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“For All Those Determined”

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Over-Subsidized and Unaware: Egypt's Culture of Energy Consumption

My name is Marwa Sabah and I am the new Editor in Chief of *Egypt Oil and Gas Newspaper*. First of all, I would like to wish our readers a Happy New Year.

New beginnings and fresh starts always give room for positive thinking and fresh output. Egypt Oil and Gas aims to be innovative and dynamic, through digital and print output of which I hope—with the help of our wonderful dedicated team—to advance this year.

Egypt is currently going through major transitional phases, some of which could be very fruitful while others could be challenging for the country as a whole. Of the most pressing issues this month is the newly drafted constitution. A lot depends on the outcome of this month's referendum, which in so many ways affects the political, social, and mostly the economic milieu in Egypt.

This issue mostly focuses on forthcoming policies of the Egyptian government, the Ministry of Petroleum, and companies to better the oil and gas industry in Egypt. This is not to say that we don't mention main impediments and problems the country and the sector are facing, but we almost always offer suggested solutions and/or alternatives to these concerns. In

terms of content, my goal for this year is to focus on producing issues that are in dialogue with a primary, cohesive theme. For our website, I hope to make it more accessible and visually aligned with the content. Finally, I am hoping—in collaboration with the whole team and through our Publisher's guidance—to further integrate Egypt Oil and Gas Newspaper in the realm of social media to generate awareness of the sector and its importance to a wider audience in Egypt.

I am looking forward to working with my new enthusiastic team, who helped to a huge extent in making this month's issue seem effortless. I would like to thank all my new colleagues for their constant encouragement, support, and absolute commitment. I am happy to welcome our new Managing Editor, Lily Leach, whose support and commitment has been invaluable throughout the last three weeks. Finally, I would like to thank Salma Selim, our Communications Liaison who will be leaving us, for her priceless contribution and effort. Salma's commitment and work ethic have been a huge value for this newspaper, and although I did not get a chance to work with her as much as I would have wished, her presence will be highly missed.

Editor in Chief **Marwa Sabah**



Publisher

Mohamed Fouad

This publication was founded by Omar Donia, Mohamed Fouad and Mohamed Sabbour

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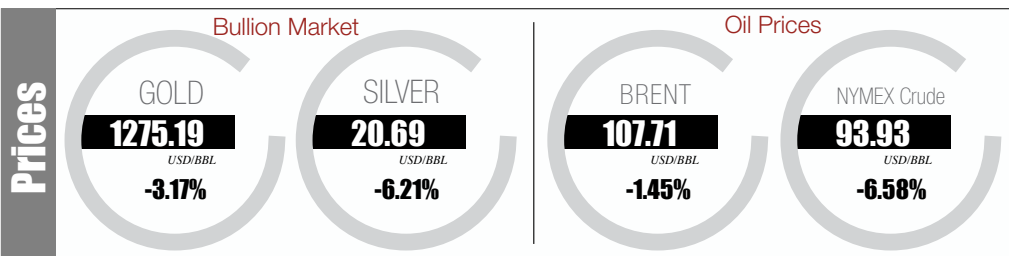
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- Application of 2D and 3D.
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- New Technologies: Obstacles and Recommendations
- Breaking the Economic Barriers of Brownfields.
- Planning the Greenfield-to-Brownfield Production Transition.
- Integrated Reservoir and Asset Management in Brownfields.
- Improving Recovery from Mature assets.
- Intergraded Planning: Managing Mature Assets.

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Delivery: 2014



New Cairo

Location: Nearby AUC
Types: Apartments, Duplexes
Areas start from: 115 meter sq.
Delivery: 2017



New Cairo

Location: beginning of 90 Road
Types: Apartments, Duplexes, Twin houses, Separate villas
Areas start from: 130 meter sq
Delivery: 2016



6th of October

Location: Sheikh Zayed next to Beverly Hills Compound
Types: Apartments, Duplexes, City Villas
Areas start from: 122 meter sq.
Delivery: 2015



6th of October

Location: 3 Minutes from Shooting Club
Types: Town, Twin Villas, Stand Alones
Areas start from: 270 meter sq.
Delivery: 2015



6th of October

Location: Nearby Dream Land
Types: I- Villas, Stand Alones, & Town Houses
Areas start from: 272 meter sq.



Sukhna

Location: 5 kilo from Sukhna Gates
Types: Chalets, Twin Houses, Villas
Areas start from: 100 meter sq.
Delivery: Summer 2013



Sukhna

Location: 134 kilo Alex - Marsa Matrooh Road
Types: Chalets, Villas
Areas start from: 86 meter sq.
Delivery: Immediate



Sukhna

Location: 8 Kilo from Porto
Types: Chalets, Town Houses, Villas
Areas start from: 120 meter sq.
Delivery: Summer 2014

BEST Resale Properties



New Cairo

Location: Mirage City - New Cairo
Type: Vila for Sale - Fully Finished
Area: Land: 1000 SQM / Built Up: 600 SQM
Delivery: Immediate



New Cairo

Location: Mountain View - New Cairo
Type: Villa for Sale- Fully Finished
Area: Land : 490 SQM/Built Up:415 SQM
Delivery: Immediate



New Cairo

Location: Katameya Heights Extension
Type: Villa for Sale- Fully-Finished
Area: Land: 1000 SQM / Built Up: 650 SQM
Delivery: Immediate

BEST Adminstrative Buildings



New Cairo

Location: St. 90, Downtown - New Cairo
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Area: 485 Meter
Finishing: Fully Finished



New Cairo

Location: 90 st. - New Cairo
Administrative Building for Sale/Rent
Area: Total Area 20,806 sqm
Finishing: Core & Shell



New Cairo

Location: El Marwaha - New Cairo
Commercial Building for Sale
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Variety From The Best Real Estate Projects in Egypt

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Khalda Drills Nine Wells



Khalda Company, a joint venture between EGPC and Apache American Corporation, recently drilled a new developmental well in its concession area in the western desert. The company's production rate of crude oil reached 4,286,181 barrels in November 2013.

Umb-224

The Umb-224 oil producing well was drilled to a depth of 11,250 ft utilizing the EDC-40 rig. Investments surrounding the drilling process are estimated at USD 1 million.

SWAG-6

The SWAG-6 oil producing developmental well was drilled to a depth of 11,231 ft utilizing the ST-6 rig. Investments surrounding the drilling process are estimated at USD 1,886 million.

PEPI-12

The PEPI-12 oil producing developmental well was drilled to a depth of 14,770 ft utilizing the ST-5 rig. Investments surrounding the drilling process are estimated at USD 2,372 million.

KHEPRI-35

The KHEPRI-35 oil producing developmental well was drilled to a depth of 7,400 ft utilizing the EDC-61 rig. Investments surrounding the drilling process are estimated at USD 300,000.

WRZK-117

The WRZK-117 oil producing developmental well was drilled to a depth of 6,613 ft utilizing the EDC-66 rig. Investments surrounding the drilling process are estimated at USD 840,000.

UMB-223

The UMB-223 oil producing developmental well was drilled to a depth of 12,550 ft utilizing the EDC-18 rig. Investments surrounding the drilling process are estimated at USD 1,100 million.

TAYIM W-4 ST-1

The TAYIM W-4 ST-1 oil producing developmental well was drilled to a depth of 14,922 ft utilizing the EDC-19 rig. Investments surrounding the drilling process are estimated at USD 1,800 million.

FAGHUE S-5

The FAGHUE S-5 oil producing developmental well was drilled to a depth of 16,300 ft utilizing the EDC-41 rig. The well is temporarily abandoned. Investments surrounding the drilling process are estimated at USD 3,150 million.

HYDA-7

The HYDA-7 oil producing developmental well was drilled to a depth of 13,730 ft utilizing the EDC-48 rig. Investments surrounding the drilling process are estimated at USD 3.300 million.

Qarun Drills Three Wells

Khalda Company, a joint venture between EGPC and Apache American Corporation, recently completed drilling three new developmental wells in its concession area in the western desert. The company's production rate of crude oil reached 1,318,721 barrels in November 2013.

HAMRA-27

The HAMRA-27 oil producing well was drilled to a depth of 5,800 ft utilizing the PD-1 rig. Investments surrounding the drilling process are estimated at USD 850,000.

MARINA Drills New Well

MARINA Company recently drilled a new developmental well in its concession area in the western desert during the fiscal year 2013-2014. The S.RAHMAN-5 oil producing well was drilled to a depth of 3,985 ft utilizing the ECDC-6

N.HARUN-11

The N.HARUN-11 oil producing developmental well was drilled to a depth of 3,575 ft utilizing the EDC-17 rig. The well is permanently abandoned. Investments surrounding the drilling process are estimated at USD 660,000.

S.W.Q.7

The S.W.Q.7 oil producing well was drilled to a depth of 9,950 ft utilizing the EDC-53 rig. Investments surrounding the drilling process are estimated at USD 1 million.

rig. Investments surrounding the drilling process are estimated at USD 507,000. The company's production rate of crude oil reached 12,202 barrels in November 2013.

PETROSANNAN Drills New Well

PETROSANNAN Company, a joint venture between EGPC and Naftogaz, recently completed drilling a new developmental well in its concession area in the western desert. The HG 34/11 oil producing well was drilled to a depth of

11440 ft utilizing the SHAMS-2 rig. Investments surrounding the drilling process are estimated at USD 2,868 million. The company's production rate of crude oil reached 156,305 barrels in November 2013.

Agiba Drills New Well

Agiba Company, a joint venture between EGPC, Mitsui 10%, and IEOC 40%, recently drilled a new developmental well in its concession area in the western desert. The NADA W-4 oil producing well was drilled to a depth of 6,300 ft utilizing the ST-8 rig. Investments surrounding the drilling process are estimated at USD 500,000. The company's production rate of crude oil reached 1,881,120 barrels in November 2013.



BAPETCO Drills New Well

BAPETCO Company, a joint venture between EGPC and Shell, recently completed drilling a new developmental well in its concession area in the western desert. The ASSIL-8 oil producing well was drilled to a depth of 14495 ft uti-

lizing the EDC-51 rig. Investments surrounding the drilling process are estimated at USD 9,700 million. The company's production rate of crude oil reached 1,117,943 barrels in November 2013.

Apache Drills New Well

Apache American Corporation recently drilled a new exploratory well in its concession area in the western desert during the fiscal year 2013-2014. The WKAL U-1X oil producing well was drilled to a depth of 14,930 ft utilizing the EDC-

59 rig. Investments surrounding the drilling process are estimated at USD 3,800 million.

Story Board



GPC Drills New Well

GPC Company recently drilled a new developmental well in its concession area in Gulf of Suez. The ALHAMD-7 oil producing well was drilled to a

depth of 4,009 ft utilizing the ADMARINE-3 rig. The company's production rate of crude oil reached 1,267,300 barrels in November 2013.

GSPC Drills New Well

GSPC Company recently drilled a new exploratory well in its concession area in the western desert during the fiscal year 2013-2014. The SD ST-4X oil producing well was drilled to a depth of 8,731 ft utilizing the EMESCO-602 rig. The well is permanently abandoned. Investments surrounding the drilling process are estimated at USD 6,200 million.



PETROBEL Drills Two Wells

PETROBEL Company, a joint venture between EGPC and Eni, recently completed drilling two developmental wells in its concession area in Sinai. The company's production rate of crude oil reached 3,521,191 barrels in November 2013.

113-127

The 113-127 oil producing well was drilled to a depth of 10,128 ft utilizing the ST-12 rig. Invest-

ments surrounding the drilling process are estimated at USD 1,700 million.

112-158

The 112-158 oil producing well was drilled to a depth of 9,002 ft utilizing the ST-3 rig. Investments surrounding the drilling process are estimated at USD 2,600 million.

PETRODARA Drills New Well

PETRODARA Company, a joint venture between EGPC and TransGlobe, recently drilled a new developmental well in its concession area in the eastern desert. The FADL-5 oil producing well was drilled to a depth of 4,805 ft utilizing the ST-7 rig.

The well is temporarily abandoned. Investments surrounding the drilling process are estimated at USD 700,000. The company's production rate of crude oil reached 357,085 barrel in November 2013.

GUPCO Drills New Well

GUPCO Company, a joint venture between EGPC and British Petroleum (BP), recently drilled a new developmental well in its concession area in Gulf of Suez. The OCTOBER J-1 oil producing well was drilled in 59 days to a depth of 10,865 ft utilizing the BENNVIS rig. Investments surrounding the drilling process are estimated at USD 3,600 million. The company's production rate of crude oil reached 3,521,191 barrels in November 2013.



NORPETCO Drills New Well

NORPETCO Company, a joint venture between EGPC and Sahari Oil Company, recently completed drilling a new developmental well in its concession area in the Western Desert. The ABRAR-14 oil producing well was drilled to a depth of 6,950 ft

utilizing the ECDC-2 rig. Investments surrounding the drilling process are estimated at USD 2,750 million. The company's production rate of crude oil reached 219,569 barrels in November 2013.

Egypt's Seven New Oil Agreements worth USD 1.2 Billion

Eng. Sharif Ismail, Minister of Petroleum and Mineral Resources, recently got the approval of Egypt's cabinet on seven new oil and gas exploration agreements. These agreements are to bring the sector a total investment of USD 1.2 billion. The firms participating in these deals include BP, Petroceltic International, Sea Dragon Energy, and Dana Gas. The Ministry of Petroleum mentioned that these agreements will be sent to the Interim President Adli Mansour for confirmation.

Dana Gas

The agreement with Dana Gas in North El Arish offshore concession includes the drilling of three new wells and a minimum investment of USD 71.5 million.

IEOC Agreement

An agreement with the Italian company IEOC in Shorouk offshore concession includes two new wells with a minimum investment of USD 150 million.

British Petroleum (BP)

The first agreement with BP in North El Max offshore concession includes two new wells with an investment amounting to USD 330 million. The second agreement in North Tenin offshore concession includes two new wells with investments amounting to USD 370 million.

Edison and Petroceltic

Edison and Petroceltic first joint agreement in North Thekah offshore concession includes two new wells with investments amounting to USD 170 million while their second agreement in South Idku onshore concession includes three new wells with investments amounting to USD 23 million.

Sea Dragon

Sea Dragon's agreement in South Disouq onshore concession includes three new wells with investments amounting to USD 17 million.

CHOICE Words



Energy prices need to be liberalized gradually lest we wish to see a spike in inflation . . . as we face rising unemployment as a result of failing enterprises. We need to cushion the impact of price rises through a system of direct cash subsidies to consumers."

Ahmed Heikal

The Founder and Chairman of Citadel Capital



If I were an investor, I would buy up whatever I could buy up, but look at it as an investment, not a quick trade. If you are looking for profit in 2-3 years down the line—tourism, foodstuffs, energy—you can't lose.

Nabil Fahmy

Egypt's foreign minister



We are thinking of replacing [the subsidy] with monetary compensation. But the problem is not theoretical, it is practical. How can we find a reliable database to identify all those people who merit a subsidy?

Hazem al-Beblawi

Egypt's Prime Minister



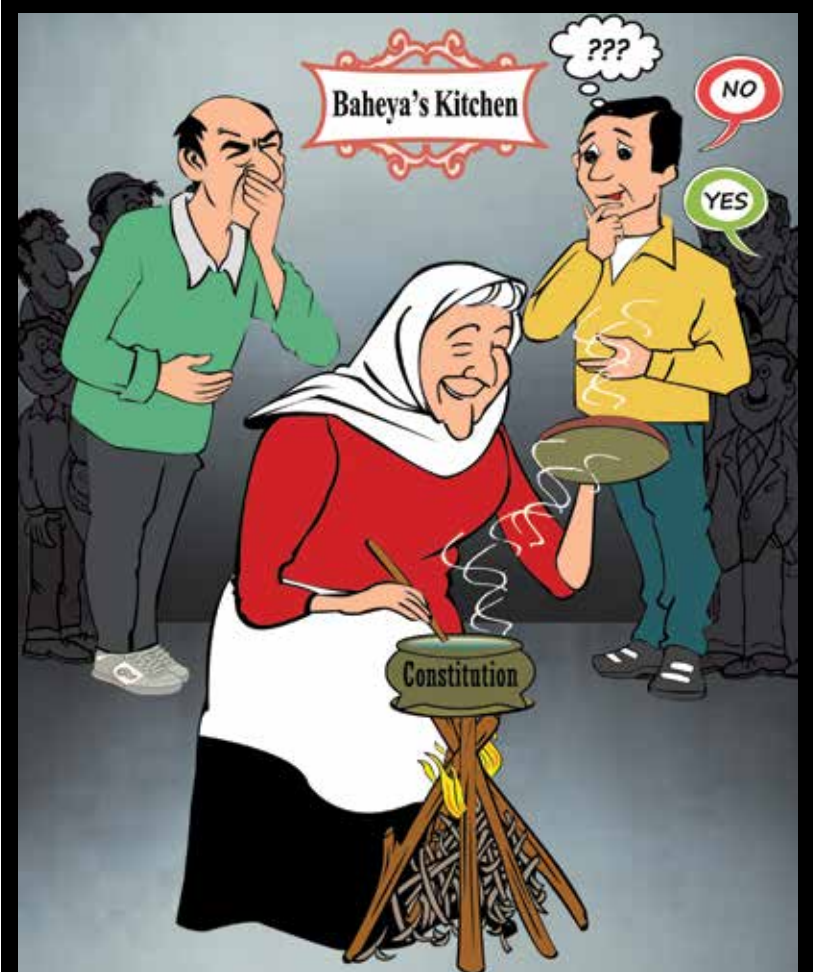
[Egypt and the US] are revising their concepts about the relationship. The objective is . . . to continue to build relations, but on sounder and stronger foundations. We need have good relations with all countries, including Russia and China. This should not be at the expense of relations with the US."

Mohamed Tawfik

Egypt's Ambassador to the US



CARTOON



RWE Dea Egypt Achieved Ministry Agreement for Offshore Concession in the Gulf of Suez

The Egyptian Ministry of Petroleum has signed the concession agreement for the East Ras Budran Offshore area. RWE Dea is the operator, holding a share of 80%. The company plans a 3D seismic survey and one exploration well during the first three-year exploration period.

RWE Dea is pleased to announce that the Egyptian Ministry of Petroleum has signed the concession agreement for the East Ras Budran Offshore area with the Egyptian General Petroleum Corporation (EGPC), RWE Dea, and Dove Energy. RWE Dea will operate the concession with an 80% share, with Dove holding the remaining 20% interest. "We are delighted to have signed this new concession agreement in Egypt, especially in the Gulf of Suez where RWE Dea has several decades of experience in oil exploration, development and production," said Maximilian Fellner, General Manager RWE Dea Egypt.

The concession, with an area of approximately 45 square kilometres, is located offshore the Gulf of Suez, nearby one of RWE Dea's existing assets, Ras Budran, and related production facilities.

RWE Dea plans to acquire a 3D seismic survey and drill one exploration well during the first three-year exploration period. Exploration activities will target the cretaceous sandstones play RWE Dea successfully drilled in the adjacent Ras Budran oil field. Any discovery will benefit from important synergies with the existing

production facilities that will allow for a quick and optimised development.

"The concession agreement reconfirms RWE Dea's strong commitment to this country, both in terms of development of existing discoveries and in terms of further exploration to sustain future growth," Fellner explained.

Including its predecessor company, RWE Dea Egypt has already been engaged in upstream operations in Egypt for almost 40 years and has produced oil in the Gulf of Suez as operator for three decades now. In recent years, the company has made a number of large gas discoveries in Egypt and extended its portfolio substantially by acquiring additional concessions. RWE Dea is engaged in 10 onshore and offshore concessions in Egypt with a total area of about 6,500 square kilometres.

The block East Ras Budran Offshore was offered in the International Bid Round 2011 of the Egyptian General Petroleum Corporation (EGPC) and awarded to RWE Dea end of last year.

Stakes in the licence:

RWE Dea Egypt (operator):	80%
Dove Energy Inc.	20%

Egypt's Deal to Payoff Energy Debts

Cairo is planning crucial investment in the energy sector by paying off debts to foreign companies that extract its oil and gas. According to *Reuters*, Egypt owes more than USD 5.2 billion to companies including BP, BG Group, Edison SPA and Trans Globe Energy, as of 2012. The Egyptian government scheduled a timetable to be able to pay its foreign oil firms in arrears. It decided to pay part of the debt worth USD 3 billion on December 12th and the rest of the USD 6.3 billion to be paid in monthly install-

ments until December 2017. Egypt has received financial aid worth USD 12 billion from Saudi Arabia, Kuwait, and the United Arab Emirates, which is deeply intimidating to the Muslim Brotherhood.



IPR Discovers New Well

The Improved Petroleum Recovery (IPR) group of companies recently discovered a new oil well in the field of Yidma in Alamein. The discovery took place in the company's concession area in the western desert. Mervat Nabil, Secretary of the Vice Chairman of IPR Oil Corporation, said the production rate of this well is expected to reach 12,000 barrels of light oil and 14 million cubic feet of natural gas per day. Natural gas was first produced from Alam El-Buweib from a depth of 12,000 feet. Nabil said, "It opened new horizons for discovering more oil and natural gas from deep layers after the success in detecting natural gas in the Alam El-Buweib layer."

Power Cuts in Egypt Despite Natural Gas Abundance

Power cuts at Greek-owned company Titan Cement have brought them a 20% capacity loss, leading them to seek out coal as an energy source to make up for the shortfall, reported *Financial Times*. However, Egypt's Environmental Ministry is preventing the plan from being adopted. Other companies experiencing blackouts are considering energy alternatives as well, such as importing natural gas. Chairman of EGAS Taher Abdel Rahim said the government plans to build a floating degasification terminal by the end of this year to increase gas imports before next summer.

Egypt to Procure Natural Gas from Cyprus

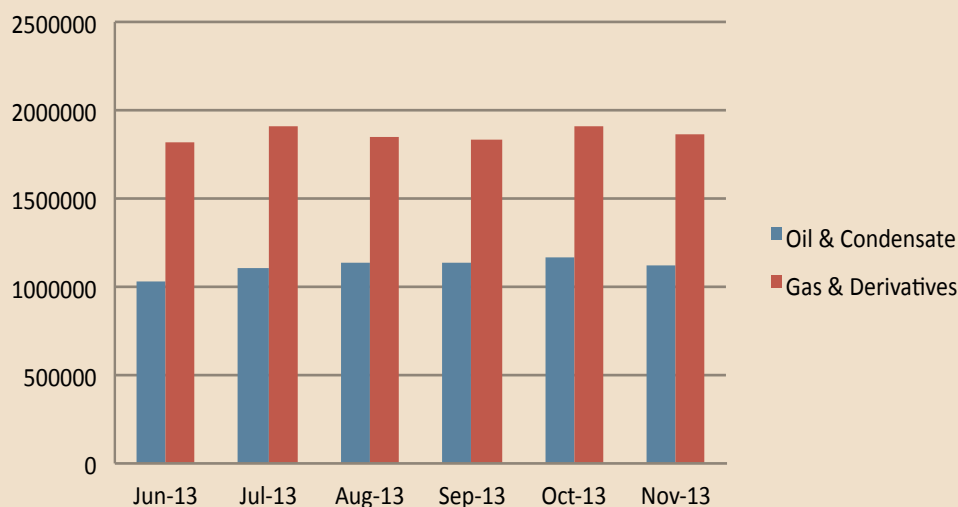


An anonymous Egyptian official said the Greek-Cypriot administration is facilitating a natural gas sale to Egypt, reports *World Bulletin*. The exchange also includes technical assistance for gas drilling in Egyptian plants in Cyprus, and Egypt has also agreed to help liquefy Mediterranean gas fields. "We have untapped gas-liquefaction capacities at the two plants," the official said. "It would be cheaper for companies in [the Greek-Cypriot administration] to liquefy here rather than building liquefaction plants there." In a meeting with Egyptian interim President Adly Mansour, Greek-Cypriot administration leader Nicos Anastasiades discussed relations with Egypt and other Arab countries, as well as the Syrian crisis and Palestine. Cyprus is also reported to be negotiating a deal with Israel for gas supplies.

PRODUCTION INDICATORS

BAPTECo's Gas Production Stable Below 2 Million Boe

BapTECo's Oil Production Indicators June 2013 - Nov. 2013.

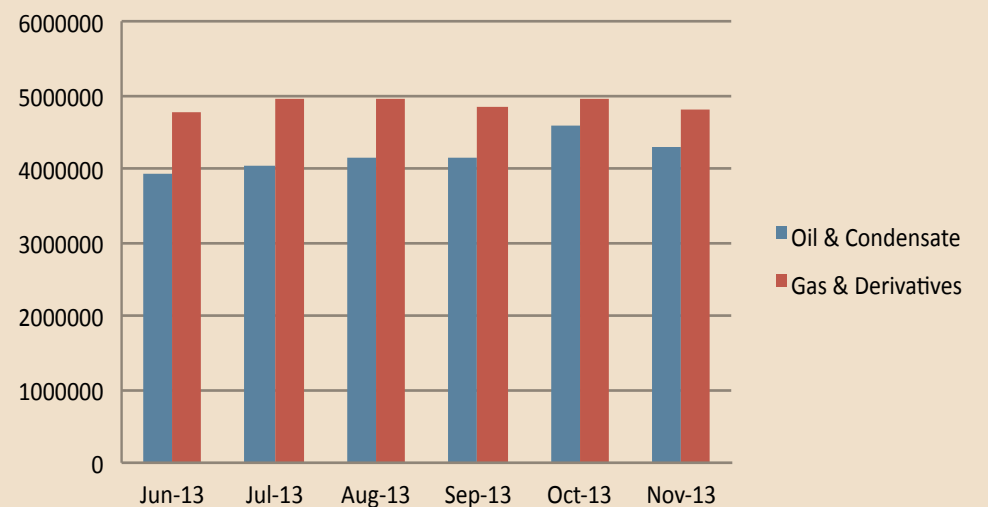


The oil and gas production of Badr El Din Petroleum Company (BAPETCo) was relatively stable from June to November. The company's production of oil and condensates remained between 1.0 and 1.2 million barrels, with the average production being 1,115,089 barrels over the six-month period. In November, the production was 8.9% higher compared to June, indicating there may be a modest upward trend underlying the

minor monthly movements. BAPTECo's average production of gas and derivatives was 1,864,315 barrels of oil equivalent, ranging from 1.8 to 2.0 million barrels. June saw the lowest production as the output reached the highest level in October.

Khalda's Gas Production Slightly Below 5 Million Boe

Khalda's Oil Production Indicators June 2013 - Nov. 2013.



The oil and gas production of Khalda Petroleum Company (KPC) was quite steady from June to November. The company's production of oil and condensates, which amounted to 3,931,275 barrels in June, reached over 4 million barrels in the next month and remained above this level for the rest of the period. In October, the production increased by as much as 10.6% and reached 4,588,147 barrels, which is the highest level of the peri-

od. Thereafter the production fell by 6.6% in November, but nevertheless ended up 9.0% higher compared to June. Khalda's production of gas and derivatives remained between 4.7 and 5.0 million barrels of oil equivalent, with the average production being 4.9 million barrels over the six-month period. The production was the lowest in June and reached the highest level in October.

Success seems to be largely a matter of hanging on after others have let go.

William Feather

East Abu Sennan Petroleum Co.



شركة شرق ابو سنان للبترول

Cairo, November 5th, 2013

From : EAST ABO SENNAN PET.COMP
278 Street, New Maadi, Cairo, Egypt.

To : PICO Petroleum Integrated Services- DFT
Attention : Eng. Mahmoud Saleh - DFT Director

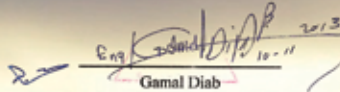
Subject : Appreciation Letter

Reference to the above mentioned subject, EAS would like to thank PICO Drilling Fluid Technology for the excellent performance and effort done while drilling ASB 1 X Well. While drilling this Well, PICO DFT showed good performance, good hole stability & Gauge hole through all the four drilled sections, despite the challenge of HPHT on 8 1/2" hole.

In addition to the above previous success, Pico drilling fluid materials showed good shale inhibition with the lowest mud weight and mud properties.

EAS wishes PICO DFT to continue with the recorded performance and success in the upcoming period.

We appreciated your kind cooperation and performance.


Gamal Diab
Operation General Manager

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Israel Buys German Warships to Protect Gas Fields

According to Israeli officials, the country is going to buy two German-built frigates under a USD 1.37 billion contract to protect its gas fields in the Mediterranean. These will be the most advanced surface vessels of the Israeli navy, which has been gradually building up patrols around the country's recently discovered gas fields, reports *UPI*. Hezbollah, backed by Iran and Syria, is considered a particular threat. Israel fears that

some of the 72 anti-ship missiles that Russia provided Syria this year may be handed over to Hezbollah, which already is believed to possess more than 60,000 missiles and rockets. As for Iran, Israel believes that it also supports the Palestinian Hamas group. In February 2012, Israel's navy seized a shipment containing 50 tons of arms said to be delivered to Gaza for Hamas.

Egypt and Cyprus Sign Gas Unitization Deal

Egypt and Cyprus on December 12th signed a framework agreement for a joint exploration of hydrocarbon reserves on the median line between the economic zones of the two countries in the Mediterranean. Under the agreement, Egypt and Cyprus will exchange information about any gas discoveries within 10 kilometers of the maritime boundaries of the both countries, writes *Egypt Independent*. In case a joint reservoir is found, the companies working on either side of the line have to reach a corporate agreement on their exploitation within the frame-

work of the unitization deal, informs *Cyprus Mail*. This is the first unitization agreement that Cyprus has signed with its neighbors following its discovery of significant gas resources.



Libyan Oil Terminals Remain Shut



Oil terminals in eastern Libya remain shut as rebels rescinded their promise to reopen them on December 15th. Ibrahim Jedran, militia leader in eastern Libya, said the terminals would not reopen because the government had not met all the demands of the group. Namely, the government refused to divide oil revenues using the federal system that was established during the rule of King Idris, reports *Digital Journal*. Jedran had prom-

ised to reopen the terminals after mediation efforts by tribal leaders. The terminals have been closed since summer and the self-declared regional autonomous government in eastern Libya—whose Political Bureau is headed by Jedran—formed its own oil company to handle all sales of oil. Until the closure of the terminals, Jedran was on the public payroll, in charge of the security of the terminals.

Italy Seeks to Import Israeli Gas via Egypt

Italy would like to import gas from Israel via Egypt's LNG export facilities, which are not currently operating at full capacity since Egypt lacks gas to export. "Israeli natural gas exports to Italy are a common interest of both countries," said Italy's Minister of National Infrastructures Silvan Shalom, according to *Globes*. The country's Minister of

Economic Development Flavio Zanonato said he would promote the option of exporting Israeli gas via Egypt's Idku LNG plant since it is the fastest and most economical way for all countries and gas companies. However, Egypt's Prime Minister Hazem al-Beblawy has said that the country would not import Israeli gas via Cyprus.

Reserve Estimate at Cyprus' Gas Field Drop 21%

The companies conducting appraisal drilling at Cyprus' Aphrodite gas field in the Mediterranean announced on December 1st that they had lowered its reserves to 4.1 trillion cubic feet from the 5.2 trillion previously estimated. On the other hand, the companies discovered that the field has significant amounts of condensates, an estimated 8.1 million barrels, reports *Reuters*. 70% of

the field is owned by the US firm Noble Energy, and Israeli companies Delek Drilling and Anver Oil Exploration possess 15% each. Based on the data obtained by the drilling, Noble will decide in the next few months whether a further appraisal of the existing well is needed, and whether a new exploratory drill will take place, informs *Kathimerini English*.

Noble Discovers More Gas Offshore Israel

Noble Energy announced in December that it has made a gas discovery at its Tamar Southwest exploration well offshore Israel in the Mediterranean. The well, drilled to a depth of 17,420 feet in 5,405 feet of water, encountered 355 feet of net natural gas pay. The high-quality reservoir sands encountered are expected to produce 250 MMcfd per well, writes *Oil & Gas Journal*. This is Noble's eighth consecutive discovery in the Levant basin. It has a 36% working interest in the well. Other partners include Isramco Negev 2 (28.75%), Delek Drilling

(15.625%), Avner Oil Exploration (15.625%) and Dor Gas Exploration (4%).

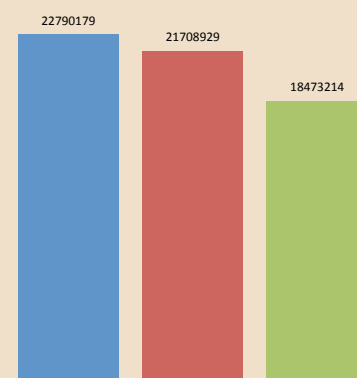


Mediterranean STATISTICS



Production/ Barrel

Oil		
November-11	November-12	November-13
N/A	N/A	N/A
Equivalent Gas		
November-11	November-12	November-13
22790179	21708929	18473214
Condensate		
November-11	November-12	November-13
1341980	1221595	1020050
Liquefied Gas		
November-11	November-12	November-13
471790	370311	387864



■ November-11 ■ November-12 ■ November-13

Mediterranean Rig Count 2013

Total	Percentage of Total Rigs
9	8 %

Noble

in Talks to Sell Gas to Jordan

Companies developing gas fields offshore of Israel in the Mediterranean are in talks about exports to Jordan. Israel's Delek Group and US Noble Energy are discussing a gas supply deal with Arab Potash, a fertilizer company who owns a plant in Jordan. The deal would include extending a gas pipeline from Israel to Jordan, writes *The Wall Street Jour-*

nal. According to Oded Eran, Israel's former ambassador to Jordan, an agreement has already been reached, but the companies are still negotiating over pricing and other details. According to *Haaretz*, Noble said in November that it seeks to export Israeli gas to nearby markets like Jordan and Egypt rather than shipping it further as LNG.



OPEC Sustaining Crude Oil Production

OPEC decided not to change its crude output target and maintain its 30 million barrels a day. This decision was made based on the current oil demand and supply balance, reports *Xinhua News*. Sources stated that if the sanctions against Iran are lifted in 2014, that could lead to a significant increase from 2.7 million barrels per day to 4 million. The

Iranian Oil Minister, Bijan Namdar Zangeneh, declared his expectations that OPEC member nations would support such an increase. Ali al-Naimi, the Saudi Arabian Petroleum Minister, mentioned that, "The market is excellent," and that "Demand is good, growth is good, and supply is good."

FDI Increases in Tanzania

Tanzania has expectations for foreign direct investment (FDI) to grow by 6% this year to USD 1.8 billion, according to *The Africa Report*. Juliet Kairuki, the executive director of the state-run Tanzania Investment Centre, mentioned the fact that the biggest source of FDI for Tanzania was the United Kingdom followed by Canada, Switzerland, and the United States. Ongoing oil and gas exploration activities in east Africa's second-biggest economy helped in increasing FDI inflows, said Tanzania Investment Centre.



Petrofac and Taleveras MOU

Petrofac Limited and Taleveras Energy Resources Limited have signed a five-year memorandum of understanding (MOU) to cooperate with the Nigerian Petroleum Development Company Limited (NPDC), said *RTT News*. The MOU

deal aims to improve NPDC's offshore block OML119 in a risk-based support agreement. Both companies have also agreed on providing financial, technical, and capacity and capability building support to NPDC.

Chevron and Agip Give Out 14 Fields in Marginal Bid Round

Chevron Nigeria Limited will provide the Department of Petroleum Resources (DPR) with 12 fields. These fields are part of the 31 marginal fields that would be offered to Nigerian independent companies by the federal government. The 31 fields are divided into 16 onshore fields, and the rest in the continental shelf, said *This Day Live News*. The Nigerian Agip Oil Company (NAOC) and ENI will leave two marginal oil fields for the bid round. The marginal fields that Chevron will provide to the Nigerian independents comprise Olure, Bime and Omofejo in Oil Mining Lease (OML) 49. According to *Africa Oil + Gas Report*, other marginal fields include Meta, Shango, Azama, Ruta and Oloye in shallow water

OML 95. Chevron will also give out both marginal fields Obria and Kudo, in shallow water OML 89, to increase participation in the upstream sector of Nigeria's oil and gas industry. Mrs. Diezani Alison-Madueke, the Minister of Petroleum Resources stated that the aim behind the marginal field-licensing round was to increase exploration and production activities in the oil and gas sector, to benefit Nigerians and the Nigerian economy. She also added, "Over the next two weeks, the Department of Petroleum Resources will undertake a roadshow to different parts of the country about the program."



Dana Petroleum's Discovery in North Sea KNOC

Dana Petroleum, a subsidiary of Korea National Oil Corp (KNOC), recently discovered a new crude oil well in the North Sea. The drilling operations took place in October at Dana's Liberator exploration well, reported by *Business Recorder*. KNOC stated, that the well's estimated capacity was between 10 to 15 million barrels of crude oil. Suh Moon-hyu, KNOC's Chief Executive, told *Reuters* that, "the company would invest in ex-

ploration, along with South Korea's move to focus on exploration as it scales down spending on overseas energy and resources development."



Major Oil Discovery in Gulf of Mexico First Since Deepwater Horizon

BP announced it has hit oil in the Gulf of Mexico at depths close to 30,000 feet, reported *The Guardian*, making it the first major oil discovery in the region

since explosion at Deepwater Horizon, one of the worst environmental disasters in US history. Richard Morrison, regional resident of BP's Gulf of Mexico busi-

ness told *The Guardian*, "The Gila discovery is a further sign that momentum is returning to BP's drilling operations and well execution in the Gulf of Mexico.

Russia Investing in Sudan

Sudan Vision Daily announced that the petroleum ministry is ready to welcome Russian investments in the country. On December 7th, Awad al-Karim Mohamed Khair, Undersecretary of the Petroleum Ministry, was in a meeting with a delegate from RUS-Oil company headed

by Segrey Podlisetsky, the Director General of the company. They discussed Sudan's willingness of enlarging the country's oil partners from different parts of the world by investing in the oil and gas services sector in the country. According to Mohamed Khair, both Sudan and

Russia will notice a development in all economic relations, as the ministry is looking for more oil production by exchanging experiences as well as being up to date with the modern technology in the oil industry.

Circle Oil's Expectations for Production in Morocco

Circle Oil Company told *Alliance News* about its 2014 plans for drilling in Morocco, Tunisia, Oman, and Egypt. The company stated that its total production for its Morocco blocks had reached their expectations between 6.8 to 7 million cubic feet of gas per day. In the next few weeks they are expecting to

drill more to add 30 billion cubic feet to the reserve base. The Tunisian authorities have recently approved the offshore Mahdia permit for Circle Oil's contract in Tunisia at the Beni Khaled field in production. In 2013, the company has participated in a bid round for an onshore block in Oman expecting the updates

starting 2014.



US to Meet Records in 2016 for Crude Oil Production

By 2016, the US may set crude-oil production records, seeing a boom in shale exploration through hydraulic fracturing and horizontal drilling techniques, according to *The*

Wall Street Journal. The US is reconsidering free export of its crude oil, which has been capped since 1973. Global oil prices are expected to reduce considerably as a result. Oil producers are calling for a

lift 1973's export limitations, which were implemented as a result of US support of Israel in its war with Syria and Egypt. Natural gas exports are also set to increase for the US.

GE Oil & Gas and Yara International Secure Services Contract

GE Oil & Gas has signed a twelve-year contractual service agreement (CSA) with Oslo-based chemical company, Yara International ASA, reported *News Wire Today*. The CSA will provide maintenance and services for Yara's fertilizer com-

plex in the Netherlands, and will also boost GE's downstream sector growth. Girish Saligram, Contractual Services General Manager of GE Oil & Gas, told *News Wire Today* "as industrial companies look to optimize the efficiency and long-term

availability of their production facilities, CSAs at fertilizer plants represent a significant potential downstream growth opportunity. Therefore, our CSA with Yara is an important model for GE's strategic growth in the downstream sector."

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AMEC and KNPC Refinery Agreement

According to *PennEnergy*, The International Engineering and Project Management Company (AMEC) and Kuwait National Petroleum Company (KNPC) have signed a five-year call-off contract. This agreement aims to provide the Kuwait refineries Mina Al Ahmadi, Mina Abdallah, and Shuaib oil with project-engineering and management services. The contract is worth KWD 72 million (GBP 158

million). Alan Armstrong, AMEC's Operations Director in Kuwait concurs, "I am delighted that KNPC have again selected AMEC to deliver this important work. This is a testament to our relationship since 2007 and our ability to apply our global design, engineering and project management expertise to deliver complex projects anywhere in the world."

Bahrain Preparing for Post-Petroleum Era

HRH Prince Khalifa bin Salman al-Khalifa, Bahrain's Prime Minister, said that the country is going through an infrastructure stabilization process of a strong base of international banking, *Hispanic Business* reported. The aim was to prepare the country for a post-petroleum era. The Prime Minister was in an interview with *Valeurs Actuelles*, discussing that Bahrain had reached a very high index in human development. They believe human development would be one of the factors that would help in

the development of the post-petroleum era. The Prime Minister mentioned the recommendations set by the Council of Representatives and the Shura Council for the aim of fighting terrorism, and King Hamad bin Isa al-Khalifa has assigned the government to put them into action. He also added that the government is helping low-income citizens by providing them with housing services in addition to preventing individuals or corporations from paying any charges on taxes.

Omani Oil and Gas sector to Contribute USD 64 Billion to Economy

Over the next seven years, the oil and gas sector in Oman is projected to add USD 64 billion to its in-country value (ICV), informs *Arabian Business*. The ICV committee has conducted a study indicating that of the USD 64 billion, USD 51.5 billion is

to be dedicated to local sourcing, and the remaining USD 12.5 billion towards employment of Omanis. Currently, 22,000 of the total Omani workforce of 55,000 work in the oil and gas sector.

Fujairah Seeks Port Expansion Investment for Oil Projects

Fujairah port, on the Eastern seaboard of the United Arab Emirates, has recently become an important hub for the downstream oil trade, *The National* reported. It is planning to expand its port coastline by 500 meters into the sea to encourage more investments in oil projects. The General Manager of Fujairah port, Captain Mousa Murad, mentioned the plan of adding another 2.5 million square meters to the emirate's land mass. This plan aims for adding crude oil and petrochemicals to Fujairah's energy industry portfolio. This portfolio includes 7 million cubic feet of downstream oil products that are stored in huge tanks facing its narrow strip of coast between the mountains

and the sea.



Growing Fuel Demand in Saudi Poses Challenge

Despite the competition from an increase in US shale input, surging fuel use in the Kingdom is seen as the main threat for Saudi Arabia, reports *Gulf Business*. A combination of rising local and global demand for hydrocarbons and low domestic prices are becoming a strain on the Saudi economy. Cheap natural gas from

the shale boom in the US is also making it difficult to compete. Fahad Al Turki, head of research at a Riyadh-based investment bank told *Gulf Business* that the reduction of price differentials between light and heavy crude grades would be the primary impact on Saudi from US Shale production.

Kuwait Backs Out of Offshore Oil Expansion Deal With Saudi

Saudi will proceed with expansion of an offshore oil field it initially shared with Kuwait. Due to political deadlock between Kuwait's parliament and government, they told Khafji Joint Operations (KJO)—the joint venture in charge of overseeing the project—they could not participate, reported *The Wall Street Journal*. A source said, "No official wanted to make a decision on shar-

ing the costs of the project and get questioned later by the parliament for one reason or another, so they pulled out." Khafji is an extension of Saudi Arabia's Safaniya field, which is the world's largest offshore oil field. KJO plans to increase Khafji's productions from 300,000 to 400,000 barrels per day.

TAQA Receives Approval To Develop North Sea Field

Abu Dhabi National Energy Co., also known as TAQA, has been approved by the UK government to develop the Morrone oil field in the North Sea, reports *Arabian Business*. TAQA, based in the UAE, is set to begin production of more than 3,000 barrels per

day. The Morrone field is a joint project between TAQA holding 70% and Maersk Oil North Sea UK Limited, holding 30% interest.

Unconventional News

Shale Drilling in Marcellus

Shale exploration companies in Marcellus are drilling bigger wells in less time at less cost. In addition to producing more natural gas than ever in Pennsylvania, US. Marcellus is currently producing a fifth of the nation's natural gas, reports *Philly*. During the last two years the number of drill rigs operating in Pennsylvania has been declining due to the low price of natural gas. Now, each rig is achieving much more. David Dewberry, who manages the Lycoming County site in Loyalsock State Forest for Seneca Resources Corporation said that when they first started in 2010, it required more than a month to drill a typical Marcellus shale natural gas well.

However, now it only requires 16 days to finish drilling a well's full length more than 2 1/2 miles. Dewberry said, "Since I came up here three years ago, its 200 percent better." Pad drilling has been introduced as a new technological tool that enables the drilling of multiple wells from a single location instead of moving through locations, which wastes time and money. According to Adam Sieminski, the Energy Information Administration (EIA) administrator said, "for natural gas, EIA has no doubt at all that production can continue to grow all the way out at 2040."

Greka's Deal with Essar Oil



ECNS News reported that Greka Drilling Limited, which is the largest independent and specialized unconventional oil and gas exploration company in Asia, had recently signed an agreement with Essar Oil in India for USD 65 million. The drilling deal aims at providing Essar Oil with turnkey and allied services. The contract states that Greka will drill 100 wells that are expected to be finished by the end of 2014. It is also planning to relocate five rigs from its current fleet in China in order to meet the client's expectations to start drilling soon.

Joint Venture Between BP and Oman to Develop Gas Field

A deal has been struck by BP to develop a major gas field in Oman using horizontal wells and hydraulic fracturing, informed *The New York Times*. The Khazzan field is likely to reach a depth of 15,000 feet, and the cost of development is said to be USD 16 billion over

15 years. Drilling and viability tests have already been conducted since the concession was awarded in 2007. Seven million cubic feet of are expected to come from Khazzan, and as many as 100 trillion cubic feet in the future.

BP and China Exploring Shale Gas

BP is willing to cooperate with Chinese companies to explore the country's vast reserves of shale gas, hoping that the government would provide more private and foreign companies with direct access, *China Daily* reported. China has the biggest shale potential outside the US and is trying to encourage more development. According to Chen Liming, the President of BP China, the company is interested in providing the Chinese market with liquefied natural gas as well as cooperating with the Chinese companies for onshore and offshore exploration. Chen also mentioned the fact that, "BP has rich exploration experience in unconventional resources in North America, so we hope to use that expertise to join China's development of shale gas." A source at the Ministry of

Land and Resources announced that there would be a third round of shale gas bidding starting soon, in addition to releasing the draft of shale gas reserves evolution standards in a few weeks.



China's Output in Shale Gas is 143 million Cubic Meters

The National Energy Administration announced that China's shale gas production has reached 143 million cubic meters, *China Daily* reported. Sinopec Company, China's largest refiner, has noticed an increase in the shale gas project output in Chongqing about 73 million cubic meters with a daily output of 150,000 cubic meters. The project's annual production capacity will reach 5 billion cubic meters with an output of 3.3 billion

cubic meters by the end of 2015. As for PetroChina, the biggest oil and gas developer, its Changning-Weiyuan and Fushun Yongchaun shale gas projects has an increased output of 70 million cubic meters. By 2014, China's industrial plan for shale gas sector will reach 1 trillion cubic meters with an annual output of 6.5 billion cubic meters.

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Nigeria's Global LNG Market Share in Decline

Due to increased production and demand for the liquefied natural gas (LNG) industry and shale gas boom in the US, Nigeria's market share is being negatively affected, reported *Business Day*. Nigeria is Africa's top oil producer and the world's fifth LNG exporter, and has seen its share drop from

10% to 7% of the global market LNG share. Asian markets are already considering the US as a cheaper alternative to Nigeria's high LNG prices. Singapore is also investing heavily in new facilities aiming to become Asia's leading trading hub for LNG.

Call for Transparency in Ghana's Downstream Sector

Ghana's National Petroleum Authority (NPA) inaugurated its newly reconstituted board of directors, encouraging its members to increase transparency in the downstream oil sector. They aim to ensure that petroleum subsidies equitably benefit high and low-income consumers, reports *Ghana Web*. Board member, Kofi-Armah Buah, Minister of Energy and Petroleum, stressed that regulations on pirated petroleum products be enforced and called for new strategies to reduce black market activity at distribution points. He stated that, "While subsidies on petroleum products have had a serious impact on the economy, there is also the need to

deploy more productive measures such as investment in human capital through social services as a means of alleviating poverty among the citizenry."



Nigerian Prime Minister Calls For Deregulation of Petroleum Downstream Sector

Nigeria's Minister of Information, Labaran Maku said in Kaduna that the best solution to the petroleum sector problems is to release the downstream sector of the petroleum industry, reported *Daily News NG*. The reason behind this decision was to make sure products are available to Nigerians. Maku gave an example about kerosene saying that, "Unless

government deregulates this sector, middlemen will continue to feed fat on the sweat of the poor masses". He elaborated that deregulation would not only open up the market and provide options to Nigerian kerosene consumers but would also state the challenges created by wholesalers.

ENI Considering Sale of Czech Refinery Stake

Italian company ENI is in talks to sell its 32.5% share in Ceska Rafinerska and 124 Agip petrol stations, according to *Reuters*. The Czech refinery

Ceska Rafinerska's only other shareholder will be Unipetrol, a Czech downstream oil group, who could use its right of refusal over ENI's stake.

Pipeline from Iran Proposed to Supply India

National Iranian Gas Imports Co. is in negotiations with Indian companies to transfer gas through a deepwater pipeline via the Sea of Oman, informs *United Press International*. Agreements have been reached to supply India with over 1 billion cubic feet of gas per day. Due to western economic sanctions, Iran is barred

from delivering gas by land.



TransCanada Pipeline In Operation

The southern portion of TransCanada's pipeline Keystone XL began pumping oil, a spokesman told *RT USA*. President Obama has yet to approve the project, which runs from Oklahoma to the Texas Gulf Coast and is a part of 485 mile pipeline. Since the southern leg of the pipeline does not cross international borders, presidential approval is not required. As to the northern portion of the proposed pipeline that would link Canada and the US, production permits approval and is the basis of debate between Environmental groups and the administration. Carol Browner, former head of the Environmental Protection Agency, predicted that "there will be some twists and turns" in the debate over the Keystone XL pipeline but "at the end of the day [Obama] is going to say no." The president is scheduled to make his decision mid-March.



Increasing Solar Power in Oman

According to *Oman Tribune News*, the Electricity Holding Company (EHC) in Muscat decided to promote renewable energy by implementing solar power projects. Omar Al Wahaibi, the Chief Executive Officer at EHC, stated in the first Knowledge Sharing Conference, "We go by the government's decision to promote renewable energy. We are seriously looking at solar power generation and will line out projects in this regard." Detailed plans had been prepared by a sub-

sidiary of the EHC called Rural Areas Electricity Company (RAECO). These plans are for developing renewable energy projects in the country. A project with a targeted power generation of 304 KW has been drafted to be located at Al Mazyonah in the Dhafter Governorate. Another big project is in the pipeline at Haima, located in the heart of the desert in the middle of the Sultanate of Oman, with a targeted power generation of 1000 KW.

Changes for UK Government Renewable Energy Subsidies

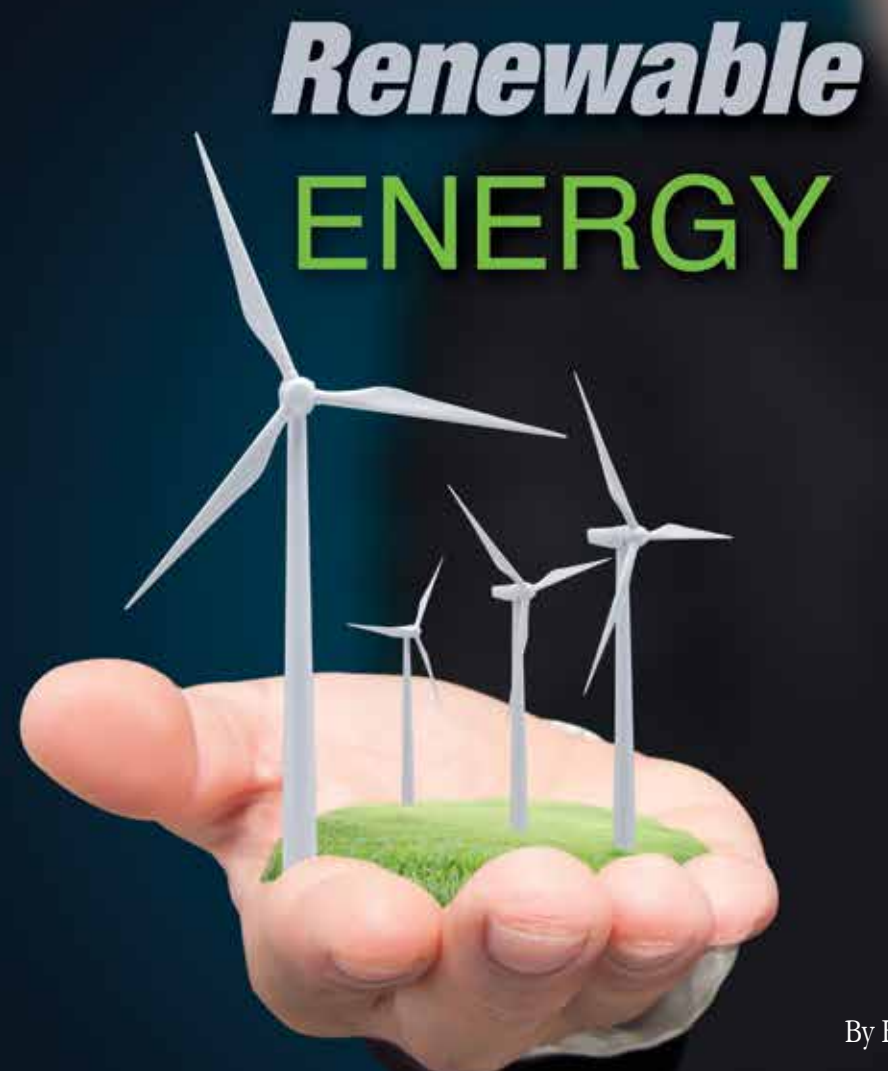
The UK government is planning to shift from onshore wind and solar energy to offshore wind power. Sources told *BBC News* it's no longer necessary to invest in onshore wind and solar energy as significant investments have already been made. However, they needed to encourage more long-term investments in offshore. One of the sources stated, "We are in a very good place. If we didn't curtail onshore a bit, we would

have so much onshore that the constraint wouldn't be financial but political. Ditto solar," Energy Minister Micheal Fallon said. "So constraining solar and onshore makes good value-for-money sense, it lets us move quicker than expected to market forces, and enables us to ensure that the one renewable technology that can go to scale in the 2020s—offshore wind—gets the early support that an immature technology needs."

Obama Triples Mandates for Renewables

An executive order calls for federal agencies—including civilian and military—to replace 20% of their electricity usage with renewable sources, which is an increase of 7.5 percent from a previous mandate from 2005, said *Washington Times*. Based on that, President Barack Obama has tripled the mandate for use of renewable sources of energy for federal agencies by 2020. The

goal of Obama's administration is to reduce greenhouse-gas emissions by 17% from 2005 levels by 2020. This mandate will influence the renewable energy consumption for approximately 500,000 buildings and 600,000 federally operated vehicles, for agencies that spend on average USD 500 billion annually in goods and services.



By EOG



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A Positive Outlook into the Future: An Interview with

Eng. Hesham Ismail

Vice President of Halliburton North Africa

In an exclusive interview, Vice President of Halliburton North Africa Hisham Ismail gives Egypt Oil and Gas insightful information on future steps in the industry.

Can you tell me a bit about yourself and your role at Halliburton Egypt?

I have a responsibility towards everything related to business in the North African region.

I believe that the road to success in business and life is commitment. For example, Halliburton is very committed to its employees. We, in Halliburton, believe that investing in human development is crucial to the success of any business and to do so requires commitment. Our strength as a company at the moment is the number of contracts we have acquired, but our success as a company over the next five years will depend on our investment in human development. Personally, I have been able to achieve where I am today through leading by example in terms of my absolute commitment to the company, the customers, and to my colleagues. When I was a business development manager, I developed a theme that eventually spread throughout all of Halliburton Egypt: relationship backed by service quality. I believe that I was able to accomplish a lot in only a few years by developing a good relationship with customers and colleagues alike, as well as being a leader of a team that is committed to provide adequate professional service quality.

What do Halliburton's activities in Egypt consist of?

Halliburton was first registered in Egypt in 1968 servicing the upstream and downstream sectors of the oil and gas industry. Currently, Halliburton is catering to more than 50 oil and gas operators in Egypt (JVs, IOCs, and NOCs) through four different main bases: Cairo-Kattamia (main office), Matrouh, Abu Rudeis, and the Ras Shukher base. Furthermore, Halliburton Egypt has different satellite bases that are close to our customer's operation areas (Karama, Salam Base, Sumpetco, Amria, Abu Qir, and Port Said), to enhance Halliburton's footprint and to cover market fragmentation. Halliburton Egypt's head count is now close to 1500 employees of which almost 98% are nationals, working in different product service lines.

Can you tell me about Halliburton's operation in Egypt? What services do you offer?

Halliburton Egypt covers many of the disciplines in the oil and gas industry including:

- Drilling Fluids-Baroid

- Cementing services
- Completion Tools
- Production Enhancement
- Testing and Subsea
- Boots & Coots (Stimulation & well intervention)
- Wireline & Perforations services
- Sperry Drilling
- Drilling Bits & Coring
- Landmark Software and Services
- Consulting & Project Management
- Artificial Lift
- Multi-Chem

What products and/or services are most popular here in Egypt?

Halliburton is a pioneer provider in pumping, fracking, well placement, well intervention, cementing, drilling fluids and completion services. Over the years, we have consistently achieved great successes in major projects with our clients, which include the following successful projects: 2X project and Horizontal drilling (Apache), BP and BG HPHT wells, running complex completion in the Mediterranean gas wells, as well as providing reliable services and enhancing production with several operators in the western and eastern deserts.

We sustain a strong market share on both high and low-end markets as well as develop technical solutions to address and resolve customers' challenges.

What should the government do to increase efficiency and promote renewed investment and momentum in the sector?

Egypt is going through a series of different changes, which require modifications of existing laws and investment encouragements. The current oil and gas laws for the conventional resources will not be suitable for the unconventional exploration and production process. Many countries across the globe realized such differences and are either in the process of changing or have already modified their laws accordingly. Egypt will be required by investors to do similar changes.

On another front, there is an increasing local demand for energy, which will only be resolved through more production and reserves enhancement. However, huge foreign investments are needed to support active exploration and development drilling. In order to attract such pricey investments, the Egyptian government has to provide a better environment in terms of the following: political stability, security, clearer regulations, and infrastructure (communications, roads, etc).

EGPC and EGAS release a couple of new bid rounds every year covering the western and eastern deserts, the Gulf of Suez, Sinai, the Nile Delta and the Mediterranean. We need to study what attractive offers are available in other areas like West Africa, Asia Pacific, and include new terms in our future offering.

“

Halliburton Egypt's theme has always been relationship backed by service quality, those are the components that make us market leaders

”

“

Working with our customers in optimizing the application of our newly introduced technology is one of the factors that make us unique in the market

”

Can you tell me about any of your current projects?

Our main current projects are:

- The horizontal drilling and shale gas with Apache's JVs
- Smart completion technology with ENI group
- Simultaneously running two of the highest profile projects in the HPHT drilling with BP and BG (introducing our latest drilling technology through different Product Service Lines)

In order to promoting different fracking and stimulation techniques for several operators to enhance productivity Halliburton, works with all of Egypt's oil and gas companies in two directions: the first is to increase the production of the brown fields and the second is to help in unlocking the potential of unconventional plays.

Regarding the brown fields, Halliburton worked with the Egyptian market to help enhance the awareness of the importance of high-end technology to increase the production of its brown fields. Many companies in Egypt are now considering and/or drilling horizontal wells as a fit-for-purpose approach for field developments. Also, Halliburton used the technology of transversal fracturing accompanied with the horizontal drilling for the first time in Egypt, with Khalada/Apache. This proved to be a successful and achievable brown field solution for increasing field production and reaching difficult oil. In addition, Halliburton contributed to the introduction of the infinite conductivity fracturing called the "conductor fracturing" method, which is applied in Egypt and has resulted in increasing well deliverability.

Concerning unconventional plays, Halliburton is working very closely with the Ministry, EGPC, and the oil and gas companies to discover, book, drill, and promote this very important reserve for Egypt. Between workshops, seminars, evaluation of existing wells, and drilling new wells, this potential will soon be unleashed for the benefit of Egypt.

What challenges do you face in your operations here?

The Egyptian market is a price driven market at the low and medium end, which makes it difficult to provide the latest technology at certain market segments.

There is also a great demand for resources in several other geographies (Middle East and Asia Pacific) rendering it difficult to compete with other locations in order to secure the required

resources (especially when other locations can provide better margins with better pricing).

Cash issues with several operators is still impacting our financial performance, although positive signs-steps can be observed.

What edge do you have over your competitors in the service market?

Halliburton always differentiates itself from competitors in two main different domains: people and technology.

We hire, train, retain, and attract the best people in the market. We have a dedicated knowledgeable team that we are proud of. They constitute the most important pillar in Halliburton's structure. The second is the fit-for-purpose technology. Halliburton does not introduce technology in the market for the sake of having new technology. We go through a couple of major steps before we launch new technologies in the market. We first start by internally evaluating our technology implementation strategy. In this step we discuss and decide whether or not this technology fits the Egyptian market. Once we are all convinced of the benefits of this new technology, we invite our customers to technical seminars to demonstrate the technology's value. Finally, we work with our customers in optimizing the application of the newly introduced technology. These are the factors that make us unique in the market.

Do you feel the industry is plagued by stagnation due to delayed payments?

There are definitely negative effects to delayed payments. The extent of these negative impacts depends on different operators and how they choose to handle the deferral. In certain cases, major operators maintained their active plans (2013/2014), while others—who are small size operators—are far more affected and reduced their plans accordingly. We still believe that having a clear schedule of paying old debts will send a positive signal to the operating companies and will encourage others to invest in Egypt, and I believe this is what is happening now.

Were your operations impacted by any of the recent unrest?

Because the majority of our operations are located in remote areas, away from the unrest, there were no major setbacks. However, we occasionally face challenges, in the form of delays

on our end, when sending explosives and radioactive materials to rig sites.

Do you face any problems in importing equipment?

No, we don't face any problems importing equipment under the customer umbrella. It's important to mention however, that there is a cycle time of 7 to 30 days for the customer and EGPC to grant the duty exemption prior to the clearance. Also, we don't have an import license to enable direct importation without a customer umbrella.

Tell me about your software and services tailored to unconventional exploration. Do you feel that Egypt has potential in the realm of unconventional?

I think I touched on this in the previous questions and answers. Halliburton is globally considered a leader of unconventional plays developments. We develop methodologies of evaluation like "ShaleXpert" and "ShaleBasin" software that analyze and enhance understanding of the potential of these unconventional plays. These are also implemented in Egypt. The full implementation process takes place through a step-by-step approach to ensure proper evaluation. Halliburton is in full partnership with the Egyptian government regarding the unconventional, and very soon the market will hear very good news.

What are Halliburton Egypt's goals for the upcoming year of 2014?

Developing our market share is an ongoing objective. This can be done only through our competent, well-trained and developed workforce, and also through our strong customer relations and our latest fit for purpose technologies.

We also believe that the unconventional plays (shale gas and oil) will add a lot of value to Egypt's reserves and hence, we are working with the EGPC, EGAS, and the Ministry of Petroleum and Mineral Resources to provide the technical support required to assess and validate the existing reserves and provide the best production techniques. In brief, our goal has been always to be market leaders in brown fields and the unconventional field in Egypt, and will continue to be our goal. We believe that people and technology will continue to put Halliburton Egypt where it deserves to be in the market. We have the best people and technology to continue to be the most preferred service provider.



EMPLOYEE GROUP LIFE PLAN

Provides Takaful plans for the employees and support the company's employee benefit plans.



EMPLOYEE SAVING PLAN

Provides the employees with a lump sum of money upon their retirement as well as providing them with valuable Takaful protection benefits.



CREDIT SHIELD PLAN

Provides benefits when customers business needs help the most, either for loan protection or credit facility protection.



MEDICAL PROGRAM "MEDLIFE"

Offers the employees some medical benefits, therefore Provide supporting companies to offer more benefits to their employees.



From Origin to Excellence



Egypt's Poor Suffer at the Hands of Butane Crisis

For short and long-term memories alike, lack of butane supply occupies the minds of many Egyptians this season, but more likely they are suffering from it. News breaks annually when the shortage worsens, and headlines echo a familiar call for alarm. But the real crisis runs far deeper than winter discontentment.

By Lily Leach

Butane is a form of liquefied petroleum gas used for cooking and heating water in homes that are not connected to the natural gas grid, distributed in canisters containing 12.5 kg of fuel. Only 5.5 million households in Egypt are connected to the natural gas lines while 12 million rely on butane, and a typical household consumes at least three cylinders a month. These blue canisters are a common sight throughout the country, and anxieties over scarcity lead people to hoard supplies.

Egypt is experiencing an ongoing fuel crisis, and specifically, the shortage of cooking gas intensifies annually in November and subsides early spring. November 18th this year, *Al-Monitor's* headline read, "Egypt's Rulers Face First Test With Gas Shortage," despite an announcement from the government earlier that month claiming that the crisis "had been resolved following the arrival of new butane gas shipments last week," according to *Daily News Egypt*. While it's true distribution woes are exacerbated during winter months due to inclement weather—which delays shipments and increases the demand in homes—supply lines remain in a state of crisis beyond this timeframe, despite contradicting announcements from the Ministry of Supply and Trade. *Al-Ahram Online*, informing that the shortage showed no indication of letting up, reported "Egypt's Butane Crisis Still Cooking" in mid-March last year. Even further back, in February 2010, *The Scotsman* published: "Butane Gas 'Shortage' Piles Pressure on Mubarak's Regime." The roots of the butane crisis, the scope of its effects, and the institutional deadlock impeding viable solutions, intersect at the political, economic, and social situation in post-revolutionary Egypt.

Insufficient Domestic Supply, Importing Debt, Tenuous Foreign Aid

How Egypt became a major energy importer despite its oil and gas reserves "goes back to the years of neglect of real long term planning in the energy industry," says Paul Sullivan, Professor of Economics at the US National Defense University. "The *botogaz* (butane) shortage is a symptom of an overall sickness in the planning and implementation of energy and fuels in Egypt that goes back decades."

Reform of the natural gas sector is crucial to attract investment from international oil companies (IOCs), says University of Oxford Energy expert Justin Dargin. Until this happens, there is little hope for an increase in domestic production of butane. However, political stagnation and heavy energy subsidization dulls the incentive for further investment in butane, and makes reformation unlikely.

The reality of this flawed economy is that Egypt's domestic production of butane accounts for only 2 million of the 4.5-5 million tons actually consumed by Egyptians, according to Dr. Omnei Helmy,

Director of Research of The Egyptian Center Economic Studies (ECES). Most of the rest comes from Saudi Arabia in imports, and other countries such as Algeria, the UAE, and Kuwait supply additional butane in the form of aid.

Despite unyielding dependence on foreign aid, several factors prevent Egyptians from actually seeing this aid in the form of butane. Donors are soon likely to feel "donor's fatigue" from Egypt's chronic aid situation, and even the UAE, despite its friendly relationship with the new administration, has expressed unwillingness to continue disbursements, informs Dargin. But when it comes to receiving butane specifically, he admits that "butane is not a priority for aid disbursements as it is typically consumed by the more impoverished Egyptians that lack political power" as opposed to aid in the form of natural gas which, "directly benefits major industrial consumers, and therefore, the national economy and large corporations that have significant political influence."

Subsidies: A Pain Killer, Not a Medication

Subsidies provide only a temporary solution for Egypt's butane needs, and like aid "act like a pain-killer, rather than a medicine," says Heba Khalil, a researcher from The Egyptian Center of Economic and Social Rights. Despite the debilitating debt amassing from supporting the subsidy bill and the institutional inability to implement effective systems for subsidy allocation, it is perceived as politically impossible to cut the funding.

Butane is and isn't a priority for subsidies. In terms of the USD 2.9 billion dollar debt coming from butane's share of the subsidy bill in 2012/13—making the canisters available at such a low cost—the priority is significant. But compared to other sources of fuel, butane receives comparatively little funding. Because energy subsidies tend to be regressive in scope, "they favor forms of fuel that benefit industry and higher-income households because they consume more," explains Dargin.

This distortion affects poor people the most, especially considering the favoring of fuel-based subsidies in general and "the trajectory of subsidies in Egypt, [whereby] subsidies have increasingly shifted away from food and non-energy products," points out Khalil. Households that rely on butane, by definition, tend to be low-income in remote areas of Egypt. Butane accounts for just 16% of the total subsidy bill—as opposed to 64% allocated to benzene and diesel oil, Dr. Helmy informs. In spite of this relatively small share, each butane cylinder is priced at merely EGP 8 lbs, but private-sector smugglers are the ones reaping the benefit of this low cost. For decades, massive profits are made on the butane black market, where canisters see a mark-up as high as EGP 75 lbs. While winter weather is regularly blamed for dwindling of butane supply, the black market is directly responsible for creating and exacerbating shortages and manipulating prices.

Black Market Manipulation

Everyday, civilians are denied the necessary butane required to sustain their livelihood. The nightmare of the distribution warehouses from which they usually come away empty handed is well reported. However, the underlying factor is the system of corruption in place making supplies available to tank retailers of a monopolized black market instead of the needy.

The black market creates an initial perceived shortage, which causes alarm, influences hoarding, and further depletes distribution centers. This vicious cycle heightens demand and increases the prices on the black market, leaving less privileged citizens in a constant state of panic. Desperate competition for supplies has even lead to death in extreme situations.

The heart of the problem isn't so much with the lack of domestic production, imports, or aid disbursements, but with distribution. "Depots have received the same amount of canisters as they did before the crisis. During the Mubarak administration, it was an informal, but an agreed upon, system. But, since the revolution, that system is disintegrating and there is a definite increase in violence used by the syndicates to secure supplies and protect their distribution," says Dargin. This is not to say that during the old regime Egyptians were getting sufficient supply of butane. Rather, "There was more predictability and less overt violence during Mubarak's era." Now, all that is changing, and general unrest has a direct influence on what is happening in butane warehouses. "Whenever there is violence in system," Dargin says, "it means the rules are breaking down and not being followed to a certain extent."

Sullivan also notes the possibility of old networks hanging onto power within the black market, and "hoarding by certain groups for economic as well as political leverage." This hoarded butane is ultimately supplied to their supporters. Even though Egypt experienced a revolution Dargin states, "[it] did not totally eliminate these power centers that were at the base of the Egyptian economy for decades."

Proposed Solutions: Past, Present, and Future

In an effort to regulate the butane market, a plan was proposed to issue ration cards to consumers, but never implemented. Similar assurances were made at the end of November this year by Mohamed Abu Shady, the Minister of Domestic Trade and Supply, when he announced that the crisis was simply resolved. A large butane shipment followed by a system of coupons and ration cards would make cylinders available free of price, and eliminate the black market, reported *Egypt Independent*.

The Supply Ministry also said several hotlines would be activated by which cylinders could be ordered for home delivery. This plan was to be implemented within a few days of the announcement early September this year, but was not. The blunt frequency of these announcements for short-term pacification is indeed strange, since despite claims of stability, shortages are maintained and clashes at distribution centers continue. "The state's ability to manage a similar system [to the ration cards system for food goods] is very questionable," admits Khalil. "Several studies have shown that the most vulnerable households either have no access to the ration cards, or are allowed insufficient amounts of subsidized goods on their ration cards."

Another solution offered for subsidy reform is to replace them with targeted cash transfers. Similar to welfare programs in Europe and the US, they would be conditional to income and ostensibly benefit low-income households who actually need it, while avoiding the system of subsidized butane on the black market. However, implementation of such a plan would potentially open new avenues for corruption and would be an administrative nightmare to accurately locate those in need, who are typically off the grid and not well-informed. Of the short-term options proposed by the government such as price controls, cash transfers, and rationing, Sullivan says, "they are great for smugglers, but do not solve the overall problems of Egypt's energy supply gaps."

In the long term, the Ministry of Petroleum and Mineral Resources plans to expand the gas grid to 8 million homes after accepting a loan of USD 500 million from the World Bank to ease Egypt's dependence on the butane subsidies. Connecting more Egyptians to the grid would limit the black market's influence because natural gas is virtually impossible to smuggle. The main benefit of expanding the natural gas network is the "Centralization of energy, in effect promoting universal access to energy across the income spectrum, and reducing dependence on cylinders themselves will reduce costs of their maintenance," says Dargin, but there are pitfalls as well. Natural gas allocation is a crisis in Egypt unto itself and the government can hardly manage the burden of its existing connections. "Connecting as many homes as possible to natural gas pipeline systems is probably the best of these solutions," says Sullivan, "but this does not resolve the problems with the overall energy system of Egypt, which is more interconnected than most people would like to believe."

Conclusion

Experts almost universally agree that reduction of subsidies is vital to solving the crisis—in concurrence with shorter-term transitional solutions such as ration cards or cash transfers—but they stress the need for a competent administrative system to come first. However, while foresight is crucial to curing Egypt's energy situation, it's just as important to look back to past attempts at subsidy removal—the bread riots of Sadat's Egypt serve as a sobering reminder of the consequences of brash structural reformation. When considering the common Egyptian, for whom the need for butane supply poses a dire and existential crisis on a daily basis, taking away subsidies would void them of a resource that makes their livelihood just barely sustainable—but without it, conceivably impossible.

Gas News

EGAS and Shell Fail to Strike Summer Gas Deal

EGAS and Shell have failed to reach an agreement concerning Egypt's summer gas supply. Sources told *Daily News Egypt* that EGAS "has only one choice to supply the electricity stations' needed gas for next summer, through dividing the imported quantities required over several petroleum companies, which would be easier to access and negotiate with states," but EGAS has decided against new private sector auctions in the past, and chose to depend on its limited agreement with Shell. However, Egypt is considering proposals from Golar, Accelerate, Citadel, and another Norwegian company to establish a station for transforming imported liquefied gas to gaseous form, to meet domestic needs.

Ministry of Petroleum Announces Subsidy Reform Plan

Sherif Ismail, Minister of Petroleum, announced a five-year plan to restructure the petroleum products subsidies system, according to *Daily News Egypt*. The minister told *Al Borsa* that "This timeframe was decided in a way for price changes to not cause any market shocks." Last year's budget for these products reached EGP 120 billion, EGP 57 billion of which were assigned to diesel, while this year the budget for diesel reached EGP 99 billion. Ismail added, "There

would be no more than one price for fuel and diesel in the Egyptian market." He stated that the smart card system is applied to control the circulation process of the petroleum products in the market as well as limiting smuggling activities. Budget calculations show that the smart card plan will cut EGP 24 billion from diesel subsidies, EGP 7.9 billion from fuel and EGP 2.6 billion, with a total EGP 99 billion remaining from petroleum products subsidies.

Egypt Distributing Gas Smart Cards

The Egyptian Ministry of Petroleum announced this month they would start the second phase of smartcards distribution. The aim is to buy subsidized gasoline and diesel from the government, *Al-Shorfa* reported. Radwan Fathallah, an advisor at the ministry, stated that this phase should

end by January after all gas stations are equipped with the proper devices. He added that, "Using smart cards will allow for better control over the distribution of subsidized gas, and prevent leakages to the black market or to cross-border smugglers." According to Amr Mokhtar,

the ministry's planning director, he mentioned that citizens could order their smart cards online through the Ministry of Supply and Internal Trade's website. Smart Cards can also be picked up free of charge at the post office, the bank for Development and Agriculture Credit, or they

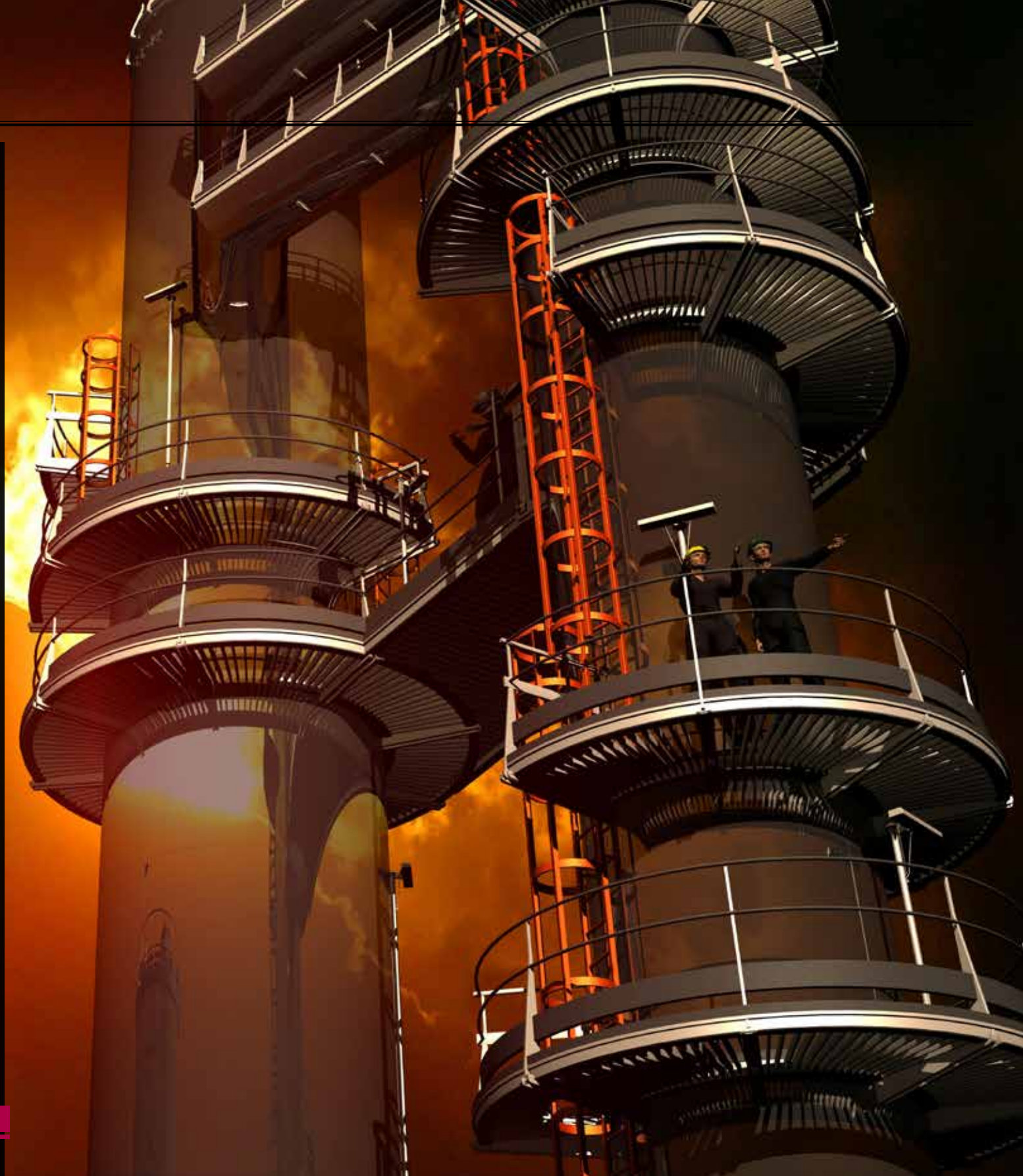
can be mailed to a home address for free. Fathallah mentioned that the ministry will print a total of nine million cards to replace any lost or damaged cards. Seven million total smart cards are to be distributed.

Egypt's Gas Calamity:

The Way Forward?

Egypt's gas consumption has doubled in the past decade, but production has been in a downward trend since 2009. Currently, the country consumes about 6.7 billion cubic feet of natural gas a day, but produces only 5.4 billion, 0.8 billion of which is exported. The production fell by 8.5% in the first nine months of this year compared to the same period of 2012. Since gas export obligations are still in place, but import options are hardly established, the country is experiencing shortages. The shortages are set to worsen rapidly unless Egypt manages to produce or import more gas or curb consumption.

By Laura Raus



Consequences of Shortages

Gas shortages have disrupted the production of some other goods, particularly cement. This summer, production at South Valley Cement had to be suspended due to lack of gas¹. In October, Titan Cement Company said its factories had reduced cement production by 24% because of low and volatile gas supply, writes *Daily News Egypt*. Additionally, since about 60% of the gas produced for the domestic market is utilized in electricity production, the shortages risk putting power plants on halt.

Due to shortages, Egypt has been forced to slash its gas exports, to an extent that as of mid-November, two of the country's LNG export plans, the Damietta facility operated by Eni and Spain's Gas Natural SDG, have not shipped any cargoes this year. Pipeline exports to Jordan, which should amount to 240 million cubic feet per day, have been reduced to around 50 million most of this year and have dropped further, to "negligible" quantities, since September, writes the *Jordanian Times*. "We will compensate Jordan later when we have natural gas surpluses after satisfying local needs," promised the Chairman of EGAS Taher Abdel-Rehim. However, until this happens, Jordan has to use more expensive fuels for power production, which it says will cause losses reaching USD 5.24 billion by the end of year.

Causes of Shortages

Egypt has Africa's third largest proven gas reserves,

amounting to 77.2 trillion cubic feet, informs the US Energy Information Administration. Besides, the US Geological Survey estimates that Egypt's Nile Delta basin contains as much as about 230 trillion cubic feet of not yet fully proven, but technically recoverable reserves.

There has been a number of gas discoveries made in Egypt recently. For example, BP announced a new offshore discovery in September. The deepest well ever drilled in the Nile Delta, reaching about 7 kilometers under the sea bed and costing USD 380 million, led it to discover an estimated 1.2 trillion cubic feet of gas, indicating that there may be very productive geology at these depths, reports *Reuters*.

However, Egypt lacks capacity to produce gas from its reserves. "The development of gas fields has been hindered in recent years by the lack of a satisfactory price for producers selling gas to the government," noted Wafik Alfred Hanna, Senior Partner at Deloitte, referring to the Deloitte Resources – Intellinet (The Economist intelligence Unit). "Certainly if gas prices were higher in Egypt, we could exploit some discoveries we made in the Mediterranean," said the Chief Executive Officer of Eni, Paolo Scaroni, in November. Political instability, payment delays, and uncertainty about government policies have also had a negative effect on investments. For these reasons, BP has not yet acted on another deep discovery, Satis, which it made more than a year ago. BG announced in September that it was delaying its West Delta Deep Marine project due to "ongoing po-

litical and social instability in Egypt". Dana Gas last year had to restructure about USD 1 billion of its bonds because of payment delays in Egypt and Iraq. By the end of September this year, the amount Egypt's government owes increased to USD 297 million. Dana recently said it could boost its production quickly by 25% if the government paid off the debt and the company was permitted to sell output at a higher price, writes the *Wall Street Journal*. According to *Bloomberg*, Dana has also proposed that the government could pay 65% of its dollar debt in Egyptian pounds. "Clearly Egypt is becoming more gas deficient," said Tom Hickey, the CEO of Petroceltic International, adding that there is more upside in oil because the price is not capped.

Efforts to Raise Production

In order to make gas exploration and production in Egypt more attractive for companies, the government is revising the prices it pays them for gas. The Minister of Petroleum and Mineral Resources Sherif Ismail, informed in November that EGAS would sign seven new contracts and modify seven others within two weeks. However, three weeks later the negotiations had not yet been concluded.

In December, the government announced it had approved the repayment of USD 1.5 billion of its USD 6 billion debt to foreign oil and gas companies. The repayment, USD 0.3 billion of which will be in Egyptian pounds, was set to start on December 1st. A further

USD 3 billion is planned to be paid back in monthly installments until 2017.

In addition to reassuring the existing investors, the government is trying to lure new ones. It recently asked Russian companies to draft a map of Egypt's oil and gas reserves by using satellites. According to Egyptian officials, Russia would be asked to bid for development of new reserves. However, it may be hesitant to do so after the Russian gas producer Novatek exited the Egyptian market in February due to political instabilityⁱⁱ.

The government is also encouraging companies to explore Egypt's shale gas resources. According to EGAS, 100 trillion cubic feet of extractable shale gas has been discovered in the eastern and western deserts. The company is currently studying the feasibility of shale gas exploration in the western desert with Shell and Apache, writes *Egypt Independent*.

There are signs that the government's efforts are paying off to some extent. For example, in September RWE Dea launched gas production at its Disouq concession, expecting an output of 160 million cubic meters per day by mid-2014ⁱⁱⁱ. Foreign oil and gas companies have committed to spending USD 8 billion for research, exploration and development according to the investment budget of 2013/14, said Sherif Ismail. "Some new fields will start production during the second quarter of 2014," he informed. BG and Petronas have said that they would produce additional 400 million cubic feet of gas next year at investments worth USD 1.5 billion. BP is considering drilling a USD 360 million exploration well close to Damietta, informs *All Africa*. In October and November, the government signed 14 oil and gas exploration contracts, the first such awards since 2010, which require minimum investment of USD 585 million. Next year, EGAS plans to launch an international tender for deep water gas exploration in the Mediterranean.

Challenges for Raising Production

"There is still a lot of potential for natural gas in Egypt," believes Dr. Paul Sullivan, Professor of Economics at the US National Defense University. However, there are big challenges for realizing this potential. Due to increased risks related to operating in Egypt, exploration companies want a larger stake in revenues, noted Professor Christopher Knittel, the Director of MIT Center for Energy and Environmental Policy Research. According to Sullivan, producers will probably want longer term contracts, but these carry higher risk for the government since gas prices are likely to fall due to the shale revolution and more integrated gas markets resulting from spreading LNG exports. Sullivan stressed that besides improving political stability and paying off debts, the government has to become more rational and timely when it comes to decision-making in gas issues. "World gas markets are getting more competitive by the day and Egypt needs to keep up," he said. Sullivan does believe Egypt has potential to attract new investors from emerging economies such as Russia and China. "The US is losing leverage in Egypt due to its policies on Egypt. Russia and China would be very happy to fill in the gap," he explained.

He is rather skeptical about the potential of shale gas in Egypt since the country so far does not seem to have very much of this resource and producing it requires a lot of water. However, Sullivan added that, "there is no harm in trying" since shale gas wells can be completed, as well, shut down more quickly than conventional wells where pressures are usually higher. Shale gas production can be turned on and off readily depending on how much the producers can get paid for the gas. Knittel believes that some exploration for shale would make sense in Egypt since the country's geology may prove good for its production.

Gas Import Options

At least as a temporary measure, Egypt needs to raise gas imports in order to meet surging demand. In Oc-

tober, Israel said that Egypt had expressed interest in importing its gas via the pipeline connecting the two countries, which until spring 2012 transported Egyptian gas to Israel. "If it turns out that they do want gas and that these things are real, I see no reason why not (to sell it)," said Israel's Energy and Water Minister Silvan Shalom. According to Wafik Alfred Hanna, Israeli investors have also discussed the possibility of using the two LNG export terminals that Egypt has for exporting Israel's gas further. However, Egypt in October denied its interest in the Israeli gas, saying it is eyeing LNG imports instead, reports *World Bulletin*. Last year the government launched a tender to build a LNG import terminal, but canceled it later. In October this year, the government issued a tender to rent a floating LNG import unit, expected to be in use by April. Hence, if Egypt is determined to import LNG it would be cheaper from Israel. "It may be cheaper to import gas via pipeline from Israel on the ground cost terms, but it could be hugely expensive politically to have this happen for any Egyptian leader," noted Professor Sullivan. "I would not rule out imports from Israel in the future, but that would entail many changes in the region, including a comprehensive peace accord and an improvement in the relations between the Egyptian people and Israel."

There are speculations that Egypt may attempt to buy Israeli gas via Cyprus. These stem from the fact that Egypt is negotiating with Cyprus over buying its gas in exchange for the use of Egypt's LNG export facilities, writes the *Middle East Monitor*. However, Egypt's Prime Minister Hazem al-Beblawy assured in December that the country would not import Israeli gas through Cyprus.

Since Cyprus will be ready to start gas exports only after 2020, Egypt's needs other import options in the near term. A convenient option for LNG imports could be Qatar, but Egypt's relationships with this country are problematic. Qatar was a firm supporter of Egypt during the reign of Mohamed Morsi and even agreed to send five cargoes of LNG for free. Talks were underway for acquiring more cargoes, but these ceased after Morsi's ouster. Yet, Egypt has not excluded gas imports from Qatar but other options are being explored. In October, EGPC Chairman Tarek El Molla said, "We still have possibilities with Algeria, Yemen, and other countries."

"The political differences may be outweighed if the Qataris agree to sell LNG to Egypt at well below market prices, much like what they do with the US," believes Sullivan. Gas imports from Yemen would be very risky in his opinion due to the country's political situation. "Yemen would also likely want to sell gas at higher prices to Asia, unless the Saudis or others subsidized sales to Egypt," he noted. "Algeria has far more gas than Yemen. It is politically more stable for now. We will have to see what happens in the future. The attack on the In Amenas field run by BP was not a good sign."

Sullivan added that Egypt should strive for diversification of gas imports. "There are many options open to Egypt. LNG is often traded over massive distances," he said. "World natural gas markets are in for some very big changes and one of the drivers is the shale gas revolution in the US that will likely spread to many other parts of the world. It could even be the case that US LNG exports could come to Egypt some time in the future."

However, Egypt is currently struggling to find any import options. *Al-Borsa* reported in December, that negotiations of EGAS and Shell over gas imports for next summer have failed. Talks with some other companies continue as Egypt plans to import 500-750 million cubic feet of gas per day for its power plants next summer, but according to sources, EGAS has already a significant delay with preparing the imports. According to BG CEO Chris Finlayson, Egypt is converting more of its power plants into dual-fuel or oil burning due to the lack of gas.

There are also talks underway between Egypt and Gazprom to buy 13 shipments of LNG equal to 30 billion cubic feet of gas. This LNG is to be allocated to Gas

France and BG since—as per the agreement that was finalized in March—the companies sent 18 shipments to Egypt and it pledged to pay for them in gas rather than money. Five shipments have already been returned thanks to free cargoes that Egypt received from Qatar in the summer.

Gas Consumption Reduction Options

Egypt can also curb its gas consumption by replacing it with other fuels. This is the option that Titan Cement Company is eyeing. Its proposals, submitted to the government, include using coal and producing energy from waste. The government agrees that it is important to find alternatives to gas. However, the Minister of Environment Leila Iskandar, has expressed her opposition to importing coal, even though her ministry has not made its final decision. Renewables, on the other hand, are more expensive. Frustrated by gas shortages at its factories, the cement company Lafarge at the end of October started importing coal without the government's permission. "A violation report was issued and a fine will follow," said Iskander after being informed about it. "Although I doubt that this fine will make a dent in this multinational's budget."^{iv}

Another way to reduce gas consumption is just to consume less energy. According to Professor Knittel, raising public awareness and reducing subsidies could improve energy efficiency. "It would be difficult for Egypt to achieve large-scale reductions in consumption without raising prices," he noted. However, higher energy prices could bankrupt many companies. "Getting rid of gas subsidies could lead to greater unemployment and a further slowdown in the economy with increased inflation," admitted Professor Sullivan. "Maybe the best thing to do is to keep the gas and electricity subsidies until the political and economic situation is better and then start to phase them out at carefully moderated speeds and directions." Sherif Ismail said, "Any change in the subsidy system should be put up for societal discussion."

Conclusion

According to Wafid Alfred Hanna, Egypt's gas consumption will increase another 36%, to 58.8 million ton of oil equivalent, by 2020, mainly due to the expansion of the electricity sector. Experts are not sure if Egypt will manage to avoid gas shortages in the future, but there are many ways for minimizing their likelihood. They include solving the arrears problem, speeding up and rationalizing decision making, exploring unconventional resources, ensuring diversified imports, replacing gas with other fuels, reforming subsidies, as well, increasing awareness about energy efficiency. Additionally, it is particularly important to improve political stability and security since without them, as Professor Sullivan says, "all other policies could prove to be just background noise." The question remains, will Egypt emerge from this gas crisis in time?

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Over-Subsidized and Unaware:

Egypt's Culture of Energy Consumption

By Tatiana Duran & Maya Moseley

Energy Consumption Crisis in Egypt

Egypt lacks an energy conservation culture. Yet, the demand for energy continues to grow with increasing industrialization and a skyrocketing population. Egypt is not alone in facing this problem, as many other oil-producing countries in the Middle East are plagued with increasing domestic demand for energy.

The heavy subsidization of energy products in Egypt is forcing the oil producing countries of the Middle East to pay billions of dollars to keep prices low. Subsidies, in theory, can help some countries protect the poor and can aid in the overall industrialization process. However, subsidies have led to a lack of conservation culture and wasteful spending in Egypt. According to the Arab Union of Electricity, the price of residential electricity in (US cents/ kwh in 2010) was less than two cents in Egypt, but around 11 cents in the United States. Low prices have made companies and households alike less concerned about their monthly electricity bills, which leads to wasteful spending.

While energy subsidy policies need to be re-evaluated, all aspects of demand-side management should be a priority. The lack of education about wasteful consumption or energy efficiency is one of the biggest factors hindering Egypt's economy today, and is crucial for Egypt to increase its energy efficiency to attain the economic and environmental benefits for consumers, industry, and the government alike.

According to *Ahram online*, in the last two years, national electricity consumption in Egypt has increased by more than 10% whereby total daily electricity production in Egypt stands at about 27,000 megawatts, while in summertime consumption stands at about 29,500 megawatts per day. It is evident that awareness of energy efficiency must be increased to avoid such massive disparities between production and

consumption, which has resulted in paralyzing power cuts in the past.

According to the Arab Forum for Environment and Development's (AFED) Energy Efficiency Handbook (EEH), buildings in Arab countries account for 35-45% of all CO2 emissions and account for around 35% of all final energy consumption. However, studies have shown that efficiency renovations can save commercial buildings around 30% of their energy usage. Unfortunately, there are barriers towards efficiency upgrades. The biggest hurdle is the upfront capital cost of efficiency upgrades. While a major efficiency overhaul could save a company a substantial amount of money, they may not see those savings for a couple of years. Again, lack of knowledge about energy saving measures and ways to increase energy efficiency is a major factor.

Current Efforts to Improve Energy Efficiency In Egypt:

Non-governmental agencies (NGOs), private investors, and government agencies have collaborated on programs that are designed to improve energy efficiency in Egypt. Current efforts include an awareness campaign launched by the Egyptian German Joint Committee on Renewable Energy, Energy Efficiency, and Environmental Protection (JCEE) organization, in partnership with Procter & Gamble. Additional programs targeting industries have also been developed, including a pilot project by the USAID, Egyptian Industrial Development Agency, the Egyptian National Cleaner Production Center, and the World Environment Center, which targets food-processing enterprises. The project assists companies in conservation through investments in energy-efficient equipment, as well offering strategies to reduce energy leakage.

Easy and Cost-Effective Ways to Save Energy:

Lighting

In the Arab world, lighting represents 15-25% of the total energy consumed by large office buildings. Not only are most lighting systems inefficient, but they also emit a large amount of waste heat that adds to the building's cooling load. Light bulbs today are still surprisingly inefficient; incandescent lamps only convert 6% of drawn electricity into useful light, whereas compact fluorescent lamps (CFLs) come in at 24%, and light-emitting diodes (LED) rank at a 27-45%.

- Artificial Light: Switching off lights in unoccupied rooms and during the night can increase energy efficiency by up to 20%.
- Natural Light: Offices can also make better use of natural light via windows and doors when possible, which can help save up to 30% of lighting electricity consumption when used effectively.
- Ensure regular lighting maintenance: This is especially important in Cairo where pollution and dust buildup on lights and walls can decrease illumination by 20%.
- Light Bulbs: Replace older incandescent light bulbs with more efficient CFL bulbs. Not only are these bulbs more energy efficient, but they also give off less heat waste, thus reducing cooling costs as well.

Office Equipment

Surprisingly, office equipment (i.e. computers, copiers, monitors) accounts for, on average, 18% of total energy use for offices. Non-energy saving PCs, consume about 520 KWh/yr while Energy Star models can save up to 83% more energy per year. A standard non-Energy Star copier (21-40 ppm) uses 660 KWh/yr, but if energy saving mode is used or if the copier is upgraded to an Energy Star model, the copier has the potential to save up to 55% more energy. Energy Star equipment is often no more expensive than less efficient products.

- Shut down computer monitors, copy machines, and other equipment that are left on over night.
- Be aware and take advantage if your office equipment has energy-saving settings.
- Upgrade office equipment to more efficient models with an energy certification, like Energy Star. Energy Star was developed by the United States Environmental Protection Agency to reduce energy consumption and air pollution by manufacturing products designing buildings that meet the highest energy efficiency standards.

HVAC (Heating, Ventilation and Air-Conditioning)

Heating, ventilation and air-conditioning systems are responsible for the biggest percentage of an office's energy consumption, yet they have the potential to bring the energy savings if used effectively. HVAC consumption varies geographically due to climate differences, and AC levels are highest in the Middle East for longer periods throughout the year. According to the EEH, HVAC systems account for on average 51% of a building's energy consumption in the US, 52% in Spain, 58% in the United Kingdom, 70% in Saudi Arabia, and 71% in Bahrain.

The Egyptian government's Organization for Energy Planning (OEP) has developed efficiency standards for air conditioners—along with other common residential appliances—that must be met by manufacturers and importers to attain efficiency labels for the appliances. As reported recently by *Ahram online*, the Egyptian Ministry of Industry and Foreign Trade, in an effort to promote energy conservation, has given local producers and importers of household air-conditioners a one-year grace period to implement energy-saving air-conditioning units. Even though these units might be costly, Mohab Hallouda, senior energy specialist for the Middle East/North Africa Region, emphasized in a quote to *Ahram online* that the increase in unit prices will be "quickly offset by decreases in monthly electricity bills." While this was a positive step by the government, it falls to consumers to check the labels to ensure that they are purchasing an energy efficient HVAC system.

- Increasing lighting efficiency will also reduce wasted heat within a building.
- HVAC systems should not be used in unoccupied spaces or be left on overnight.
- Make sure all windows and doors are shut when HVAC systems are on—easier said than done since many Egyptians smoke indoors and leave windows open to facilitate ventilation.
- Adjust the thermostat during the winter and summer. In many offices people unnecessarily lower the temperature to 20°C or lower during the summer months. When an HVAC system is regulated correctly an average temperature of 23*-24* C in the summer and 20* in the winter is ideal. EEH estimates that for every 1°C decrease, energy consumption could increase by 1-2%.
- Ensure HVAC systems receive regular maintenance to remove buildup from clogged air and water filters.

Vehicles

Energy efficient measures can also be taken on a company's vehicle fleet to reduce green house emissions and to save money on fuel. Companies should be conscientious of the way company vehicles are used. While this is relevant globally, this is especially important in Egypt, where traffic is considered some of the most chaotic in the world.

- Choose the "best-in-class" model when buying a new vehicle, as these cars often have the highest fuel efficiency.
- Make sure that cars meet but not exceed the needs of the company. Extra features such as 4-wheel drive can increase the cost of the car and sometimes create higher emissions.
- Educate employees about how to be more efficient drivers. Rapid acceleration and deceleration can waste up to 40% more fuel than a slow controlled deceleration.
- Drivers should also to avoid idling. According to the EFH, ten seconds of idling can use more fuel that re-starting an engine would.
- Drivers should obey speed limits, as most cars reach their maximum efficiency before 100 km/h. Like light and HVAC systems within an office, vehicles need to be properly maintained to keep their fuel efficiency. Under inflated tires and wheels that are out of alignment can decrease fuel efficiency by 3-4% each.



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A Constitution “For All Those Determined”

In an article last month, I wrote that the new Egyptian constitution must accomplish these three aims: prevent presidential autocracies, limit the authority of the military, and provide more rights for more Egyptians. Given that the draft constitution has been finalized, and a national referendum on the draft will commence on the 14th and 15th of January, I believe it is necessary to examine the degree to which the amended constitution accomplishes the lofty aims set forth in my December article. Although the draft constitution of 2013 takes some positive steps in the realms of protecting rights and freedoms and preventing presidential autocracies, it ultimately fails to limit the power of the military. Instead, it appears to pave the way for greater military involvement in politics as an unchecked, quasi-government entity.

A Rough Start

It is safe to say that the final draft of the 2013 constitution has gotten off to a rocky start. On December 15th, a press conference held to generate support for the new constitution appeared to have precisely the opposite effect. Behind the panel speakers, among whom sat Amr Moussa, head of the 50 member constitutional committee charged with amending the constitution, hung a banner expressing support for the draft constitution. The rest of the story closely resembles a transcript from a Bassem Youssef episode, but sadly this is no joke. The banner misspelled the Arabic word for "Egyptians" and instead used a word meaning "(those) determined". Second, the banner featured five pictures of people meant to symbolize the diverse Egyptian people whom the constitution ostensibly protects. Unfortunately, only two of the pictures depicted actual Egyptians. Of the other three, one was an American doctor who fixes stretch marks, another showed an Irish businesswoman, and the third was a young American man with Down syndrome. While the banner itself represents little more than a minor controversy of major oversight, it nevertheless highlights concerns as to whether the new constitution adequately represents and protects Egyptians.

A Mixed Bag

Despite the rocky start, the draft constitution makes some definite strides in providing more rights to more Egyptians, such as women. Article 11 of the draft constitution clarifies the unclear language of the 2012 constitution regarding the state's responsibilities towards women. In addition to clarifying the state's responsibility to achieve equality between men and women, the draft constitution mentions, "the state commits to the protection of women against all forms of violence, and ensures women empowerment to reconcile the duties of a woman toward her family and her work requirements." In addition to promoting equality and protection of women, the constitution also contains a clause granting women "appropriate representation" in parliament and the "right to hold public posts and high management posts". While many consider this language long overdue, these developments nevertheless represent real progress, however small, in defining the state's responsibilities towards female citizens. It remains to be seen how successful the state will be in carrying out these responsibilities.

The constitutional committee also made minor changes to the article concerning freedom of belief. In the 2012 constitution, freedom of belief was described as an "inviolable right"; however, the wording of article 64 in the new constitution states, "freedom of belief is absolute". It is unclear to what degree this change in language will affect the state of freedom of belief in Egypt. The other clause in the article reads, "The freedom of practicing religious rituals and establishing places of worship for the followers of revealed religions is a right organized by law." This limited definition of religion is essentially the same as that used in the 2012 constitution, and it does not go far enough to protect practitioners of religious traditions that fall outside of the revealed, or Abrahamic, religions.

In my December article, I wrote that creating a legal framework for preventing presidential autocracy served as an important goal to be accomplished by the new constitution. There has been some minor success in this regard. The draft constitution delegates some executive power to the prime minister, creating more of a semi-presidential system. At the

same time, the draft constitution hampers the president's ability to declare a state of emergency. A state of emergency must be presented to the parliament within seven days of enactment, and it must be approved by a majority vote in parliament. This means that a state of emergency can only last for a week before its fate is determined by parliament. This is especially important considering that past Egyptian presidents took advantage of their authority to enact states of emergency lasting for decades. For this reason, many observers have heralded this aspect of the draft constitution as the most promising of the amendments.

The role of the military, as defined in the draft constitution, is unfortunately less promising. First, the draft constitution failed to end military trials of civilians. Article 204 of the draft constitution prohibits military trials of civilians, but it then includes a massive list of exceptions, which essentially negate the aforementioned prohibition. The exemptions include "crimes that represent a direct assault against military facilities, military barracks, or whatever falls under their authority; stipulated military or border zones; its equipment, vehicles, weapons, ammunition, documents, military secrets, public funds or military factories; crimes related to conscription; or crimes that represent a direct assault against its officers or personnel because of the performance of their duties". These exceptions provide the military with a great degree of flexibility to try civilians.

Second, the draft constitution takes the responsibility of appointing the defense minister out of the president's hands. Instead, the Supreme Council of the Armed Forces (SCAF) is responsible for appointing and approving the defense minister. Moreover, the draft constitution describes the president as Supreme Commander of the Armed Forces and the defense minister as Commander-in-Chief of the Armed forces. This confusing language begs the question as to who ultimately controls the military. This is especially important given that it is the SCAF, which appoints the defense minister. Third, the draft constitution stipulates that the National Defense Council determines the military budget, a body composed of and heavily influenced by members of the military. These three aspects of the draft constitution demonstrate a strengthening of the military as an unchecked, quasi-governmental institution.

The Devil's in the Details

The situation is further complicated when discussing the role of religion in the state as defined by the draft constitution. With respect to Sharia law, the newly drafted constitution is essentially no different than the 1971 constitution created by President Anwar Sadat and the more recent 2012 constitution. Just as in the older constitutions, article 2 stipulates, "The principles of Islamic Sharia are the principle source of legislation." The Nour Party representative, one of the only Islamist members of the committee, lobbied unsuccessfully to change the term "principles" to "rulings", which would have resulted in the facilitation of a stricter version of Islamic law. The 50 member constitutional committee also fiercely debated article 219, which strictly defined these principles of Sharia law. Ultimately, the committee members decided to completely remove article 219, and it does not appear in the new draft of the constitution.

The committee also decided to ban religious parties in article 74 of the draft constitution. The full article reads: "Citizens have the right to form political parties by notification as regulated by the law. No political

activity may be exercised or political parties formed on the basis of religion, or discrimination based on sex, origin, sect or geographic location, nor may any activity be practiced that is hostile to democracy, secretive, or which possesses a military or quasi-military nature." This article serves as an inherent contradiction. On the one hand, its goal is to exclude the Muslim Brotherhood from official participation in political parties. On the other hand, the article seems to ignore the fact that another religious party, the Nour Party, was active in drafting the constitutional and is urging their supporters to vote in favor of the draft. How can a fair constitution exclude one religious party and include another? Clearly, the Nour Party believes that they may be exempted from the ban because of their willingness to cooperate with the interim government following the removal of former President Mohamed Morsi. Yet, if that is the case, then it appears all the more likely that this new constitution will not represent all Egyptians but rather only those who supported the military intervention on July 3 and the consequent interim government.

A scandal over one word in the finalized draft may provide some insight into the future of this draft of the constitution and the greater consequences for Egypt. After the final vote on the draft constitution, members of the committee pointed out that the phrase "civilian rule" had been secretly changed to "civilian government." Some observers believe that since "government" is often understood as the cabinet in Egypt, the word change leaves open the possibility for members of the military to run for higher offices like the presidency. The current defense minister, General Abdel Fattah al-Sisi, has not dispelled rumors that he may run as a presidential candidate, and this small word change may just provide him with enough legal leeway to make a successful presidential bid. Others believe that the change is meant to prevent religious figures, especially those from the Muslim Brotherhood, from participating in government.

Whatever the case may be, this controversy serves as another example of a rushed and unnecessarily secretive constitutional process that is unlikely to result in a lasting success. The composition of the constitutional committee did not adequately represent the Egyptian people, though a great effort was put forth to portray the members in such a light. Moreover, some of these members were even absent from major votes, like the vote over abolishing the Shura Council. High aspirations for a lasting political tradition quickly deteriorated into acceptable standards for a transitional period of recovery from Muslim Brotherhood rule. This time around, perhaps good enough is good enough, but it doesn't necessarily have to be that way.

By Robert Mogielnicki

Robert Mogielnicki is a political and economic analyst who focuses on the MENA region. He is currently pursuing a graduate degree at the University of Oxford in the field of Middle Eastern Studies. He can be contacted at mogielnicki.robert@gmail.com

Construction of the East Baharia Power Station

By Eng. Amr Mohamed Hafez-
Project Dept. Head

Foreign partners have agreed to fund an electricity station to produce up to 8,000 barrels, and attract investments amounting to USD 47 million. This is following the company's success in reducing the cost of barrels, and maximizing the use of natural gas to manage all machinery and pumps—under the guidance of the Minister of Petroleum and the President of EGPC—that will reduce the imported amount of diesel and currency, made possible by the confidence of foreign partners in the feasibility of such projects.

The East Baharia and Heba concessions contain about 78 wells of oil and water, and are produced from these wells using pumps powered by mobile generators ranging from 256 to 480 kilowatts. However, each well has its unique diesel generator and is scheduled to drill 25 wells during the coming year.

The diesel fuel that is used in the current generators costs about USD 19 million annually, which is imported from abroad and is considered too pricey.

Therefore, to reduce the price of this fuel, the company has conducted engineering studies for using natural gas located in the western desert and the establishment of a power plant powered by natural gas in East Baharia, with capacity of 16 MW. The plant is to feed the well regions at East Baharia and Heba, as well as, feed the oil stations and water injection stations at the two regions, in addition to the secondary electrical needs, such as camps.

The project consists of six gas turbines, the capacity of each being 3.2 MW per turbine. Switch gear building, in addition to the transformer station which will transfer power to the wells and shipping stations, and water injection through the overhead transmission lines with length of 30 km and fuel gas to the power plant, shall be connected through an 8-inch pipeline along the 20 km line linking by Abu Algradik / Dahshur.

Initiating this power plant in East Baharia reduces the operation of diesel generators to 78, which are currently in

service within the concession area at East Baharia. The estimated capital savings associated with the transfer of the 78 generators to remote locations is around USD 4,290,000, in addition to the termination of contracts and the provision of 13 rented electric generators.

The total estimated value of the provision of annual diesel fuel is about USD 19 million annually, and the installation of the power plant will reduce downtime of production, and improve the operation efficiency and the age of pumps within the wells. These overhead transmission lines shall provide the energy needed to run the large water injection pumps, which require high-power capacity. They can't be operated in the case of a mobile generator shortage, which also reduces the risk of a production loss relating to the supply of diesel fuel. The expenses of this loss for the project will be fully recoverable within 30 months from the start of the project.

The cost of this project is USD 47 million and ENPPI shall carry out engineering and designs, EMC is responsible for electric and mechanical installation work, and Petrojet shall construct the gas pipeline to get this project completed within two years.

Through this project, the company aims to increase the investment value of Egyptian companies (EMC, PETROJET, ENPPI, Elswedy, ELMACO, and ABB) by approximately USD 25,826,604, and incur foreign investments amounting to approximately USD 21,706,397, represented in the value of gas turbines. This is meant to increase the confidence of foreign partners in Egyptian products and the status of the Egyptian economy, thus providing foreign currency and job opportunities for technical staff.

Contractor implementation: ENPPI, Petrojet, EMC, ELSWEDY, ELMACO.

The operation of three turbines using gas fuel, and the completion of the entire project is expected during the month of December of 2013.



Reported By Wael El Serag

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EPEX Explores Unconventional

ENAP Sipetrol – Egypt Branch had the pleasure of hosting this year's EPEX Conference (Egyptian Petroleum Exploration Society) at Sky Resort on Wednesday December 4, 2013, under the auspices of HE the Minister of Petroleum and Mineral Resources. The Egyptian Oil Sector's most prominent figures, as well as Sipetrol's top management currently headed by Eng. Sayed Rezk, the newly appointed General Manager, attended the conference. Mr. Hesketh Streeter, ENAP E&P Manager attended as well.

The following presentations were given during the conference: Mr. Lisandro Rojas, former GM of ENAP Sipetrol –

Egypt Branch, gave a presentation about the "Economics & Contract Models for Unconventional Gas Projects", and Mr. Joe Versfelt, Apache Egypt Region Exploration Manager, gave a presentation titled "Egypt Unconventional and Tight Resource Potential." Dr. Ahmed Abdel Fattah, EGPC Vice-Chairman for Exploration, gave a presentation titled "Shale Gas Evolution or Revolution...Where Are We Now?".

To commemorate the event, Dr. Ahmed Abdel Fattah handed honorary gifts to the guest speakers thanking them for their contribution. Mr. Streeter also received an honorary gift on behalf of ENAP

Sipetrol.

It is worth mentioning that EPEX is the geological society of a public-spirited, nonprofit organization that was founded in 1982, as the Egyptian Petroleum Exploration Society (EPEX).

The Society's mission is to stimulate and advance the application of geosciences and geengineers in the oil exploration and production field, through conferences, technical sessions, short courses, publications, as well as field trips.

Moreover, the society aims at spreading the knowledge, sharing the best practices, and applying new exploration ideas for enhancing innovation and for the improvement of the oil and gas business.



Egypt Oil & Gas Winter Cup Soccer Tournament

The 2nd Egypt Oil & Gas Winter Soccer Tournament took place this month. Egypt Oil & Gas would like to thank all of the tournament's sponsors: Dana Gas, Enap Sipetrol, Kuwait Energy, Lafarge and TransGlobe Energy. We would also like to thank all of this year's participating teams:

Apache, Baker Hughes, Dana Gas, EDC, Enap Sipetrol, Halliburton, Lafarge, Kuwait Energy, Mantrac, PWC, Transglobe "A" and TransGlobe "B". It is worth mentioning that Halliburton was the winner in both the Ramadan and winter tournaments this year.



Egypt Oil & Gas was glad to award the tournament's winners. Yasser Mohamed from Lafarge, won the Best Player award. The Best Scorer went to Ahmed Salah from EDC and also Mohamed Atlam from EDC took the Best Goal Keeper prize. Apache's Best Coach winner was Wael Abdel Razek. Best Referee was awarded to Hatem Allam. Kuwait Energy won for having the Best Team Spirit, while Halliburton was awarded the Winter Cup, as well as, Most Entertaining Team. Finally, the Fair Play award went to TransGlobe "A".

First Place

Halliburton won the whole tournament for the second time this year. The final match was played between Lafarge and Halliburton, of which Lafarge lost 4-0 to Halliburton.

Second Place

Lafarge was initially in the third place in Group B but after beating EDC in the semi-final match they won second place.

Third Place

Apache won the third place after beating EDC 2-0.

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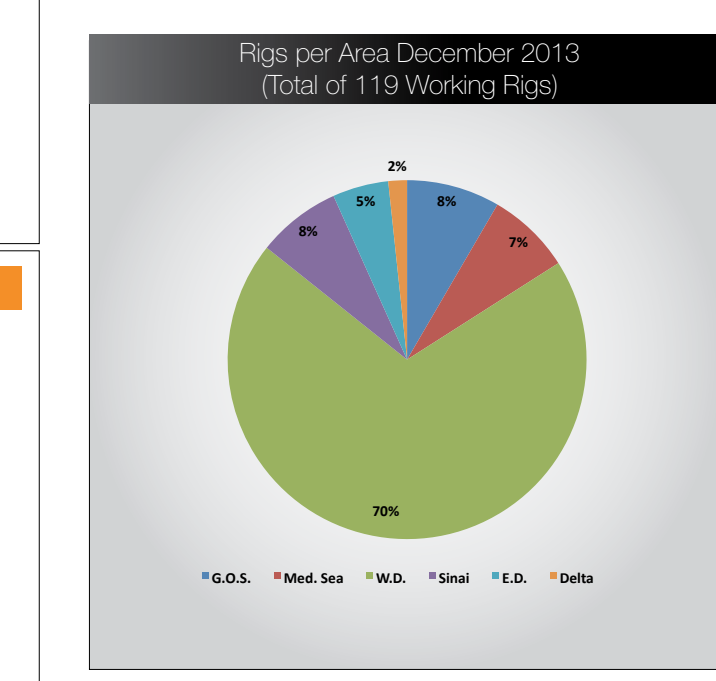
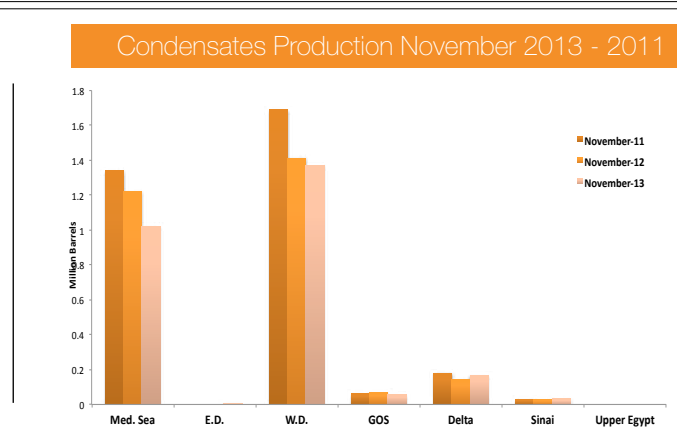
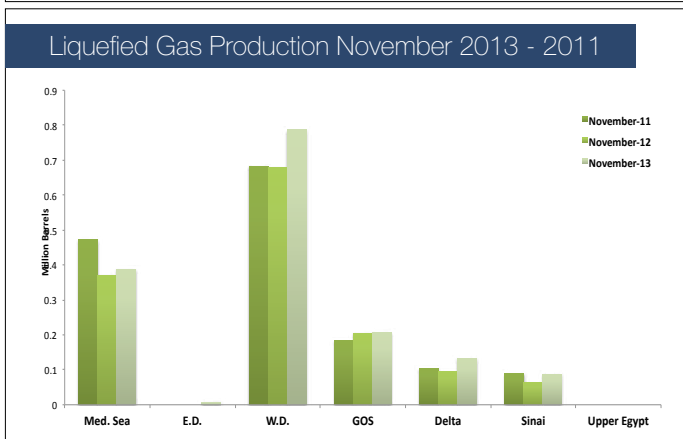
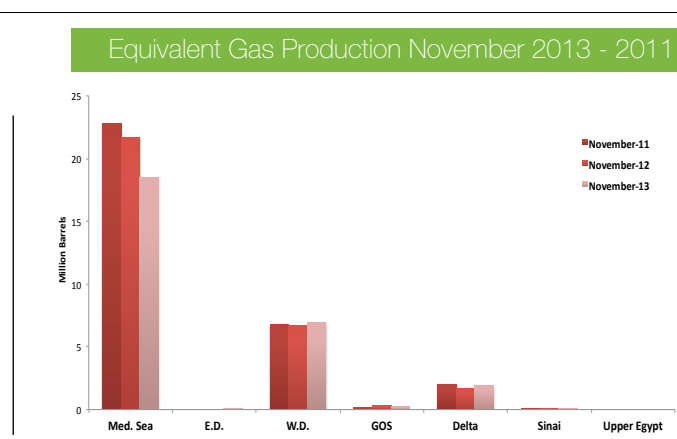
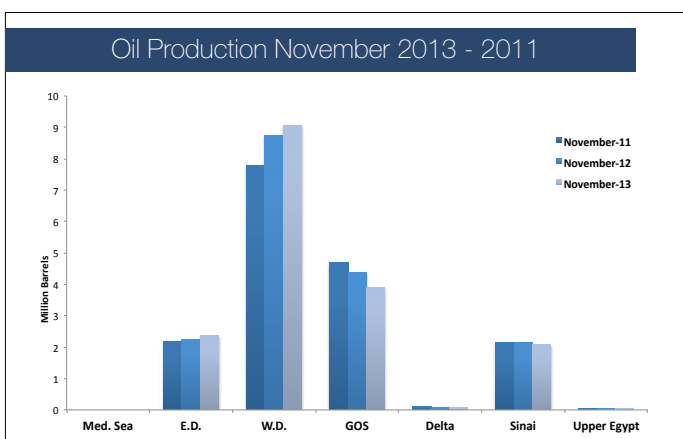
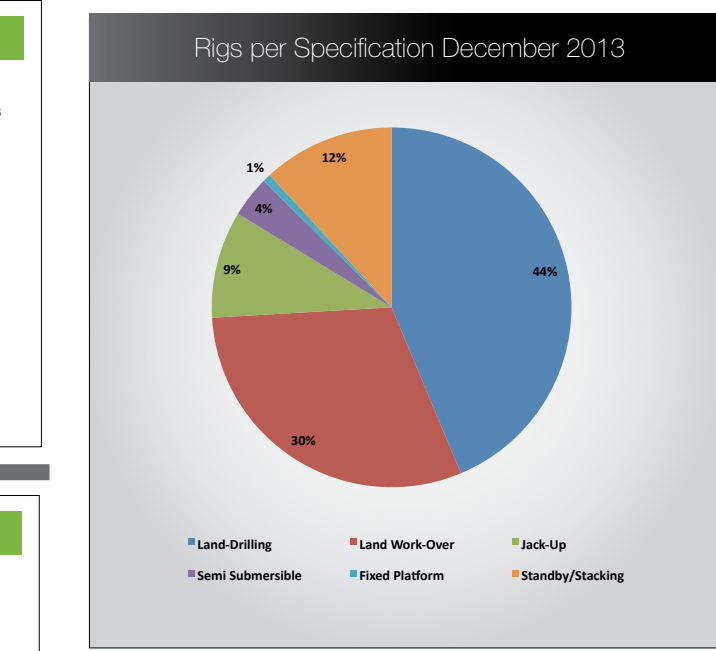
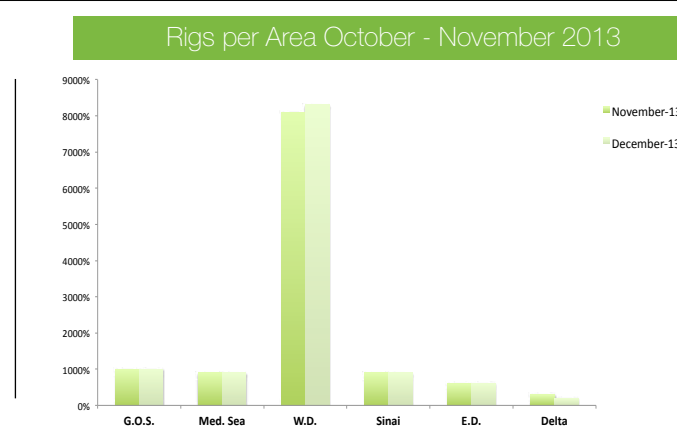
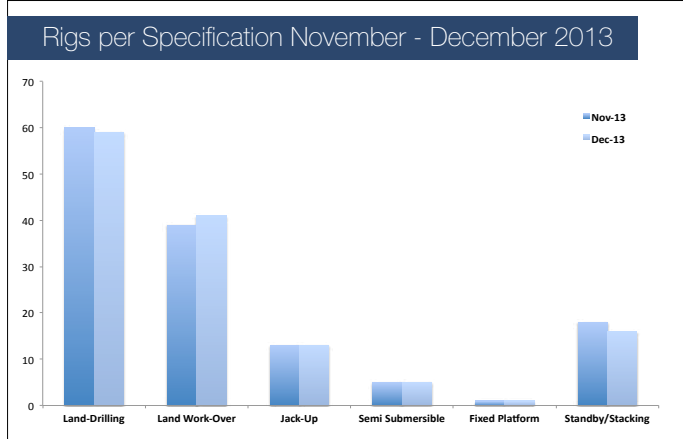
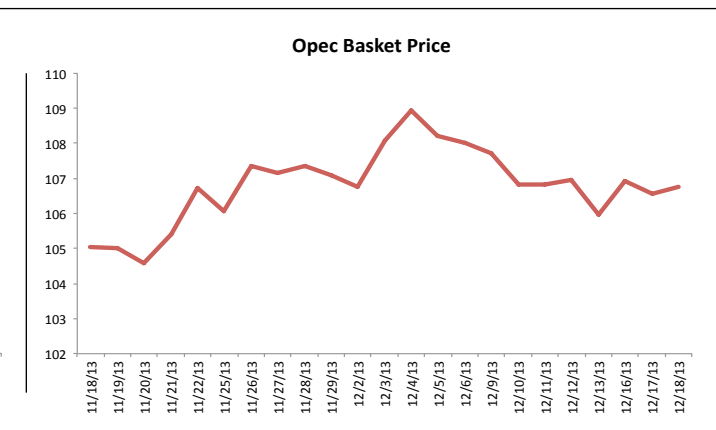
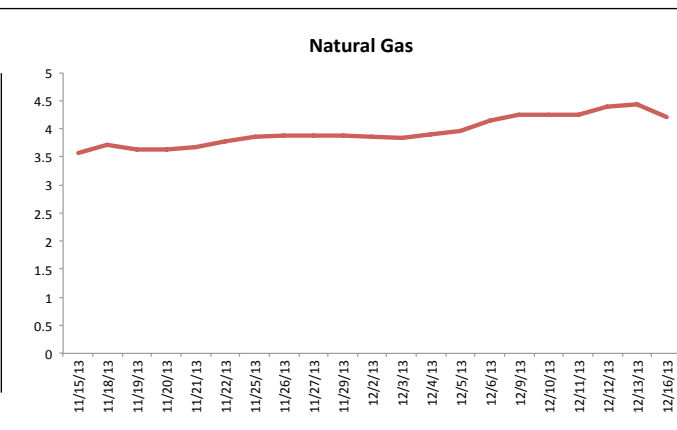
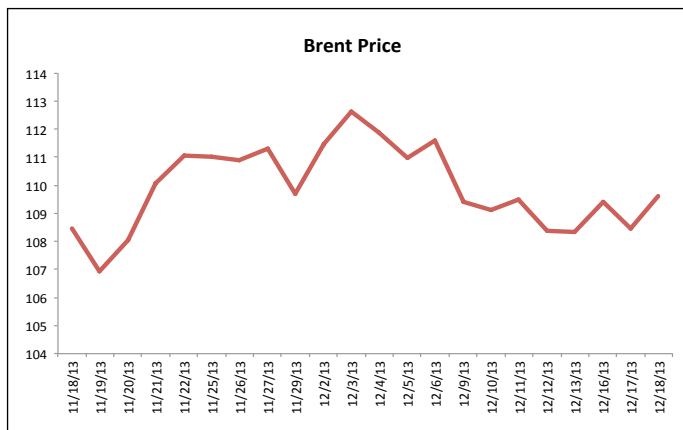




Egypt Rig Count per Area – December 2013

Area	Total	Percentage of Total Rigs
Gulf of Suez	10	8 %
Mediterranean Sea	9	8 %
Western Desert	81	69 %
Sinai	9	8 %
Eastern Desert	6	5 %
Delta	3	2 %
Total	118	100%

	Oil			Equivalent Gas			Condensate			Liquefied Gas		
	Barrel			Barrel			Barrel			Barrel		
	November-11	November-12	November-13	November-11	November-12	November-13	November-11	November-12	November-13	November-11	November-12	November-13
Med. Sea				22790179	21708929	18473214	1341980	1221595	1020050	471790	370311	387864
E.D.	2193329	2238556	2362781			61250			3214			7804
W.D.	7784788	8745839	9060056	6783214	6661429	6963929	1689762	1412081	1368944	681950	679507	786525
GOS	4694289	4379301	3912466	158750	311071	256429	62980	67551	54531	183791	204964	206695
Delta	97914	79870	65125	2031429	1647500	1906071	179995	140884	168588	104244	94652	131614
Sinai	2132391	2139566	2091950	3214	3929	15357	31279	29621	31894	88984	64154	86908
Upper Egypt	16052	18777	11847									
Total	16918763	17601909	17504225	31766786	30332858	27676250	3305996	2871732	2647221	1530759	1413588	1607410



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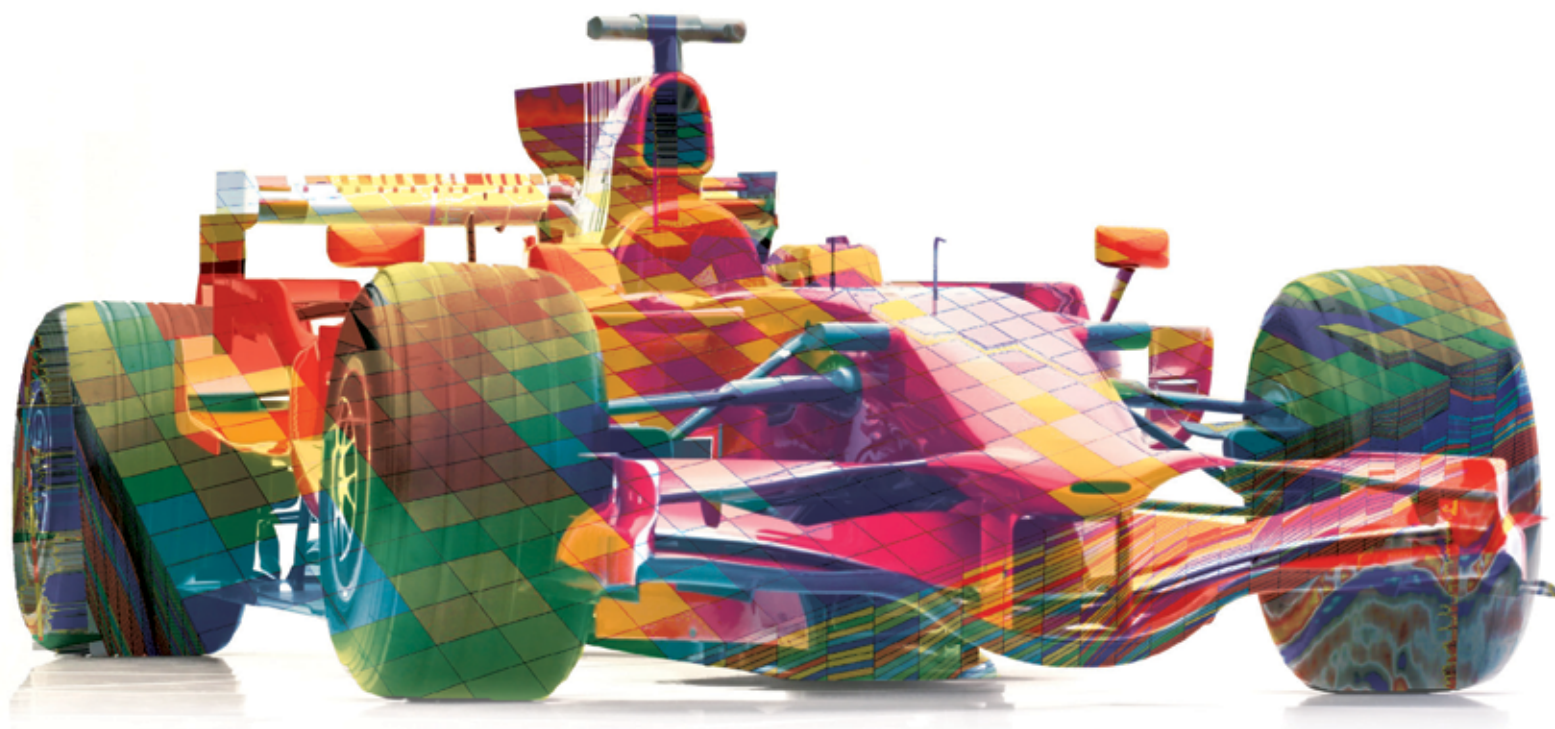
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