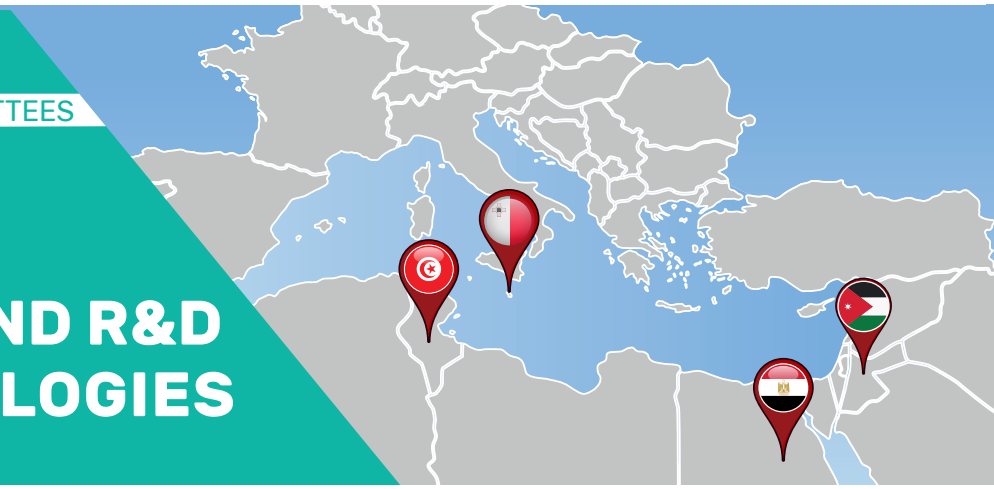
Project funded by the EUROPEAN UNION

EBSOMED
ENHANCING BUSINESS SUPPORT ORGANISATIONS

EBSOMED EMPLOYERS THEMATIC COMMITTEES

FACT SHEET #1 ON EDUCATION AND R&D ENERGY TECHNOLOGIES



EXECUTIVE SUMMARY

Renewable energy (RE) developments in the Arab world have gained momentum in recent years. The main driver behind these developments is the strong support from governments that recognise the urgency of tackling rising demand for energy and are attracted by the declining costs of solar PV. In addition, multilateral development banks and development agencies have played a critical role in financing projects in Egypt, Jordan, and Morocco at a time when international banks were reluctant to invest.

To support their renewable sectors, countries have introduced several supporting mechanisms including competitive bidding, feed in tariffs (FiTs), tax exemptions, and power-purchase agreements, in addition to land and financial incentives.

On the European level, The European Union has always been on the forefront in the battle against Climate Change and has set itself a number of headline targets for 2020 and as of 2014, also for 2030. Each EU Member States should publish a National Renewable Energy Action Plan (NREAP) explaining how the national overall renewable energy target and the transport target shall be achieved.

EU targets for obtaining energy from renewable sources

20 % 2020 / **32 %** 2030

Fact sheet developed by :

BUSINESSMED
Union of Mediterranean Confederations of Enterprises

اتحاد الصناعات المصرية
FEDERATION OF EGYPTIAN INDUSTRIES

MEA
MALTA EMPLOYERS ASSOCIATION

غرفة صناعة الأردن
Jordan Chamber of Industry

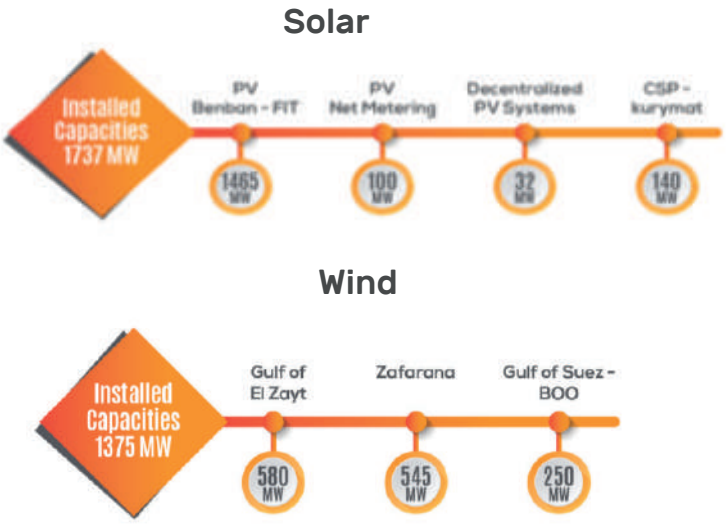
Egypt

ENERGY SITUATION IN EGYPT

In its 2019 Annual Report, the New and Renewable Energy Authority (NREA) published that the total installed RE capacity is around 6000MW, with 2832MW from hydro, 1375MW from wind, 1587 MW from PV, 140MW from CSP and 11.5 MW from biomass. Almost 60% of the installed capacity is state owned particularly hydro, wind and CSP, although the private sector has mainly invested in PV.

Ownership of RE projects per technology as of 2019

The below figure shows the installed capacity in solar and wind per mechanism:

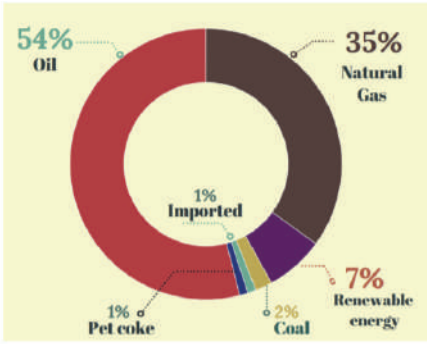


Installed RE capacity per mechanism

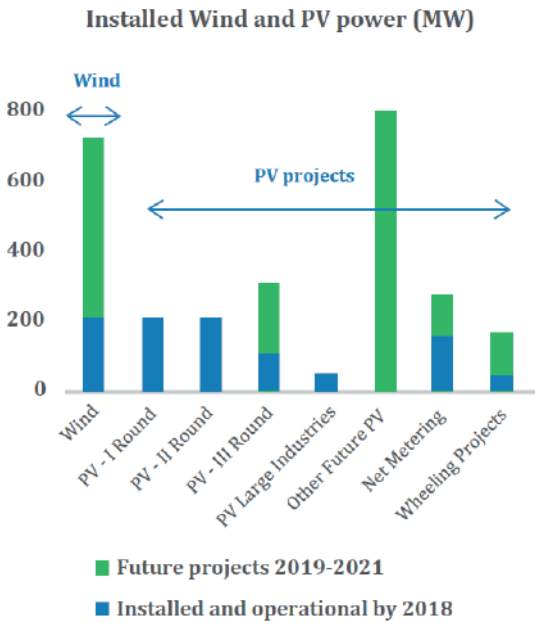
Jordan

ENERGY SITUATION IN JORDAN

Jordan faces two significant challenges in its energy sector, the rising energy demand, and limited domestic resources to meet the country's needs. Imported oil and natural gas comprise the largest share at 87% of the total energy need, while domestic resources account for 7.8% of energy supply, including the 7% obtained from renewable energy



Energy production per source



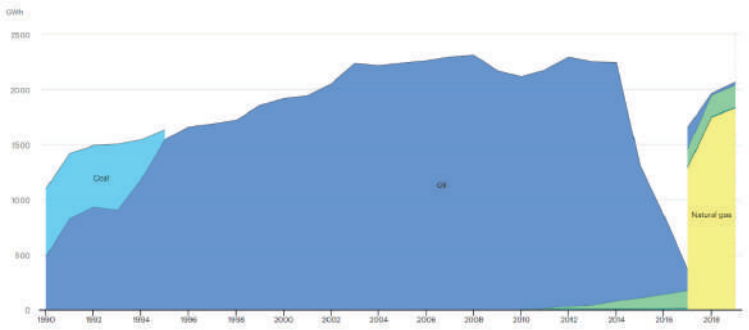
of imported energy pushed the government to draft a National Energy Strategy Plan for the years 2007–2020. Under this strategy, the power supply from renewable energy sources will increase from current measures of 7% in 2018 up to 10% by 2020. The National Energy Strategy Plan seeks to produce 2,000 MW from direct investment in wind and solar energy by 2020. As a result, Jordan has ranked first in the MENA region in renewable energy adoption and clean energy growth and ranked third globally, according to a Bloomberg report in 2017.

As of today, RE installed capacity accounted for 600 MW on a total of 4300 MW. Considering the capacities expected to go on- line by 2018 and already planned projects, as listed by the NEPCO Annual Report 2017, total installed renewable capacity should reach 2,726 MW by the end of 2021.

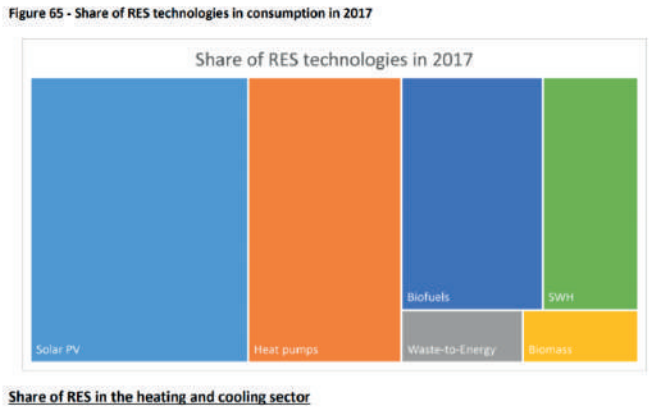
Malta

ENERGY SITUATION IN EGYPT

In its 2019 Annual Report, the New and Renewable Energy Authority (NREA) published that the total installed RE capacity is around 6000MW, with 2832MW from hydro, 1375MW from wind, 1587 MW from PV, 140MW from CSP and 11.5 MW from biomass. Almost 60% of the installed capacity is state owned particularly hydro, wind and CSP, although the private sector has mainly invested in PV.



Electricity generation by soucre, Malta 2009-2019 (IEA)i



Share of RES technologies in consumption in 2017

Efforts to increase the renewable energy share are ongoing; however, the full exploitation of RE within the technical and geographical limitations of a small country with a high population density is not enough to keep up with the steep increase in demand, due to the increase in population, increased tourism activity and relatively high economic growth.

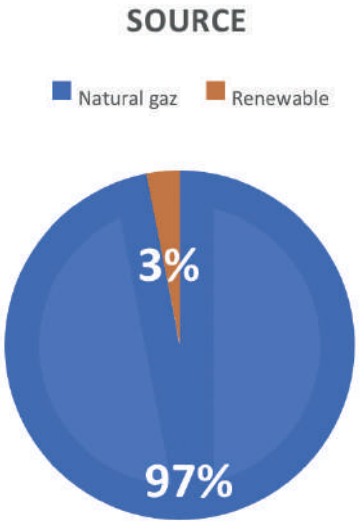
In Malta, sourcing of energy from indigenous renewable energy sources is mainly via electricity generation by solar photovoltaics. There was a sharp increase in the uptake of PV between 2010 and 2017, with the total cumulative installed capacity at the end of 2017 standing at just over 112 MWp. Successful PV deployment has happened largely due to national incentives offered through various schemes, including ERDF (European Regional Development Fund) co-financed grants and attractive feed-in-tariffs.

Tunisia

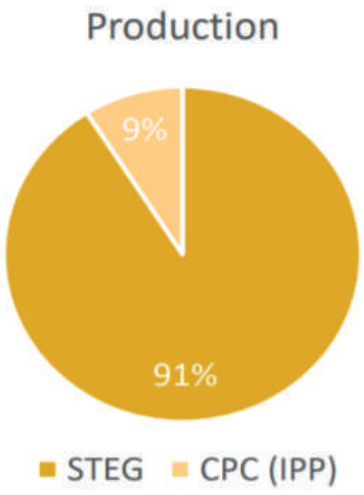
ENERGY SITUATION IN TUNISIA

The electricity sector in Tunisia is mainly made up of thermal power stations, being therefore the largest consumer of gas natural; which represents 97% of source of electricity .

Tunisian Solar Plan which is the national program that helps achieve the objectives of the renewable energy development strategy. It aims to increase the share of renewable energies in total electricity production from 3% currently to 30% in 2030. By 2030, the objective of the Tunisian Solar Plan is to install different sources of renewable energy to provide an additional installed capacity of 3,815 MW.



Electricity production by source



Electricity Production by producer

To enable renewable energy development, the Tunisian government passed Law No. 12 on renewable electricity production in 2015. The law provides the framework for large-scale renewable energy projects with three main areas for support:

• Generation for export to other countries (currently not applicable)

• Generation for export to other countries (currently not applicable);

• Self-consumption and sale of surplus (net billing and net metering); which allows residential and commercial customers who generate their own electricity from solar power to sell the electricity they aren't using back into the grid.

• Generation to meet domestic needs under a PPA between STEG and private solar developers. The contract runs for 20 years whereby STEG buys the electricity at a fixed price.

EDUCATION AND R&D ON ENERGY TECHNOLOGIES COMITTEE MEMBERS
Coordinator: BUSINESSMED
President : Dr Khaled AbdelAzim (FEI)
Vice presidents: Sharon Farrugia (MEA) & Maen Ali Ayasrah (JCI)
Expert: Khadija Dorra Essghairi

Project funded by the EUROPEAN UNION

The EBSOMED project is led by BUSINESSMED within a consortium of six partners.

BUSINESSMED Union of Mediterranean Confederations of Enterprises
CAWTAR
ANIMA INVESTMENT NETWORK
EUROCHAMBRES
ASCAME
AHK Deutsch-Arabische Industrie- und Handelskammer German-Arab Chamber of Industry and Commerce الغرفة الألمانية العربية للصناعة والتجارة