

ENERGY COOPERATION IN THE MEDITERRANEAN SEA

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This essay seeks to examine the progress in energy cooperation in the Mediterranean Sea, particularly in the areas of electricity integration, renewable energy such as solar and winds, creating a unified regulatory framework, the growing volume of natural gas trade, and energy efficiency. A preliminary assessment of the political upheavals that have engulfed the Arab world since early 2011 and the role the European Union can play in responding to these new challenges will be discussed.

Introduction

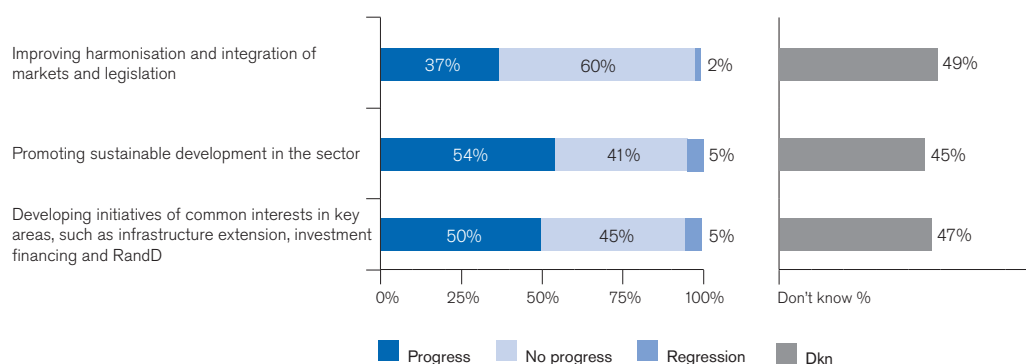
At the 5th Euro-Mediterranean Energy Ministerial Conference in December 2007, European Energy Commissioner Andris Piebalgs launched a new Euro-Mediterranean Energy Partnership. This partnership endorsed the Ministerial Declaration and its 2008-2013 Priority Action Plan for Euro-Mediterranean cooperation in the field of energy. This plan seeks to achieve three goals:

- To pursue and amplify the implementation of energy market reforms and develop gradual harmonization of energy policies and regulatory frameworks between the Euro-Mediterranean Partner Countries towards the longer-term goal of creating a common energy market;
- To engage on more sustainable energy strategies, policies and systems by encouraging energy conservation and energy efficiency on both supply and demand sides, and by the substantial increase of renewable and other low carbon energy sources as well as closer attention to environmental protection, including maritime oil pollution; and
- To establish adequate frameworks for improving the investment climate, in particular to ensure the diversification of energy sources, reinforce gas and electricity interconnections, and support energy efficiency technology deployment and best practices.¹

As the results of the Euromed Survey show, about one-third of the respondents agreed that there was improving harmonization and integration of markets and legislation and approximately half saw progress in promoting sustainable development in the energy sector and in developing initiatives of common interests in key areas, such as infrastructure extension, investment financing and research and development. Meanwhile, slightly fewer than half the participants stated that they were not aware of the progress in the implementation of the 2008-2013 Limassol Priority Action Plan (LPAP) on the Euro-Mediterranean Energy Partnership. Their common comment was: these programs associated with the LPAP are perfect, but it is difficult to assess without the full picture.

1. European Commission, "Commissioner Piebalgs Launches the New Euro-Mediterranean Energy Partnership", available at <http://europa.eu>. Accessed 20th April 2011.

Graph 1: Assessment of the progress achieved between July 2009-July 2010 in the implementation of the 2008-2013 Limassol Priority Action Plan on the Euro-Mediterranean Energy Partnership



Source: Compiled by the IEMed based on the results of the 2nd Euromed Survey

I. General Overview of Euro-Mediterranean Energy Cooperation

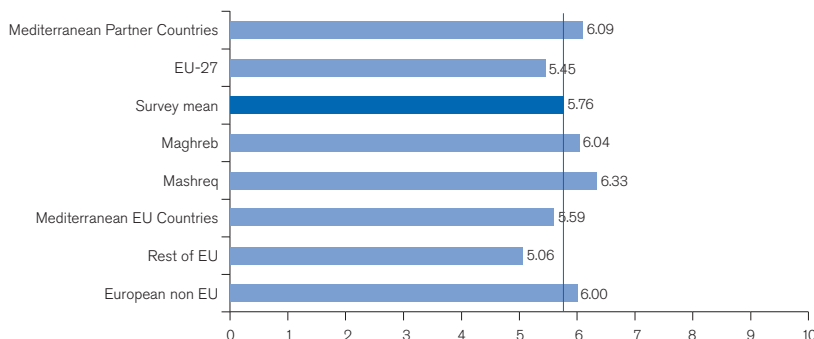
The citizens of the 27 nations that constitute the European Union (EU) enjoy one of the highest standards of living in the world. Their economies, and indeed way of life, run on sustainable energy supplies. The EU, however, suffers from a severe shortage of indigenous energy deposits. This combination of high energy demand and limited production means that the EU is very dependent on foreign supplies. On the other side of the Mediterranean, North African oil and natural gas producers enjoy several geological and geopolitical advantages. First, unlike other producers such as the United States, Mexico, China, and the North Sea where production has already peaked or started declining, several North African reservoirs are largely untapped. Second, most of North Africa's oil is high-quality, low-sulfur oil. This crude is highly prized by refiners in Europe (and elsewhere) because it yields far more lucrative refined products than oil from other regions. Third, the location of most oil fields is convenient for shipment to major consuming regions in Asia, Europe, and North America. This geographical proximity makes oil and gas shipments from North Africa to Southern Europe cheap and easy. Finally, compared to other producing regions, most North African producers offer attractive fiscal terms to international oil companies (IOCs). Most of the companies operate under favorable production-sharing contracts that allow even the most challenging fields in deep water to be developed at a good financial return. Despite growing competition from national oil companies (NOCs), foreign investment is generally welcomed in most North African countries in both upstream and downstream sectors. These characteristics (substantial reserves, high quality, easy transportation, and attractive investment environment) have laid the foundation for a partnership between major European companies and North African producers and cemented energy interdependence across the Mediterranean.

This interdependence is not limited to oil and natural gas supplies but includes green energy, renewable sources, a regulatory framework, and conservation. Thus, creating a more integrated Mediterranean energy market is of primary importance for coping with the fast growing energy demand in the Southern Mediterranean countries, while favoring low-carbon and renewable energy sources and energy efficiency. At the 5th Euro-Mediterranean Energy Ministerial Conference that took place in Limassol, Ministers and the Commissioner endorsed the Ministerial Declaration and its 2008-2013 Priority Action Plan for Euro-Mediterranean cooperation in the field of energy.

Within this context, the Euro-Mediterranean Energy Market Integration Project (MED-EMIP) was established to serve as a regional platform for energy policy dialogue and exchanges of experiences, secure energy supplies, diversified energy sources and to reduce the environmental impact of energy uses.

Since 2005, the Euro-Arab Mashreq Gas Market Project (EAMGM) has sought to improve regional integration of the energy market in general and of the gas market in particular in the partner countries (Egypt, Iraq, Jordan, Lebanon, Syria, and Turkey). The goal is to achieve legislative and regulatory harmonization amongst themselves and with the EU. The main activities of this project include assistance for preparatory legislative work and regulatory reforms, preparing economic and financial analysis for key investments, and undertaking advanced training on regulation, legislation and management issues.

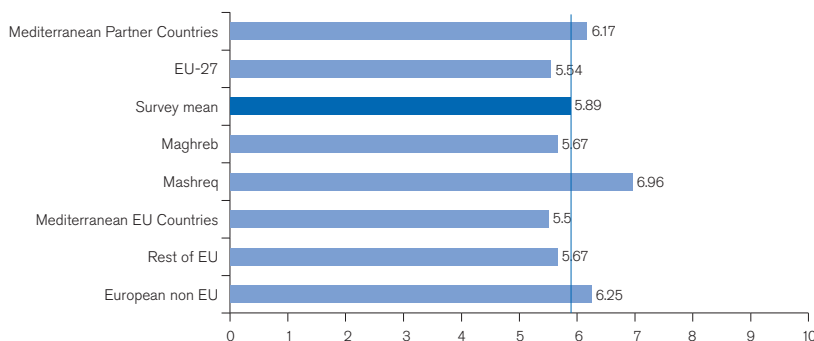
Graph 2: Evaluation of the regional cooperation projects: a) Electricity market integration
 (average on a scale of 0-10, where 0 stands for very disappointing, and 10 for very positive)



Source: Compiled by the IEMed based on the results of the 2nd Euromed Survey

Graph 3: Evaluation of the regional cooperation projects: b) EAMGM II – Euro-Arab Mashreq Gas Market Project

(average on a scale of 0-10, where 0 stands for very disappointing, and 10 for very positive)

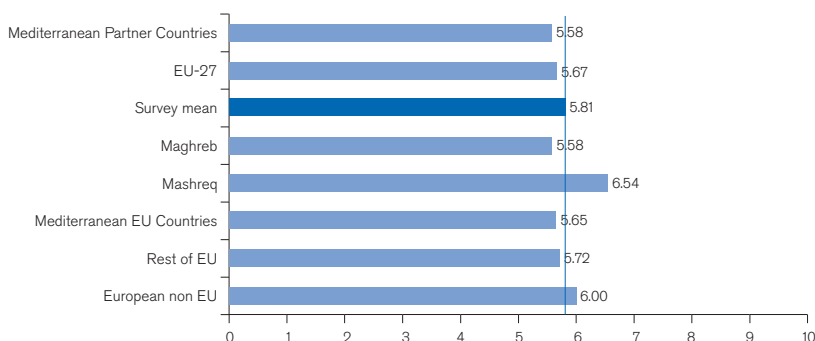


Source: Compiled by the IEMed based on the results of the 2nd Euromed Survey

A similar platform is the Energy Efficiency in the Construction Sector in the Mediterranean (MED-ENEC). This regional project aims to increase the use of energy efficiency measures and renewable energy sources in buildings in Southern and Eastern Mediterranean countries. It also seeks to build capacity by organizing national and regional workshops and consulting events, while encouraging the creation of information, communication and cooperation networks.

Graph 4: Evaluation of the regional cooperation projects: c) MED-EMIP-Energy Cooperation

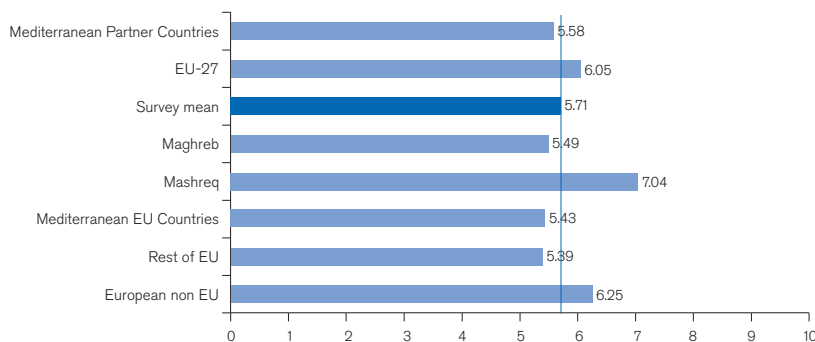
(average on a scale of 0-10, where 0 stands for very disappointing, and 10 for very positive)



Source: Compiled by the IEMed based on the results of the 2nd Euromed Survey

Graph 5: Evaluation of the regional cooperation projects: d) MED-ENEC II-Energy efficiency in construction

(average on a scale of 0-10, where 0 stands for very disappointing, and 10 for very positive)



Source: Compiled by the IEMed based on the results of the 2nd Euromed Survey

In the last few years, efforts have been made in supporting the development of an integrated electricity market between Algeria, Morocco and Tunisia and between these three Maghreb countries and the EU, through the harmonization of their regulatory framework. The goal is to gradually integrate these electricity markets with that of the EU.

As discussed above, the EU-Mediterranean energy cooperation is not limited to fossil fuels. Indeed, in recent years cooperation on utilizing renewable sources (i.e. solar and wind) has gained momentum. Although renewable energy investment in the Middle East and North Africa had increased from \$0.2 billion in 2004 to \$2.5 billion in 2009, these investments account for less than 1% of the global total investment in 2009.² These figures demonstrate the growing interest in renewable sources, but also indicate that much more efforts and resources need to be invested to fully utilize this untapped energy.

The share of renewable resources in the region's energy mix is generally very low and varies from one country to another. In 2010, the share of solar and wind-based electricity generation stood at a minimum of 0% in Lebanon and a maximum of just below 1% for Egypt.³ The Southern and Eastern Mediterranean Countries (SEMC) – Morocco, Algeria, Tunisia, Libya,

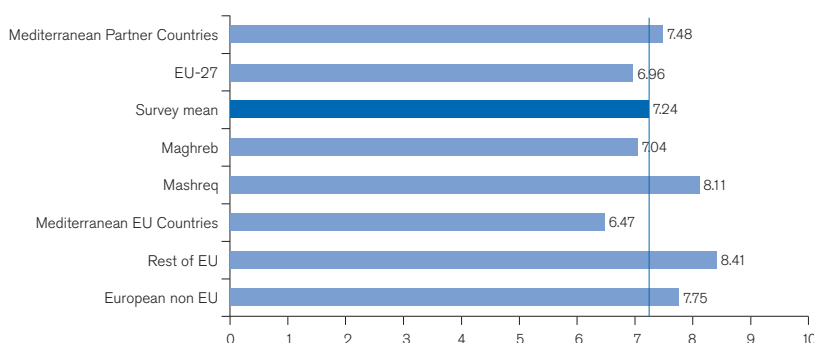
2. United Nations Environment Program, *Global Trends in Sustainable Energy Investment 2010: Analysis of the Trends and Issues in the Financing of Renewable Energy and Energy Efficiency*, UNEP-Division of Technology, Industry and Economics, Paris, 2010, p. 19.

3. Euro-Mediterranean Energy Market Integration Project, *MEDRING Update: Overview of the Power Systems of the Mediterranean Basin*, Vol. 1, Barcelona, 2010, p. 7.

Egypt, Israel, the Palestinian Territories, Jordan, Syria, and Lebanon – enjoy tremendous potential to develop abundant solar power. The EU launched the Mediterranean Solar Plan (MSP) as one of the priority projects of the Union for the Mediterranean at the Paris Summit in July 2008.

Graph 6: Evaluation of the relevance of the project “Paving the Way for the Mediterranean Solar Plan” adopted by the European Commission

(average on a scale of 0-10, where 0 stands for very low relevance, and 10 for very high relevance)



Source: Compiled by the IEMed based on the results of the 2nd Euromed Survey

The MSP aims at developing a large amount of solar and wind generation in the SEMC to supply the increasing demand in these countries and to also export power to Europe through new high capacity electricity corridors. Specifically, the MSP aims at two complementary targets: (a) developing 20 gigawatts of installed renewable energy capacity in the Mediterranean region by 2020 along with the necessary electricity transmission capacity and cross-border interconnections and (b) promoting energy efficiency policies in the region, thus addressing both supply and demand.⁴

A year later, twelve European companies launched the DESERTEC Industrial Initiative. Under the proposal, concentrating solar power systems and wind parks would be located on 6,500 square miles (17,000 square kilometers) in the Sahara Desert. Produced electricity would be transmitted to European and African countries by a super grid of high-voltage direct current cables. It would provide continental Europe with 15% of its electricity. By 2050, investments in solar plants and transmission lines would total €400 billion.⁵

This variety of energy policies and initiatives needs a unified regulatory system. Responding to this need, in May 2006 the EU established the Mediterranean Regulators for Electricity and Natural Gas (MEDREG). In its 4th General Assembly held in Rome (November 2007), MEDREG became a permanent association with a permanent secretariat in Milan, Italy.⁶ The main objective of MEDREG is to create the conditions for the development of an integrated energy market throughout the Mediterranean basin by encouraging the harmonization of the legal, technical and economic frameworks. This objective is directly linked to the setting up of a clear, stable and transparent regulatory context at regional level to encourage investment and guarantee a high level of consumer and environmental protection.⁷ The project focuses on the creation of a network for information exchange and assistance between EU and Mediterranean Partner Countries' regulators. Nonetheless, these intense and growing cooperative relations between the EU and the

4. European Commission, "External Dimension: The Mediterranean", available at <http://ec.europa.eu/energy/international/euromed.en.htm>. Accessed 16th May 2011.

5. DESERTEC, "Concept Summary", available at <http://www.desertec.org>. Accessed 8th March 2010.

6. Alessandro Rubino and Rozeta Karova, "Workshop 05: Regional Energy Initiatives: MEDREG and the Energy Community", European University Institute, available at <http://www.eui.eu>. Accessed 16th May 2011.

7. MEDREG, "MEDREG Response to EC Public Consultation on the External Dimension of the EU Energy Policy", available at <http://www.medreg-regulators.org>. Accessed 16th May 2011.

Mediterranean neighbors were interrupted with the wave of political and economic unrest that has shaken the Arab world since early 2011.

II. The “Arab Spring” Impact on Euro-Mediterranean Energy Cooperation and the EU’s Energy Security

Since early 2011, political upheaval has swept several Arab countries including Tunisia, Libya, Egypt, Syria, Bahrain and Yemen, among others. Most of the uprisings were driven mainly by domestic policy grievances such as the high rate of unemployment and corruption. However, it is hard to separate foreign policy from domestic. Furthermore, the extensive decades-long (even centuries-long) ties between several EU Member States and the peoples and governments in the Arab world mean that Brussels was compelled to articulate a strategy and respond to these ground-shaking developments in its backyard.

The uprisings in the Arab world have presented Europe with both uncertainties and opportunities. Europe, like the rest of the world, was taken by surprise and did not fully comprehend the depth of anger and frustration in the Arab streets. Like other global powers, the EU is trying to articulate a cohesive strategy, but more likely Brussels is responding to the Arab Spring case by case. In other words, Libya is not Egypt, and Syria differs from Yemen. Each country is unique and requires a specific response. Still, several ideological and strategic forces are likely to shape the European response to the Arab uprisings. These include the European democratic ideals, concerns over the flow of immigrants and refugees, and economic interests.

In the short run the political upheavals are likely to raise domestic security concerns, weaken economic growth and contribute to overall socio-economic and political instability. In the long run, the replacement of the authoritarian regimes that stayed in power for decades by more transparent and democratic leaders is likely to be more accommodative to the peoples’ aspirations and demands. The EU has an opportunity to associate the new regimes in Tunisia, Egypt and probably other Arab states to the European ideals of democratic governments and free-market economies. This means supporting democratic reforms, pursuing market liberalization, and providing badly-needed financial and technical assistance.

The participants at the European Council meeting of March 2011 agreed to develop a new partnership with the Southern members of the European Neighbourhood Policy (ENP). The new partnership is based on deeper economic integration and closer political cooperation. Immediate priorities include stepping up humanitarian aid, increasing support from the European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD), and enhancing trade and foreign investments. The EU also plans to develop a stronger dialogue and partnership with civil society organisations in the Mediterranean region. Responding to political upheaval in North Africa, on 8th March Commission President José Manuel Barroso and High Representative Catherine Ashton jointly proposed a new policy framework entitled “A Partnership for Democracy and Shared Prosperity with the Southern Mediterranean”.⁸ The proposal’s central thrust is the need for the EU to exercise conditionality properly in the future. Specifically, European aid, trade and investment should be made available to North African states on the basis of real progress on democracy and human rights.

One of the main objectives of this essay is to provide insight on the potential impact of the “Arab Spring” on the EU’s energy security and the broad energy cooperation between the EU Member States and the Mediterranean partners. Is there a threat to oil and natural gas supplies from North African producers? Will the projects outlined in the above section be frozen? Will European oil companies investing in Algeria, Libya and Egypt face restrictions on their

8. European Commission, “Joint Communication to the European Council”, available at http://eeas.europa.eu/euromed/docs/com2011_200_en.pdf. Accessed 6th May 2011.

operations? Will the political and economic upheavals further destabilize oil and gas prices and endanger fragile global and European economic recovery?

These are some of the main questions that need to be addressed. It is important to point out that any attempt to predict the directions and impacts of the Arab Spring is speculative and is likely to be shaped by several known and unknown forces. These include the success or failure of Arab uprisings not only in toppling autocratic regimes, but also restoring public order and gaining legitimacy. Europe's historical ties and geographical proximity suggest that the European response (i.e. military action, economic assistance, or any other means) will play an important role in shaping the outcome of the uprisings. Despite these uncertainties, it is highly likely that the emerging Middle East/North Africa will be driven by nationalist/Islamic sentiments and will face tremendous economic and financial challenges. These two characteristics should not be seen as a threat but they will impact Europe's energy security and how the EU should respond to the uprisings sweeping the Arab world.

The potential impacts of political upheavals on energy markets arouse concerns in both civil society and policy-makers. Namely in relation with fluctuation of international oil prices and domestic security, which not only concerns supplies and prices but also the maintenance of market dominance for the EU energy companies.

First, it is probably too simplistic to say that the upheavals in the Arab world are the main force behind high oil prices. Other factors are equally important, including global economic recovery, level of consumption, energy conservation, the impact of the Fukushima nuclear disaster on Japan's energy strategy, and whether OPEC will increase production. That said, instability in the Middle East/North Africa has added more uncertainty to global energy markets. For example, Libya's volume of oil production and export has been considerably reduced and there is no way to know when or if it will reach the pre-uprising level.

Second, oil and gas revenues supply a substantial proportion of North African economies. In other words, Algeria, Libya and Egypt depend heavily on exporting a large share of their hydrocarbon production. Given geographical proximity and low costs, most of these exports go to Europe either by tankers or pipelines. The post-uprising regimes are not likely to block these very profitable commercial ties. They will need these revenues to provide for their citizens. Assuming a higher level of transparency and accountability, the new regimes in the Arab world are likely to demand a higher price (what they perceive as a fairer price than they obtained under the old regimes) for their energy resources. In other words, Europe does not need to worry about disruption of supplies, but is likely to pay a higher price.

Third, British, French, Italian, Spanish and other European oil companies have made significant investments in the energy sector in North African countries. They have partnered with the national oil companies such as Sonatrach in Algeria, the National Oil Corporation in Libya, and the Egyptian General Petroleum Corporation and Egyptian Natural Gas Holding Company in Egypt. In the case of the pro-democracy movements that have already toppled the regimes or are working to achieve this goal, a strategy on foreign investment and the role of the state in the economic system in general and the energy sector in particular is pending. However, the lack of indigenous expertise, the necessary capital, and the dire need to explore and develop their hydrocarbon deposits suggest that reliance on European oil companies (and other international companies) will continue.

Given geographical proximity and century-long historical ties, the EU is well-positioned to assist its Mediterranean neighbors in shaping their new future. The close cooperation between governments and private enterprises on the opposite sides of the Mediterranean in exploring and developing all forms of energy is likely to survive the 2011 uprisings. Developing and utilizing all energy resources (i.e. oil, natural gas, solar) would benefit all parties. It is a win-win situation.