
ABSTRACT: Over the last few years, the unconventional energy revolution has profoundly changed, if not the essence of global energy geopolitics, at least its narrative. This article analyses the impact of such a geo-economic shift for Southern European countries. Despite this development, North Africa will remain the main energy supplier for EU Mediterranean countries. As a consequence, the main shared strategic challenge regarding energy security will be the geopolitical deepening of a wider North Africa. To manage European energy interdependency with the Mediterranean Southern shore in such a changing context a new, credible and more appealing energy narrative for their southern energy partners should be developed. This article proposes some of the elements that could be included to successfully increase energy cooperation in the Western Mediterranean.

KEY WORDS: Euromediterranean energy relations, energy security, unconventional energy revolution, global energy geopolitics, North Africa, European Union.

LA GESTIÓN DE LA INTERDEPENDENCIA ENERGÉTICA EN EL MEDITERRÁNEO OCCIDENTAL

RESUMEN: Durante los últimos años, la revolución energética no convencional ha cambiado profundamente, si no la esencia de la geopolítica global de la energía, al menos su narrativa. Este artículo analiza el impacto de este cambio geo-económico para los países del sur de Europa. A su pesar el Norte de África continuará siendo la principal fuente de suministro energético para los países mediterráneos de la Unión Europea. En consecuencia, el mayor desafío estratégico común para su seguridad energética consiste en un Norte de África más amplio y profundo. Para gestionar la interdependencia energética europea con la orilla sur del Mediterráneo en un contexto cambiante como el actual, debe elaborarse un nuevo discurso energético creíble y más atractivo para los socios...

1 Gonzalo Escribano Francés, Director, Energy Program, Real Instituto Elcano (Madrid) and Associate Professor (Profesor Titular) of Applied Economics, Spanish Open University (UNED, Madrid), <gescribano@rielcano.org>. Enrique San Martín González, Lecturer (Profesor Ayudante) of Applied Economics, Spanish Open University (UNED, Madrid), <esanmartin@cee.uned.es>. This article updates previous versions of part of the research conducted for the IEEE (Instituto Español de Estudios Estratégicos, CESEDEN, Spain) and CEMISS (Centro Militare Di Studi Strategici, Italy) international research project “Energy geopolitics in the Mediterranean Region”, whose original Spanish version is available at <http://www.ieee.es/en/documentos/areas-tematicas/regiones-geopoliticas/2014/DIEEET03-2014.html>.
meridionales. En este artículo se proponen algunos elementos que podrían ser incluidos en una nueva narrativa para mejorar la cooperación energética en el Mediterráneo Occidental.

**PALABRAS CLAVE:** relaciones energéticas euromediterráneas, seguridad energética, revolución energética no convencional, geopolítica energética global, Norte de África, Unión Europea.

**LA GESTION DE L’INTERDÉPENDANCE ÉNERGÉTIQUE DANS LA MÉDITERRANÉE OCCIDENTALE**


**MOTS CLÉS:** relations énergétiques euro-méditerranéennes, sécurité énergétique, révolution non conventionnelle, géopolitique de l’énergie, Afrique du Nord, Union Européenne.

**I. INTRODUCTION**

Energy geopolitics is by definition a quite static field of strategic thinking. The economic and political geography of Mediterranean energy interdependency conform a natural energy space that has been rather stable over the last decades. Stability refers here to the fact that threats and opportunities, complementarities and conflicts, are projected in a highly stable analytical landscape: the geography of energy resources, which evolves in a setting of long-term investment projects and gradual technological progress. Threats and conflicts arise in a recurrent manner and under different form, but they tend to come from the same geographical origins. When they emerge abruptly and unexpectedly, a failure in risk evaluation has been made; if they affect the functioning of national or regional energy markets, it is because the latter were ill-conceived to deal with energy security threats. However, over the last few years, the unconventional revolution has profoundly changed, if not the essence of global energy geopolitics, at least its narrative. It is true that energy geopolitics has been historically prone to fashions whose announced long-term impacts never materialise, at least no to the predicted extent. While these fashions receive a lot of attention from policy-makers, structural trends continue to unfold.
This article nuances first the impact of such a geo-economic shift for Southern European countries. On the contrary, the following section argues that for these countries the main shared strategic challenge regarding energy security will be the geopolitical deepening of a wider North Africa. The final section concludes further arguing that managing European energy interdependency with North Africa in such a changing context requires developing a new, credible and more appealing energy narrative for their southern energy partners. It also emphasises the need for Southern European countries to be more pro-active in this regard in the European and bilateral policy domains, especially when a window of opportunity for a more cooperative energy interdependency opens with the increasing uncertainty regarding Russian and Central Asian supplies.

Emphasising the North African dimension by no means dismiss the relevance of other regional emerging dynamics that also affect Southern European countries, like energy developments in the Eastern Mediterranean, the growing relevance of the wider Atlantic basin or the Black Sea and the energy future of the post-soviet space. Even more so if, as a consequence of the current deterioration of EU-Russian relations after the Ukraine crisis, the evolving energy scene in the Mediterranean becomes more crucial for European countries in need of diversifying away from Russia and its “near abroad”.

II. WILL NORTH AFRICA FADE AWAY IN A SHIFTING GLOBAL ENERGY LANDSCAPE?

This section is devoted to identifying some key global drivers for energy geopolitics. On the global arena, the recent literature on energy geopolitics is plagued with analyses that predict the emergence of a new balance in the international energy system due to the global impact of the shale gas revolution and the expected effects of the on-going unconventional oil revolution. This paper tries first to nuance the direct and indirect impacts of such developments on Southern European countries before addressing the North African dimension itself.

In Europe, most of the attention has been given to Russia, balancing the policies of engaging the country and diversifying away from it. Although Russia is the EU main energy supplier, its energy policy had always raised concerns due to the use of the energy weapon in his ‘near abroad’. In the 2014 Ukrainian crisis, energy does

---

2 LARSSON, for instance, had recorded more than fifty incidents involving Russian use of the
not seem to be playing the main role, but it was used first to attract Ukraine to the
Russian positions, with more than a 30% off in the gas bill\(^3\) and, later on, to punish
the pro-Western cabinet that reached office after the Euromaidan events, cancelling
the discount\(^4\). Precisely this crisis reminds Europe that its energy supply cannot rely
solely in Russia. But to diversify energy supplies away from Russia has proven a
hardly consistent and difficult endeavour, which has concentrated European strategic
attention in the so-called ‘Great Game’ of (petty) energy diplomacy in Central Asia.
Nevertheless, being optimistic, it could be said that the results of this policy has
been limited, because Russia can still exert high political, economic and military
pressure in the post-soviet space to its fullest extent, as we have seen very clearly in

Thus being North Africa the closest energy exporting region to the EU, a
deepening in the Euro Mediterranean relations, as this paper advocates, seems to be
the proper option to balance Russian geopolitical energy risk.

At a global level, the first interesting trait in the emerging energy landscape is
that it is biased towards the US unconventional energy power, while the alternative
European vision of a renewable, low-carbon future seems increasingly unappealing
to strategic thinking. A renewables-based energy mix seems too much a soft
energy power, whose appeal is fading in an energy world dominated by the hard
narrative of hydrocarbon resources, conventional or unconventional. When dealing
with alternative energy futures, unconventional oil and gas are from Mars, while
renewables are from Venus, to put it in Robert Kagan’s terms\(^5\).

This discourse was reinforced by the International Energy Agency-IEA- World
Energy Outlook-WEO-2012\(^6\), which projects a significant geographical shift in
hydrocarbon production to the benefit of North America and, lastly, to the US.

\(^3\) “Russia offers Ukraine major economic assistance”, BBC News, December 17, 2013.
\(^4\) “Russia cancels Ukraine’s gas discount and demands $1.5bn”, The Telegraph, March 4, 2014.
\(^5\) ESCRIBANO, G., “Shifting towards what? Europe and the rise of unconventional energy
wps/portal/rielo|cano_eng/Content?WCM_GLOBAL_CONTEXT=/elcano/elcano_in/zonas_in/ari82-2012_esc|ri|bano_europe_unconventional_energy>
The summary of the report was widely echoed by international media and attracted a lot of attention from policy makers and energy analysts alike. In most analyses, US energy independence and even its emergence as an oil exporter were almost being taken for granted. On this assumption, it has been mechanically argued that US geopolitical interests in the Middle East will almost disappear. ‘Saudi’ America would lead world energy markets, pushing conventional producers to the fringe of the international geopolitical scene. Europe would stay alone in providing for its energy security, increasing European energy vulnerability compared with the new unconventional US power.

But this unconventional boom, boosted to be a world geopolitical game changer only one year ago, was not seen by the IEA any more as a world revolution: the last WEO argues that, regarding oil, there will be effects only in the short and medium term («Light tight oil shakes the next ten years, but leaves the longer term unstirred») while the main key features of the energy system keep going in the future («The Middle East, the only large source of low-cost oil, remains at the centre of the longer-term oil outlook»). Nonetheless, the situation for some key players, like the US, could change dramatically in the future if its predicted energy self-sufficiency finally happens.

Although, unconventional resources have changed the balances of global energy geopolitics, at least in the short and medium term, its development does not push conventional hydrocarbon suppliers to the fringe of energy geopolitics. Some figures can help to nuance the present and future significance of unconventional resources. The 2013 WEO’s ‘New Policies Scenario’ projects that world unconventional oil production will reach 15 mb/d in 2035 (3.9 mb/d in 2011), compared with 65.4 mb/d for conventional crude oil and 17.7 mb/d for natural gas liquids (68.5 and 12.2 mb/d, respectively). Notwithstanding the fact that unconventional oil provides most additional production, together with natural gas liquids, it represents only 15.2% of 2035 total liquids production, and is expected to be restricted to North America. Unconventional gas (mainly shale) would rise from 16% to 26% of world

7 “Saudi America. The U.S. will be the world’s leading energy producer, if we allow it”, The Wall Street Journal, November 12, 2012.
8 Light tight oil (LTO) is a kind of unconventional oil extracted using the same technology used to extract shale gas: horizontal drilling and hydraulic fracturing (COGA- COLORADO OIL & GAS ASSOCIATION, “Oil Shale vs. Shale Oil, The Basics”, Denver (Colorado), 2013.
production, accounting for close to half of world gas production increases between 2011 and 2035. Half of it would come from China and the US.

These are big numbers that make for most of the new production capacity. But they should be kept in perspective with its weight in global energy markets, which will remain dominated by conventional traditional producers through development of existing fields and new conventional discoveries (including high cost deep water fields).

Table 1 shows that the Middle East represents roughly a third of world oil production and exports (and almost a half of world oil proven reserves). When adding North African producers and Nigeria, the figures increase to over 40% of world oil production and exports. Even more importantly, they own the only available spare capacity in the world, which gives Saudi Arabia and other smaller Gulf producers the power to balance (or not) global oil markets by squeezing or preserving it. To date, Gulf swing producers have been the last resort to compensate for strikes in Nigeria, hurricanes in the Gulf of Mexico, disruptions in Libyan production or the oil embargo on Iran, to name but a few.

In this context, sudden US strategic neglect of the Gulf region does not seem a plausible option. Especially so in the longer run, when the predominance of Persian Gulf reserves could prove more enduring than is currently though. It is true that US physical oil vulnerability would tend to be reduced. But the US already imported only 20% of its oil from the Persian Gulf in 2012, and this reduced reliance did not prevent a clear signal to Iran that any traffic disruption in the Hormuz Strait would imply military action. Besides energy issues, the Middle East host a full menu of geopolitical nightmares, from Shia-Sunni tensions to the Arab-Israeli conflict, in a region accumulates over 1 trillion US$ in reserves.

Another noticeable figure in Table 1 is the evolution of production and exports between 2011 and 2012. Taking Libya out of the picture, as its production is recovering from the civil war, the only region with a relevant increase in oil production (1.2 million barrels daily) is North America and, specifically, the US. This result could be transferred to oil exports, even with greater intensity, because if US oil exports were not accounted for, world oil exports would have dropped. The main factor behind this production increase is, obviously, the unconventional revolution. However, it must be kept in mind that unconventional oil (and gas) is not produced due to a lack of conventional crude (or gas); on the contrary it has been produced
Table 1: Oil production and exports, 2012 (Thousand barrels daily)

<table>
<thead>
<tr>
<th>Thousand barrels daily</th>
<th>Oil production</th>
<th>Oil exports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012</td>
<td>Share of total</td>
</tr>
<tr>
<td>US</td>
<td>8,905</td>
<td>9.6%</td>
</tr>
<tr>
<td>Canada</td>
<td>3,741</td>
<td>4.4%</td>
</tr>
<tr>
<td>Mexico</td>
<td>2,911</td>
<td>3.5%</td>
</tr>
<tr>
<td>Total North America</td>
<td>15,557</td>
<td>17.5%</td>
</tr>
<tr>
<td>Venezuela</td>
<td>2,725</td>
<td>3.4%</td>
</tr>
<tr>
<td>Brazil</td>
<td>2,149</td>
<td>2.7%</td>
</tr>
<tr>
<td>Colombia</td>
<td>944</td>
<td>1.2%</td>
</tr>
<tr>
<td>Argentina</td>
<td>664</td>
<td>0.8%</td>
</tr>
<tr>
<td>Ecuador</td>
<td>505</td>
<td>0.7%</td>
</tr>
<tr>
<td>Total S. &amp; Cent. America</td>
<td>7,359</td>
<td>9.2%</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>10,643</td>
<td>12.8%</td>
</tr>
<tr>
<td>Norway</td>
<td>1,916</td>
<td>2.1%</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>1,728</td>
<td>2.0%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>967</td>
<td>1.1%</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>872</td>
<td>1.1%</td>
</tr>
<tr>
<td>Total Europe &amp; Eurasia</td>
<td>17,211</td>
<td>20.3%</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>11,530</td>
<td>13.3%</td>
</tr>
<tr>
<td>Iran</td>
<td>3,680</td>
<td>4.2%</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>3,380</td>
<td>3.7%</td>
</tr>
<tr>
<td>Kuwait</td>
<td>3,127</td>
<td>3.7%</td>
</tr>
<tr>
<td>Iraq</td>
<td>3,115</td>
<td>3.7%</td>
</tr>
<tr>
<td>Qatar</td>
<td>1,966</td>
<td>2.0%</td>
</tr>
<tr>
<td>Oman</td>
<td>922</td>
<td>1.1%</td>
</tr>
<tr>
<td>Total Middle East</td>
<td>28,270</td>
<td>32.5%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>2,417</td>
<td>2.8%</td>
</tr>
<tr>
<td>Angola</td>
<td>1,784</td>
<td>2.1%</td>
</tr>
<tr>
<td>Algeria</td>
<td>1,667</td>
<td>1.8%</td>
</tr>
<tr>
<td>Libya</td>
<td>1,509</td>
<td>1.7%</td>
</tr>
<tr>
<td>Egypt</td>
<td>728</td>
<td>0.9%</td>
</tr>
<tr>
<td>Total Africa</td>
<td>9,442</td>
<td>10.9%</td>
</tr>
<tr>
<td>China</td>
<td>4,155</td>
<td>5.0%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>918</td>
<td>1.1%</td>
</tr>
<tr>
<td>India</td>
<td>894</td>
<td>1.0%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>657</td>
<td>0.7%</td>
</tr>
<tr>
<td>Total Asia Pacific</td>
<td>8,313</td>
<td>9.6%</td>
</tr>
<tr>
<td>Total World</td>
<td>86,152</td>
<td>100.0%</td>
</tr>
</tbody>
</table>


Notes: (1) no data provided for consumption in Iraq, Oman, Angola, Libya and Nigeria. (2) The increase in Libyan oil production during 2012 is due to the end of the 2011 civil war.
because there was a technological breakthrough that made it competitive enough to substitute other hydrocarbons that could have been produced.

Table 2 shows that changes in natural gas global balances are more dramatic due to the shale revolution, even if its impact has not been so dramatic out of North America due to social opposition, lack of regulation, absence of technological capabilities, and high investment requirements. A few countries have very important shale gas reserves (in descending order): China, Argentina, Algeria, Canada, the US, Mexico, Australia and South Africa. Each of these countries has, at least, a 5% of the

| Table 2: Estimated shale gas technically recoverable resources for selected countries, compared to existing reported reserves and production during 2011 |
|---------------------------------------------------------------|-----------------|-----------------|-----------------|-----------------|
| | 2011 natural gas production | January 1, 2013 estimated proved natural gas reserves | 2013 EIA/ARI unproved wet shale gas technically recoverable resources |
| | trillion cubic feet | share of total | trillion cubic feet | share of total | trillion cubic feet | share of total |
| Asia and Pacific | | | | | |
| China | 17 | 13,7% | 504 | 7,4% | 1.808 | 25,1% |
| Australia | 4 | 3,2% | 124 | 1,8% | 1.115 | 15,5% |
| Pakistan | 2 | 1,6% | 43 | 0,6% | 437 | 6,1% |
| India | 1 | 0,8% | 24 | 0,4% | 105 | 1,5% |
| Indonesia | 3 | 2,4% | 108 | 1,6% | 46 | 0,6% |
| North America | 32 | 25,8% | 403 | 5,9% | 1.685 | 23,4% |
| Canada | 6 | 4,8% | 68 | 1,0% | 573 | 8,0% |
| United States | 24 | 19,4% | 318 | 4,6% | 567 | 7,9% |
| Mexico | 2 | 1,6% | 17 | 0,2% | 545 | 7,6% |
| South America & Caribbean | 6 | 4,8% | 269 | 3,9% | 1.430 | 19,9% |
| Argentina | 2 | 1,6% | 12 | 0,2% | 802 | 11,1% |
| Brazil | 1 | 0,8% | 14 | 0,2% | 245 | 3,4% |
| Venezuela | 1 | 0,8% | 195 | 2,9% | 167 | 2,3% |
| Paraguay | - | - | 0 | 0,0% | 75 | 1,0% |
| Colombia | 0 | 0,0% | 6 | 0,1% | 55 | 0,8% |
| Chile | 0 | 0,0% | 3 | 0,0% | 48 | 0,7% |
| Bolivia | 1 | 0,8% | 10 | 0,1% | 36 | 0,5% |
| Middle East and North Africa | 26 | 21,0% | 3.117 | 45,6% | 1.003 | 13,9% |
| Algeria | 3 | 2,4% | 159 | 2,3% | 707 | 9,8% |
technically recoverable world reserves estimated by the US Energy Department\textsuperscript{10}. Other countries come next, like Russia, Brazil, Venezuela, Poland, France, Ukraine, Libya, Pakistan or Egypt with at least 100 trillion cubic feet shale gas recoverable resources. While Southern European countries do not seem to have large shale gas deposits, Algeria, Libya and even Egypt, do have significant ones. These three countries together account for almost 13\% of the identified world shale resources, more than three times their conventional gas proved reserves. When and by whom those resources will be accessible is an issue that will be addressed in more detail in a coming section. However, in this respect the unconventional revolution does not directly affect energy security prospects of EU Mediterranean countries, which under normal circumstances would keep Middle East and North African producers as their main energy suppliers.

Nevertheless, figures in Table 2 must be used with caution as the cumulative empirical knowledge in shale gas outside the US is limited. This could make estimations less accurate than in the US or when assessing conventional counterparts. If we compare the last two EIA world estimations of shale gas recoverable resources\textsuperscript{11}, differences, which could be attributed to an improved knowledge, are significant. The most shocking ones are the complete dismissal of the Norwegian unconventional

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|c|c|c|}
\hline
\hline
Libya & 55 & 81 & 222 & 390 & 547 \\
Egypt & 77 & 1,1 \% & 1,1 \% & 1,1 \% & 1,1 \% \\
Sub-Saharan Africa & 2 & 1,6 \% & 3,2 \% & 5,4 \% & 5,4 \% \\
South Africa & 0 & 0,0 \% & 0,0 \% & 0,0 \% & 0,0 \% \\
Europe & 10 & 8,1 \% & 2,1 \% & 6,5 \% & 6,5 \% \\
Poland & 0 & 0,0 \% & 0,0 \% & 1,9 \% & 1,9 \% \\
France & 0 & 0,0 \% & 0,0 \% & 1,9 \% & 1,9 \% \\
Romania & 0 & 0,0 \% & 0,0 \% & 0,0 \% & 0,0 \% \\
Former Soviet Union & 30 & 24,2 \% & 31,8 \% & 5,8 \% & 5,8 \% \\
Russia & 24 & 19,4 \% & 24,7 \% & 4,0 \% & 4,0 \% \\
Ukraine & 4 & 0,1 \% & 0,6 \% & 1,8 \% & 1,8 \% \\
Total World & 124 & 100,0 \% & 100,0 \% & 100,0 \% & 100,0 \% \\
\hline
\end{tabular}
\caption{Shale Gas Recoverable Resources (Trillion Cubic Feet) by Country (2011-2015)}
\end{table}

Source: EIA (2013a), Technically Recoverable Shale Oil and Shale Gas Resources: An Assessment of 137 Shale Formations in 41 Countries Outside the United States.


\textsuperscript{11} Ibid. and EIA - ENERGY INFORMATION ADMINISTRATION, World Shale Gas Resources: An Initial Assessment of 14 Regions Outside the United States, 2011.
gas resources due to “the disappointing results obtained from three Alum Shale wells drilled by Shell Oil Company in 2011”\textsuperscript{12}, and the fifteen times increase in Venezuela due to better data and the inclusion of associated gas. However, most changes are in the +/-35% range, a reasonable gap for such a new development.

In the Mediterranean Southern shore, Algerian unconventional recoverable resources were multiplied by three in the last report due to the inclusion of six additional basins, reaching third position in the world ranking after China and Argentina. Libyan resources were downgraded due to the application of a more severe organic threshold in shale gas estimation. Finally, Egypt was not assessed in the former report, but it is supposed to have resources of similar magnitude than Libya. Notwithstanding, shale gas resources could vary quickly in the short and medium term as knowledge increase, especially outside the US, and more basins and more countries were assessed.

The impact on Mediterranean Europe’s energy security of an eventual US strategic neglect of the Middle East is also difficult to envision. First, while unconventional oil and gas is making the US an unconventional (energy) power, no country is immune to the evolution of global markets. The main US’ energy risk is the economic cost of a major disruption in global oil supplies\textsuperscript{13}, and the fact is that global oil markets will remain dominated by conventional traditional producers. The 2012 WEO\textsuperscript{14} (p. 24) itself warns that “reducing its oil imports will not insulate the United States from developments in international markets”. Second, the 2014 Ukrainian crisis could have made a new geopolitical shift, as the US has realized that Europe cannot help to contain Russia if this country supplies approximately one third of European oil and gas imports and one fourth of European consumption of oil and gas. Thus the US Government is willing to accelerate natural gas exports to Europe, reducing European energy dependence to undermine Russian influence\textsuperscript{15}. It must be kept in mind that until recently the US was discussing the convenience to keep the gas for its own industries rather than exporting it abroad\textsuperscript{16}.

\textsuperscript{12} Ibid., 2013.


Then, no sudden US strategic neglect of the Gulf region and the Middle East (or Europe) seems to be expected. Can the same be said on North Africa?

**III. NOT FOR SOUTHERN EUROPE: THE GEOPOLITICAL DEEPENING OF A WIDER NORTH AFRICA**

With such a soundtrack of global unconventional transformations, Russian hopes and fears and Central Asian ‘chessboards’, in the last two years Southern Europe were repeatedly affected by energy disruptions from the apparently old-fashioned energy pivot of the Middle East and North Africa. The sequence of events that followed is well known and certainly evokes more the immediacy of dominoes than the subtleties of chess. It can be noted in passing that while being perhaps less intellectually inspiring, domino is a tricky strategic game in which, contrary to chess, it is cooperation among players in the same team what makes the difference.

First, the 2011 Tunisian revolution affected the maintenance of the Transmediterranean gas pipeline exporting Algerian gas to Italy. Then, the Egyptian revolution threatened Egyptian supplies and transit through the Suez Canal. Neither of both materialised in serious disruption, but reminded Southern Europe the strategic importance of their oil and gas imports from the Gulf and North Africa. For instance, Spain’s Gas Natural Fenosa was affected by the Damietta gas export facility running out of feedstock by Egyptian authorities, and many international companies are having difficult times in recovering arrears and debts from the Egyptian government. Civil war in Libya (February – October 2011) was a serious disruption which halted the country’s oil and gas exports, cutting almost 14% of EU Mediterranean countries oil imports in 2010, including 23% of Italian oil imports, 16% of French imports and 13% of Spanish oil imports, besides 12% of Italian gas imports and a minor share of Spanish LNG imports17 (EUROSTAT, 2014).

Early after the war Libyan oil production recovered quickly but only to 75% of pre-war levels: 1.65 mb/d in 2010 vs. 1.37 mb/d in 201218 (EIA, 2013b). At the beginning of 2013 oil production was affected sporadically by labour-related protest and power outages but in summer the situation worsened as protest evolved into more politicized issues leading to the closure of the eastern oil exporting and

---

producing facilities. As a result Libyan oil production plunged to little more than 200,000 b/d in February 2014\textsuperscript{19}. The \textit{Morning Glory} story could illustrate perfectly Libya’s situation where Central government can not control neither the whole territory nor the exploitation of its energy resources\textsuperscript{20}.

In 2012, the Iranian embargo further forced Southern Europe, who was importing almost 5\% of its crude oil imports from Iran\textsuperscript{21}, to rely on new oil imports from the Persian Gulf and Nigeria. In parallel, an already deteriorating situation in the Sahel was worsened by the security vacuum left in southern Tunisia and Libya and the mounting pressure on Mali’s territorial integrity, forcing the French military intervention. In January 2013, a jihadist attack against the In Amenas gas plant, producing about 10\% of Algerian gas, significantly reduced Algerian gas supplies to Italy through the Trans-Med\textsuperscript{22}.

However, together with energy security threats other trends, like Renewable Energy Resources (RES) deployment\textsuperscript{23}, could entail a more positive outlook and help to forge a better compensated energy interdependency pattern between Southern Europe and its North African partners. In any case, since the beginning of 2011 the evidence has been mounting that North African dynamics were rapidly evolving and that the energy sector could hardly spare those changes. Nevertheless, there is no need anymore, at least in the main EU Mediterranean countries, to make the case for the centrality of North Africa in their respective energy external strategies. Until 2011, interdependency was managed and assured by (oligopolistic) markets

\textsuperscript{19} \textit{Aljazeera}, «Libya oil output dives after key field shut», February 23, 2014.


\textsuperscript{21} In 2011 Iran supplied 37\% of Greek oil imports, 14\% of Spanish oil imports and almost 13\% of Italian oil imports (Eurostat, \textit{op. cit.}).


and (sometimes confidential) contracts. Popular revolts across North Africa and regime change in Tunisia, Egypt and Libya disrupted supplies from Tripoli to the Sinai Peninsula. But Algeria, the North African energy pivot, remained untouched, although at a considerable fiscal cost\textsuperscript{24}. Would it be enough to assure North African stability as the unrest and turmoil remain in Libya and Egypt?

With this background, the extension of the Sahel crisis to southern Mali and the terrorist attack to the In Amenas gas facility risked to develop into a long-time feared nightmare scenario. To put it in a classical geopolitical manner, Italian and Spanish energy ‘rimlands’ from the Mediterranean to the Gulf of Guinea would have been threaten simultaneously by a diffuse power emanating from the Sahel-Saharan ‘heartland’, whose borders ‘suddenly’ reached their interest directly. In the Spanish case, the sum of Algeria, Libya and Nigeria makes for 25\% of its 2012 oil imports, and over 55\% of gas imports.

There is a lot to nuance in this interpretation, especially in two regards. First, the generalisation of terrorist attacks to energy facilities is difficult to foresee, especially in Algeria, which has extensive experience in dealing with terrorism and protecting energy infrastructures. Second, it remains to be seen the Libyan capacity to recover production levels and to exploit its un-explored potential under more transparent rules and institutions concerning domestic oil wealth redistribution and contract terms with international majors. Third, regarding the influence on Nigerian oil and gas supplies and Boko Haram capacity to disrupt them, or the extent to which a Somalia-like piracy situation could affect shipping in the Gulf of Guinea; however, the news on oil tankers being hijacked in international Western African waters show the plausibility of such a scenario. Contrary to France, who depends heavily on Uranium imported from Niger, Spain barely imports 15\% of its uranium from that country, and neither Spain nor Italy nor Portugal have that highly significant energy-related mining interests in the Sahel.

In any case, and on a more positive stance, EU Mediterranean countries energy preferences call for a deepening and widening of its energy interdependency pattern with North Africa, in the sense of both further developing existing initiatives and projects, and diversifying its energy partnership to new areas. In security affairs

this may call for an integral strategy towards North Africa, the Sahel and even Western Africa, also widening geographically Southern Europe geopolitical borders; notwithstanding this, the following discussion will remain focused in North Africa. Emphasising the wider North African dimension by no means dismiss the relevance of other regional emerging dynamics related to the EU Southern energy corridor in the East and to the wider Atlantic basin in the West.\(^{25}\)

On the contrary, such differences could reinforce the complementarity of Southern Europe energy preferences in North Africa. If Mediterranean Europe main shared strategic challenge regarding energy security is to be the geopolitical deepening of a wider North Africa, both deepening and widening call for more resources devoted to cover more issues over a larger geographical area in a more integrated manner.

**IV. MANAGING INTERDEPENDENCY: WHAT CAN SOUTHERN EUROPE DO?**

The North African recent developments mentioned above entail a different pattern of interdependency between Southern Europe and North Africa. This section address its policy implications for EU Mediterranean countries, which at least comprise the following actions: doing homework first, consolidating current energy relations, launching new initiatives in new domains, improving energy governance, addressing energy-related hard security threats, and finally, to jointly develop a credible Euro-mediterranean energy narrative.

**1. HOMEWORK FIRST**

The new political economy balances\(^{26}\) imply deeper geopolitical consequences for Southern European energy supplies, either current hydrocarbon resources or even future RES flows. As shown in table 3, most of the Mediterranean EU Member States share a relatively minor significance of European imports; a higher weight of Middle East supplies; and even more relevant for the purpose of this paper, a higher interdependency with North Africa and West Africa. A drastic change in the wider North Africa’s energy scenario would imply an asymmetric energy shock for the EU


\(^{26}\) ESCRIBANO, 2013, *op. cit.*
Mediterranean member States. This is also true for other security dimensions, like terrorism, trafficking, irregular migration or money laundering to name but a few.

The convergence of Southern European energy preferences in the Western Mediterranean is so evident that the lack of at least a shared reflection strikes most observers. True, the energy dimension is not an exception regarding the difficulties that Southern European officials have found in projecting their shared preferences towards the EU or in dealing with them bilaterally in a more fruitful manner, especially in the Mediterranean\(^{27}\) (POWELL, 2012). The geopolitical deepening of North Africa is perhaps the clearest example of a shared strategic challenge that demands a much more proactive approach.

The Euro-Mediterranean energy dimension is certainly to be promoted in a more consistent manner at EU level, but the bilateral track is also to be explored more fully, from policy coordination to information exchanges. Other schemes, like the 5+5 or new initiatives between European Mediterranean members and third North African partners can also offer channels of cooperation and merit to be explored. Coordination in the security dimension may also involve the 5+5 initiative and the NATO’s Mediterranean Dialogue, but also eventual emerging schemes to deal with the Sahel crisis and its North African spillovers.

All of them require first the awareness of EU Mediterranean officials and policy-makers on the existence of common preferences and shared challenges in the region. Second, the conviction that cooperation between Southern Europe is crucial because they are among the most affected EU countries by North African developments. This is especially so in the energy domain, where EU Mediterranean countries share the eventual consequences of an asymmetrical energy shock coming from the region. And third, the will to invest political capital to change the prevailing discourse on Euro-mediterranean energy cooperation. This includes acting by example rather than by default, and doing things together. EU Southern Mediterranean countries like France, Italy, Portugal and Spain need to recover the initiative in EU’s Mediterranean policy, and energy not only makes no exception, but signals a clear opportunity to cooperation. A joint agenda could include the items that follow, each of them offering distinct opportunities to do things together.

Table 3: Characterisation of EU countries according to its energy suppliers, 2005

| PROFILE 1: Predominance of intra-European imports (76% on average) and the moderate weight of Russia and Central Asia (11% on average) and North Africa (5% on average) |
|---|---|---|
| Austria | Ireland | Slovenia |
| Belgium | Luxembourg | Sweden |
| Denmark | Malta | United Kingdom |

| PROFILE 2: Significant dominance of intra-European imports (44% on average) but high Russian and Central Asian imports (41% on average) and a moderate contribution from the Middle East (6%) and North Africa (5%) |
|---|---|---|
| Czech Republic | France | Latvia |
| Estonia | Germany | Netherlands |

| PROFILE 3: Clear Russian predominance (81% on average with Central Asia) and moderate European weight (17%) without significant participation from other areas |
|---|---|---|
| Bulgaria | Hungary | Poland |
| Finland | Lithuania | Romania |
| Slovakia | | |

| PROFILE 4: Minor significance of European imports (22% on average) with high weight of the Middle East (27%), North Africa (17%), and Sub-Saharan Africa (8%) |
|---|---|---|
| Cyprus | Italy | Spain |
| Greece | Portugal | |

Source: ESCRIBANO (2010)\textsuperscript{28}. Note: the clustering refer to total energy imports: oil and gas and their products, coal, biomass and electricity.

2. CONSOLIDATING ENERGY RELATIONS AND LAUNCHING NEW INITIATIVES IN NEW DOMAINS

Over the years, Euro-mediterranean energy relations have developed to include several issues from physical interconnections (the Euro-mediterranean electricity and gas rings) to normative issues included in both Barcelona’s Association...
Agreements and European Neighbourhood Policy Action Plans. The Union for the Mediterranean added the Mediterranean Solar Plan and recent EU renewable regulation explicitly contemplates RES flows from the region. There has been an increasing energy dialogue in different areas, from energy regulators (MEDREG) to companies (Observatoire Méditerranéen de l’Énergie-OME). As a result, a good relationship has been built between regulators, grid operators and utilities across the Mediterranean.

A detailed account of the various initiatives and its evolution is out of the scope of this paper. Its only point here is the need to consolidate such process and to explore the opportunities it already offers. This includes reviewing its successes and failures, and re-designing its foundations wherever needed. The existence of such foundations and the closing of the identified gaps between expectations and measures should be highlighted in any narrative aimed at renewing the energy discourse for the region. A joint reflection by Italy and Spain on the existing initiatives should be conducted at the various EU, multilateral and bilateral levels.

Wherever any significant gap in the existing energy framework is identified, EU Mediterranean countries should try to jump in by launching new initiatives. This can entail deepening interdependency in some fields where cooperation already exists, like physical interconnections or technical harmonisation; or widening its scope to cover new issues, like extending interdependency to RES deployment or securing energy infrastructures. It would be interesting for Mediterranean Europe to conduct the exercise of identifying new domains on which it could have convergent energy preferences in North Africa and the ways to advance them. This include diversifying economic relations within the energy sector (RES deployment, cross-investments, facilities’ security…) and away from it, to build a bilateral relation less polarised on oil and gas imports.

Broadening the agenda and revitalising it should however be balanced with the need to provide real progress and not just rhetoric. The problems of both deepening and widening are well known for observers of EU integration, who tend to think that one happens at the expense of the other. This tend to be true under the assumption of fixed resources, but this paper argues that the new geopolitical weight of a wider North Africa do need more resources to conduct both a deepening and widening of EU policies towards the region. Regarding the renewal of the EU’s energy discourse, the idea that energy cooperation has ‘solid’ foundations need to
be complemented with the idea that there is dynamism and a broad potential to do more things together in the future and the operational and financial capacity to attain more ambitious goals.

3. FOCUSING ON THE GOOD GOVERNANCE OF ENERGY RESOURCES

good energy governance is a key driver of the future evolution of energy security in the Western Mediterranean, and should be included in any credible narrative on energy interdependence. The time-consistency of North African energy policies will critically depend on whether energy governance is improved to provide a more inclusive and sustained growth and investment pattern, or remains anchored in internal and external power politics and inefficiencies. For this paper’s purposes, energy governance has two distinct aspects: the domestic dimension of escaping the resource curse, and the international imperative of avoiding resource competition between international oil companies.

Contrary to the political science concept of Resource Curse, economists like to approach energy governance as a (Dutch) Disease. There are different reasons and implications behind each figure, but a fundamental one is that ‘curses’ requires some kind of witchcraft while ‘diseases’ can have cure. Oil and gas producers, including Algeria, have learned a lot on the macroeconomic management of its resource wealth over the last decades, and macro-prudency and monetary sterilisation, together with oil-wealth funds and micro-economic reforms have allow to obtain better economic results than in the past.

However, institutional reforms lagged again to make the management of these resources more transparent and inclusive, and were not able to prevent rent-seeking behaviours at both the economic and political levels. Resource allocation has been led by clientelism, rather than efficiency, and redistribution by the way of subsidies and public employment distorted markets and ultimately became a political trap. Political distortions also affect the international oil companies’ ecosystem and citizen’s perceptions on the role they perform in their countries. Greater transparency adds legitimacy to foreign energy companies that behave according to rules like the ones provided by the Natural Resource Charter (NRC) or Extractive Industries Transparency Initiative (EITI).  

29 The description of these initiatives could be seen in their webpages: <http://naturalresourcecharter.org/> and <http://eiti.org/>.
In this regard, invoking good energy governance (including subsidies) in North African producers presents a strand of actions that include the preferences of North African citizens on transparency and rule of law, a fair redistribution of resource wealth and making it work to economic development; only then government’s needs to redesign energy policies and international companies’ claims on access to resources can be addressed in a political sustainable way. For the latter, medium regional powers like Italy and Spain can expect to obtain better results in a rule of law scenario than in an energy sector dominated by political influences.

4. ADDRESSING ENERGY-RELATED HARD SECURITY THREATS

One of the most pressing North African energy security challenges for EU Mediterranean countries is to address the issue in a sensible way that helps to secure supplies without over-securitising energy relations. One way to approach it is what can be called ‘outward securitisation’, meaning by that both projecting security risks towards third countries and confining security cooperation to borders.

To date, the logic of bilateral dependencies has overplayed the opposing preferences of producers and consumers. The geopolitical transformations in the region offer an opportunity to overcome such a reductionist approach by making explicit how interdependency spills over North African countries’ southern neighbours. It is not producer countries that threat security of supply, and consumer countries that threat security of demand. Instead, both are threaten by third parties, reinforcing the logic of interdependency vis-à-vis shared risks and making the need for cooperative security self-evident and more palatable from a political perspective.

However, given that security cooperation is a highly sensitive issue, pragmatism should prioritise measures at the border, not inside the countries themselves. Measures can combine different aspects, from training to information-sharing initiatives. For instance, ESCRIBANO and PALLONI\textsuperscript{30} have shown how training formats have been experimented with some success within the framework of the Africa Partnership Station and could be pursued within the 5+5 Initiative in the domain of oil platform and maritime security. In both cases the training would constitute a capacity building opportunity regarding operational skills (like force protection equipment, platform defence equipment & facility protection), and

information management (Maritime Domain Awareness –MDA– technology and information sharing systems).

Following the events in the Sahel, it could be useful to think of even more ambitious security cooperation, like a SIVE\textsuperscript{31}-like system for North African Saharian and Sahelian borders. Drone-sharing in the region is another option. The US African Command (USAFRICOM) have been considering deploying drones to monitor the activities of Boko Haram and their links with Al Qaeda in the Maghreb (AQIM) and other jihadist terrorist groups for some time. Recent developments in the region have result in the US finally establishing a drone base in Niger\textsuperscript{32}. But the US has already other capacities in the region and this has not impeded the Algerians to comply on the lack of information coming from them. Cooperative security does not only require agreeing on deploying technical capacities: they have to be shared to be fruitful, which in turn implies setting procedures and priorities in an equally cooperative manner.

\textbf{V. CONCLUDING REMARKS: DEVELOPING A CREDIBLE ENERGY NARRATIVE}

The previous sections have tried to show why North Africa remains a key energy partner for EU Mediterranean countries is spite of a rapidly changing energy global landscape; that in fact, North African energy geopolitics are becoming more important and demanding for these European countries; that new issues should be included in a comprehensive strategy for a geographically expanded North Africa; and that EU Mediterranean countries do share energy preferences in the Western Mediterranean that are barely reflected in common positions or even common strategic thinking towards the region. This situation overlaps with current economic crisis that make it difficult for policy-makers and public opinions to devote resources and attention to what is going on in their southern neighbourhood.

Things are definitively changing in North Africa. New social, political and economic balances are in the making, and Europe as a whole, and specifically, EU Mediterranean countries, should be prepared to offer a credible vision of how energy interdependency can be managed to be mutually beneficial. The Arab Spring makes imperative that these benefits reach the citizens, and the situation in the Sahel

\textsuperscript{31} Sistema Integrado de Vigilancia del Estrecho (Strait of Gibraltar Integral Surveillance System), which has proven very efficient in surveiling the North African coast.

clearly needs a security response. Collective energy security is made of different pieces combined in an appropriate manner. EU Mediterranean countries should think about promoting a new approach towards energy cooperation in the Western Mediterranean. To be convincing in both North Africa and Europe, they need to develop a credible narrative for energy cooperation in the region that can match their preferences. Here are some of its, admittedly speculative, possible elements:

- **Regional and sub-regional:** EU Mediterranean countries should work together in promoting and supporting energy initiatives in the Western Mediterranean along the lines presented above, either under Euro-mediterranean, 5+5, Mediterranean Dialogue, bilateral or multilateral formats. Regional visions are always more appealing and can have more political traction, but the sub-regional and bilateral dimensions are the key to fine-tune cooperative schemes and to reduce transaction costs. The main elements of any of such vision should be consistent among initiatives in order to project a coherent global strategy. Polycentric governance requires strong links among the nodes.

- **Interdependency rather than dependency:** Interdependency is a more propitious environment to cooperation than dependency, and European Mediterranean countries should base their regional energy cooperation in providing such an alternative narrative of cooperative interdependency rather than the competitive dependency approach.

- **Development instead of rent:** European preferences are consistent with promoting energy as a driver for development and cooperation in North Africa. EU Mediterranean countries are interested in preserving socio-economic stability in the region and accessing its energy resources under transparent rules and procedures.

- **Democratic energy governance:** after the Arab Spring energy resources’ management will be increasingly watched by producer countries’ population. Energy policies will be subjected to more open scrutiny, which is essentially a good thing, but risks leading to a more populist stance. Emphasising good governance allows for compromise among different institutional elements.

- **Sustainability:** the regional energy narrative should be refreshed by infusing sustainability through RES deployment and energy efficiency, together with linked dimensions like technological transfers, training and technical and...
industrial cooperation. RES are more security-neutral than conventional energies and provide innovation opportunities and a more soft approach to energy cooperation. Current difficulties in the Mediterranean Solar Plan illustrate the lack of a common narrative in such a symbolic area as renewable energies and sustainability.

• **Cooperative energy security**: projecting security threats beyond North African geographical borders allows for more cooperation space in North Africa itself. True, hard energy security threats should be addressed, but solutions should seek consensus and results and be embedded in both a broader and well diversified strategy, and operational measures to improve security in the region. It would be advisable, however, to confine hard security issues to specialised forums like the NATO’s Mediterranean Dialogue, 5+5 Initiatives and bilateral relations.

• **A Pan-Mediterranean vocation for the Energy Community Treaty**: by contrast, most of the soft elements mentioned above could be addressed under the framework of an extended Energy Community Treaty, which could be opened selectively to North African countries. Morocco could be the first country to benefit from it, something that entails interesting long-term prospects, like participating in the European energy single market or even export virtual ‘green electricity’ through green certificates. Offering prospects of acceding the EU’s energy market to oil and gas producers in exchange of good energy governance and better sustainable economic development performance can help to provide a warmer ecosystem to pan-Mediterranean energy cooperation.
PAIX ET SÉCURITÉ INTERNATIONALES

REVUE MAROÇO-ESPAGNOIÈ DE DROIT INTERNATIONAL ET RELATIONS INTERNATIONALES
NOUVELLE SÉRIE - VERSION ÉLECTRONIQUE

SOMMAIRE / Janvier -Décembre 2014 / N° 2

ÉTUDES

Luis Norberto GONZÁLEZ ALONSO
Le Service Européen pour l’Action Extérieure à l’heure de son épreuve:
Une contribution renforcée de l’UE au maintien de la paix ?

Yahaya NAMASSA ZAKARIA
La Transhumance transfrontalière en Afrique de l’Ouest

Antonio BLANC ALTEMIR – Eymis ORTIZ HERNÁNDEZ
The Union for Mediterranean (UfM): a critical approach

Anass GOUYEZ BEN ALLAL
La politica nuclear de la OTAN: la amenaza de las armas nucleares tácticas para la seguridad internacional
y el régimen de no proliferación nuclear

Gonzalo ESCRIBANO FRANCÉS - Enrique SAN MARTÍN GONZÁLEZ
Managing Energy Interdependency in the Western Mediterranean

NOTES

Jorge DEZCALLAR
Una reflexión sobre las relaciones hipano-marroquíes

Rachid EL HOUDAIGUI – Samar KHAMLICHI
Le réglementation française en matière de contrôle des exportations d’armes conventionnelles

Sara IGLESIAS SÁNCHEZ
Limits of EU immigration policy and citizenship based on the experience of Spanish and Moroccan workers in Gibraltar

Abdelhak BASSOU
La Mer du Golfe de Guinée : Richesses, conflits et insécurité

DOCUMENTATION

Mercedes MOYA ESCUDERO
Recommandations issues des rencontres internationales sur les relations familiales et sucesorales hispano-marocaines

BIBLIOGRAPHIE CRITIQUE