## ENERGY RELATIONS IN THE EURO-MEDITERRANEAN

A Political Economy Perspective

Simone Tagliapietra

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To the memory of my grandmother, Giulia Pasa Tagliapietra

### **Executive Summary for Policy Makers**

#### Energy: The Cornerstone of the Euro-Mediterranean Economic Relations

Despite their geographical proximity and common heritage, trade links between Southern and Eastern Mediterranean countries (SEMCs) are very limited. This feature is due to several factors such as the political unwillingness to attain regional cooperation, the protectionist commercial policies implemented by most SEMCs, the ineffectiveness of bilateral trade agreements within the region and the lack of appropriate infrastructures. In this context, trade in the Mediterranean region remains centered on the European Union (EU). The EU constitutes the most important trade partner for SEMCs, with regard to both exports and imports. Over the last decades, trade between the two shores of the Mediterranean developed, particularly, in the energy sector. In fact, in contrast to trading sectors like agriculture, where both sides of the Mediterranean compete, the energy sector is based on strong complementarities between the two shores of the sea: a capital- and technology-poor South.

## The Need for a Full-Fledged Analysis of the Euro-Mediterranean Energy Relations

Notwithstanding their pivotal role in the regional economic relations, Euro-Mediterranean (Euro-Med) energy relations have never been framed into a comprehensive analytical framework, able to assess the potential role of energy in acting as a catalyst for the overall Euro-Med economic and political cooperation. Considering the crucial importance of this issue for the future prospects of the overall Euro-Med cooperation, this book aspires to fill this gap by providing a full-fledged analysis of the regional energy relations with a particular focus on gas and renewable energy.

## A New "EU-Turkey Gas Task Force" to Scale-Up the Regional Gas Cooperation

Gas has played, since the 1970s, a pivotal role in Euro-Med energy relations. This long-lasting story has largely been composed by a series of bilateral partnerships that never translated into a unique regional cooperation scheme. This traditional approach has changed with the development of large-scale projects like the Southern Gas Corridor (SGC), which naturally require a multilateral approach. Also considering the important role of the SGC in the EU Energy Union initiative, the book proposes the establishment of a new "EU-Turkey Gas Task Force" to reinvigorate the regional cooperation in the area. In practice, the EU, Turkey and gas-producing countries in the Caspian, Middle Eastern and Eastern Mediterranean regions could be convened in such a "Task Force," to discuss the prospects of regional gas cooperation in a coordinated manner. This should facilitate the resolution of the different barriers currently limiting the regional gas trade, and allow the full exploitation of economies of scale at regional level.

#### A New 'Euro-Med Renewable Task Force' to Turn the Regional Potential into Reality

SEMCs have a consistent solar and wind energy potential. The exploitation of this potential could bring various benefits to the region, such as: meeting the rising energy and electricity demand at a lower cost; freeing up additional export volumes of oil and gas in energy exporting countries; reducing energy bills in energy importing countries; enhancing the quality of the environment. However, solar and wind energy continue to cover less than two percent of the SEMCs' electricity generation mix. The book illustrates that the only way to turn the regional renewable energy potential into reality is to tackle the various barriers (i.e. commercial, regulatory, infrastructural, financial) to its implementation, at one fell swoop. To this end, the establishment of a "Euro-Med Renewable Energy Task Force" is proposed. This should be composed by the key institutions active in the regional regulatory, infrastructural and financial areas. By emerging as the focal point for the development of renewable energy in the SEM region, this "Task Force" might contribute to the creation of a more stable and predictable investment environment in the region: a key prerequisite to attract institutional and private investors into the regional renewable energy projects.

#### Coordinating the Two "Task Forces" with a "Euro-Med Energy Community"

In the SEM region, the future developments of gas and renewable energy will be closely interconnected. A consistent deployment of solar and wind energy sources in the SEMCs might indeed free up consistent volumes of gas, alternatively used in the domestic power generation sector, for additional exports to Europe via the existing infrastructure. This prospect illustrates the need to coordinate the actions of the proposed "EU-Turkey Gas Task Force" and "Euro-Med Renewable Energy Task Force" with a small and flexible secretariat, which might be denominated "Euro-Med Energy Community."

#### The Key Role of a "Euro-Med Energy Community" in Ensuring Energy Investments

Over the last decade, European financial institutions have been actively involved in the region by co-financing various energy projects. However, the current Euro-Med energy-financing scheme is not sustainable, as only capital markets could structurally satisfy the need for regional energy investments. Energy projects are characterized by high up-front costs and long payback periods. In financial terms, this means that only investors with a long-term investment horizon can potentially find it attractive to finance these projects. In the case of SEMCs, it seems that only institutional investors such as pension funds, insurance companies, mutual funds and sovereign wealth funds could provide a solid response to the energy investment requirements. In fact, due to their long-term liabilities, these investors can behave in a patient and counter-cyclical manner. A stable and reliable investment environment is the key prerequisite for attracting these investors in the SEM region. On top of this, the establishment of dedicated financing mechanisms (such as risk mitigating and credit enhancing tools) by European financial institutions is also important to favor the action of institutional and private investors in the region. A new "Euro-Med Energy Community" should have the primary aim of creating these conditions, by enhancing the coordination of the European financial institutions already operative in the region.

#### The Need for a Long-Term Perspective on Euro-Mediterranean Energy Relations

Discussing energy relations in a region currently characterized by high geopolitical instability, such as the Mediterranean, might appear as a mere speculative exercise. For this reason, it is important to underline that the analysis carried out in this book does not focus on the short-term outlook of regional cooperation, but rather on its long-term horizon. In other words, it is realistic to assume that the regional energy cooperation will most likely not significantly advance during this decade due to the prolonged geopolitical turbulence in the South and to the sluggish economic recovery in the North. However, it is fair to assume that during the 2020s, structural factors such as the rapidly growing energy demand in the South and the falling cost of renewable energy technologies will pave the way for the emergence of a new age of energy cooperation between the two shores of the Mediterranean. This book should be read in light of this long-term perspective. After all, energy is a sector that intrinsically requires a long-term strategy, as some of the investments being planned today might not become operational for a decade.

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## **List of Abbreviations**

DCM	
BCM	Billion Cubic Metres
CDC	Caisse des Dépôts et Consignations
CDP	Cassa Depositi e Prestiti
CIS	Commonwealth of Independent States
CNG	Compressed Natural Gas
CNPC	China National Petroleum Corporation
CSP	Concentrated Solar Power
DII	Desertec Industrial Initiative
EBRD	European Bank for Reconstruction and Development
EC	European Commission
EEZ	Exclusive Economic Zone
EIA	U.S. Energy Information Administration
EIB	European Investment Bank
EMP	European Mediterranean Policy
ENP	European Neighbourhood Policy
EU	European Union
FEMIP	Facility for the Euro-Mediterranean Investment and Partnership
FLNG	Floating Liquefied Natural Gas
GAS	Gas Sales Agreement
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GW	Gigawatt
HVDC	High Voltage Direct Current

#### xx List of Abbreviations

IEA	International Energy Agency
ILO	International Labour Organization
IOCs	International Oil Companies
IPCC	International Panel on Climate Change
IPE	International Political Economy
IR	International Relations
IRENA	International Renewable Energy Agency
KRG	Kurdistan Regional Government
KRI	Kurdistan Region of Iraq
LNG	Liquefied Natural Gas
MED-TSO	Association of Mediterranean Transmission System Operators
MEDREG	Association of Mediterranean Energy Regulators
MENA	Middle East and North Africa
MOU	Memorandum of Understanding
MSP	Mediterranean Solar Plan
MT	Million Tonnes
MTOE	Million Tonnes Per Oil Equivalent
MW	Megawatt
NECs	Net-Energy Exporting Countries
NICs	Net-Energy Importing Countries
NIF	Neighbourhood Investment Facility
NIOC	National Iranian Oil Company
NMCs	North Mediterranean Countries
NPD	Norwegian Petroleum Department
OECD	Organization for Economic Co-operation and Development
OME	Observatoire Méditerranéen de l'Energie
PPP	Purchasing Power Parity
PV	Photovoltaic
SEM	Southern and Eastern Mediterranean
SEMCs	Southern and Eastern Mediterranean countries
SGC	Southern Gas Corridor
SWFs	Sovereign Wealth Funds
TANAP	Trans-Anatolian Pipeline
TAP	Trans-Adriatic Pipeline
TCF	Trillion Cubic Feet
TCM	Trillion Cubic Metres
TREC	Trans-Mediterranean Renewable Energy Cooperation

TWH	Terawatt Hours
UFM	Union for the Mediterranean
UN	United Nations
UNEP	United Nations Environment Programme

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## 1 Introduction

What is the Mediterranean? A thousand things at once. Not a landscape, but countless landscapes. Not a sea but a succession of seas. Not one civilization but more civilizations stacked one on the other. The Mediterranean is a space-movement. (Braudel, F. (1977), p. 10.)

In this poetic passage, the French historian, Fernand Braudel, captured the essence of the Mediterranean and the two crucial aspects of its nature: complexity and dynamism.

For over 3000 years, since the time of Phoenician and Greek colonization and up to the discovery of America, the Mediterranean region was a crossroads of people and cultures, and the greatest free trade area in the world. After such a flourishing period, the Mediterranean region experienced a gradual decline, to the point of losing its preeminence for the benefit of other regions, namely Northern America and Northern Europe. This process ultimately resulted in a sort of partition of the Mediterranean region into two parts: the developed North and the developing South-East.

© The Author(s) 2017 S. Tagliapietra, *Energy Relations in the Euro-Mediterranean*, DOI 10.1007/978-3-319-35116-2 1 Over the last few decades Southern and Eastern Mediterranean countries (SEMCs)<sup>1</sup> staged a considerable process of economic growth, but this remained at a far lower level in comparison to other emerging economies in the world. One of the key reasons behind this gap relates to the level of openness to trade, a factor that in the economic literature is generally recognized as an important driver of economic growth.

Trade would play a particularly important role in the development process of SEMCs due to their small and medium-sized economies. However, despite their geographical proximity, trade links between SEMCs remain at a very low level. This low level of intra-regional trade is usually justified by the political unwillingness to attain sub-regional cooperation, the protectionist commercial policies implemented by most SEMCs, the ineffectiveness of bilateral trade agreements within the region and inappropriate infrastructure.

It has often been said that by removing these obstacles intra-regional trade would have grown at a fairly rapid pace. However, over the last few decades nothing has substantially changed, and the high potential for increased intra-regional trade among SEMCs still remains untapped (as it remains, so also the potential expansion of output, private investment and job creation related to trade openness).

In this context, trade in the Mediterranean region still remains centred on the European Union (EU). In fact, the EU constitutes the most important trade partner for SEMCs, with regard to both exports and imports.

Over the last decades, the Mediterranean North-South trade developed, particularly in the energy sector. In fact, in contrast to trading sectors like agriculture, where both sides of the Mediterranean compete, the energy sector is based on strong complementarities between the two shores of the Mediterranean: a capital- and technology-rich but energyhungry North and a resource-rich but capital- and technology-poor South. These complementarities will likely further expand in the future, as additional energy resources will be discovered in the region and as

<sup>&</sup>lt;sup>1</sup>Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, the Palestinian Territories, Syria, Tunisia and Turkey.