Libya: Old or New Picture? Risks of political uncertainty for the gas and oil business

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Libya has an opportunity to get back on track. The end of embargoes and sanctions after the conclusion of the "February Revolution"[1] is favoring a fast production growth. For the IEA the oil production should recover and reach almost pre-war levels in 2013 with a production of 1,1 millions barrels/day[2]. The new Oil Minister Abdul-Rahman Ben Yezza[3] should soon undertake a renewal in the Exploration and Production Sharing Agreement (EPSA) rounds that stopped during the conflict

The race for Libya's oil and gas seems to have just started. But the growing presence of international companies began before the end of the Qaddafi's regime, when sanctions and trade bans were lifted in 2002 and 2003.

The first open bid organized in January 2005 after the lifting of sanctions saw over 150 companies participating, where the presence of US oil and gas utilities was preponderant. The great return is thus mainly characterized by long-standing American companies, which were obliged to leave after the sanctions imposed on Libya by the US in the 80's. However, the presence of new actors, coming in particular from developing countries, in all the bids that followed the reopening of the oil and gas trades testifies a renewed interest for the enormous unexplored and unexploited potential of the Libyan soil. Algerian Sonatrach, Russian Gazprom, Oil India, Chinese Petroleum - all these companies have showed interest and are trying to get their share of the cake.

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[1] The EU lifted sanctions on NOC September 27th 2011.
[2] Libye : Total reprend sa production de pétrole, Le Point, 23/09/2011
[3] "Libya New Oil Minister Ben Yezza", Bloomberg, 11/23/2011

Thus diplomatic activity in Libya has been intensifying. Multiple meetings are being held by the Ambassadors of many Western countries[4] as well as visits from CEO of main companies like Eni[5] have already been held.

Can the February revolution have an impact on this process started back in 2003? How will the new oil minister manage the growing competition in the oil and especially the untapped gas sector? What are the possible future developments of the gas race in Libya and might the 2012 elections change the rules? In particular, will the future government be constructed upon a broad local representation, as it is generally the case of the National Transitional Council today and how will the new government handle the mineral revenues distribution?

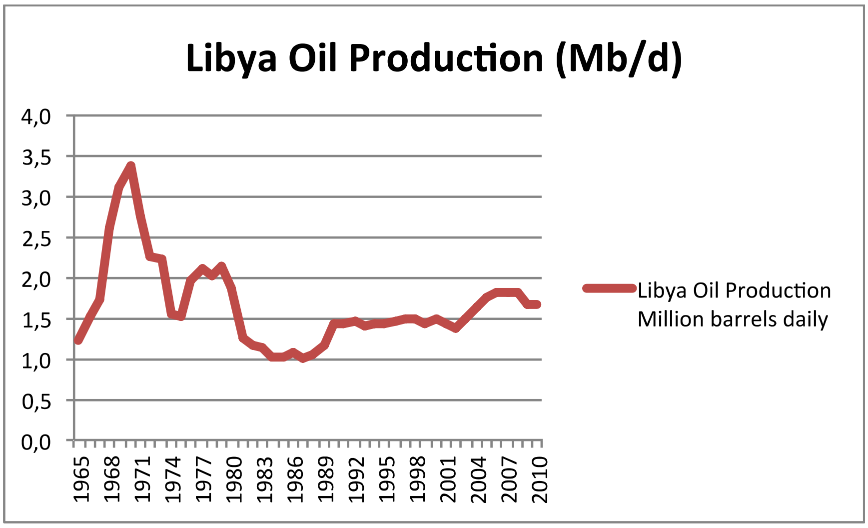
Impact of the political situation between the 1990's and the February revolution

The presence of the international oil companies in Libya started as far back as 1959. The first minerals laws of 1953 and 1955 put in place a unique regime, with a system allowing multiple five-year concessions to different companies, differentiating itself in this way from the Iranian or Saudi Arabian systems. Therefore, in only ten years, the number of oil companies passed from 10 in 1961 to 39 in 1968 with a production of over one million oil barrels per day. Colonel Qaddafi's arrival and the regime that followed transformed the way government co-operated with the companies by putting them in competition with one another and by raising the demand for bonuses and taxes on oil production. The nationalization of the oil industry in 1973 was a severe coup for the international companies present on Libyan territory. Many American companies left Libya because of theses constraints and, after the 1981, a trade embargo was imposed by the US government. By 1986 all American companies were gone. What's more, the political tension caused by the 1988 and 1989 attacks on American and French flights led to the imposition of UN sanctions in 1992.

[4] "The Ambassador of Norway in Libya and a delegation accompanying him visited NOC. The meeting was attended by Mr. Ahmed Almekdmai, Mr. Mustafa Abdullah Sanallah members of the Board and Mr. Abul Qasim Shinghir general manager of exploration and production, Mr. Salah Ben Ali, Manager of the Office of International Cooperation and the Energy Information", NOC website 27/11/2011 en.noclibya.com.ly

[5] « Dr. Nuri Berruien meets with the President of the Italian group Eni » NOC website 13/09/2011 en.noclibya.com.ly

Graphic 1 – Libya Oil Production 1965 - 2010



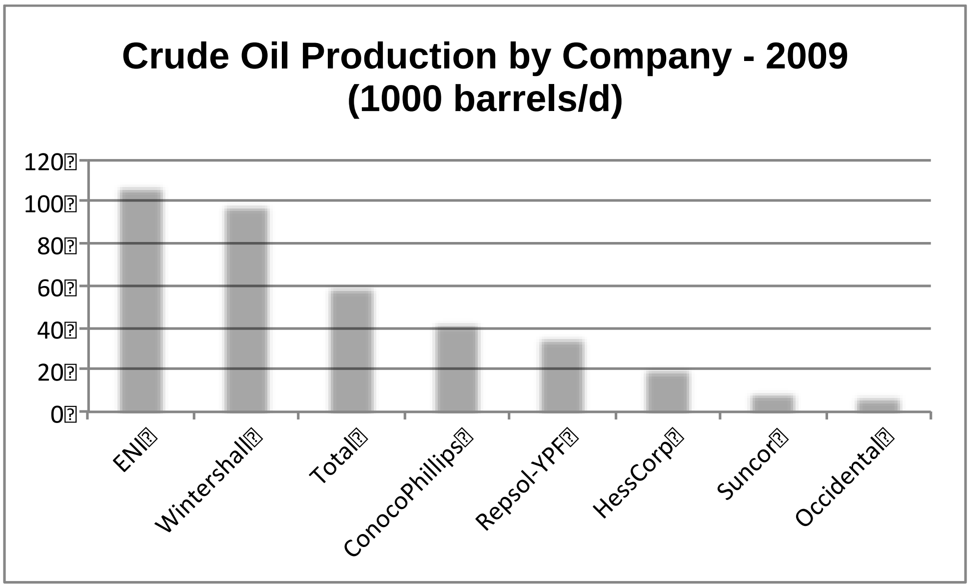
Source: BP Statistical Review of World Energy 2011

Except certain European companies that continued their business during the regime period, like Eni and Repsol, the end of the 80's saw decreasing foreign company activity in Libya and its overall production fell accordingly (see graphic 1).

The isolation Libya put itself in has been a primary cause of its economic slow down aggravated by economic sanctions. The attacks of September 11, 2011 gave the occasion to Qaddafi to convince Western countries that Libya wanted to co-operate and by 2003 Libya had renounced its nuclear program. In fact, despite the signature of the Non Proliferation Treaty (NPT), for years Qaddafi tried to build the infrastructures necessary to have nuclear weapons. Civilian nuclear programs were used to train personnel and progressively acquire the technology and know-how. After the seizure of a cargo with uranium-enrichment components bound for Libya, Qaddafi decided to abandon his ambitious military nuclear program, allowing inspections and finally abiding by the NPT.

These events created a favorable environment for business to go back to Libya and many oil companies participated in the four EPSA that were conducted between 2005 and 2007 (at the first EPSA round around 160 international oil companies registered for the bid). However, traditional Libya-based American and European companies like the Italian ENI, Spanish Repsol and French Total, still represent the main foreign producers in Libya. Particularly, in gas, Eni still dominates both in production and exports while in the oil sector, as shown in graphic 2, it is followed closely by Wintershall, with just less than 100 thousand barrels per day.

Graphic 2 – Libya main Oil Producers – 2009



Source: Evaluate Energy, "Oil & Gas Companies in Libya - a Who's Who", Richard Krijgsman

While these companies might seem to have a more favorable position with respect to others – the new appointed Oil Minister previously held an executive position in an ENI company[6] - the collapse of the old regime could generate new challenges for the traditional companies and their respective countries' representatives since several changes could be waiting ahead.

Oil sector: Tripoli vs provinces?

The February revolution temporarily stopped oil production activity partially affecting the global market. Production sites have been progressively coming back to normal with oil flowing from the Sirte, Murzuk and Ghadames fields since the end of the conflict. Waha Oil Company started its crude oil production from the fields of Dahra and Samah from the Sirte basin at the end of November[7]. Eni, Total, Repsol, all announced the resumption of their production with possibilities to recover the pre-war levels in 6-12 months and forecast in some cases an increase in their overall production by 2020[8].

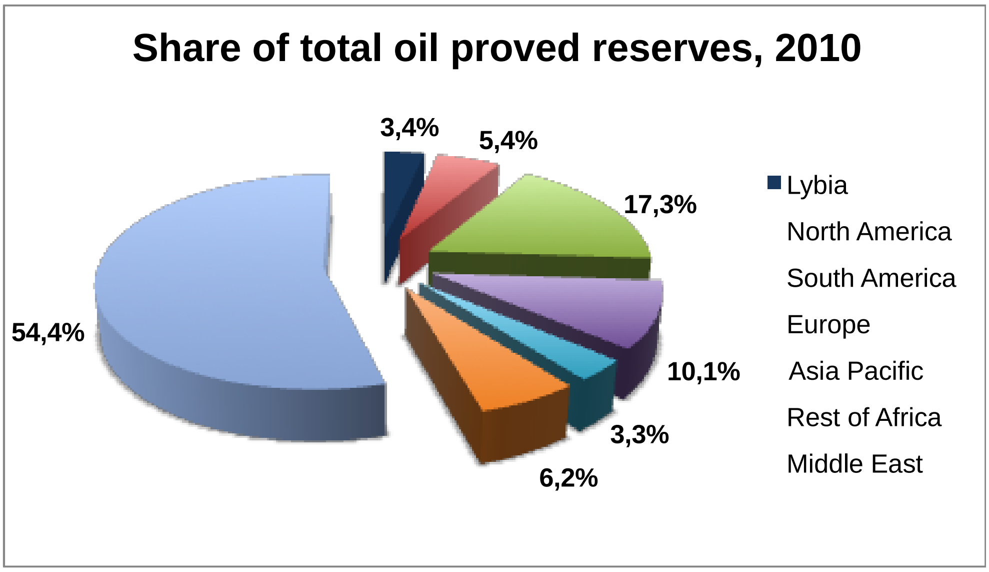
With 46.4 billion barrels of proved reserves representing 3.4% of the world's total (see graphics 2), Libyans sit on the top of one of the main world sweet crude oil reserves. Sweet crude is a low-sulfur oil that is more easily transformed into high-value products like gasoline and diesel, used mainly for transport. Its transformation process varies from sour crude thus a shortage of light crude oil is then not directly

[6] "Libya New Oil Minister Ben Yezza", op. cit.
[7] NOC website 27/11/2011 en.noclibya.com.ly
[8] « Libye : ENI prévoit de doubler sa production d'ici 2020 »Elisabeth Studer, 26/11/2011 www.leblogfinance.com
« Eni's giant Libyan oil field Elephant restarts production », Benoit Faucon, World oil, 11/10/2011

replaceable. In comparison, Libyan total reserves amount to only 17.5% of the total Saudi reserves. However Libyan oil is not easily replaced therefore responding to the disruption due to the revolution, the IEA on June 2011[9] intervened on the oil market by coordinating the release of 60 millions barrels of emergency stocks.

The years of repression of the Qaddafi regime established a centralized government focused on its capital Tripoli and the Qaddafi clan. The February upheavals were thus, amongst other civil rights demands, a protest against an unfair and not sufficient repartition of the revenues coming from the oil activity.

Graphic 3 – Share of proved oil reserves per region in 2010



Source: BP Statistical Review of World Energy 2011

Currently, the NTC is trying to take into account all the different voices arising from the provinces and towns, as well as the interests of the international companies as it can be read on the official webpage ("The interests and rights of foreign nationals and companies will be protected"[10]). Yet a battle among Tripoli and resource-rich zones is not to be excluded in the sharing of oil and gas revenues.

If we overlay a political map of Libya and the main oil and gas production fields (see map 1), we can identify the principal oil and gas intensive regions, namely Wadi al Hayat with its gigantic Elephant field operated by Eni; Murzuq where the presence of Total, Repsol, and OMV is predominant; Al Jufrah (Wintershall); Al Wahat; Sirte and offshore fields around Tripoli (Eni). These zones are poorly populated, as the population is concentrated in big towns like Tripoli and Benghazi or provinces like Misratah.

The NTC assured the representation of each town with an appointed minister with a double responsibility, a specific portfolio, say Justice, and its town of origin. So Mr. Abdul Hafiz Ghoga is Vice Chairman of the NTC and its official spokesman but he

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[9] A Look at the IEA 2011 Release of Strategic Oil Reserves, Davin Glick, Actuelles de l'Ifri
[10] www.ntclibya.com

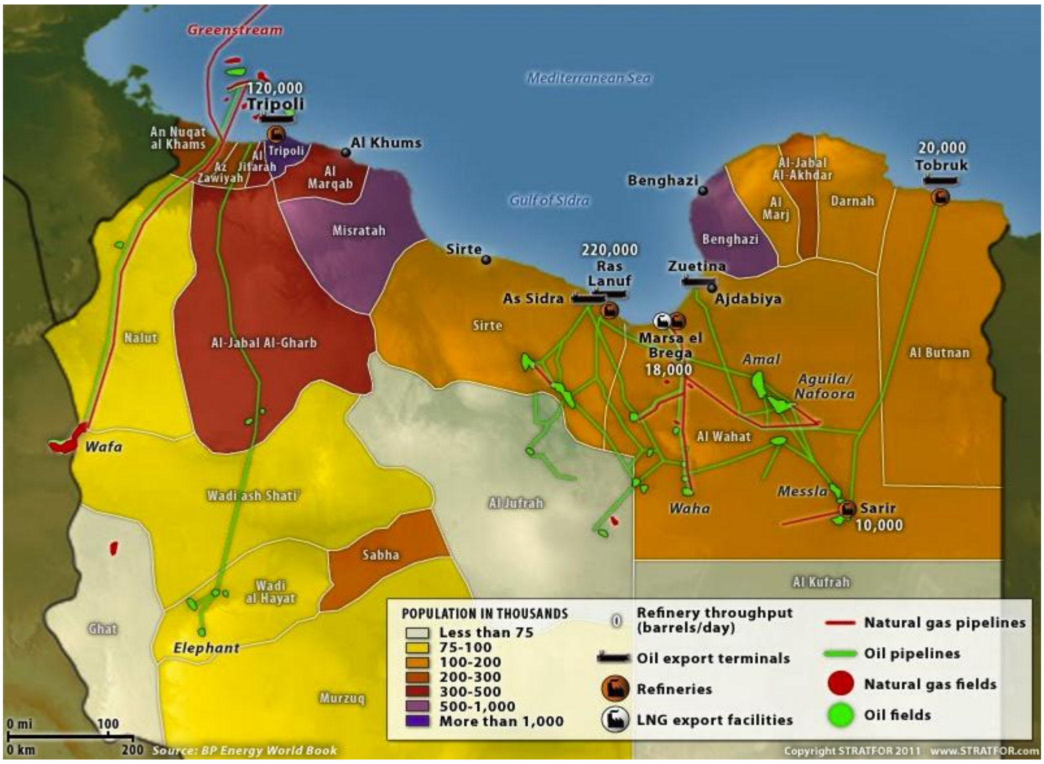
also represents the city of Benghazi. But other ministers were only selected as representatives of their hometown. So Mr. Mohamed Al-Muntasir Mohammed, a businessman, represents the city of Misratah.

A mix of regional and national representation is thus the initial response to the puzzle of tribes, clans and townships that characterize Libya. Representing oil-rich regions maybe a first answer to futures problems though it looks to a great extent like the issue Irak faces at this moment, with a Kurdistan oil rich region claiming its rights to conclude agreements and profit directly from its resources. The Irak situation may then inspire Libyans future legislators.

Nevertheless, by the end of November 2011 new nominations are only partially reassuring this geographical representation and protests have already arisen in the second most important Libyan town, Benghazi. The protesters in particular criticize the lack of transparency[11]. Since the new NTC appointments, neither new communications on the relevant decisions already taken nor the list of the NTC members had been given.

This year elections will be thus extremely important and might change once again the interlocutors of negotiators. This continuous changing might as well damage the business environment and have negative effects in the recovery of the fragile Libyan economy, as doubts arise over the capability of the institutions and banks to be able to manage the frozen assets.

Map 1



[11] "Libyan activists demand transparency from National Transitional Council", Chris Stephen in Tripoli, guardian.co.uk, 13/12/2011

Libyan gas: a sleeping giant

While oil exploration has been active and production has been sustained despite old infrastructure, gas exploration and production has been substantially underexploited. Two main reasons lie behind the under performance of the gas sector and are intertwined: low development and poor infrastructure.

The fourth EPSA round awarded in December 2007 was focused only on gas, with 12 areas on offer mainly in the Sirte and Ghadames basins. The main foreign companies present for this round were Eni, Repsol, Shell, Sonatrach, Gazprom, Occidental and RWE. Italian Eni currently has a dominant position thanks to its important production based on an earlier round and (renewed recently until 2042 for oil and 2047 for gas)[12], infrastructure projects and the joint venture created with NOC. Its production levels are 10 bcm of gas out of total 16 bcm (see graphic 4) Libyan production from onshore and offshore fields located in the main basins. Although being a company of the former colonial country, Eni established special links with Libyan companies thanks to the “special relationship” Italy claims with Libya. Eni’s advantage comes from historic ties with the Libyan institutions and benefits from the extensive trade partnership between the two countries (Italy is Libya’s first trading partner, followed by China for Libyan imports and France for exports). Nonetheless, the great amount of reserves still available gives hope to the progressive entry of new actors in the gas sector thanks to the EPSA round which have been held and eventually will be renewed by the new government.

Therefore, fostering competition among companies in the Libyan market, should stimulate production and reinforce existing infrastructure. Creating new pipelines and LNG plants should be one of the key initiatives of the NTC and of the next government in order to boost production and reach the global market.

Except from Eni then, all companies face the same problem: access to infrastructure.

Gas export infrastructure is composed of only one LNG plant (created by Exxon back in 1971) and of the 520 kilometer Greenstream pipeline[13]. This gas pipeline, opened in 2004, brings gas from Libya to Gela, in Sicily. It is operated by Eni. The 11 bcm of capacity is not completely exploited, Italy imports only 9 bcm (see Table 1). Libyan LNG goes mainly to Spain, with remaining exports of around 0.7 BCM that remain constant.

The Western Libyan Gas Project (50% Eni and 50% NOC) is one of the most important. It will enable gas coming from the offshore field Bahr Essalam, located 110 kilometers off the Libyan coast, and the onshore field Wafa, close to the border with Algeria, to reach the Mellitah plant. From Bahr Essalam, two underwater pipelines will transmit the gas and condensates to the treatment plant at Mellitah, while the gas and condensates produced and processed at Wafa will be sent to the

[12] http://www.eni.com/en_IT/eni-world/libya/eni-business/eni-business.shtml
[13] “Eni to reopen libyan gas facility”, Liam Moloney, The Wall Street Journal, 6/09/2011

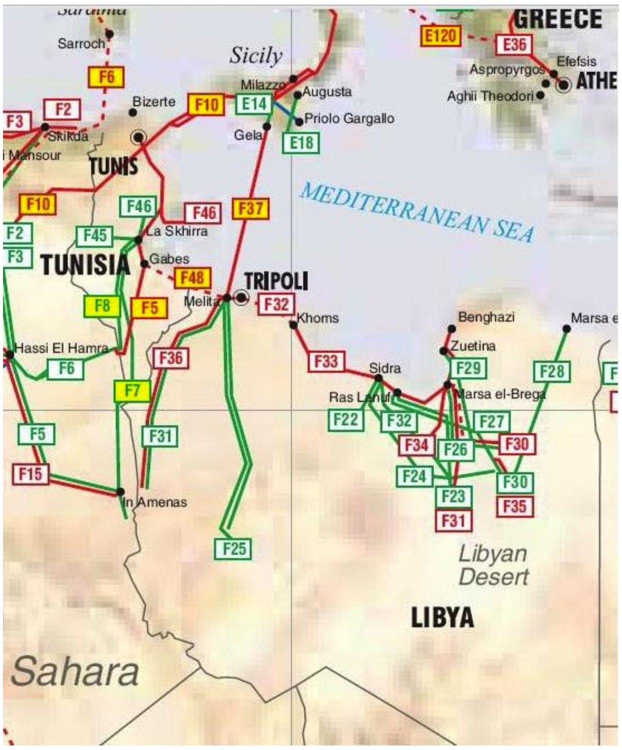
Mellitah plant through a 530 kilometers-long pipeline. This again is a product of Eni's partnership with NOC.

On the Eastern side, pipelines connect the gas fields to the Marsa-el-Brega LNG plant directly and to some of the main coastal cities (see Map 2), but stop before reaching the capital Tripoli.

Two projects have already been launched to connect the Libyan grid with Tunisia from one side, and to create the missing link with the coastal gas pipelines from the east to Tripoli.

Map 2 – Map of Libyan pipelines

Legend: red lines – gas infrastructures; green lines – oil infrastructures



Source: [*www.theodora.com*](http://www.theodora.com)

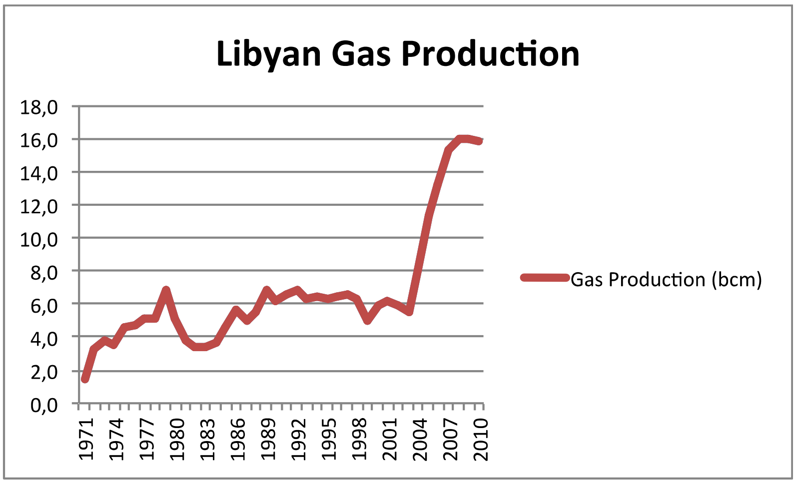
These projects are even more relevant since the Libya government decided to utilize its gas reserves, estimated to 1.5 Tcm, for power generation instead of oil[14]. To do so, it will have not only to accelerate the existing projects, but also to attract new investments and technology to further expand the poor gas transmission system. Foreign direct investment has been increasing in the last five years[15] but the current instability might discourage some companies from taking the risk[16].

[14] http://www.eia.gov/countries/cab.cfm?fips=LY

[15] https://www.cia.gov/library/publications/the-world-factbook/index.html

[16] "Libyan activists demand transparency from National Transitional Council", *op.cit.*

Graphic 4 –Libyan gas production 1971 – 2010



Source: BP Statistical Review of World Energy 2011

Table 1 – Libya Trade movements (bcm)

Libya Trade Mouvements (bcm)									
	2002	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Italy			0,5	7,69	7,69	9,2	9,87	9,17	9,41
Spain	0,63	0,75	0,63	0,72	0,72	0,76	0,53	0,72	0,34
LNG exports	*0,63*	*0,75*	*0,63*	*0,72*	*0,72*	*0,76*	*0,53*	*0,72*	*0,34*
Total exports	**0,63**	**0,75**	**1,13**	**8,41**	**8,41**	**9,96**	**10,4**	**9,89**	**9,75**

Source: BP Statistical Review of World Energy 2011

Conclusion

The designation last November of a new Oil Minister and recent demonstrations that took place in Benghazi give a hint of the difficulties energy utilities will face in the next twelve months in Libya. An undefined institutional pattern and a blurred legal framework are restraining European countries to free up the frozen funds and assets. The Italian government only recently, following a NTC President Jalil visit, released 600 millions euros (of which 370 will be used for the recapitalization of Unicredit, an Italian bank severely touched by the economic crisis) 17. This year national elections could once again reshuffle the cards with new nominations for the oil and gas Minister and representatives from the key Libyan cities. Tensions arising over oil revenues and the emergence of an Iraq-like situation could disappoint the hopes of the revolution.

[17] « Il trattato Italia-Libia riparte », Gerardo Pelosi, 16/12/2011, Il sole 24 Ore

Political ambiguity could hamper Libyan recovery and limit the potential of its gas and oil reserves. While forecasts see an increasing role for gas at the European level (see the recent "Energy roadmap for 2050" of the European Commission or the LNG plant project ongoing in Poland) and globally (the special report "Are we entering a golden age of gas" of the IEA underlines the growing Chinese LNG demand), Libya still lacks the infrastructures needed to diversify and boost its exports. Big investments will be needed to foster its overall production but a legal and stable framework will be necessary to attract a more diverse group of investors