Political Change and the Outlook for North African Energy Supplies

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The North African Energy Scene

Algeria, Libya and Egypt are the Mediterranean region's biggest hydrocarbon resource holders and producers. In 2009, they accounted for over 90% of the region's proven oil and gas reserves and about 85% of its output (see Table 11). In the early 2000s, governments in these countries set out to expand hydrocarbon exploration and production, introducing more attractive upstream investment terms for international oil companies (IOCs) and injecting more resources of their own in the sector. As a result, their combined reserves and output of oil and gas increased each by about 25% between 1999 and 2009, driven mainly by the expansion of Libya's oil reserves from 30 to 44 billion barrels and Egypt's gas production from 17 to 62 billion cubic meters per year (Bcm/yr).

At the same time, Europe's resolve to reduce dependence for its energy needs on imports from Russia, the continent's single most important supplier of oil and gas, was reinforced by the series of gas supply disruptions caused between 2006 and 2010 by transit issues with Ukraine and, to a lesser extent, Belarus. This led the European Union to assert rather optimistically that by 2013 the southern Mediterranean could be as important for Europe as Russia in terms of energy supply. However, it is now evident that this is unlikely to materialise – while Russia provides the EU with over 30% of its gas imports and just under 30% of its oil imports, North African supplies account for about 16% of the EU's natural gas imports and 13% of its oil imports.

Moreover, the latter half of the 2000s saw North Africa's upstream activity become relatively subdued, with the politics of 'resource nationalism' trumping earlier decisions to ramp up hydrocarbon exploration and production. Thus, by the end of the decade, Egypt was unable to fully utilise its existing gas export infrastructure, let alone expand it. Libya and Algeria missed their respective flagship production and export expansion targets of 2.3-3 million barrels/day (bbl/d) of oil by 2013 and 85 Bcm/yr of gas by 2010. In addition to the twists and turns of the investment and institutional frameworks in these countries, North African energy supplies have been constrained by domestic energy needs. These have been growing at faster rates over the last ten years, reflecting sustained economic and population growth, energy-based diversification strategies, and distorted consumption patterns caused by the artificially low pricing policies pursued by governments across the region.

These trends and developments pertain most particularly to natural gas, upon which the energy policies of North African countries, as well as the EU's import diversification strategy, are mostly based. Renewable and alternative sources of energy – mainly solar and nuclear power – have also been the focus of these countries' energy policies in recent years, but only timid steps have been taken towards achieving meaningful progress in their development within the next decade.

The recent events have cast serious doubt on the political and economic prospects of the region, with likely implications for the energy sector. The unexpected radical political changes that began unfolding in North Africa at the start of 2011 raise questions not only about the implementation of the energy policies devised by North African governments prior to the uprisings, but also more crucially regarding the likely impact of political change on the substance

TABLE 11	2009 North African Oil and Gas Data*					
	Reserves		Production		Exports	
	Oil	Gas	Oil	Gas	Oil	Gas
Algeria	12,200	4,500	1.8	81	1.5	53
Egypt	4,400	2,190	0.7	63	0	18
Libya	44,300	1,540	1.65	15	1.5	10
Rest of the Mediterranean**	4,000	180	0.6	16	0	0

Sources: BP (2010) and OPEC (2010).
* In millions of barrels (per day of production) for oil and Bcm (per year of production and exports) for gas.
** Reference mainly to Syria, Italy and Tunisia.

of these policies and their future trajectories. This article focuses on the likely impact of recent events on the natural gas sector in North Africa given its importance in the energy policies of Algeria, Egypt and, to a lesser extent, Libya, as well as its central role in the interdependent energy relationship between Europe and North Africa.

Security of Supply from the MENA Region

In a region where for decades political change was painstakingly slow – even non-existent – the events of the last four months in the Middle East and North Africa (MENA) have been a shock to the system. The popular uprisings that have so far uprooted long-serving despots in Tunisia and Egypt and are seriously challenging the power grip of autocratic leaders in Libya, Syria and Yemen are a reflection of the new sense of political agency that young people in the region have discovered. This new dynamic will have a transformative impact on the 'social contract' that has defined the nature of politics in MENA countries since their accession to independence and will in all likelihood affect their relations with foreign governments and businesses, including in the energy sector.
As is well known, the MENA region is an important player in global oil and gas markets, accounting for about 60% of proven oil reserves and 45% of gas reserves. It has long been associated with regional conflict and political instability, which have been the main causes of energy security concerns in consuming countries with relatively high dependence on MENA hydrocarbon supplies. The recent revolts have worsened perceptions of political risk in the region, exacerbating Western fears of supply disruptions and the withering of upstream investment opportunities for IOCs.
Concerns over the interruption of energy flows from the region have not been totally unfounded: the revolts in both Egypt and Libya – and to a lesser extent Tunisia – have affected oil and gas supplies. Algerian gas shipments through the Transmed pipeline, which supplies Italy with around 32% of its pipeline gas imports, recorded a sudden 40% dip amid the chaos immediately following the departure of Tunisian President Zine al-Abidine Ben Ali on 14 January, but normal flows resumed shortly thereafter.
In Egypt, fears over the disruption of transit flows through the Suez Canal, through which some 7% of global liquefied natural gas (LNG) passed in 2010, and the 2.3 million bbl/d Sumed oil pipeline did not materialise. However, an explosion on 5 February at a gas compressor station at El-Arish, in the Sinai, cut off gas supplies to Israel and through the Arab Gas Pipeline to Jordan and Syria. It took more than five weeks for the repair work to be completed and for Egyptian pipeline gas exports to resume, only for a second explosion to take place on 27 April causing another suspension of gas flows.
Finally, in Libya where the most dramatic events since the eruption of the uprisings in the region have taken place, gas flowing at an annual rate of as much as 9-10 Bcm/yr through the Greenstream pipeline to Italy and the 40-year-old, underperforming Marsa el-Brega LNG plant, as well as 1.6 million bbl/d of oil supply, have been taken out of the market as a direct result of the full-blown confrontation between rebel fighters and government forces and the suspension of IOC upstream activities in the country.
However, if these disruptions vindicated consumer concerns over the security of energy supplies from the MENA region, they had a rather limited impact on the fundamentals of oil and gas markets. These adjusted fairly flexibly to the loss of output capacity in Libya, by far the most important outage in volume and qualitative terms. What the Libyan disruption did was feed into market concerns over the potential spillover of unrest into neighbouring Algeria, which exports roughly the same amount of light sweet crude, but supplies Europe with about six times as much

gas as Libya. Furthermore, given the unrest in the Gulf countries of Bahrain, Yemen and Oman, there was also anxiety in the market concerning stability in major oil exporter and spare capacity holder Saudi Arabia.

Emerging Pattern

Market reactions to the spread of unrest across the Arab world reflected wider uncertainty about the nature of the phenomenon and its potential destabilising effect for the region and the global economy. The feeling among observers of the region was that if this could happen in Tunisia and Egypt – the two countries believed, prior to the uprising, to be among the least likely to experience such events – it could well happen anywhere. Attention soon turned to countries like Algeria which had higher political risk rankings and where popular expressions of discontent were more common.

However, despite the eruption of popular protests in almost every Arab country since the Tunisia uprising, attesting to the common grievances of young people in the region, there seems to be an emerging pattern in terms of the end result of these demonstrations in the short term. Countries with nominal republican political systems, as well as long-serving leaders (over 20 years in power) with a propensity to promote nepotism and dynastic succession at the expense of broader participation in the political process, have seen the most radical uprisings and calls for the removal of leaders and their regimes. Tunisia, Egypt, Libya, Yemen and Syria fall within this category. In other countries, the 'contagion effect' has demonstrated itself through the revival and emboldening of longstanding political demands for change, some of which are based on ethnic grievances such as in Bahrain and Saudi Arabia.

In Algeria, where localised protests have been a permanent feature of the political background for the best part of the last decade, events in the region encouraged opposition organisations to press harder for political reforms. But the striking feature of this renewed activism is the shared aversion to political violence and instability among large sections of the Algerian population and political class. Algerians had their botched 'spring' more than 20 years ago and are no longer interested in sudden, radical change. Instead, political and economic reforms are likely to be introduced, but quite how deep and meaningful they will be will hinge first and foremost on intra-regime dynamics.

In the face of this 'awakening', all MENA countries share an undecided future. The final outcome of the recent events is as yet unknown, and the longer-term consequences of the transformation process it has ushered in are as uncertain for countries that have had their leaders ousted, as for those that have not/will not.

Impact on Gas Development

Concerns about the short-term disruption effect of political unrest in North Africa on gas supplies from the region gave way to uncertainty over longer-term development issues as soon as it became clear that the risk of short-term market shocks was minimal. Domestic price subsidies, upstream investment terms and export policies are the main issues in question.

Artificially low domestic gas prices have become over the years an untenable feature of gas markets not only in North Africa but throughout the entire MENA region. They have caused enormous distortions in consumption patterns across the region, have indirectly hampered upstream development in some countries, and in many cases have added to the fiscal pressure that governments face. In North Africa, Egypt had been grappling with the issue of energy subsidies before the unrest of January 2011 and was planning to raise gas prices for industrial users by the end of the year from $1.25 to $2.65-3/MMBtu. Elsewhere in the MENA region, most governments – with the exception of Iran's – showed little urgency to tackle the issues of low gas prices. Their concerns stemmed from the potential socio-economic effects raising gas prices would have in terms of inflation and attracting investment in the downstream sector – both vital ingredients for social stability.

The recent events are most likely to all but reinforce North African governments' longstanding hesitation to deal with the issue of subsidies, at least in the short term. Stability, political reform and survival will now be the main priorities for old and new governments in the region, which means gas price reforms will be put on the backburner. This was exemplified by the Algerian government's prompt announcement back in January that it would maintain its 7-billion-dollar annual subsidy for the gas-to-power sector.

The same is likely to apply to the issue of upstream investment terms. With many countries in the region facing gas supply shortages, there is an urgent need for governments to improve the fiscal terms for foreign investment in the upstream. However, short-term political priorities are likely to delay meaningful action in this direction. What is more, the likely temptation for governments to maximise the rent from hydrocarbons in order to be able to buy social peace could militate against the improvement of fiscal terms, especially given the current relatively high oil price environment. In Libya, the outlook for the current standoff is highly uncertain, with the country facing the prospect of prolonged civil confrontation and possibly partition. But it may be expected that an eventual rebel-led, post-Gaddafi government will promulgate improved hydrocarbon investment legislation by way of reviving the economy and cementing its relations with foreign partners. Conversely, as was seen in Iraq after the removal of Saddam Hussein, new governments could be tempted to use the energy sector to demonstrate their nationalistic credentials, notably by imposing restrictive terms on foreign investors.

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Finally, the coming to power of new governments may lead to a revision of gas export policies, which would have an impact on the prospects for North African gas exports over and above the amount of gas available for export from the region. Again, Egypt is leading the way in this regard, with the government announcing a revision of the price and volume elements of its gas supply contracts with Jordan, Israel and the operator of the Damietta LNG train, SEGAS. In the meantime however, the second explosion in the Sinai, said to be larger than the first one, may result in a longer supply disruption, which in the case of Israel at least could precipitate plans for the development of alternative supply options from offshore fields and/or floating LNG.

Outlook

With issues of supply shortages and strong demand growth pervading most regional gas markets, the outlook for North African gas supply was not particularly promising before the uprisings. The recent events are only likely to exacerbate the region's main gas market issues, particularly in the short term. The longer-term prospects remain highly uncertain, and a lot will depend on the type of politics that will ultimately emerge and its implications for the 'social contract' between state and society in the region, for the efficiency of government institutions and decision-making processes, and for the economic development models that countries in the region will pursue. In all of this, politics will continue to be the main determinant of gas development policies in North Africa, especially in the short term.

Bibliography

Arab Oil and Gas Directory (AOGD), various issues: www.arab-oil-gas.com/DIRECT/present.htm

BP Statistical Review of World Energy, various issues: www.bp.com/productlanding.do?categoryId=6929&contentId=7044622

Middle East Economic Survey (MEES), various issues: www.mees.com

Observatoire Méditerranéen de l'Energie, OME. *Mediterranean Energy Perspectives 2008*, OME, France. www.ome.org

OPEC Statistical Review Bulletin, various issues: www.opec.org/opec_web/en/publications/202.htm