HE Eng Sameh FAHMI

The reformer

TOGY talks to

HE Eng Sameh FAHMI, MINISTER OF PETROLEUM AND MINERAL RESOURCES

His Excellency Sameh Fahmi rose through the ranks of the Egyptian oil and gas sector to become Petroleum Minister in October 1999. Making an immediate impact on the industry, Fahmi set about restructuring the petroleum sector into five powerful entities focused on the optimal exploitation of petroleum and mineral resources. Fahmi has overseen Egypt's rise as an LNG powerhouse, its burgeoning downstream sector and renewed exploration throughout the country.

The Oil & Gas Year: *As a mature oil province, Egypt has faced declining oil production for several years. How far can recent discoveries in Upper Egypt, The Nile Delta and the Western Desert go towards reversing that decline?*

Sameh Fahmi: The petroleum sector's top priority is to deal with the decline in production rates of crude oil that Egypt has witnessed since 1994. The Ministry has tried to reverse this situation in several ways; the development of existing reserves, appropriate pricing and massive investment and infrastructure to accommodate the increase in production.

To meet this challenge, we succeeded, between 1999/2000 and 2007/2008 in signing 151 petroleum agreements. These have resulted in more discoveries, bolstered proven reserves and increased oil and gas production.

In addition, an ambitious plan has been set up to increase crude oil and condensates production by 100,000 barrels of oil per day (bopd), of which 60,000 bopd are from the Gulf of Suez with the rest coming from the Western Desert.

This plan has already been implemented yielding a record increase in production. For instance last year alone 31 oil discoveries were achieved in the Western Desert; raising the area's production to reach 280,000 bopd of crude and condensates.

For the first time oil has been discovered in Upper Egypt. The two discoveries, Al-Baraka-1 and Al-Baraka-2 in Kom Ombo, will pave the way for major oil companies to intensify oil exploration activities in this virgin area.

Egypt's total production of crude oil, natural gas and condensates reached 1.8 million bopd at the end of 2008/2009, with the production rate targeted to reach 2 million bopd during 2009/2010.

Another encouraging sign is that the petroleum sector succeeded in concluding 19 new petroleum agreements in the first half of 2009 alone. Some of these came from companies working in Egypt for the first time, representing a minimum investment of about four billion US dollars.

The petroleum sector is keen on the optimisation of its existing assets and facilities. We are also investing heavily in our infrastructure to further facilitate exploration activities and maximise early well production.

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TOGY: *Your Excellency has been intimately involved in discussions for the proposed Nabucco natural gas pipeline project. With your existing international crude oil and gas pipeline infrastructure, what role does Egypt hope to play in supplying gas to Europe and to act as a future global export powerhouse?*

SF: With political stability, close proximity to energy markets, ample natural gas reserves and the relevant gas exporting infrastructure, Egypt has the essential features to become a regional energy hub.

Over the last 10 years we have executed three large-scale LNG exporting projects at Damietta and Idku. In such a short space of time, Egypt has become among the largest LNG exporters in the world. Exportation to many countries has already taken place, including the United States, France, the United Kingdom, Spain, Belgium, Italy, Greece, Korea, Japan, India and Mexico.

Egypt has become a destination of choice for global energy investment

Besides LNG, Egypt has significant involvement in regional oil and gas pipeline networks. The Arab Gas Pipeline project, which is considered one of the most vital strategic projects in the region, was executed in record time. The pipeline represents an economic artery between the pipeline's founding countries; Egypt, Jordan, Syria, and Lebanon and affirms Egypt and the participating states' ability to plan and execute the Arab region's gas future.

With regards to energy security, the Arab Gas Pipeline is expected to play an important role in strengthening Arab – Euro Mediterranean co-operation. With Nabucco in mind, we are currently negotiating with the Arab Gas Pipeline participating parties to accommodate Iraqi gas for eventual export to Europe either directly through the pipeline itself or via Egypt's LNG infrastructure. Eventually, the Arab Gas Pipeline will become another source that provides energy supplies to the consuming markets in Europe via Turkey. In addition, Egypt is a major player in transporting hydrocarbons, where more than 110 million tonnes annually are transported via SUMED pipeline with success and creditability for long periods.

As energy security is still one of the most significant issues globally, the last few months have witnessed three significant conferences in Budapest, Sofia and Prague, in addition to the G8 Energy Ministers Meeting in Rome. Egypt was invited to attend these events due to its significant role in activating the dialogue between producing, consuming and transit countries.

TOGY: *Has the current economic crisis affected the attractiveness of investing in Egypt's oil and gas sector?*

SF: In 2007/2008 we received 7 billion US dollars in foreign investment for the developemnt of the upstream and petrochemicals sectors. This was up from 3.7 billion US dollars in 2006/2007. Despite the global financial crisis, we signed a record-breaking three billion US dollar agreement at the beginning of this year with Italian company Edison to develop the Abu Qir offshore concession area. This alone confirms international investors' confidence in Egypt's political and economic stability, as well as its hydrocarbon potential.

As further proof of investor confidence, May 2009 witnessed a significant strategic co-operation initiative signed with the Italian giant ENI. Promising to pump huge investment into Sinai and the Mediterranean the company also expressed its desire to pursue exploration opportunities abroad with EGPC. There is a huge potential in other petroleum-associated areas

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such as the refining, petrochemicals and mineral resource industries. Several specific fields, including the construction of third generation refineries, upgrading current refineries, LNG projects and equipment manufacture all hold significant investment opportunities.

TOGY: *With the likes of Shell, BP and BG engaged in ambitious offshore exploration, what are your medium term hopes and expectations for the Mediterranean deepsea programme?*

SF: The Mediterranean Sea and deep sea exploration in general plays a key role in Egypt's natural gas production. Currently the region

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produces 4.6 billion cubic feet per day (102 million cubic metres) of gas and 65,000 bopd of condensates, representing 76 percent of Egypt's total gas production and 58 percent of its total condensate production. Furthermore, the region accounts for 81 percent of the country's proven gas reserves, boosting Egypt's growing position on the natural gas world map.

Moreover, according to the internationally renowned energy consultancy firm Wood Mackenzie, the Mediterranean region is considered one of the 10 best sedimentary basins worldwide in terms of added reserves volume and newly discovered fields during 2008. The foundation estimates that projected discoverable reserves over the coming phase will reach 57 trillion cubic feet of gas.

The Mediterranean region is characterised by a highly competitive tendering environment. Attracting investment from internationally renowned companies, the region continues to yield successful natural gas exploration, particularly in the deep-water environment. Indeed, as confirmed by Wood Mackenzie, The Mediterranean is classified in the highest tier when it comes to exploration potential.

Spanning 104,000 square kilometres, 52 percent of Egypt's total commitment areas and 38 separate petroleum agreements, Egyptian, Arab and international companies alike have succeeded in realising several significant discoveries in the Mediterranean.

TOGY: *With a 20-year vision to dramatically expand the petrochemicals sector and an ever-growing population, can natural gas reserves satisfy growing domestic demand while also balancing the export demands of exploration companies?*

SF: From 1999 onwards Egypt has witnessed a significant upturn in major natural gas discoveries. With the push to exploit these through export, the volumes available didn't however keep pace with growing gas demand in the domestic market.

The successful upswing in gas coincided with a reciprocal decline in crude production. It was therefore decided to rationalise crude oil exportation to prioritise Egyptian refineries needs.

In order to maintain demand growth from Egyptian residential units, factories, power plants and fuel for vehicles, the petroleum sector has also prioritised the needs of the domestic market of gas; allocating one third of the reserves for domestic consumption and another third for export, the final portion was left as a strategic reserve for the needs of future generations.

In light of sustained increases in domestic natural gas demand, a 16,880-kilometre expansion

"With the growing domestic demand for natural gas... the petroleum sector has made its top priority meeting the needs of the domestic market."

of the National Gas Grid was implemented in 2008. Currently, we have in place an urgent short-term plan to convey natural gas to 1.5 million residential units over the next three years. We aim to convey gas to 5.5 million residential units during the coming phase.

In addition, we are delivering natural gas to the South Valley to boost Upper Egypt's social and economic potential. The gas will create new urban and industrial communities in various Upper Egypt governorates, from Beni Sueif to Aswan, to which the gas will be delivered at the end of this year.

In June 2008 the Ministry announced that no new gas export agreements were to be signed until the end of 2010. This proclamation will allow us, despite the increase in reserves, to assess the situation, in light of global changes in energy markets.

TOGY: *What is the Ministry of Petroleum doing to engender a stronger homegrown oil and gas industry?*

SF: The Ministry of Petroleum is giving great consideration to maximising and deepening local manufacturing in the different fields of oil, gas and petrochemicals. These flagship Egyptian companies represent a security factor for different industries and deepen the concept of self-reliance.

Overall our strategy is to achieve the best monetisation of available resources and potential while at the same time satisfying our own and the requirements of our international partners .

Besides, promoting local involvement in the petroleum equipment industry is a laudable aim. It reduces imports and foreign currency expenditure while transferring and adapting modern technologies to keep pace with the international requirements.

In order to achieve this strategy, various companies specialised in local manufacturing in the different fields of the petroleum industry have been established. For instance, Egyptian Petroleum HH Rig Manufacturing Shareholder Company has been successful in producing five well received onshore drilling rigs. With plans to increase production to 20 rigs annually by 2012, the first drilling rig, Mubarak-1, succeeded in leading two discoveries in the Eastern Desert.

In addition, the sector is starting the manufacture of four offshore drilling rigs, in co-operation with China and Japan. This, in turn, paves the way for Egypt to enter one of the most crucial areas of the exploration industry.

Lastly, we have seen success in the manufacture of platforms, production equipment and, in a regional first, Lufkin pumps under proprietary licence.