 135,000 tons, marking a 110% increase, and also an annual gasoline production rise of 1.6m tons, compared to the current production volume of 1m tons, an increase of 60%.
The Ministry also aims to increase the annual factory production of diesel fuel to 2.8m tons instead of 2m tons, an increase of 33%, and the annual production of jet fuel to 2.2m tons, compared to the current production volume of 900,000 tons, targeting a surge of 145%.
In January 2016, Ahram Online reported that Midor borrowed $1.2b from Credit Agricole and BNP Paribas, for its expansion plans. The loan was guaranteed by the Italian Central Bank and the Italian Export Development Authority.

Assiut Power Plant Tenders Attract 26 Companies

Twenty-six national and international companies have submitted their offers for the transformer, electrical work, civil work, and reservoir tenders at the Assiut Al Walideya power plant. The final decision on the four tenders will be made within three months, reported Daily News Egypt.
The total cost of this project is approximately EGP 5b, its funding will be secured through loans issued by the international funding authorities.
According to the Chairperson of the Upper Egypt Electricity Production Company (UEEPC), Ibrahim Al-Shahat, six companies have presented offers for the electricity transformers tender. The transformers tender includes designing, manufacturing, supplying, supervising, and testing the main electricity transformers.
The source also added that seven companies, including Hassan Allam, CSE, Orascom, Petroget, Tecne, and Acordion, have also submitted their offers for the civil works tender. While Petroget, the Arab Renewable Energy Commission (AREC), and Port Said Engineering, have submitted their offers for the reservoirs tender.
23% of the whole project's expenses are financed by the UEEPC's autonomous resources. Other significant sponsors include the Arab Fund for Economic and Social Development, the Kuwaiti Fund for Arab Economic Development, the Islamic Development Bank, and the OPEC Fund for Development.

SUMED Signs $100m Loan Contract

Minister of Petroleum and Mineral Resources, Tarek El Molla, witnessed the signing of an Egyptian loan contract to fund Phase 1 of the construction of a pier and a center for the trade and storage of oil products in Ain Sokhna between the Arab Petroleum Pipelines Company (SUMED) and the National Bank of Egypt (NBE), the ministry informed in a press release. The loan is worth $100m and Phase 1 is scheduled to be completed by the end of March 2017. The investment cost for the entire project, which aims to build a pier, storage center, and trading center for petroleum products in Ain Sokha is approximately $321m.

DRILLING

BAPETCO

BAPETCO, a joint venture between EGPC and Shell, has completed drilling a new exploratory gas well in its concession area in the Western Desert. The oil production rate of GPC in June was 1,524,266 barrels, while the natural gas production was 2,567,509 barrels.

BED18-F-ST
The well was drilled at a depth of 11,713ft utilizing the EDC-52 rig. Investments surrounding the project are estimated at $2.6m.

BED15-M
The well was drilled at a depth of 13,156ft utilizing the EDC-51 rig. Investments surrounding the project are estimated at $3.6m.

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 production rate of Qarun in June 2016 was 1,156,098 barrels of oil.

WON C-213
The well was drilled at a depth of 7,050ft utilizing the EDC-63 rig. Investments surrounding the project are estimated at $1m.

SHELL/APACHE

SHELL/APACHE, a research and exploration company is drilling a new oil development well in its concession area in the Western Desert.

JDT1-6H
The well was drilled at a depth of 8.150ft utilizing the EDC-1 rig. Investments surrounding the project are estimated at $2.3m.

PETROSILAH

PETROSILAH, a joint venture between EGPC and MERLON, has completed drilling new oil development wells in its concession area in the Western Desert. The production rate of PETROSILAH in June 2016 was 289,889 barrels of oil.

N.ASILIN-1-1
The well was drilled at a depth of 8,922ft utilizing the IPR-1 rig. Investments surrounding the project are estimated at $1.2m.

KHALDA

KHALDA, a joint venture between EGPC and Apache, has completed drilling new oil development wells in its concession area in the Western Desert. The production rate of Khalda in June 2016 was 4,556,412 barrels of oil and 4,361,515 barrels of natural gas.

WKAL P-2
The well was drilled at a depth of 15,300ft utilizing the EDC-54 rig. Investments surrounding the project are estimated at $6.313m.

IMHOTEPS-1X
The development well was drilled at a depth of 15,475ft utilizing the EDC-16 rig. Investments surrounding the project are estimated to be $2.751m.

W.KAL A-16
The exploration well was drilled at a depth of 12,916ft utilizing the EDC-54 rig. Investments surrounding the project are estimated to be $1.8m.

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 June 2016 was 1,356,200 barrels of oil.

HF-36/7C
The well was drilled at a depth of 7,349ft utilizing the ST-4 rig. Investments surrounding the project are estimated at $2m.

BAKR-129
The well was drilled at a depth of 4,354ft utilizing the ST-9 rig. Investments surrounding the project are estimated at $1.5m

WASCO

WASCO, a joint venture between EGPC and DANA gas, has completed drilling a new crude oil development well in its concession area in the Nile Delta. The production rate of WASCO in June 2016 was 165,631 barrels of oil and 1,087,009 barrels of natural gas.

W.MANZALA-3
The well was drilled at a depth of 9,088ft utilizing the EDC-11 rig. Investments surrounding the project are estimated at $2.6m

AGIBA

AGIBA, a joint venture company between EGPC and IEOC, has completed drilling a new crude oil development well in its concession area in the Western Desert. The production rate of AGIBA in June 2016 was 1,717,987 barrels of oil.

MEL-96
The well was drilled at a depth of 6,310ft utilizing the ST-8 rig. Investments surrounding the project are estimated at $1.2m

DORRA-28
The well was drilled at a depth of 6,515ft utilizing the PDI-147 rig. Investments surrounding the project are estimated at $1m

Iran Eyes New Oil, Gas Contracts

Iran's Resistance Economy Headquarters, a top government economic advisory body, approved Iran's new oil and gas contracts after some amendments had been done. According to Trade Arabia, the final draft for the contracts must still be ratified by the government.

In efforts to boost crude oil production through foreign investment, the Iran Petroleum Contract (IPC) serves as a main pillar for the Islamic Republic's plan to boost crude oil production through foreign investment. The launch of contracts was postponed several times due to President Hassan Rouhani's objections to deals that may end the buy-back system. This system, that dates back more than 20 years, prohibits foreign firms from booking reserves or taking equity stakes in local companies, Al Arabiya wrote.

For his side, Ayatollah Ali Khamenei, the country's Supreme Leader stated that no contracts are to be awarded except when necessary reforms were made. The advisory board, chaired by Eshaq Jahangiri and several cabinet members, was formed last year, working towards executing Khamenei's economic view.

Meanwhile, the Tehran Chamber of Commerce, Industries, Mines and Agriculture (TCCIMA) is expected to support the newly-developed oil contracts model, Trade Arabia informed.

Head of the TCCIMA's Energy Committee, Mansour Mo'azzami, said, that all views by the Chamber of Commerce, the Iranian Parliament, and the Expediency Council should be considered in the oil contracts model, according to SHANA, the Iranian news agency. For his side, Director of Legal Affairs of National Iranian

Oil Company (NIOC), Ali Akbar Mahrokh, said that the draft of the new oil contract model is being prepared and its final version will be released in the near future.

In related news, Director of the International Affairs Department at National Iranian Gas Company, Azizollah Ramezani, said that the country's five-year economic development plan will help Iran retain its potential to export 30bcm/year of gas to Europe between 2016-2021, while another 50bcm/year are to be allocated for exports to the neighboring countries, IRNA reported. In light of implementing the optimization projects, 120mcm of gas more is expected to be added to the exports capacity.

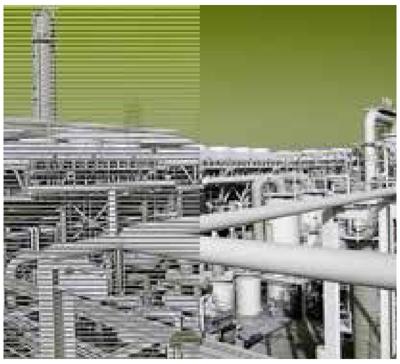
Saudi SABIC, Exxon to Build Petchem JV

A US Exxon Mobil affiliate and Saudi Basic Industries Corporation announced they are considering constructing a jointly owned petrochemical complex on the US Gulf Coast. The development would potentially be located in Texas or Louisiana near natural gas feedstock and would include ethylene and derivative units, Reuters reported.

Before investing in the joint venture (JV), both companies will conduct studies and work with local and state governments to pick a site with adequate infrastructure access, Gulf Business informed.

For his side, Youssef Abdullah Al-Benyan, SABIC Vice Chairman and CEO, has stated that the company focuses on geographic diversification to supply new markets, adding that "the proposed venture would capture competitive feedstock and reinforce SABIC's strong position in the value chain."

SABIC has said it was targeting North America and other markets to secure



feedstock and expand its presence in key markets to fuel its growth as petrochemicals producers in Saudi Arabia are constrained by gas supplies shortages.

The Irving-based company and the Saudi-based company have worked together for 35 years in chemical joint ventures in Saudi Arabia, and their joint rubber project in Saudi Arabia started last year.

Kuwait Mulls Privatization of Oil Sector

The Kuwaiti Ministry of Finance and Kuwait Petroleum Corporation are seeking to privatize the oil services sector as a part of the state's privatization program, reported Kuwait Times. Kuwaiti Government's Undersecretary, Khalifa Hamada, affirmed that these moves are to focus on oil service companies and not to include the OPEC member's production capability, according to Reuters.

Hamada did not set a specific date for the privatization plan, however, he said that the programs aim at offering the shares to the citizens and thus strengthening their role and the private sector contribution. The goal is to reduce the financial load on the state budget.

However, he revealed that Kuwait is planning to issue international bonds worth $9.94b before the end of the year. The ministry of finance is coordinating with the Kuwait Investment Authority on the bond plans and will begin negotiations with external parties such as advisers in September.

Undersecretary further added: "This move may be like the Saudi offering of a percentage of Aramco shares. Oil prices have dropped and indicators show the slump may last five more years. These forecasts are by most financial bodies including the World Bank and the International Monetary Fund, who expect oil prices will not exceed $50 a barrel, so we have adopted our reforms based on these figures."

Iraq to Witness Rise in Oil Exports

Iraq's oil exports are to witness a boost in July following two months of slump. Loading data and industry sources reveal that exports from south Iraq will rise from 3.18mb/d in June reaching around 3.28mb/d in July, according to Reuters. Despite a pipeline leak in the southern territory in mid July that induced a 12-day loading delays to cargoes, exports did not witness a sharp decline, according to an industry source, who added that cargoes "have an incentive to try to catch up on the delays." In addition, northern shipments of crude from fields in the semi-autonomous Kurdistan region have risen from 514,000 b/d in June to 550,000 b/d in July.

Morocco Approaches Russian Energy Investments

Morocco's Secretary General of the Ministry of Energy, Abderrahim El Hafidi, said that several investment opportunities were proposed to the Russian oil companies during a joint working group held in Moscow. The meeting aimed at exploring the opportunities for Russia to supply gas to the Morocco's domestic market. Earlier, the two countries planned to cooperate on LNG supply, gas infrastructure, and the construction of power generation plant. El Hafidi praised the presence of the Moroccan delegation among several large Russian companies including giant Gazprom and Rosneft, and added that recommendations will be taken after the meetings to strengthen cooperation between both countries in the energy field, reported Morocco World News.

Saudi Aramco Mulling New Clean Fuels Projects

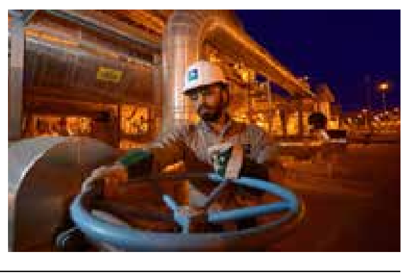
Aramco's CEO, Amin Nasser, stated that the company is studying plans for clean fuels project. The bidding deadline to build the clean fuels project at Aramco's biggest oil refinery in Ras Tanura had been extended for the contractors to file their projects in July, according to Reuters. Aramco is taking an environment-friendly approach by proposing a $2b scheme to remove sulphur from refined products to meet strict environmental standards. In line with this, Aramco has recently partnered with General Electric (GE) to install the kingdom's first wind turbine at the Turaif Bulk to generate renewable energy.

Tunisia's Energy Import Costs Increased

Tunisian government data revealed that energy import costs have witnessed an increase of 45%, standing at $2.5b, since 2010. Tunisia's oil production slashed over the period of six years by about 25%, reaching 63,000 b/d last year, reported Bloomberg. Meanwhile, the country's fragile economy affected energy production in Tunisia as only one exploration well has been drilled in the North African state this year, instead of the eleven initially planned. In 2016, IOCs have relinquished investments in the country influenced by political unrest and the fall of oil prices, Minister of Energy and Mines, Mongi Marzouk, noted.

Shell Demands Aramco to Pay $2b in Compensation

Shell has asked Saudi Aramco for up to $2b in compensation as part of the breakup of their giant Motiva Enterprises refining joint venture (JV) in the US, The National informed. The payment would be a compensation for the Saudi company that will retain a larger share of the nearly two decade-old JV. The split of the JV is expected to be completed in October, however, the disagreements over the payment could postpone the final date, Reuters wrote. Under the agreement announced in March, Aramco will take control of Motiva's largest US refinery in Port Arthur, Texas, and retain 26 distribution terminals.



Algeria's Energy Sector Witnesses Progress

Algeria's Energy Minister, Noureddine Bouterfa, has said that the state-run company Sonatrach expects a boost in its oil and gas production by 30% in 2020, reported Natural Gas Europe. Minister Bouterfa stated, that "efforts are being deployed in order to reach this objective within the targeted schedule."

Meanwhile, the North African country has increased its oil output at the Hassi Messaoud and Ourhoud oil fields over the last few months in an effort to compensate for lost revenue, Reuters reported. A representative from the state-run firm Sonatrach said that the output from the Hassi Messaoud field has risen from 420,000 to 470,000 barrels. At the Ourhoud field, output has increased from 100,000 to 125,000 barrels.

In addition, Sonatrach plans to dig between 32 and 50 wells at the Hassi Messaoud field this year compared to eight wells in 2013 and 2014, as the country is working to raise its hydrocarbon output following the crash in oil prices.

Algeria is also seeking foreign investors and partners in technology, yet Sonatrach would not wait out a two-year tender, instead it has opted for working directly with international partners already doing business there, Trade Arabia wrote.

Further, the Energy Minister also participated in the start-up of a 660 MW power plant to the northwest of Hassi Messaoud oil field.

In related news, Algeria's Tiguentourine gas plant will be put back in service, according to Director General of the gas complex, Kamel Aouaes, for the first time since a deadly militant attack in 2013 has taken place, Reuters reported. Plant managers said that the gas plant is producing currently 16mcm/d, with the aim to reach between 24mcm/d to 25mcm/d when the third and final section of the plant comes online. Aouaes stated that the plant has currently about 20% of the 500 employees who are foreigners, adding that the cost of repairing the plant was estimated at $90m. Security is handled entirely by the military that has a visible presence around the site.

Saudi Oil Minister: Above $50 Per Barrel Needed

Recently appointed Saudi Energy Minister, Khalid Al-Falih, said that an amount of more than $50 per barrel is needed to sustain investments in the global oil sector, Reuters wrote. He added that the excess of huge stocks are imposing pressure on the prices.

Accoding to Trade Arabia, Al-Falih said: "We need a price higher than $50 to achieve a balance in oil markets in the long term, and just as $50 is too low to sustain investment, prices in excess of $100 are too much. The optimum lies somewhere in between."

Even though the decline of oil output by roughly 1mb/d in countries like the US and Canada has brought the oil market to a re-balance, a long time is needed before it is fully accomplished, according to Al-Falih. He further said that "here are economic headwinds in some important markets and we hope this does not trigger a slowdown in global demand."

World's biggest crude exporter, however, has previously scheduled to boost crude production to 10.5mb/d in the next few months as higher summer temperatures increase demand for electricity needed to cool homes and offices. The country's output was 10.26mb/d in April 2016 after reaching a record high of 10.56mb/d in June 2015.

Iran to Launch First $12b Green Tender

Iran begins a green power build out as it plans its first tender for utility-scale renewable projects by the end of the year. The green power projects could attract investments worth of $12b by the time it is complete, reported Bloomberg.

Iran's Energy Minister, Hamid Chitchian, said that the country is looking forward to installing 5GW of renewable energy in the next five years. By 2030, Iran is aimed to reach an additional 2.5GW, Trade Arabia informed.

It has also determined 12 separate feed-in tariffs for renewables based on technology used and the power plant's size. The feed-in tariff system is to be used for projects of less than 100MW, while the new tender system will be used for facilities with higher generation capacities.

Iran's market has recently been courted with many investors targeting both oil and green power projects. However, Chitchian affirmed that money generated from oil will not be used in the green economy sector, adding that "all the investment will be done by the private sector, including local and foreign companies."

Meanwhile, as most of the country's power plants are more than 40 years old, the government is planning to invest a total of $50b in its electricity system in the next seven years to renovate its infrastructure.

Aramco Eyes $13b Fadhili Gas Plant

Saudi state oil giant Aramco announced it had signed four engineering contracts to build its Fadhili gas processing plant worth more than $13b, reported The National. The Fadhili gas project will be the first in Saudi Arabia to treat gas from onshore and offshore fields. The project is expected to add more than 5bscf/d along with Wasit and Midyan gas projects, raising Saudi gas production capacity to more than 17bscf/d by 2020. The plan for Fadhili gas field includes a 1,500 MW power plant, which will use 400 MW of electricity to power the gas project and send the remaining 1,100 MW to the domestic grid.

UAE: ENEC's Nuclear Plant Crosses 65% of Completion

The Emirates Nuclear Energy Cooperation (ENEC) is moving forward with the completion of the country's first nuclear plant, with the successful installation of Unit 3 Reactor Vessel (RV) at Barakah, Trade Arabia announced. Weighing over 400 tons and measuring almost 15 meters in height, the RV will eventually contain the controlled nuclear reaction that will generate safe, clean, and reliable nuclear energy that will feed into the UAE's national grid. ENEC said the project at Barakah is progressing steadily, pending regulatory reviews and licenses. The company further announced that the construction of Units 1 to 4 is now more than 65% complete.


PETROJET
THE PETROLEUM PROJECTS AND TECHNICAL CONSULTATIONS COMPANY - PETROJET
EPC CONTRACTOR
VIEW THE FUTURE
WITH CONFIDENCE
UNLIMITED
ACHIEVEMENTS & AMBITIONS
Head office
Joseph Tito Road, Haikestep, Heliopolis, Cairo, Egypt
P.O. Box 2048, Horreya, Heliopolis
Tel.: (+202) 26230740 (10 lines)
Fax: (+202) 26230788
E-mail:mbd@petrojet.com.eg
bd@petrojet.com.eg
WeCare
ONE OF THE EGYPTIAN PETROLEUM SECTOR COMPANIES

EIA: Global Oil Glut Persists

U.S. Energy Information Administration

The Energy Information Administration (EIA) said that the oil market is maintaining a global crude glut despite global demand for oil grew, non-OPEC production dropped, and crude stockpiles declined, Economic Times reported. According to EIA, crude stockpiles fell 2.2m barrels by the start of July, which is below a 2.3m barrel drop previously forecast by analysts in a Reuters' poll.

World's largest oil exporter Saudi Arabia and OPEC heavyweight produced 10.262mb/d in April, compared with 10.224mb/d a month earlier.

Iran is further considerably adding to the global glut as its crude export capacity at its main terminal on Kharg Island increased to allow eight tankers to load simultaneously. Tehran thus continues exporting extra barrels of crude in oil markets following the removal of oil sanctions, sparking an unprecedented market competition among top oil producers.

In mid June, Iran's Minister of Petroleum, Bijan Zanganeh, said in a parliamentary session that the country's crude oil output has crossed 3.8mb/d with over 2mb/d being exported to foreign destinations. Furthermore, Iranian top government economic advisory body has approved, in early July, the country's new oil and gas contracts in efforts to boost crude oil production through foreign investment.

Previously, Iran had strictly rejected an oil freeze plan suggested by OPEC members expressing determination towards increasing oil production with a goal to recapture its once lost global market share.

Economic Times further added that comments by Iran to export extra barrels of oil will ensure that the glut in the oil market continues to bother investors' sentiment.

Meanwhile, in related news, the International Monetary Fund (IMF) raised its 2016 growth forecast for the Middle East and North Africa after a rebound in oil prices, informed World News Report. Along with Afghanistan and Pakistan, the MENA region is expected to witness an economic growth that stands at 3.4% in 2016, compared to a previous estimation of 3.1%. The IMF preserved its growth projection for OPEC top oil producer, Saudi Arabia, standing at 1.2% in 2016 and reaching 2% for 2017.

Italy's Eni to Drill Offshore Cyprus

CEO of Italian oil and gas company Eni, Claudio Descalzi, has announced that exploratory drilling off Cyprus' southern shore will be initiated in 2017, according to Hellenic Shipping News. Officials from Eni and French Total have met with Cyprus' President, Nicos Anastasiades, to discuss exploring the three blocks. After discussions with the president, Descalzi confirmed that drilling will "for sure" start in three blocks next year.

To date, eight energy companies have submitted six applications for winning exploratory drilling rights in blocks 6, 8, and 10 in Cyprus' Exclusive Economic Zone (EEZ). The names of the companies are yet to be revealed, according to In Cyprus.

Cypriot Energy Ministry, Georgios Lakkotrypis, said that the three blocks are located close to Egyptian waters, the licenses will give the authority to the firms to explore in waters near Egypt's Zohr field where Italian energy giant ENI discovered the Mediterranean's largest ever offshore natural gas field, in August 2015.

Descalzi added that the eastern Mediterranean's gas potential is "becoming more and more important" following the recent discovery of significant gas fields in the Egyptian and Israeli waters, reported ABC News.

Cyprus aims to begin exporting gas and possibly oil from the fields by 2022.

USA Becomes World's Largest Oil Reserve

Recoverable oil reserves in the US have currently surpassed those in Saudi Arabia and Russia, making the US the world's biggest oil reservoir, according to an evaluation published by the Norwegian independent oil and gas data firm, Rystad Energy, reported RT.

The Guardian quoted the Head of Analysis at Rystad Energy, Per Magnus Nysveen, saying: "We have done this benchmarking every year, and this is the first year we have seen that the US is above Saudi Arabia and Russia." He believed that the rise was due to a sharp increase in the number of discoveries in the Permian basin in Texas over the past two years.

The analytical firm reached the conclusion by recording each country's economically viable reserves, distinguishing between those "in existing fields, in new projects, and potential reserves in recent discoveries, and even in yet undiscovered fields." The Oslo-based company found that the US had 264b barrels of oil in reserve, ahead of Russia with 256b barrels, and Saudi Arabia with 212b barrels of oil.

Rystad Energy also discovered that many members of the Organization of Petroleum Exporting Countries (OPEC) have previously exaggerated the size of their reserves in self-reported surveys.

India to Evaluate Gigantic Merger of 13 Oil Companies

India's government has begun the process of evaluating the prospects of an ambitious plan that aims to merge 13 state oil firms to create a giant corporation that is expected to have a bigger market value than Russia's state oil giant Rosneft and India's Reliance Industries Ltd, The Economic Times informed. According to NDTV Profit, upstream oil companies like ONGC and Oil India and downstream companies like HPCL, BPCL, Indian Oil, Mangalore Refinery and Petrochemicals (MRPL), Chennai Petro, and Numaligarh Refinery, are all targeted for the gigantic merger. India has previously considered a proposal of that sort a decade ago, but eventually decided that it was more reasonable to postpone the project.

China's Crude Oil Output Slips in H1 of 2016

According to the National Development and Reform Commission (NDRC), China's crude oil output dropped by 4.8% year-on-year to 100.45m tons in the first half of 2016, reported China Daily. Xinhua wrote that the drop came as the oil companies in China, the world's second-biggest crude consumer, reduce output due to low crude prices. The world's biggest refiner, China Petroleum & Chemical Corp. (Sinopec), plans on cutting production by 7.5% this year, while PetroChina, the nation's largest oil producer, aims to reduce output by 4.8%. Bloomberg added that both companies have said that they will shut down high-cost fields in 2016 after prices crashed to the lowest since 2003.

Europe Receives Second US LNG Cargo

A cargo of liquefied natural gas (LNG) from the US has arrived at Spain's Murgados LNG import terminal, making it only the second cargo to reach the European market since US LNG exports began at the end of February 2016, wrote S&P Global Platts. According to LNG Industry, the cargo was initially shipped from Cheniere Energy's Sabine Pass terminal in Louisiana, US in early July 2016. The vessel that carried the cargo, SestaoKnusten, is controlled by Royal Dutch Shell. It has a carrying capacity of 138,000cm. The vessel had entered the terminal after spending seven days circling off the coast of northern Spain.

Nigeria's Gas Reserves Increased

Nigeria's Department of Petroleum Resources has recently showed that the nation's natural gas reserves increased from about 189tcf to 192tcf as of 2016, with potential for up to 600tcf. The Department's Director General, Mordecai Ladan, added that domestic sector was relatively underdeveloped. This is due to hampered gas investments resulting from oil companies' recorded deficit. The country has still to seek ways to fully benefit from the natural gas endowment.

Chevron's Oil Producers Trade Section Managing Director, Clay Neff, said that "only about 25% of those reserves are being produced or are under development today. The remaining 135tcf of proven gas is not associated with any planned development." He further added that "the total power potential of these discovered but undeveloped reserves represents 68 years of 40,000 MW compared to today's power generation of approximately 4,000 MW."

Nigeria has one of the lowest power generation levels per person in the world despite being home to Africa's largest natural gas reserves. Recently, the nation was deprived of 40,000 MW of electricity generated from natural gas reserves, Punch reported.

Chevron's official explained that since 2010, the Nigerian oil industry received about $6b per year less than required to fully implement its joint venture plans including gas developments. This setback is due to the Nigerian National Petroleum Corporation failure to meet its funding share.

In related news, the Nigerian National Petroleum Corporation (NNPC) has weighed overall losses in nation's oil revenues in 2013 amounting to $518m due to inefficiencies in oil swaps and offshore processing agreements, reported Vanguard. Executive Secretary of Nigeria Extractive Industries Transparency Initiative (NEITI), Waziri Adio, said that Nigeria thus lost $211.88m to crude-for-product swaps and $306.16m to offshore processing agreements.

Further, Adio revealed that the NNPC and its subsidiaries have blocked an amount of $3.8b that was due to be paid to the Nigerian government. As a result, the Economic and Financial Crimes Commission (EFCC) will soon commence investigations into the matter.

Nigeria's oil market has recently been unstable due to a series of attacks on country's energy infrastructure by militants of the Niger Delta Avenger group, pushing crude production in spring to 30-year lows, which eventually brought the country's crude oil output at risk.

Petrobras Records High Oil, Gas Output

The Brazilian state-run oil company, PetroleoBrasileiro SA (Petrobras) has declared that new wells have helped push oil and natural gas output to a record high in June 2016 after falling to two-year lows in recent months because of platform maintenance, according to Reuters. Petrobras has produced an average of 2.9mb/d of oil and natural gas, within Brazil and internationally, during June 2016, 5.53% more than a year earlier and 2.35% more than in May 2016. Oil Price reported that the company will need to produce an average of 2.24mb/d over the next six months in order to jumpstart output and meet its production objective for 2016.

Canada Seeking to Boost Oil, Gas Output

Canada's sixth largest province, Alberta, has introduced two new incentive programs, directed at oil and gas companies, that aim to promote investing in new exploration and enhanced recovery of existing wells, reported CBC News. Under the Enhanced Hydrocarbon Recovery Program and the Emerging Resources Program companies would be paying reduced royalty rates on those projects for a longer period, according to Maclean's. Reuters quoted President of the Canadian Association of Petroleum Producers, Tim McMilan, saying that "these programs serve to recognize the higher risks and greater project costs of drilling in emerging resource plays and implementing secondary recovery schemes."

African Union Calls for Joint Energy Projects

African Union's (AU) Commissioner for Infrastructure and Energy, Elham Ibrahim, suggested that African nations pursue joint infrastructure projects to fill the prevailing energy gap across the continent, reported All Africa.

On the sidelines of the 27th African Union summit held in Kigali, Ibrahim stressed the importance of African countries teaming up to execute joint projects. "This is what can enable us undertake huge projects, as well as alternative projects. It is important to work together since resources in some countries are not adequate enough for large projects. That is why we are devising a strategy of joint infrastructure projects," The News Time cited Ibrahim.

She further pointed out that the countries that implemented joint projects have witnessed rapid growth, adding that the continent is suffering from inadequate infrastructure such as road network, railway access, and pipelines, which experts say has slowed integration and limited intra-African trade.

Additionally, Ibrahim urged African countries to use renewable energy sources in efforts to speed up power generation from solar, wind, and geothermal sources.

Ibrahim lauded regional efforts under the Northern Corridor Integration Projects, which gave rise to the Smart Africa Initiative currently with about 11 African countries. She noted that such initiatives had made it possible to implement the One Area Network.

Tanzania Launches Sustainable Energy Initiative

Tanzanian Ministry of Energy and Mining has launched the Sustainable Energy For All (SE4ALL) action agenda and investment prospectus to be achieved by 2030, according to SE4ALL website.

In collaboration with the UNDP, the initiative aims at achieving universal energy access, improving energy efficiency, and implementing power projects through which renewable energy would be used.

Minister for Energy and Minerals, Sospeter Muhongo, underscored the importance of focusing on energy supply to the population as a priority, instead to global supply. This strategic plans comes against the background that the Tanzanian population is rapidly increasing and will hit 87.6m by 2030 from a current population of 45m, the minister added.

In addition, All Africa informed that Muhongo highlighted the climate change issue as the Tanzanian government has carried the agenda to meet global demands with respect to minimizing greenhouse gases. To achieve this, the minister said, the country would focus on natural gas, coal, and hydro power as its main sources of energy.

The African Development Bank's (AfDB) Country Director, Tonia Kandiero, praised the initiative and announced that the African Bank would offer technical support for the ministry to achieve the target of the initiative.

Additionally, Tanzanian Mobisol has installed 50,000 solar systems for rural homes and businesses, enabling it connect over 250,000 beneficiaries to off-grid energy, reported All Africa.

Corporate Social Responsibility Offers Win-Win Scenario

By Gamal Shaban

Corporate Social Responsibility (CSR) has recently turned into a buzz word that is trending among all the savvy oil and gas companies all over the world. These companies are frequently caught publicizing the contributions they make to the economic development of their hosting communities, which focuses on ethical, philanthropic, and environmental practices.

The concept of CSR has been changing throughout the last two decades, however, the first mention of CSR came in the early 1950s, a few years after the birth of large corporations in the US. In 1953, Howard Bowen, the man who may be considered the father of CSR, addressed the societal expectations towards the business people. In his book Social Responsibilities of the Businessman, he preliminary defined CSR as referring to “the obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society.”

Nowadays, CSR is framed as an on-going business approach that focuses on how corporate entities can continue their pursuit of wealth creation in harmony with their surrounding environments and indigenous societies. It is considered as one of the top ten challenges that oil and gas companies come across during their lifespan, especially in the third world countries like Egypt, where there is a bad need for all three types of CSR.

CSR Challenges

The whole challenge lies in balancing between implementing ethical, philanthropic, and environmental CSR projects, while maintaining healthy relationships with all the company’s stakeholder groups, and pursuing the execution of the company’s interdisciplinary operations.

An important element that corporations of all activities and sizes should become cognizant of, for the sake of the profitability of their own business, is the opportunity cost that is associated with choosing to offer only some of more convenient CSR practices. In order to maintain profits that the companies strive for, they should instead rely on a combination of all three CSR projects targeting economic, environmental, and social welfare of societies.

As former President and CEO of the Montreal-based Rio Tinto Alcan, one of the world’s leading companies in aluminum mining and production, Travis Engen, once explained, investing in implementing all three types of CSR gets reflected on a company’s financial statement. According to a book by David Etken - Disaster Theory: An Interdisciplinary Approach to Concepts and Causes - published in 2014, Engen emphasized: “We know that the profitable growth of our company depends on the economic, environmental, and social sustainability of our communities across the world. And we know it is in our best interests to contribute to the sustainability of those communities.”

In other words, the more homogenous CSR projects a company provides, the less profitable it may become, as it may face major struggle in managing its good relationship with wider society that translates into company’s public image and reputation.

The global oil giant, Royal Dutch Shell, widely recognized as the leaders in the corporate citizenship, has proved that the social responsibility comes in different colors.

In 1995, Shell faced a huge scandal that was related to its lack of capability to meet its ethical responsibilities. The company was accused of complicity in the execution of nine activists that were striking against its operations in Nigeria. The activists’ deaths have started a wave of global protests against the Dutch-based oil and gas giant. As a result, the company has struggled with law suits and faced $15.5m in fines. Human rights violation reports accusing the company of involvement eventually led to a boycott of Shell’s products.

The deadly incident threatened company’s global reputation and public image, despite the fact that Shell might have invested in material improvements of communities’ infrastructure before. Yet, in this instance, it has failed to materialize its complex social responsibility with tragic outcomes.

Environmental CSR Actions

Another major challenge for oil companies relates to the environmental needs of communities, both locally and globally. Oil and gas operations often heavily pollute the surrounding environment, especially during a company’s exploration and production period, when huge volumes of hazardous chemicals are produced.

Therefore, the priority of environmental CSR actions should be taken into consideration with highest urgency in order for a company being able to strike a balance between its societal obligations and corporate interests.

In 2005, BP, another major oil company, failed to achieve this outcome. The company witnessed a dangerous environmental CSR related incident when a group of Colombian farmers filed a lawsuit against BP alleging that the laying of one of its pipelines on their land has caused them severe environmental damage as it resulted in soil erosion, spoiled crops, and fish ponds being starved out of water. The trial, which is considered to be one of the largest environmental legal cases, has lasted for almost a decade, as more farmers kept on bringing up their testimonies and demanding millions of pounds in compensations.

The lesson learned from the BP case strongly suggests that CSR practices should come as a complex package. Instead of choosing a set of CSR projects that companies may find most appealing in terms of their budgeting and PR profiling, it is paramount that energy actors seriously consider a variety of social needs as spelled out by each specific community and in line with global sustainable development goals.

CSR Win-Win Scenario

It is in this way that both the corporate sector and local societies can benefit from the CSR, which offers a space for a win-win outcome for both involved entities. It is one of the key CSR fundamentals to enrich both a company and its hosting community simultaneously. The intended win-win scenario entails that companies reflect on actual communal needs and address them in cooperation with affected societies.

The positive aspect is that the majority of the international oil and gas companies have already realized the importance of CSR seeking to avoid the negative balance sheets, damaging the environment, and eventually harming their global reputations. CSR has thus been portrayed as a crucial aspect of energy businesses.

This win-win scenario is yet slightly different in Egypt due to the fact that the country suffers from major environmental pollutions on a large scale. Oil and gas companies operating in the North African nation have, undoubtedly, contributed greatly to boosting local communities’ potential and capacities. Nonetheless, their input in terms of environmental projects comes in a limited scope. Instead, the community development programs that meet immediate social needs of impoverished areas have dominated CSR actions in the country. Yet, the urgency to promote the importance of sustainable development and environmental improvement in Egypt is growing at an alarming pace.

Therefore, it appears more relevant to reconsider single-minded societal material contributions in favor of a comprehensive approach to revitalize the environment with a focus on the scope of irretrievable losses that local communities have likely suffered from due to the nature of oil and gas industry operations.

As the global trend suggests, oil and gas actors seem to have been repeatedly stumbling upon the same conundrum regarding the CSR practices. Therefore, the recent calls aim for more comprehensive and balanced CSR strategies to sustain a win-win equation between the corporate entities and societies.

Where Environmental CSR and Profitability Intersect

By Salma Essam

The hydrocarbon industry involves intensive activities that have the potential to bring significant environmental transformations. Fossil fuel burning, incidents of oil spills, and the myriad of damages inflicted by the energy sector have long created on and off conflicts between oil companies and local communities. The prospects for the oil corporate-local community conflicts to exacerbate further are high when private companies' interests and indemnifications for affected people are perceived incompatible.

This raises the question of whether oil giants can contain the discontent in host communities amid operations, which is obviously a delicate balance to strike, while maintaining their profits, as the core of their investments protection strategies.

CSR for Profit Generation?

The oil and gas sector has been among those championing corporate social responsibility, partly due to the visible negative effects of day-to-day operations. However, unlike development agencies, oil firms tend to focus on profit-maximizing projects which are often seen as controversial in comparison to best practices, especially with regard to environmental concerns. Costly environmental CSR plays an important role in relation to profit generation, which, in a highly competitive market, is a major challenge that the industry, as a whole, faces.

Environmentally friendly practices necessarily inflate the oil companies' economics. For example, Shell Petroleum Development Company (SPDC) in Nigeria has provided $22.85 million of a total $71 million to local community CSR projects. Similarly, in light of preserving the unique ecosystems and biodiversity of the environments in which it operates, Baker Hughes had reserved $35 million for remediation at 71 sites, including $3 million for superfund liabilities. Cash spending totaled about $9 million, as the company's 2014 annual report on corporate social responsibility informed.

Some experts, therefore, argue that profit and efficient CSR projects are at odds. A jurist and an economist, Richard Posner, wrote in his book Economic Analysis of Law, that CSR makes little sense from an economic perspective as committing to any goals other than profitability will result in the firm's shrinking. The Wall Street Journal analysis - The Case against Corporate Social Responsibility - published in 2010 emphasized that if profit and social welfare are not aligned, corporate social responsibility will not be appealing since firms are not likely to act in favor of the public interest against their shareholders.

Putting forward costly CSR projects, even more so in the currently unfavorable oil price climate, is, however, as seeing only one side of the equation, which with time will likely prove less viable as a strategy. Oil and gas companies may instead find that investing in purposefully tailored environmental CSR actions can boost their revenues in a long term and better protect their assets.

CSR and Profits Go Hand in Hand

As CSR projects require a separate budget, does it mean that firms complying with social responsibility activities are not taking the route towards profit maximization? The answer is no. CSR has proved to be a profit-maximizing approach in spite of recurrent costs that social projects may impose. It has rather become a business enabler. Strategically planned environmentally-oriented CSR actions bring more profit for a company in lieu of publicly appealing initiative being just an act of temporary altruism or community service.

This rationale is, however, often neglected. Yet, to date, some executives have recognized the benefits of targeted CSR. They came to believe that CSR can, in fact, enhance profits and protect investments.

Baker Hughes has long monitored and set goals to improve company's performance in the area of spill avoidance, which, in turn, has minimized its environmental costs. Total spill costs were approximately $3.5 million in 2014, which recorded a drop of 15% compared to $4.1 million in costs in the previous year. Similarly, in their approach towards effective waste management, the net gain of the company from recycling efforts hit $17 million.

Indeed, companies that commit to dynamic, flexible, efficient, and sustainable CSR projects are more likely to attract higher gains and can ensure that their funds are being used properly. According to Business Ethics, the study - The Economics and Politics of Corporate Social Performance - published in 2009 revealed that, for consumer industries, greater corporate social performance is associated with better corporate financial outcomes. This includes investments in new technologies that protect both the environment and companies' resources.

BP Stiffens Environmental Preparedness

The global oil giant, British Petroleum (BP), a company with a track record of environmental damages that its operations inflicted worldwide, has adopted oil spill management measures. The company has stridden towards ensuring marine-friendly offshore drilling operations as well as reducing harmful greenhouse gases responsible for air pollution.

According to BP's official info graphs on its CSR, the company has most recently adopted an approach that is strictly testing oil spill response capabilities through newly developed technologies. In the Middle East, BP trialed the use of satellite imagery, a technology that monitors potential oil spills over large land areas and tracks clean-up response time. It has also tested the use of unmanned sea gliders to collect environmental data that would guarantee more effective and efficient responses in case of spills.

The company beats its own drum when it comes to mitigating air pollution caused by fossil fuel burning, getting its CSR in line with the global UN climate change obligations as defined by the Paris Agreement (COP21).

According to the 2015 figures published on BP's official website, greenhouse gas emissions (GHG) recorded a slump compared to the amount of gas flared in 2011. Direct greenhouse gas emitted stood at 48.9 million tons (Mt) in 2015 compared to 61.8 Mt in 2011, while direct and indirect carbon dioxide emissions were reduced from 57.7 and 9.0Mt to 45.0 and 6.9Mt, respectively.

BP is also implementing methane management projects through a process called green completion. This process was successfully used in the US to capture natural gas, which would otherwise be flared or vented.

ENI Reduces Environmental Risks

Similarly, Eni has mitigated its environmental impacts by adopting evaluations and projects for the protection of biodiversity. The company's report Sustainable Development 2014 Progress published on its official website reveals that Eni has developed the Integrated Biodiversity Assessment Tool (IBAT), through which it has mapped its proximity to protected areas and endangered species.

Phase 2 of the 'vilano biodiversity' project developed in Ecuador and completed in 2014 has shown that despite the sensitivity of the ecological context, the activities in the Agip Oil Ecuador (AOE) field did not change the stability of the ecosystem. The treatment of the primary impact of AOE's operations turned out to be feasible, effective, and relatively quick, and could potentially be extended to other similar operations. Furthermore, the project served to verify the feasibility and effectiveness of the best practices used to protect biodiversity and ecosystemic services in a sensitive area such as the Ecuadorian Amazon. What has largely contributed to the success of the project is that Eni has managed to secure a social license by involving local stakeholders such as the local organizations and the association of farmers throughout the project implementation process.

Adopting joint efforts by oil majors is another path to undertake. This shows serious involvement of oil companies in environmental responsibility. Eni is thus engaged as an external partner in BP's strategy. BP and Eni have built up an oil spill joint response scheme, which reinforces maritime safety by mitigating the risk of any impact associated with oil spills. As a result, in 2014, the volume of operational oil spills was reduced from by 38% compared to 2013.

These cases showed that structured, environmentally responsible, and ethical CSR initiatives prompt a win-win situation.

Making CSR a Business Advantage

The linkage between responsible social and environmental conduct on one side and profit generation on the other is a complex one. Business Ethics demonstrated that CSR can promote respect for the firms in the global industry, which will eventually bring higher revenues and boost personnel loyalty, according to the article - Does Corporate Social Responsibility Increase Profit? - published in 2015.

CSR investments thus help save money as they may increase shareholders' interest in a company in a long-term. Investments that reduce adverse environmental and social impacts and build productive relationships with external shareholders, aim to reduce liability and other risks as well. Helping society revitalize the environmental damages, as these CSR investments in the case of BP and ENI intend to do, may broaden stakeholders' interest that would pay off in today's transparent, connected world.

With increasing expectations placed on the energy sector, almost no large firm would want to be seen as un-engaging from CSR. It cannot be denied that companies failing to integrate effective socially responsible initiatives would expose their businesses at a considerable risk, whether CSR is deemed a force for good or merely a business survival tactic. Therefore, the recognition of environmentally responsible CSR as a business advantage should be deemed cardinal to instill acceptance among members of local communities, guarantee profits, and soothe criticism.

SOCIAL LICENSE AND OIL INDUSTRY NEXUS

By Salma Essam

Oil and gas companies' operations have often sparked the rage of the public protesting against damage that they caused to their environment. This has on myriad of occasions shaken the legitimacy of fossil fuel players. Energy companies have, therefore, found it essential to adopt corporate social responsibility (CSR) projects and initiatives in efforts to secure a 'Social License' within local communities and thus accommodate local, national, and international criticism.

Social License to Operate

The widely established notion of CSR strongly recognizes that the corporate sector, including energy firms, does not function in a social vacuum. CSR has thus developed within its scheme a new concept of social licensing, which is understood as an informal statement tacitly issued by local communities to energy players, as the Mining Facts Analysis published by Fraiser Institute argued in 2012. The then-Executive Vice President of British Petroleum, Dev Sanyal, eloquently expressed at PETEX 2012 Conference in London that "by contrast to oil and gas exploration licenses that are literal, tangible pieces of paper with signatures, the 'social license to operate' is a metaphorical concept, which indicates that companies cannot operate sustainably without the support of society."

A social license granted to oil and gas companies refers to the level of acceptance and approval by local communities on the side of governmental approvals. In essence, Pierre Lassonde, President of Newmont Mining Corporation stated in 2003 that "You don't get your social license by going to a government ministry and making an application for one, or simply paying a fee. It requires far more than money to truly become part of the communities in which you operate," as quoted by the President of the Society of Petroleum Engineers, Nathan Meehan, in his opinion column published by the Journal of Petroleum in 2016.

Gaining trust and legitimacy in a community, where a firm operates, is increasingly essential for oil companies to be able to carry out their business as usual and to guarantee their profit generation. Preserving a social license for a company's operations is inevitable as it enhances trust among local people, assures stakeholders of firms' good performances, and protects a company's reputation and brand. Indeed, a social license can also serve the overall CSR strategies since it secures effective use of companies' resources by adjusting budgets to reflect on existing demands formulated by local communities.

In functional democratic societies, informally issued social licenses are indispensable for political support. In this regard, as stressed by the Mining Facts Analysis, governments can endorse the case for oil firms in obtaining official operating ones. Deficiency in society's approval can otherwise cause costly delays to energy players' business that would eventually harm the economics of energy projects, as argued in the article 'Securing a Social License to Operate Is More Important Than Ever' published by Exploration and Publication in 2015. "These delays are expensive, carrying both tangible costs like penalties and additional taxes, as well

"The 'social license to operate' is a metaphorical concept, which indicates that companies cannot operate sustainably without the support of society."

Dev Sanyal, Former Executive Vice President of BP as opportunity costs," Manager of PwC's Sustainability Business Solutions, Britt Harter, was quoted in the article saying.

Therefore, the energy sector has largely adopted an approach to pursue visible CSR activities as a prerequisite for attaining a high level of recognition by societies, as 2013 Pacific Energy Summit statement on social licenses explained.

Society Centrism: Key to Social Licenses

Whilst social license cannot be tangibly controlled by oil firms or governments, there are number of actions that could be espoused in this sense. The Pacific Energy Summit has introduced a set of principles and activities that should be implemented within CSR approaches. Centered on an ethical environmental behavior of oil companies, these actions aim at building a friendly relation with the local community and thus earn them their social license.

First is undertaking projects in an environmentally responsible manner including compliance with governmental regulations as well as non-formal obligations. Second, companies should provide support for local communities and ensure that they are not affected by their projects. And third, they should address concerns and issues raised by local communities to improve their projects and impact of their operations.

Social licenses are secured when good relationships are established and further recommended interaction with local people, groups, formal bodies, and organizations are abided by, the Mining Facts report emphasized.

Chevron as Social License Pioneer

Benefits of a carefully tailored realization of energy projects are intended for both oil actors and local communities. The key notion is to establish a synergy among the two actors. It can be achieved based on a detailed assessment and evaluation of energy projects in collaboration with impacted communities.

Chevron, the US oil major, was one of the pioneers that wrote a success story of a social license with its liquefied natural gas (LNG) project in the Haisla's territory in British Columbia, Canada. The company eyed the development of Kitimat LNG production in 2005. In the course of preparations, Chevron signed an agreement with the Haisla Nation of British Columbia and entered a mutually supportive and precedent-setting partnership with the community. Assessment and negotiations of the project concluded with the finding that moving Kitimat LNG to a different location will prove beneficial to both the energy firm and the community as it would minimize negative environmental effects.

Chevron's willingness to change the location of the facility to an industrial area developed by Haisla was a success driver to the partnership. Chevron's Chief, Steve Wilson, said: "The Haisla acknowledge the openness Kitimat LNG has shown throughout the environmental assessment (EA) process to take Haisla interests into consideration. Our community has much to offer the project and will gain significantly from the opportunities it will afford our residents."

Involving the Haisla nation early in the implementation process has helped Chevron secure a partner in and an advocate for the project. Not only did it further LNG development in British Columbia, but it has also granted a social license to Chevron to operate in the Haisla's territory. In return, the Haisla nation has emerged as a beneficiary to the Kitimat LNG project through a range of gains in terms of economic growth, employment, and social profits.

Innergex: From Acceptance to Approval

Another social license success story emerged in the headwaters of Lillooet River, also in Canada's British Columbia. A developer of hydroelectric and wind power projects, Innergex, implemented a project in which it advanced hydroelectric facilities of more than 121 MW since 2008. Innergex has been engaging the aboriginal people of Lil'wat nation of British Columbia in the planning process and secured that they continued being involved in the processes throughout the environmental assessment study. The company's CSR approach aimed at gaining the approval of the Lil'wat community by getting their input regarding their interests and issues of concern.

In essence, Innergex put forward the objectives of the project including establishing a working relationship with identified first nations before or early in the environmental assessment process, facilitating their involvement in all stages of project assessment and review, and consulting them on the effect of the project on the aboriginal people. Throughout the implementation phase, the Lil'wats were updated about the project's progress, invited to periodical meetings, and provided with quarterly reports, and engagement tools. The community has, in addition, taken part in the environmental work associated with the project.

Eventually, the first nations moved from acceptance to approval of the project. Having been granted a social license, the company has boosted its capacities, outputs, and profits.

Innergex's approach to social license in this project underscores the leadership that the emergent renewable energy sector has in engaging local peoples and stakeholders in natural resources development.

The practice invites other oil and gas companies to pursue socially responsible behavior with direct, long-lasting effects on the wellness of communities and the environment.

"You don't get your social license by going to a government ministry and making an application for one. It requires far more than money to truly become part of the communities in which you operate."

Pierre Lassonde, President of Newmont Mining Corporation

Failed Social Licenses Doom Profits

Formulating an effective and efficient CSR strategy with regard to local communities' environmental concerns related to oil and gas companies' operations in different localities brings with it profits, achievements, and gains. On the other hand, a failure to secure a social license in local communities weighs risks of plunging capital and revenues of oil giants and can eventually place all business profits at risk, impact a corporate reputation and reduce company's market share. But how does it look like when a social license is revoked?

The case of BP's Deepwater Horizon disaster in the Gulf of Mexico in 2010, considered to be the largest accidental marine oil spill in the history, is an eloquent example. The BP oil spill as a result of an explosion on a deep water horizon oil rig has triggered harsh criticism and legal actions. Following the incident in the BP's Macondo Prospect, the US government placed a nine-month moratorium on all new deep-water offshore drilling. BP was fined to pay an amount of $18.7 billion as an environmental settlement for the US government and harmed communities.

Yet, this did not only affect the company itself, it impacted the entire sector. Other companies also lost profits and suffered delays, as explained by the Sydney Morning Herald article named Losing a Social License Can Hurt, published in 2011. Some firms even lost their viability. Texas-based Seahawk Drilling, a $300 million company that had no role in the BP disaster, filed for bankruptcy, citing the moratorium as the main cause.

More Resistance, More Loss

Stakeholders now have the ability to impose additional costs on companies over a lack of social approval. They can potentially affect conditions of financing if an energy player's position proves unsustainable due to raising resistance by local people and growing objections to environmental concerns over their businesses.

Local communities and environmentalists have effective tools to legally challenge energy projects, organize boycotts and media campaigns, or directly lobby their governments to ban oil giants' activities on environmental complaints.

It is against this background that environmentalists around the world have staged a series of direct actions against the fossil fuel development projects. This followed an objective to ban energy companies from carrying on their business detrimental to the environment, while global warming increases and the world burns.

In the United States, for instance, several congressional bills were passed banning offshore drilling in some areas due to the damage it had caused to the marine fauna and flora. Similarly, as a part of the global 'Break Free from Fossil Fuel' wave of action, American Filipinos in Los Angeles marched in the city of Bantgas protesting the fossil fuel industry, most recently in May 2016. In the United Kingdom, activists temporarily shut down nation's largest coal mine, according to an article by Zoe Carpenter published in The Nation in May 2016. In Australia, more than 60 people were arrested for blocking a rail line used to transport coal, while dozens more formed a floating blockade made of kayaks, sail boats, and surfboards in the harbor.

While the energy sector acts as a main pillar of the global economy, the mobilization by local groups in opposition to the sector can generate a wide array of both social and economic costs to industry actors, particularly, when these groups perceive that their interests and values have not been addressed or otherwise taken adequately into account. Yet, they can be greatly collaborative and help boost energy capacities of their communities under strictly observed environment protecting conditions, which would eventually baloon up oil firms' revenues.

Global growing environmental awareness calls for strategies that would sustain social license of oil companies beyond satisfactory degree of tacit acceptance. If oil players are to be serious about maintaining their long-term operations, they may wish to re-think more profoundly how their activities relate to social contracts at the local, national and international levels. In relation to socio-environmental concerns, they would be able to choose to reach beyond a singular CSR tactic as mere acts of philanthropy, and instead adhere to environment-friendly measures. In the current climate, this seems to be a crucial step to take.

CSR IN EGYPT: Balancing Environmental and Communal Needs

By Gamal Shaban

Oil and gas companies have been trying to showcase the corporate social responsibility strategies and their decisions considered to ameliorate the unhealthy practices, within their supply chain systems, that negatively affect the surrounding environment. Yet, the CSR practices by energy firms demonstrate a slight discrepancy between the offered societal services and the actual needs of local communities.

The case of Egypt indicates this gap in terms of environmental concerns. In the North African country, some state owned and international oil and gas companies portray CSR as an approach to give back to the society's social needs, yet they seem to have come in a rather homogenous way. The homogeneity of CSR strategies adopted by oil and gas companies in Egypt with a focus on philanthropy and ethical engagement stems from the existing challenges of the country in terms of sustainable development. However, their attention to the country's alarming environmental needs is lagging behind.

While Egypt might be in bad need of these philanthropic activities that aim at enhancing local services to people, the country also starves for direct and indirect environmental projects as the world's fifth most polluted nation, according to the 2016 pollution index published by the world's largest user contributed database, Numbeo. The environment oriented projects thus aim to lower the environment's unhealthy pollution levels that are continuously increasing, given the character of oil and gas companies' operations and their impacts, and maintain the country's natural resources for the coming generations.

Homogeneity in CSR

National and international oil companies (NOCs and IOCs) in Egypt tend to offer Community Development Projects (CDP) that revolve around three singular types of activities.

First, educational projects focus on material and technical improvements of educational facilities and training programs for the local inhabitants. These types of projects include renovating and equipping existing school buildings, constructing new educational institutions, and offering educational opportunities for underprivileged people.

Second, companies undertake medical projects that aim to improve the health care services. These types of projects include improving the quality of hospitals, building new health centers, and donating money, food, and medicine to charity.

Third, awareness raising projects that encourage people to become more conservative towards the energy they use. These types of projects include spreading energy conservation awareness campaigns through various media channels.

Two examples of well-known IOCs with conspicuous Community Development Programs in Egypt are Apache, the Houston-based petroleum company, and Dana Gas, the Sharjah-based oil firm. They have become proficient at investing in social action projects through the educational, medicinal, and informational services that they offer to their communities.

Apache has founded an initiative - Springboard that aims to meet the educational needs in Egypt. According to the company's website, Springboard's objective is "to provide educational opportunities to underserved populations." To date, the company has built 201 one-room schools attended by about 7,000 girls in Egypt's remote rural areas where females have scanty educational opportunities. The first of these schools was completed in 2004 in Abu Sir, a small village located 16 kilometers south of the Giza Pyramids. The program has currently expanded its initiative to target 1,000 schools; primarily, the initiative involved developing 200 schools. Apache and Springboard have been working with the Egyptian Ministry of Education on a continuous project that ensures a long-term success and sustainability of these schools. Hence, the company is continuously monitoring the student performance, furnishing the school supplies, and providing property maintenance, on a timely basis.

As for Dana Gas, the company has so far invested over $4m in bringing sustainable local development in the company's operational sites. In the past seven years, the company has successfully upgraded several local health centers and renovated schools. The company has fully upgraded the health centers and schools of Benban Ambulatory Center, Fares 2, and Al Soltan Abd El-Salam in Aswan, San El Hagr El Bahria, El Kasby Gharb, San El Hagar El Keblya, Tanees, and El Rest Primary School in Sharkia, Abu Al Akhdar in Dakahlia, and Sharbas Primary School in Damietta.

The projects that these companies deliver are all purpose-driven initiatives that succeed in making significant positive change within the Egyptian community by providing the local inhabitants with access to quality education and health care, which are part of the development scheme. While these are highly appealing to the individuals who live in the underdeveloped areas, a fundamental issue seems to be sidelined, namely the environmental responsibilities.

Environmental Responsibilities

The more the oil and gas companies expand within a country, the more the hazardous material and contaminating chemicals increase within the localities. Even though developing schools, hospitals, and awareness campaigns are needed, these can thrive in a long term only if the companies help in sustaining the Egyptian environment as well. The dif-

> *"Tharwa is continuously searching for the best practices to dispose its operational wastes away from the soil so that it would not damage Egypt's underground water resources."*
>
> *Health, Safety, and Environment (HSE) Manager, Amr Ziedan, Tharwa Petroleum Co.*

ferent types of pollution that oil and gas operations cause represent one of major challenges in the country.

As the oil and gas companies explore, drill, and produce their targeted volumes of fuel, heavily polluting the environment, the communities call for a significant shift in their CSR strategies to address the real threat to their living conditions. While the underprivileged members of local communities welcome compensations in terms of expansion of available social services such as job opportunities, school facilities, training programs etc., in theWWW long run, the communities should be included in the negotiations about needed CSR actions that would help preserve their surrounding and environment.

Therefore, and especially in Egypt, energy players should reconsider expanding their current CSR activities aiming at relevant scope of restoration and revitalization of the polluted environment. The notion of compensations for local communities within the CSR scheme are often pre-defined as appropriate, affordable, and temporary, however, they may need to be revisited in favor of sustainable, long-term, and efficient recovery.

Egypt is threatened by numerous environmental challenges, many of which complicate the efforts made to promote economic and social development of the nation. According to the governmental report, Egypt State of Environment, that was published by the Ministry of Environmental Affairs in 2010, the general primary issues are water quality and quantity, soil loss, air pollution, lack of recycling, and weak waste management systems. As long as these issues persist, reaching optimum community development results will likely remain unattainable.

None of Egypt's environmental difficulties is impossible to solve. However, the expenses of developing and implementing the adequate projects to solve these issues are expensive and time consuming as the great amount of time is needed before significant results appear.

These are the reasons why many oil and gas companies in Egypt prefer executing CDPs over environmental projects, as those are faster to execute and tend to receive more favorable positioning for the companies vis-à-vis the general public. Eloquently presented CDP projects seem to have built up an awareness strategy, which suggests that social services are the utmost that oil and gas companies would be willing to offer, which is not necessarily valid.

Remedy to Environmental Needs

In a search for viable alternatives, some oil and gas companies have been exploring new paths to contribute to sustainable development in Egypt. There is a pool of various interconnected direct and indirect potential projects that provide possible remedies for Egypt's environmental issues. Despite concerns over demanding funding, these projects suggest that environmental CSR actions may not necessarily result in a loss of revenues for oil and gas companies, rather provide a sustainable win-win climate.

The oil and gas companies can choose from direct projects that are usually considered by the big multinationals. This type of projects is implemented within a company's internal operating system in order to minimize the negative environmental impacts that are directly associated with the oil and gas production operations. Examples of these projects include developing systems that dispose the carcinogenic organic compounds and waste oil in an environmental friendly way, gas flare stacks that do not produce humongous emissions of methane, carbon dioxide (Co_2), and volatile organic compounds (VOCs), heavy duty transmission pipelines that are not vulnerable to sabotage, and water risk assessment tools that help in sustaining and sanitizing fresh water.

On the other hand, local companies and smaller corporations usually depend on indirect projects to meet their environmental responsibilities since they cannot afford developing or implementing sustainable technologies within their operation capacities. These indirect projects help the companies give back to the environment in a way that does not necessarily have to be within their business scope, thus make up for the pollution and the damage that they cause. Examples of such projects include transforming deserts and abandoned suburban areas into farmlands, promoting material recycling procedures, decreasing the levels of noise pollution, traffic congestions, and greenhouse gases within urban zones, diminishing the use of carcinogenic chemicals in planting, and decreasing the year-round irrigation that leads to the loss of agricultural land.

In this way, participating in preserving the environment through indirect projects helped minimize the drought risks, for instance, in America's most populated and third-highest crude oil producing state of California. In 2015, California regulators took immediate steps to respond to the drought risks that the state had been facing by ordering a dozen oil and gas wells to cease production over concerns that the wells might possibly be contaminating the groundwater. Oil companies, Chevron Corp. and Linn Energy LLC, have voluntarily stopped production at ten Central Valley wells as they believed that contributing to protecting California's groundwater in order to overcome the extreme drought is of their paramount responsibility. Nowadays, water in California is being carefully managed, thanks to the extensive pipeline network that the government has installed to serve the most populated and dry areas of the state, and the mandatory water conservation measures that it has also introduced.

In a similar manner as the state of California conducts its environmentally responsible activities, the Ukrainian government demanded its oil and gas companies to work hand-in-hand with the state to move to an environment friendly industry that meets the European environmental standards. In 2013, Ukrainian Minister of Ecology and Natural Resources, Nikolav Romanov, encouraged building a $60m plant that recycles used oil in the village of Borodianka in Kiev. Oilpro, a professional online network for oil and gas sectors that was designed specifically for knowledge sharing, wrote that the modern technologies used in this project are developed by Sequoia Energy & Environment. "Using 100% salvaged oil, the plant will have the capacity to process 80,000 tons of used oil annually. The used oil will be refined into high quality motor oil and sold to the public. Recycling of this used oil will help against environmental pollution, reducing harmful toxic chemicals and heavy metals from reaching nature."

"The preservation of the environment is no longer a luxury, but rather a necessity, as well as the optimizing of the use of natural resources."

Midor - Middle East Oil Refinery

As this shows, the governments and local municipalities play a major role in encouraging the environmentally responsible projects.

Environmental CSR Practices in Egypt

The positive impacts of these environmental projects on the oil and gas sector have been gaining prominence in some countries. Implementing such projects is viewed as a necessity and not as an option anymore. Some NOCs in Egypt have taken up this path.

One of the leading local companies in the country that already pursues noteworthy environmental practices along with its other ethical and philanthropic CSR projects is Midor, a crude oil refining and production firm.

Midor stated in a report that was exclusively sent to Egypt Oil & Gas that "the preservation of the environment is no longer a luxury, but rather a necessity, as well as the optimizing of the use of natural resources." In the report, Midor further admits that the oil and gas sector can potentially heavily contaminate the environment, thus the company aims to implement further projects that "maintain the safety and health conditions of the employees, production units, and surrounding community."

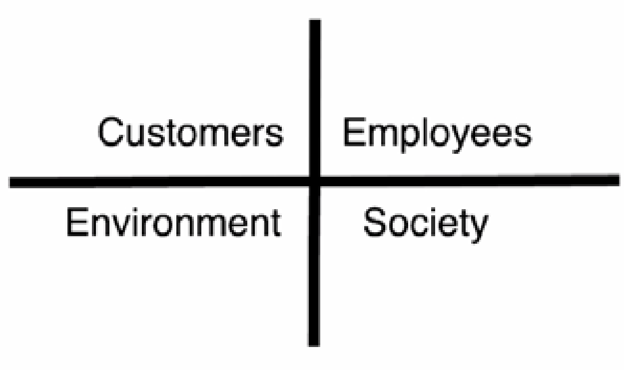
Therefore, in cooperation with the Egyptian Environmental Affairs Agency (EEAA), Midor is implementing an environmental monitoring project that "links the company's flares to the National Grid for Monitoring Industrial Emissions to detect emissions and assure their compliance with the legitimate maximum limits."

Another nationally owned company that is trying to maximize its environmental scope is Tharwa, an upstream operations company that was established in 2004. Egypt Oil & Gas had a chance to interview the company's Health, Safety, and Environment (HSE) Manager, Amr Ziedan, who provided insights into the environmental measures that the company undertakes within both its operational areas and main premises. He mentioned that regarding the operational sites, "aside from the obligatory environmental studies that Tharwa has to go through before initiating any projects at its concession areas, the company always makes sure that these studies are brought to reality and not just remain in the form of paperwork."

In line with its practical strategy, "Tharwa is continuously searching for the best practices to dispose its operational wastes away from the soil so that it would not damage Egypt's underground water resources," clarified Amr Ziedan. He added that the company also aims to save on the resources that are used in its daily operations at the offices. Its main concern is to reduce the water, electricity, and natural gas consumption at its premises.

On the other hand, a number of other oil and gas companies in Egypt are yet to implement relevant environmental projects as opposed to conducting activities with restrained developmental potential. The choice of a CSR strategy that would be reflected in the implementation of unmitigated CSR practices, especially within the energy industry, can further boost companies' outputs and performance.

Therefore, oil and gas companies in Egypt may wish to consider focusing on leveraging their CSR agendas to cover both the philanthropic and environmental responsibilities with equal importance, as opposed to offering unvaried CSR projects with limited outcome.



BEBA-EGA: Discussing New Gas Market Regulations

By Nataša Kubíková

The Egyptian government has been dedicated to venturing new gas market regulations under the New Gas Law, which was the topic of a high-profile event jointly organized by the British Egyptian Business Association (BEBA) and the Egyptian Gas Association (EGA) on July 19th, 2016 held in Cairo Marriott Hotel.

The objective of the presentation and following discussion among gas industry leaders in Egypt was to introduce new parameters of the gas market regulatory environment, which is being prepared by the Egyptian Natural Gas Holding Company (EGAS).

"Worldwide, the gas industry is becoming more liberalized," stated Eng. Khaled Abu Bakr, EGA's Executive Chairman and CEO of TAQA Arabia, who moderated the event.

He continued saying that "in Egypt, gas is the prime source of energy, representing 57%. It is against this background that Egypt's government and gas industry policy makers have considered how to develop the clean reliable infrastructure energy, how to raise the quality of life, and how to improve energy efficiency to achieve sustainable economic development."

"A clear answer to these challenges was to properly liberalize the gas market and develop strong, independent market gradually" in order to "contribute to the gas energy governance and advance effort towards optimizing gas utilization" in Egypt, according to EGA Chairman, who opened the floor for presentations.

Gas Regulatory Framework

An executive team of EGAS, under the leadership of Eng. Amira El-Mazni, EGAS Vice Chairman for Gas Regulatory Affairs, presented recent progress they made in the preparation on the new gas law.

"Egypt's commitment towards the reform of the Egyptian gas market took a few steps towards the development of a new regulatory framework to promote creation of a liberalized gas market, which is characterized by competition in the downstream gas segment," said Eng. El-Mazni. She further explained that "reasons for regulating the gas market are to encourage investments and infrastructure, facilitate additional gas supply, and diversify sources by introducing new suppliers that are eager to compete fairly for the benefit of the consumers, who eventually become free to choose their own [gas] supplier."

Currently, in the framework of Energy Sector Policy Support Program (ESP-SP), the European Union (EU) and Egypt sought to improve energy policy and regulatory climate in the country. Egyptian official representatives held a series of consultation sessions with various stakeholders in the course of 2016 on drafted documents in order to push forward the new legislation. In addition, "the EU launched a specific technical assistance to support the reform of the [Egyptian] energy sector followed by another rich program to complement these preparatory works until October 2016," noted EGAS Vice Chairman.

As a result of these efforts, "the emerging gas regulatory team has drafted a set of documents necessary to start the actual market operation under this new framework, which includes the new gas law to govern the proposed frameworks, network code, tariff calculation methodology, and licenses," she added.

The status of the new gas law at present is such that "after having been approved by the Cabinet of Ministers in October 2015, it has been reviewed by the State Council before its ratification by the parliament," as the EGAS gas regulatory team's head revealed.

The New Gas Law

The new gas law, as Eng. Amira El-Mazni stated, "is to govern the proposed framework applicable only for the downstream segment of the gas market, while the upstream sector will remain governed by its respective concession agreements."

The aim of the new regulatory framework for the Egyptian gas market is to establish a Gas Regulator that will monitor the functioning of the market in this new setting. "In addition to monitoring the market, the gas regulator's role is to set tariff methodologies for regulating activities, issue licenses, and resolve disputes," Chief of the regulatory team added. Therefore, a Gas Regulator is to be an independent entity that will abide by the principles of transparency and neutrality, while having legal powers and authority to perform its role satisfactorily.

Gradual Market Opening

As to the novelties outlined by the new legal document, "it introduces the principle of Third Party Access by defining the new market players, identifying their roles, responsibilities, and relations among each other. It allows for a better opening-up of the gas market over a period to be defined by the government," explained Eng. El-Mazni.

"The third parties access (TPA) to the transmission and distribution systems and to the customers is to be granted on non-discriminatory basis for licensed players to reach gas infrastructure upon payment of a regulated transparent and cost-reflective tariff approved by the Gas Regulator," she further specified.

Introducing new players into the gas sector dynamics will necessarily modify the current status in which "today's shippers are only EGAS and EGPC," pointed out Eng. El-Mazni.

While "EGPC and EGAS will remain supplying consumers and using the transmission system along with other shippers, they will enter into contracts with the Transmission System Operator," she elaborated further. "Suppliers will compete with EGAS and EGPC for the consumers, entering into direct sales contracts with them at the free agreed prices," she added. Together with shippers, EGAS and EGPC are thus committed to follow the Transmission Network Code and they will pay Transmission Tariff. "The shippers will also access the Distribution System following its respective Distribution Network Code and against Distribution Tariff," according to Eng. El-Mazni.

Transmission Network Code

Susan El-Gamal, Executive General Manager for Consumption Plans-Gas Network Operations Department at GASCO, explained that "Third Party Access (TPA) is the key principle around which the Transmission Network Code (TNC) was structured."

'TNC is a set of unified technical and commercial rules governing the relationship between the Transmission System Operator (TSO) and shippers, stipulating rights and responsibilities of each party, in accordance with international standards,' the presentation read.

In addition to the definition of the Gas Transmission System, nominations, measurements and physical and com-

> *"Egypt's commitment towards the reform of the Egyptian gas market took a few steps towards the development of a new regulatory framework to promote creation of a liberalized gas market, which is characterized by competition in the downstream gas segment."*
>
> Eng. Amira El-Mazni, EGAS Vice Chairman for Gas Regulatory Affairs

mercial balancing, one of the main content of TNC is capacity booking. Susan El-Gamal explained that Egypt's gas "transmission system capacity has reached 210mscm/d, while the line of the grid is around 7,050km of transmission lines." "The shipper will be able to book multi-annual - up to five years, annual, or infra annual transportation capacity, which will be requested and assigned at the Entry Points to the National Transmission System or the Exit Points from the National Transmission System," as she further disclosed,

"A clear answer to these challenges was to properly liberalize the gas market and develop strong, independent market gradually."
Eng. Khaled Abu Bakr, EGA's Executive Chairman and CEO of TAQA Arabia

The annual booking process will take four months. It will start on September 1st when the licensed shipper will request an annual firm capacity. On November 1st, preliminary annual firm capacity will be assigned, and by November 15th, the presentation of financial guarantees by shipper is expected. Once the assignment of annual firm capacity is stated by December 1st, the start of the new gas year will be launched regularly on January 1st, according to GASCO Executive General Manager El-Gamal.

The TNC also stipulates that capacity will be allocated according to shippers' requests, if quantities are available, or by a pro rata mechanism in cases of declined supply.

Transmission Tariff Methodology

The new gas regulatory framework further defines Transmission Tariff Methodology [TTM]. As Hatem Mahmoud, Financing & Investment Studies for Gas Grid Projects "Section Head" stressed, "we have been working for three years with the World Bank and EU experts to try to prepare tariff methodology that can be applied in Egypt."

"We have been working for three years with the World Bank and EU experts to try to prepare tariff methodology that can be applied in Egypt."
Hatem Mahmoud, Financing & Investment Studies for Gas Grid Projects "Section Head" at EGAS

According to preliminary formulations, a Gas Regulator is to set the methodology and basic parameters before the start of each regulatory period on the basis of certified data and calculation provided by the TSO. This entails that the Gas Regulator sets profile of allowed annual revenues for the network operator and approves actual transmission tariff calculated each year, as the presentation clearly stated. In addition, the legislative proposal accounts for 'an annual "reconciliation" between expected and actual revenues with a subsequent tariff adjustment,' Hatem Mahmoud clarified.

Mahmoud further explained that "the tariff calculation methodology is a two step process. The first step is determining the allowed revenue; the amount of money that is entitled for GASCO and for chief gas network operator to collect in the gas year to recover the investment rent and operating expenses [including depreciation]. The second is defining the tariff structure, it consists of two parts; the first part is capacity/commodity split percentage [which will amount to 70% and 30%, respectively] and the second is distance-related or postage stamp oriented tariff," which defines that users of the system pay the same tariff for gas transportation regardless of the distance.

As he continued, 'the objective [of TTM] is to facilitate effective provision of TPA on a non-discriminatory, transparent, simple and cost-reflective tariff principle with a goal to ensure recovery of capital and operating expenditures, which will allow efficient financing of the businesses and future investments.'

Shipper and Supplier Licenses

The process of licensing will be further amended in the new gas law, as Heba El-Shahat, Drilling Contracts "Section Head"explained. "Gas activities subjected to licenses are gas transmission, gas distribution, gas shipping, and gas supply," while "the two - Gas Shipping & Gas Supply - may be carried jointly by a single legal entity after being licensed by the Gas Regulator," she noted.

"The purpose of the licenses, in terms of scope, is to authorize the Licensee carrying out the shipping or supply of gas for the duration period of five years commencing on the date of license issuance. The license may be renewed upon the Licensee's request subject to the Gas Regulator's approval or be subjected to further amendments. An annual fee paid to the Gas Regulator applies," As she further stated.

Under the licenses, there are a number of common obligations both for shippers and suppliers to follow. According to Heba El-Shahat, the shippers and suppliers are to "follow the accounting guidelines applied in Egypt, and separation of accounts for shipping and supply activities." Among other obligations, she concluded, a licensee must also allow an agency to audit its accounts providing all other relevant technical and financial information required by the Gas Regulator and operators.

Conflict of Interest

Following the presentations, in the subsequent Q&A session, attendees from among key gas sector leaders and representatives discussed a series of involved challenges and contributed to the preparation of the final new gas law document.

Eng. Khaled Abu Bakr pointed out that the mechanism of power allocation should guarantee a fair and equal distribution of gas market shares among shippers and suppliers in the current liberalizing processes. On that account, Eng. El-Mazni noted that "as soon as the law is issued, the Prime Minister will

name GASCO as the Transmission System Operator," which would ensure that the authority is assigned in such a way as to avoid potential conflict of interest. As she added, "with respect to GASCO and its affiliation with EGAS, we have drafted a law that takes care of the issue by means of founding separate accounts for GASCO;" in order to differentiate the upstream and downstream sectors activities conducted by this entity.

In a series of enquiries, former EGAS representative, Eng. Ibrahim, also drew attention to EGAS' possible conflict of interest. Eng. Amira El-Mazni thus further affirmed that "in terms of conflict of interest of EGAS, being a supplier and a user of the grid, the priority for using the grid [will be given]. As we have seen, the booking and allocation is not a haphazard process, it is a scheduled process where all interested shippers will book the capacities they wish for in order to avail the capacity as requested," she clarified.

"The process should be controlled, and we will have a seasonal process when we will announce that we are ready for interested shippers to start booking the capacity," assured EGAS Vice Chairman, El-Mazni.

Upstream Sector Partners

Gas industry participants further pointed to the fact that the new gas law focuses on the downstream sector only. While "the proposed change is quite material, it will provide lot of opportunities for the different sectors in the industry," said BP's representative, Mohamed Taweel. He thus ventured an enquiry about the processes in which "the upstream sector can move from current highly regulated structures with the concession agreements set for long term gas arrangements into playing a part in the newly drafted structure either by taking a role as a supplier or a shipper."

Eng. El-Mazni affirmed that upstream partners are probably new entrance in the gas markets, "the mechanism would be, for those partners with the concession agreements, to include the clause allowing them to access the right of selling profit shares to them in the local gas market, with EGPC, EGAS or GANOPE as their partners."

"For those concession agreements that will not have this clause, they will need to revise this gas sales agreement in order to introduce this right and practice it," EGAS' Vice Chairman for Gas Regulatory Affairs concluded.

Liberalization as Gradual Process

EGAS Vice Chairman, El-Mazni further reiterated for the audience that "the liberalization process needs to take place gradually." Eng. Amira El-Mazni thus stated that "the regulator's main role is to monitor the gas market; it is not the party in charge of liberalizing the market, which is for the government to decide" how the implementation of new regulatory framework will be accomplished.

Therefore, as she elaborated, "the reform and liberalization process is formed by the government so that they can take necessary mitigated measures for the change until the completion of the process and maturity of the market" are both achieved.

In response to an enquiry by a Dolphinus representative, Mohamed Talaat Khalifa, who proposed a possible involvement of the Central Bank of Egypt in the process of seeking priority funding for the energy commodity and the proposed reform scheme, which necessarily requires foreign currency reserves, Eng. El-Mazni agreed. Yet, as she explained, the idea of an integrated communication pattern for different economic segments in the country to contribute to the debate is important, she also revealed that in her understanding "the government will not let go entirely" of the liberalizing processes for instance by involving the banking sector in it entirely.

She emphasized that "energy is not just an on-shelf commodity, it is a serious building block and it will affect all the industries and consumers directly and indirectly." Therefore, the necessary measures will have to be taken in line with this government's strategy.

According to Eng. El-Mazni, the intention is also for "the government to take care of all types of consumers [whilst in the process], not just those that cannot afford the free market prices of the gas, but also of all the industries. The government will make a decision if it opts for subsidizing certain industries or certain consumer sectors [to ensure that] the commodity is available at a fair market price."

Empowerment through Innovative Strategic Management

By Nataša Kubíková

Midor&Tharwa tandem appears resolute in its intention to enhance human resources capacities of the two companies in order to withstand the current oil price environment. Both teams continue implementing a tailored Leadership Development Program (LDP) in cooperation with Team Misr intensively.

The aim of the program "within the strategic oil and gas sector in the country is to build up a second generation of leaders that will be better suited to take over responsibilities" when the time paves the way for new business possibilities, Deputy General Manager of the training company Team Misr, Amr Helmi Sallam, said. He further added that the LDP, which "is lacking in most of Arab organizations," is a necessary prerequisite for oil companies to be able to achieve sustainability.

Strategic Management

The LDP structure, as it is outlined, promises significant improvements in terms of human resources (HR) development. It consists of several modules. Most recently, Midor&Tharwa have launched a set of courses within the first module – Strategic Management and Creative Thinking.

At the onset, they introduced participants to the concept of Strategic Management. Dr. Hanan Abd El Moneim, HR Executive General Manager at Midor, the key figure behind the massive HR development program, noted that the core of Strategic Management resides in three key elements – vision, mission, and objectives. Therefore, the training sessions focused on "the processes of formulating a vision, developing a mission, and elaborating achievable objectives for each and every department of the two companies for a year ahead," added Dr. Abd El Moneim.

"Strategic Management thus enables industry companies' leaders to meet the needs of greater empowerment within the organization," as Deputy Manager of Technical Planning Department at Midor, Ayman Elmohandis, who took part in the training, pointed out. The courses thus may boost the position of a company in both the local and global markets.

The most significant components of the Strategic Management courses, however, teach trainees alternative business approaches. One of them is the skill "to develop suitable criteria for choosing right objectives for our future as a company and our partner Tharwa, which are based on integrated analysis of the current environment," said Ayman Elmohandis.

Deputy GM of Team Misr, Amr Sallam, explained further the content of the courses within this module. They evolved around "the idea of planning for short and long terms, the concept of having SMART objectives, and the importance of forming a vision for the future."

The goal of the sessions was to practice new skills in strategic planning, which require capabilities to generate "a set of various alternatives on a board [matrix] and an informed skill to be able to evaluate them applying a strategic lens," said Amr Sallam. He further revealed that "Team Misr has brought to Midor&Tharwa new elements of the training with a focus on innovative techniques such as SWOT analysis and the Balance Score Card, the most advanced strategic management tool for a quantitative comparative analysis." Moreover, "the participants have also learned to apply the Boston Consulting Group matrix, which is useful for evaluating a set of different products by placing them in a matrix and assessing their value individually as separate business units," Amr Sallam concluded.

"The training provides something new as it is built upon up-to-date tutorials and relevant case studies from around the world. It thus aspires to modify the way of thinking among oil and gas industry leaders," emphasized Dr. Abd El Moneim.

Course Objective

The course presented further processes implicated in Strategic Management and Creative Thinking, yet, the core objective of the course was "to develop awareness about a hierarchy of strategic goals that can help an organization achieve inevitable coherence in its strategic direction," stated Ayman Elmohandis from Midor. In line with this, "the role of corporate governance that establishes a hierarchy between owner's interest and employee's interests is critical," explained Midor's Deputy Manager of Technical Planning Department.

This approach leads to considerably raising "awareness that can enhance a corporation's innovation strategy," Elmohandis added, which in return, can further boost company's outputs in terms of economic variables.

Joint Training Projects

Participants are also expected to identify joint training projects, which they choose to pursue. After completing the course, they return to their workplace and try to implement their newly acquired skills in a period of one month through pre-defined development projects related to their departments; be it technical, organizational, operational, or managerial.

At the training, participants are "required to apply all the relevant tools to analyze a problem [in their companies], reach to the root cause of the problem they wish to address, and develop alternative solutions, said Deputy GM of Team Misr, Amr Sallam.

Participants have to justify why they chose to tackle a specific area for development and assess concrete benefits that their intended projects would bring to their companies. It is therefore important that "we teach them to apply formal research tools on the projects," according to Amr Sallam. "In a final stage, they are thus able to evaluate different solutions in order to employ the best one," he added.

DM of the Technical Planning Department at Midor, Ayman Elmohandis shared his thoughts about the process saying that "instead of letting participants deliver different projects, which may not be relevant to our operations, we had the idea that we gather some of the main issues that our companies face. Each trainee then chose an idea and turned it into a project to develop it further, based on what s/he learned in the entire module."

"By the end of the course it was already established that there will be a project delivered by the participants either individually or in groups," Ayman Elmohandis, specified. Midor&Tharwa teams thus end up having between four or five fundamental projects that will be designed to improve structures and processes in different areas of the two companies.

This complex approach allows Strategic Management training attendees to develop their own innovative plans. According to Ayman Elmohandis from Midor, "we have hopes that the commercial department will succeed in developing ways to find new resources of income within the scope of our operations. We are thinking of introducing trading of products and storage as a supplement activity to our refinery and production projects. We will elaborate on it through the tools we have learned in the course to be able to see if it is feasible already now."

He further revealed that "representatives of the two companies' administration departments at the training were thinking about enhancing the organizational structures and job descriptions. They will conduct a case study in one of the departments to make necessary assessments."

The overall aspiration is "to use creative methods to develop the projects, and also to be able to support them in the future," said Ayman Elmohandis. "The idea of implementation processes for each project will be clearer with time," he noted.

"The training provides something new as it is built upon up-to-date tutorials and relevant case studies from around the world. It thus aspires to modify the way of thinking among oil and gas industry leaders."

Dr. Hanan Abd El Moneim, HR Executive General Manager at Midor

Real Time Contributions

The projects identified by Midor in the training modules will be needed as the company is planning to undergo a major expansion in the near future.

"In Midor, we are in the process of preparing an expansion; we are increasing the capacity of our production by 60%, from 100,000b/d to 160,000b/d. It is a huge investment. We are talking about $1.4b so far," revealed Ayman Elmohandis.

"Team Misr has brought to Midor&Tharwa new elements of the training with a focus on innovative techniques such as SWOT analysis and the Balance Score Card, the most advanced strategic management tool for a quantitative comparative analysis."

Amr Helmi Sallam, Deputy General Manager of Team Misr

"The time is critical for doing this [expansion] as there is deficit in supply in Egypt and the need for all the petroleum products is high to cover the local demand satisfactorily," said Elmohandis, however, other external factors and circumstances may likely affect the implementation of the training project.

Nonetheless, "the proposed investment plan is a necessity for us as a company," added Elmohandis. "The matter of expansion is crucial, it is essential, it is big," as he put it. The expansion objective is also important in line with most recent requirements that were introduced globally and oblige refineries to adopt the latest EURO V specifications for their products. "EURO V requires us to modify our products, and thus will lead our expansionist vision for us to be able to supply our products to the local and the Mediterranean markets as demand arises," Elmohandis revealed.

In Egypt, "our company provides about 40% of the local demand of diesel, gasoline 92, gasoline 95, jet fuel and other products. We are a huge player in the Egyptian market, whose demand for petroleum products is skyrocketing. In the last five years, we almost halted our export operations because of that. Therefore, it was a major decision to take this step now towards a plan to increase our capacities," explained Elmohandis from Midor.

"Strategic Management thus enables industry companies' leaders to meet the needs of greater empowerment within the organization."

Ayman Elmohandis, Deputy Manager of Technical Planning Department at Midor

"These decisions and steps that we are trying to take in order to implement our vision for expansion is the real application of the matter of strategic management and strategic change," said Ayman Elmohandis. "We are developing the vision and the mission further in a dynamic flow, trying to adapt to the current circumstances that are changing regulations and with them the entire business environment in Egypt," he concluded.

New Feasible Strategies

Participants from Tharwa had a positive response to the training that introduce them to "the processes of how to analyze and set a strategic plan for tackling problems in the company," said Sherine Sallam, PR Assistant General Manager, one of the attendees from Tharwa.

Furthermore, as Sherine Sallam confidently stated, the program succeeded in showing different useful tools to apply strategic planning. "We know how to make our objectives realistic. This is the key as it is hard to materialize certain goals and targets. We trained techniques how to think out of the box, and how to apply the presented tools such as how to formulate an economically feasible strategy and find solutions to different problems. This will replace the practice in which writing up a set of targets was the key element, however, these were not realistically achievable," Sherine Sallam shared her positive evaluation of the module.

In addition, Tharwa will also likely benefit from the Strategic Management module in a long run. In terms of training projects for Tharwa, they formulated one that can produce realistically applicable solutions for instance in the area of budgeting in PR department, as Sherine Sallam noted.

"The plan is to alter the existing budgeting structures built on an old model," while reflecting on the processes and techniques of Strategic Management, she said, adding that "previously there has been no clear strategy, and the company has expanded in terms of performing more activities, having more employees, seeking more benefits. Yet, these are currently not existing at Tharwa's PR department," revealed company's PR Assistant GM Sallam.

It is therefore within her department that Sherine Sallam will seek "to build better benefit structures for employees, introduce strategic planning for what we need for the next five to ten years in order to develop a successful company. This will come with larger inputs that promise more safe employees with more benefit packages that will make people's jobs more interesting."

As she concluded, the training offered participants an opportunity to absorb how productive the process of creative thinking is as they had a chance to observe new business tactics and "develop ideas for different business activities [still feasible and even beneficial] despite the fact that the price per oil barrel dropped. In Tharwa, for instance new opportunities for some of our concessions emerged in the stock exchange, or by diversifying our outputs," Sherine Sallam noted.

There is no doubt that Tharwa will thus also likely benefit from the Strategic Management module in a long run.

The evidence of this real-time implementation of Strategic Management and Creative Thinking skills is thus convincingly showing that benefits of similar training modules are beyond just useful. They are essential. As they become visible almost immediately, it can be expected that in a long run the potential of the entire Egyptian oil and gas sector will likely boost further.

Transfer of Knowledge

The courses, held in the premises of Tharwa, were organized as a series of debates among participants from the two companies. The Midor&Tharwa duet clearly demonstrated that there exists a large potential in creating friendly environment for open discussions.

The joint practical approach adopted by Midor&Tharwa comes as a pioneering attempt. "It is a new form of cooperation between petroleum companies Midor and Tharwa. It is considered as a forum that included different perspectives," noted Ayman Elmohandis. Such a friendly platform is thus likely to generate an enormous space for "an exchange of ideas and thoughts about what can be done in the current industry environment," as he added.

According to Dr. Abd El Moneim, "trainees are very cooperative and you can see, already in the course of sessions, a beneficial transfer of knowledge among participants" that are no longer divided into a Midor group and a Tharwa group, but rather work to merge the differences in a search for common solutions.

The key unifying element is to learn a new skill "to open your mind for exploring new possibilities," said Midor's Department's DM, Elmohandis. "Usually in

trainings in the petroleum sector there is no major opportunity to be sitting down in a joint discussion and interact between two different companies. This is one of the key benefits of the course," noted Ayman Elmohandis. Openness among participants emerged step by step, as a process of snowballing, when people slowly started producing ideas, commenting on each others' inputs in both sectors; as Midor is a refining company, and Tharwa is an exploration and production firm," he clarified.

"Introducing an integration of discussions and theoretical training will help facilitate the matters of change in the future for both companies," said Midor's attendee, Ayman Elmohandis. He further stressed that "the strategic management is a continuous and dynamic process, because important issues related to it evolve around managing individual processes, while simultaneously trying to reach a desired vision for a company as a whole."

Vision for the future

The program feeds into "a global trend to enhance employee's skills through continuous education schemes, which is essential in order to prepare a company to face its competition," as Ayman Elmohandis further explained.

The success of the Midor&Tharwa story rests on a variety of internal and external factors. The Heads of both Midor and Tharwa showed their support for the LDP, without which the implementation would see major obstacles. Team Misr's leader, Amr Sallam, therefore, cannot hide his positive surprise that during the training sessions, "both CEOs came to the training rooms, talked to people, and stressed the importance of this education scheme."

Immediate, positive effects of the training program, which the two companies adopted for the first time, were unmistakable, elaborated Dr. Abd El Moneim, when "Midor and Tharwa employees understood that we care about them and prepare them for the future by showing them a plethora of available opportunities."

The training environment thus introduced different cultures of internal governance in the two companies, which was previously an unusual sight in the Egyptian oil sector, as participants engagingly disclosed. Therefore, having positive expectations for companies' future success in the local and global markets are no longer reduced to mere hopes, rather, through the Leadership Development Program, they have transformed them to become tangible and achievable strategic visions.

ANDREWS KURTH MIDDLE EAST

RE-ASSESSING RISK AVOIDANCE STRATEGIES IN LNG CONTRACTING

By Mark Thurber, Partner, Andrews Kurth LLP

Despite the tsunami of power generation development that is currently underway throughout the world and dependent upon renewable energy technologies, more traditional thermal electricity generation strategies are still in play for a number of reasons.

The first is familiarity of technology. When total reliability and short development curves are required, governments are reluctant to move too far off of the main fairway. Some experimentation is acceptable, but there is a comfort zone of proven technology and development methods that is currently occupied only by the traditional fossil-fuel technologies. Accordingly, most governments, even in the current post-COP21 environment, are satisfied to maintain a base of traditional fossil-based generation capacity.

The second is grid reliability. In Egypt at the moment, for instance, there are discussions just underway to improve the breadth, reach, and flexibility of the national grid, and to make it more stable to accept higher proportions of non-base load generation such as wind and solar. These efforts are important to Egypt's future, but there remains the need to bridge the gap as renewable energy continues to develop prior to taking a more prominent foothold, thus ensuring that electricity quantity and reliability is maintained, if not improved.

The third reason is cost. Under a fully base-loaded analysis, fossil fuels are cheaper than renewables, and are expected to remain so for at least in the short and medium terms. Indeed, even in the current environmental emphasis on renewable energy, the most common model for efficiency and reliability is to combine renewables with fossil-based base load technologies; accordingly, there remains a significant role for thermal generation for the foreseeable future.

The most inexpensive and politically neutral fossil-based technology is gas, which though abundant, is not universally available in all markets – it must be transported through pipelines or as LNG to reach the burner tip. Despite these transportation inefficiencies, several countries throughout the world are dependent on LNG as a primary source of fuel for electricity generation.

In some cases, LNG purchasing strategies are a permanent part of a country's fuel acquisition strategy. Japan comes to mind, where there is no reasonable prospect of fossil fuel independence at any point in the foreseeable future. In other countries, LNG forms a bridging strategy to an eventual heavy reliance on renewable and nuclear generation, some GCC countries being prime examples. Other countries simply see fossil fuel as their long-term base load strategy and consider LNG as their fuel of preference, even though many renewable alternatives are available; Brazil is an eloquent example. In other selected cases where gas reserves are available but not fully developed, including Egypt and Pakistan, LNG purchasing arises out of a bridging strategy, a way to supply gas-fired generation assets while awaiting domestic supplies to be commercialized.

Economies, which are awaiting their own supply of gas, are frequently also concurrently contending with shortages of foreign reserves with which to purchase dollar-based fuel from abroad. In other words, price is king. In such countries, every dollar that can be saved on an LNG cargo is a precious resource that can be deployed elsewhere.

How to maximize this opportunity and minimize the cost? As is well known, LNG pricing and terms of delivery are currently at a historically soft level. Nevertheless, LNG suppliers are invariably large, sophisticated enterprises, well-equipped to continue and even expand their businesses in a down market. That said, such suppliers are being found increasingly flexible and creative, to arrive at new contracting strategies that benefit both sides. Whereas in the recent past it could be difficult or impossible for a buyer with lower sovereign ratings than the East Asian monoliths to even get a return phone call or otherwise seriously engage entrenched suppliers, most such suppliers are not only willing to sell LNG to less traditional buyers, but are willing and able to discuss certain terms in the agreements that have traditionally been assumed as inflexible and axiomatic within a gas supply contract.

Buyers, by showing flexibility on their side as well, can leverage this situation to obtain levels of price discounts that are potentially out of proportion even in the current soft market. To the extent a buyer is able to show flexibility in some of the key contract terms, recent experience has shown that there is room in the current market to further shave the purchase price for LNG. More than some competing buyers, sovereign purchasers with their access to alternate fuel supplies, lack of counter-party contract penalties or financing restrictions, and ability on the national grid to absorb swings in dispatch response, can find themselves in a favored position to offer flexible terms to LNG sellers.

Any material term in an LNG contract is open for negotiation, but special attention should be directed to the following clauses as key candidates for buyer flexibility in exchange for lower LNG pricing:

- **Supply Penalties** -- Most LNG purchase and sale agreements require the seller to provide cargoes in accordance with a delivery program that is established annually in advance of the contract year. This obligation includes timing and quantity components, and in the past has been invariably paired with penalties against the seller for default. As to timing, it is worthwhile to suppliers, who more and more are conducting business on a worldwide portfolio basis, managing a fleet of tankers, having multiple points of origin, destination, and varying schedules, to possess the flexibility to delay a cargo delivery. If the purchaser can absorb a late cargo then pricing flexibility will usually follow. Perhaps even more importantly, if a purchaser has the ability to either forego a cargo or to accept an extra cargo, this optionality can be valuable to a supplier and it is also likely to be reflected in lower purchase prices. One such structure allows a combined put/call option in favor of the supplier, i.e. the ability to "put," or sell, one or more extra cargoes in a contract year to the purchaser, combined with the ability to "call," or fail to deliver to the contracted purchaser one or more contracted cargoes. Another variant is providing the supplier with the optionality of early departure from the unloading berth, prior to filling the FSRU or onshore storage capacities. This allows the supplier either to mitigate risk under more restrictive contracts with other LNG buyers, or to take advantage of temporary and fluctuating market conditions in other delivery destinations. Often a supplier will offer to return with additional cargoes prior to depletion of the buyer's inventory, making this a risk that a sovereign buyer can assume with few operating consequences.
- **Force Majeure** -- It is a basic tenet of LNG supply contracts that buyers and sellers are excused from performance under contingencies that are beyond their control, particularly as relating to natural disasters such as storms, earthquakes, and fires. A buyer that is able to offer continued fixed payments to its supplier, despite experiencing force majeure events that prevent or delay its performance, would be expected to realize price savings on the purchase of LNG, particularly if the same buyer is able, for similar reasons, to accept force majeure interruption on the seller side. In reality, the delivery of LNG cargoes is more susceptible to force majeure interruption than is the on-shore receipt of such cargoes, putting most buyers in a position to accept a greater degree of force majeure exposure. Particularly if an FSRU is deployed, force majeure on the receiving side is less likely to express in an extensive or extended footprint. For instance, pipeline ruptures are normally of temporary duration, and infrastructure failure in one part of a country, while inconvenient, does not typically imply widespread failure of the grid. There are usually workarounds, and buyers willing to assume this degree of flexibility can trade it for consideration in the pricing clause.
- **Term** -- Although the concept is still under debate, the weight of opinion is that a longer-term contract will be priced lower than a shorter-term sale, referred to in the commodities markets as a "contango" forward pricing curve. Notwithstanding currently low LNG prices, which some see as expressing a tendency toward a lower price in short-term rather than long term sales, the better opinion seems to be that (i) there is a lot of gas currently available but still shut in due to demand constraints, with much more still available to come on line, and (ii) a seller can plan its business more effectively if it has locked in a significant customer for 20 years instead of 5, even if pricing is not optimum. Thus, a buyer that is able to offer long-term purchases will likely see more flexibility in the pricing clause than a buyer bound by shorter-term considerations.
- **Quality** -- Some buyers are able to offer flexibility on the quality of LNG they are able to accept. For instance, some types of gas engines, particularly reciprocating engines, can burn fuel over a wide range of specifications, both as relating to heat content and as to contaminants. If most of the gas from a particular LNG transaction is being targeted to power plants, having flexible fuel requirements, then sellers are able to supply that particular contract from a wider range of supply sources, reserving their contracted supply sources, which meet more stringent quality requirements for other buyers that have not granted the same flexibility. Conversely, if a buyer occupies a niche in terms of its required specifications, even if narrow, it may be able to nevertheless identify a seller having access to that particular tranche of LNG supply, which is not able to readily sell it to other markets without preliminary treating. In either case, the seller saves money, resulting in pricing flexibility in the LNG supply negotiation.

The foregoing comprise a few of the terms that can be put into play by a flexible buyer and seller to reach an optimum result for both sides. Not all of the terms are available to every buyer to offer as concessions, and not all of the buyer's flexibility represents equivalent value to every seller. But by candidly and realistically re-assessing the risk avoidance strategies traditionally assumed by most buyers and sellers as being foundational to their risk management, innovative parties can achieve many of their objectives in a modern LNG supply negotiation.

EGYPS2017 Eyes to Generate Business

There is a great deal of industry interest and excitement for EGYPS, the very first Egypt Petroleum Show set to take place from the 14th – 16th February 2017 in Cairo, Egypt.

The Egypt Petroleum Show is co-organized between dmg events the organizer of Gastech in Asia, GPS in North America, and ADIPEC in Abu Dhabi, and ACG-ITF one of the leading exhibition companies in Egypt. EGYPS 2017 is the first and only oil and gas event of its kind taking place under the Patronage of His Excellency President of the Arab Republic of Egypt Abdel Fattah El Sisi.

"The event has so far received a tremendous response across the whole of Africa and Europe, following the discovery of the supergiant Zohr field offshore Egypt and is being billed as 'The gateway to Egypt's new oil and gas opportunities'. This has generated huge amount of interest among both local and international exhibitors," said Salman Abou Hamzeh, event director.

Generating business

The event is fully supported by the Ministry of Petroleum & Mineral Resources and His Excellency Tarek El Molla, the Minister of Petroleum and Mineral Resources of the Arab Republic of Egypt, who is himself the Chairperson of the event.

The exhibition floor is spread across three halls and is selling out fast with over 60 leading players from the oil and gas industry having confirmed their participation. Some of the confirmed exhibitors include NOCs such as EGAS, EGPC, Ganope, ECHEM, MIDOR; IOCs such as ENI, BP, ExxonMobil, Apache, Edison; service providers such as Schlumberger (Gold Sponsor), Halliburton (Silver Sponsor), Baker Hughes and Weatherford.

EGYPS has also attracted international participation from various countries such as DNV GL and Jotun Paints from Norway, Tubacex, S.A. and Tubos Reunidos from Spain. The South Korean firms of Elyon Industry Co and Hanshin Indus Co will also be present.

The event will see a number of country pavilions from the United Kingdom, Italy, China, UAE, and India.

Technical Conference

EGYPS will have a strong and strategic conference that will see 28 technical conference sessions taking place across three days. Over 100 technical expert speakers are already confirmed (9 sessions per day, 4 speakers per session). The technical sessions cover 10 technical categories (e.g. upstream, midstream, downstream).

The Technical Conference is supported by 63 technical committee members from over 26 companies who have reviewed over 600 abstracts from 42 countries during the selection process.

Unique features

EGYPS will host unique features such as Women in Energy, Petroleum Club and the Graduate Program.

The EGYPS 2017 Women in Energy Conference will facilitate and propel the discussion to create an action plan for driving more opportunities for female engineers and professionals in the Egyptian and North African energy sector.

"The need to strategically drive gender parity in the global energy sector is critical and pressing," said Claire Pallen, conference director. Pallen added: "The conference will celebrate the active and growing role of women within the oil and gas sector. Dedicated panel discussions; live on stage interviews and formal presentations will take a look at the lives and careers of women in upstream, midstream and downstream strategic and technical positions and the opportunities that lay ahead."

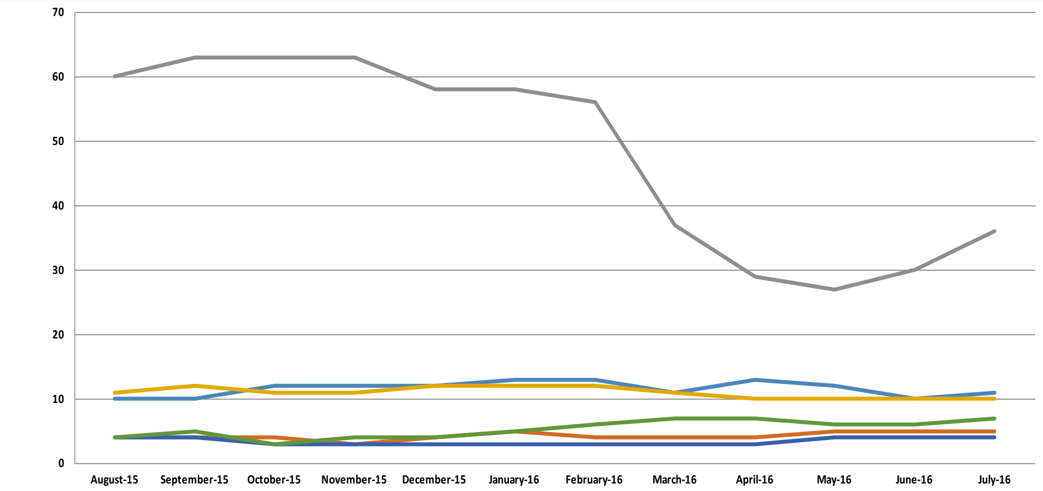
Ms Amira El Mazni, Vice Chairman for Gas Regulatory Affairs, Egyptian Natural Gas Holding Company (EGAS) is the official Ambassador for Women in Energy.

Another unique feature for EGYPS 2017, sponsored by ExxonMobil, is the Petroleum Club, known as the EGYPS Petroleum Club. This is an exclusive membership for oil and gas executives, providing a private environment for industry leaders to strengthen existing connections and forge new ones.

The EGYPS Graduate Program is a fantastic opportunity for both students and graduates in disciplines which lend themselves to the oil and gas sector. The Graduate Program will provide three valuable days of career advice, guidance, and training. Experts will be on hand to provide valuable training and knowledge sessions, which will help to make attendees stronger candidates for future employment.

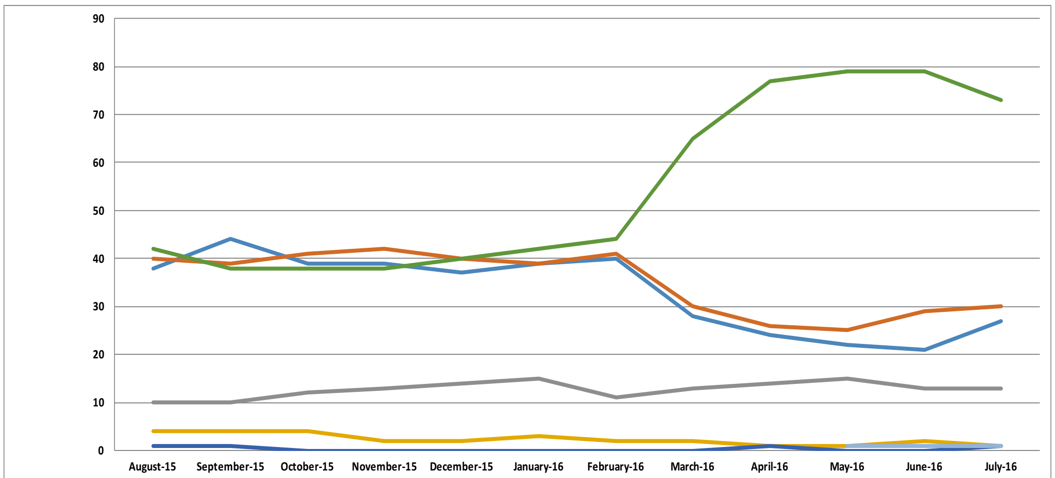
For any more information on EGYPS visit us at www.egyptpetroleumshow.com or email us at egyps.sales@dmgeventsme.com.

Changes in Rigs by Area- August 2015 to July 2016



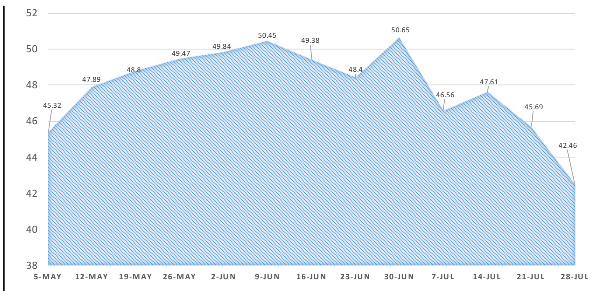
	August-15	September-15	October-15	November-15	December-15	January-16	February-16	March-16	April-16	May-16	June-16	July-16
G.O.S.	10	10	12	12	12	13	13	11	13	12	10	11
Med. Sea	4	4	4	3	4	5	4	4	4	5	5	5
W.D.	60	63	63	63	58	58	56	37	29	27	30	36
Sinai	11	12	11	11	12	12	12	11	10	10	10	10
E.D.	4	4	3	3	3	3	3	3	3	4	4	4
Delta	4	5	3	3	4	5	6	7	7	6	6	7

Changes in Rigs by Type - August 2015 to July2016

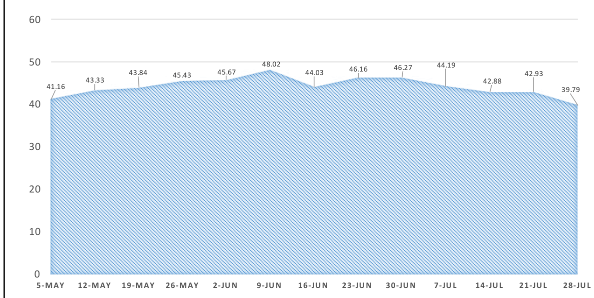


	August-15	September-15	October-15	November-15	December-15	January-16	February-16	March-16	April-16	May-16	June-16	July-16
Land-Drilling	38	44	39	39	37	39	40	28	24	22	21	27
Land Work-Over	40	39	41	42	40	39	41	30	26	25	29	30
Jack-Up	10	10	12	13	14	15	11	13	14	15	13	13
Semi Submersible	4	4	4	2	2	3	2	2	1	1	2	1
Fixed Platform	1	1	0	0	0	0	0	0	1	0	0	1
Standby/Stacking	42	38	38	38	40	42	44	65	77	79	79	73
Drillship										1	1	1

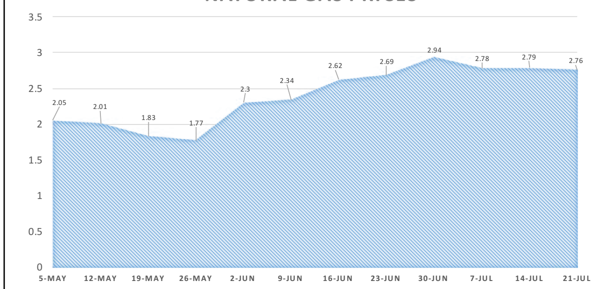
BRENT PRICES



OPEC BASKET PRICES



NATURAL GAS PRICES

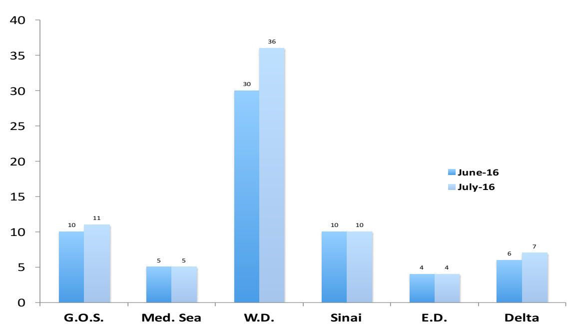


Production - June 2016

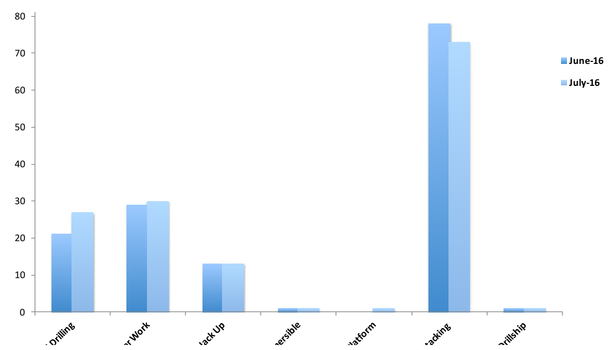
	Crude Oil	Equivalent Gas	Liquified Gas	Condensate
Med. Sea		9738929	187618	631850
E.D.	1897054	17500	2870	1269
W.D.	9525453	7292679	650747	1492034
GOS	4167415	649286	243199	68533
Delta	31933	3583750	144029	283715
Sinai	1847950	1786	42914	24010
Total	17469805	21283930	1271377	2501411

Unit: Barrel

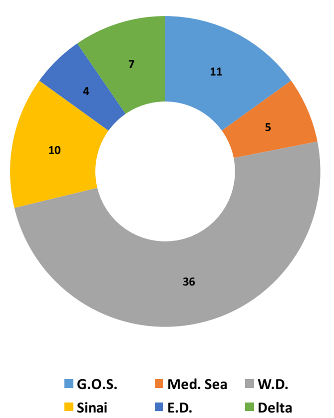
Rigs per Area - June - July 2016



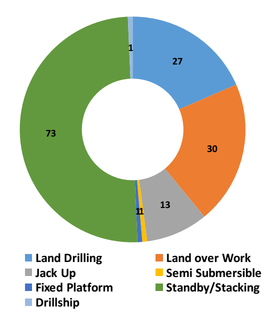
Rigs per Specification - June - July 2016



Rig Count per Area - July 2016



Rigs per Specification - July 2016



Rigs per Specification - June - July 2016

Location	June-16	July-16
Land Drilling	21	27
Land over Work	29	30
Jack Up	13	13
Semi Submersible	1	1
Fixed Platform	0	1
Standby/Stacking	78	73
Drillship	1	1
Total	143	146

Rig Count per Area- June - July 2016

Location	June-16	July-16
G.O.S.	10	11
Med. Sea	5	5
W.D.	30	36
Sinai	10	10
E.D.	4	4
Delta	6	7
Total	65	73

AMBIT ESP Monitoring Services Mobile Application

Resolve challenges, increase production, and enhance asset value—on the go

The AMBIT™ ESP monitoring services mobile application is an extension of the innovative AMBIT ESP monitoring services platform for remotely monitoring and controlling artificially lifted wells. The mobile app enables users to access the AMBIT interface via Apple iOS/ Android smartphones or tablets and HTML5 supported devices, displaying the same data as the AMBIT desktop version.

With the AMBIT ESP mobile app, you can now monitor your wells to optimize production and extend the life of your ESP while on the go. Features include real-time data access, alarming, manual data entry, memos, and the ability to demand a data poll and issue two way commands to the field controller.

Your access and security permissions are mirrored directly from the permissions previously configured for the AMBIT desktop version. And, just like the AMBIT desktop interface, the application allows you to view data on a group, well, and tag level. Alarms can be quickly visualized and responded to directly within the mobile application.

The mobile application is extremely intuitive and can be learned in minutes. Typical iOS and Android gestures such as tap, swipe, flick, touch, and hold are all supported within the mobile application. And, search and filtering functionalities get you to the data you need as quickly as possible.

Contact your local Baker Hughes representative or visit BakerHughes.com/AMBIT to learn more about how the AMBIT ESP mobile app can help you resolve challenges, increase production, and enhance asset value—all on the go, from your mobile device.

Applications

- Two-way surveillance and optimization of artificially lifted wells
- Conventional and unconventional wells

Features and Benefits

- Compatible with all Apple iOS, Android, and HTML5 supported devices
  - Enables users to access well data securely
- Real-time data access
  - Displays 7/14 day real-time data trend with ability to add and remove tags
  - Make control changes and perform a demand scan to poll the device for latest data
- Asset navigator feature
  - Lists device in the same fashion as the web interface
  - Allow users to search any production asset they have permission to
- Advanced alarm settings
  - Address various alarms directly within the mobile application
  - Provides filtering/sorting alarm options
- Easy-to-find device information
  - Control and make changes to existing parameters
- Profile access
  - Contact support directly via phone or email