Sleeping African giant awakes

While European policymakers fret about the EU's energy relationship with Russia, they forget that it is not Russia, but North Africa that will be Europe's most important gas and energy supplier in the near future. High time to give the African continent the attention that it deserves.

Gasoline is sold on the sidewalks in Tunisia. Photo: Annemieke van Roekel

by Cyril Widdershoven

Algeria has in recent years built a comprehensive network of gas pipelines to Spain and Italy to complement its successful liquefied natural gas (LNG) sector. Algeria's example is now followed by Libya. Italian oil and gas major Eni is currently, in cooperation with Libya's national oil company NOC, building a new gas pipeline to Italy via Sardinia. Egypt for her part has been very successful in reaping the rewards from deepwater offshore gas discoveries in the 1990s, which are largely being used to support the high volume of LNG projects in the Nile Delta. Egypt at present supplies almost 22% of US LNG imports. European customers are also supplied by Egypt, as Spanish and British energy companies have acquired stakes in Egypt's LNG sector.

Somehow these North African energy projects do not seem to get a lot of publicity. The importance of North Africa to the European energy supply seems to be universally underestimated. All eyes in Europe are on Russia. But if you add up the existing and planned pipeline and LNG projects in North Africa, the region will be providing around 50% of total European gas imports around 2020.

Booming gas

With a current oil production of 4.7 million barrels per day (bpd) and 163 billion m^3 (bcm) per year of natural gas, the region is still a modest producing area in comparison to hydrocarbon giants such as Saudi Arabia and Russia, which produce 10 million bpd and 600 bcm. Nevertheless, the North African figures represent 31% of the crude oil and 35% of the natural gas consumption of the EU. Part of the attractiveness of North Africa is its low domestic demand for oil and gas, resulting in a high potential for exports. Currently, North Africa generates more than 30% of total EU pipeline gas imports—a figure expected to increase substantially once projects such as the Algeria-Italy Galsi gas pipeline start operations. Algeria alone supplies around 28% of Europe's gas imports, second only to Russia.

Once the booming Egyptian and Lybian gas sectors start realising their potential, Russia will soon fall behind North Africa. North Africa's gas exporting power is expected to reach its zenith around 2020. Investments in the North African gas sector are already rising steeply. Research by several consultancies shows that between 2007-2011 the North African upstream sector will witness a capital expenditure of \$20.1 billion and the downstream sector \$22.2 billion. This is expected to take up crude oil production to 4.8 million bpd and gas production to 206 bcm per year by 2011. Most of the downstream investment will go into LNG, which will attract about \$20 billion in this period, up from \$6.5 billion in the five-year period before. Still, the LNG projects do not threaten pipeline operations to Europe. In the coming five years, a number of significant new trunk line projects are planned.

Algeria will attract the most foreign money, but the lifting of international sanctions on Libya has also made this country attractive for investments. BP's return to Libya has resulted in a commitment of \$2 billion of investments in exploration for natural gas. Shell will invest \$100 million in the LNG plant at Marsa El-Brega in Lybia. Shell has at the same time acquired the rights to explore for gas in the country's highly promising Sirte basin. This package deal is meant to bring the El Brega plant back to its full capacity of 4.4 bcm of natural gas per year and to provide Shell with a possible greenfield site of its own.

Peace Pipeline

Based on the \$12.5 billion in planned investments in drilling in the region, an increase of 27.3% in comparison to 2002-2006, it is expected that the reserve base will expand significantly. Three-quarters of the money will go to offshore exploration. Egypt is leading the pack with around \$7.6 billion in drilling investments in 2007-2011, taking 60% of the market. The majority of offshore gas produced in Egypt now goes to the US, Spain and France. In addition, Mauritania's offshore sector shows a lot of promise. Since the completion of the Chinguetti play, the nearby Tiof and Banda fields have been slated for development. These will make up the bulk of the anticipated \$2 billion investment in the region's offshore industry over the next five years.

The construction of new gas pipelines will further enhance the importance of North Africa. Two new pipelines, the 210-kilometre-long Medgaz, connecting Algeria to southern Spain, and the 900-kilometre-long Galsi pipeline, running sub-sea between Algeria and Sardinia, will come online between 2009 and 2012. The two pipelines will each bring an additional 8 bcm capacity to the European grid.

> *North African countries are also setting up immense power-generating projects with natural gas as a feedstock*

On the east side of the North African region, an additional project could add more capacity: the Arab Peace Pipeline, running from Egypt to Syria at present. Growing support by the EU has encouraged the extension of this pipeline through Turkey, potentially linking it up to the Nabucco pipeline. It could also link up with some of the Central Asian pipeline tracts planned to reach Europe in the coming years.

On the European side, additional gas supplies are already anticipated as a dozen new LNG regasification terminals are slated to be opened soon. In addition to countries on the northern Mediterranean rim, countries such as the Netherlands, Poland and the UK are building their own LNG regasification plants. Import capacity in Europe is slated to grow by another 100 bcm per year until 2012.

Landing spot for North African LNG tankers in the port of Bilbao, Spain. Photo: Pixtal

Another major new development that could boost the position of Nigeria, is the immense Trans-Saharan Gas Pipeline (TSGP), or Nigal, which Algeria and Nigeria have agreed in principle to build. It will be 4,300 kilometres long and require an investment of $13 billion, with completion expected around 2015. Some analysts do not believe that this project can succeed, but based on current market prices and expectations that European gas will become more expensive, there may well be a future for the TSGP.

It should be noted that not only gas from North Africa will be impacting European energy supply. North African countries, especially Algeria and Libya, are also setting up immense power-generating projects with natural gas as a feedstock, potentially supplying surplus power capacity to Europe via the proposed Mediterranean grid. The availability of cheap gas gives North Africa a cost advantage, resulting in an interesting trading position. There is one cloud on this particular horizon: domestic demand for electricity has been growing rapidly in recent years. At the same time, it remains to be seen how open the European power market really is when it comes to taking in large amounts of power from outside.

Ominous signs

The increasing prominence of North Africa is not without its drawbacks and complications. Increased security concerns (for example, related to Algerian and Moroccan fundamentalists) and the re-emergence of resource nationalism have been worrying operators and investors lately. Egypt's unilateral decision to call for the renegotiation of existing gas export deals, targeting a much higher gas price for international customers such as Spain and Israel, as well as the decision by the Algerian government to reign in foreign ownership are viewed as ominous signs. In September, Algerian President Abdelaziz Bouteflika reiterated that foreign investors are not looking after the economic interests of Algeria. He is now preparing a new policy, which could entail three key elements: restricting the participation of foreign companies in investments in the country to a minority stake; introducing a first right of refusal for the government to buy any asset sold by a private company on Algerian soil; and reviewing existing rules on the repatriation of capital by foreign companies operating in Algeria. In 2006, Algeria already decided to reinstate the national oil and gas company Sonatrach as majority stake holder in all projects, taking a 51% stake. As Algeria's privatisation policy is thrown into doubt, foreign operators and investors will have to reassess their options.

All of this makes for a complex but fascinating situation with different implications for all market players. European utilities and large-scale energy users will have to consider whether they should develop a new market approach. Liberalisation of the gas market is changing conditions rapidly. Old and established gas supply relations are being substituted for new short-term relations, generating potentially higher profit margins but also higher risks. To counter these risks, some utilities have already put in place a total integration of the value chain into their investment strategies. Companies such as Suez, Centrica, Eon and RWE have established their own upstream operations in Egypt, Algeria and Libya. Increased resource nationalism in North Africa will force others to follow suit.

The Algerian government has already said that investors in new upstream projects should give Sonatrach access to their own domestic markets. Some see this as a threat, but it could also be turned into an advantage. It could deepen the ties and mutual interests between parties. For Sonatrach it would create more stable demand, while European utilities could gain stable new supply sources.

The importance of North Africa to the European energy supply seems to be universally underestimated

EU policymakers should become more alert to the great and increasingly important role North Africa could play in the European energy supply. If private and public parties in the EU fail to take decisive action, they might see North African gas head towards different markets. ■