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EURO-MEDITERRANEAN COOPERATION ON RENEWABLE ENERGY FINANCE

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Overview

Investment in energy infrastructure is pivotal for the energy market integration in the Euro-Mediterranean region, and is a necessary condition for the stable and sustainable development of a market of 500 million consumers, with forecasts of 90 million more people by 2030, nearly all in the Southern Mediterranean basin. The energy scenario in the region is changing rapidly, with a decreasing electricity demand in Europe and a growing electricity demand in the Southern Mediterranean basin (where the demand for electricity demand will nearly triple by 2030, requiring 200 GW of generation capacity to be installed).

The deployment of smart grids and cross-border interconnections is being set up by the European Commission as a prerequisite for the completion of the EU's internal energy market. At the same time, the EU's energy system requires significant investment to replace aging energy infrastructure. Moreover, the operation of a power system with a very high penetration of RES is an important objective for assuring the security of supply, encompassing a level of electricity interconnections beyond 10 percent of the installed production capacity of Member States, as well as a necessary storage system development. The total cost of the energy system in Europe in 2030 is projected to increase by 0.15 percent, with the average cost over the period 2011 to 2030 projected to increase by 2 billion Euros per year. These costs are projected to shift from operational costs (OPEX) to capital costs (CAPEX). In this framework, IEA foresees \$260 billion of investments in new transmission and distribution lines through 2035.

The potential of Private Public Partnerships (PPPs) for accessing finance and reducing capital expenditure of energy infrastructure projects becomes more and more important in a time of shrinking financial resources, which have widened the gap between public and private funding.

Methods

Our analysis is both quantitative and qualitative. It investigates the growing energy demand of MENA countries and their potential to generate a good share of electricity through RES power plants, with the consequent need for power grids and energy storage development. It analyses the financial needs for the development of generation and transmission infrastructure and innovative financial instruments and PPP initiatives that could be put in place in the region. The analysis consists of interviews of institutional investors (i.e. pension funds, insurance companies, investment banks, commercial trusts, and hedge funds), and of non-institutional investors, such as the most important private equity funds and venture capitalists, as well as international and regional financial institutions. The most innovative case studies and important findings will be reported.

Results

Growing energy demand, high RES potential, the choice to reserve hydrocarbons for export, and the need to promote GHG mitigation actions in the MENA countries make the region one of the most

attractive for RES investment. Electricity, through renewable energy technology and grid development, emerges as the strong driver for reinforcing Euro-Mediterranean regional cooperation. Moreover, the creation of a gas spot market and the impact of renewable energies on existing market mechanisms suggest the need for a more integrated Euro-Mediterranean Energy System, along the South-North and East-West axis.

Conclusions

The current economic climate has posed a serious challenge to huge investment demands in energy infrastructure development, and there is a crucial need to implement a new financial paradigm based on bold, innovative approaches to fundraising, that can improve bankability and enhance value to investors and governments. The introduction of new financial instruments, such as international equity funds, project bonds, and guarantee schemes cannot disregard the adoption of a favorable political, institutional and legal framework, the improvement of a regulatory framework supportive of PPP investments, and will make a great contribution to the economic and social development of the Euro-Mediterranean region and, ultimately, the achievement of a “Mediterranean Energy Community”.

References

Alloisio, I. (2014). “Public-Private Partnerships: a focus on Energy Infrastructures and Green Investments”. International Center for Climate Governance (ICCG) Reflection No. 22/April 2014

EIB (2011). FEMIP Study on PPP Legal & Financial Frameworks in the Mediterranean Partner Countries, Vol. 2, Country analysis

Navarra, A. and Tubiana, L. (2013). Regional Assessment of Climate Change in the Mediterranean, Vol. 2: Agriculture, Forests and Ecosystem Services and People, Springer