

Country Assessment Report

Country/Region Name- Jordan:

Jordan is situated in Western Asia; bordered by Saudi Arabia, Iraq, Syria, Israel and Palestinian territories. It has a population of 10.1 million and GDP over \$43 billion, with a growth rate of 2%.

(World Bank 2018)

Economic structure and activity:

Jordan has a market-oriented economic system. The service sector accounts for 61.84%, spearheaded by telecommunications and financial services. Tourism is also booming in the country and construction and transport continue to grow. Industry contributes 27.58% and is dominated textiles manufacturing. Mining and quarrying are major sectors within the economy, with potassium and phosphates the only natural resources commodities Jordan possesses. The agricultural sector accounts for 5.63%, mainly producing wheat, barley, lentil, tomatoes, cucumbers, eggplant, citrus fruits, olives, strawberries and grapes.

(Statista 2018; Santander 2020)

Top private companies with RE commitments:

Generation and demand: (e.g. type, MW, TWh)

Jordan suffers from a severe dependence on energy imports for its power generation. The nation is yet to take advantage of its renewable energy, resulting in a thermal dominated generation mix. As of 2017, just 7% of Jordan's power generation emanated from renewable energy, whilst 76% derived from combined cycle gas plants.

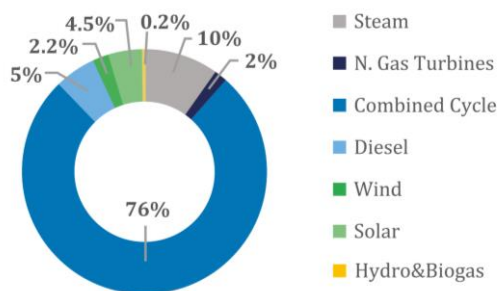
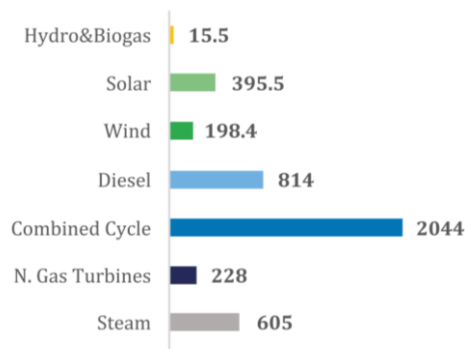


Figure 2. Electricity generation per technology in 2017.

(Res4Med 2019)

Figure 1. Installed Power Capacity in 2017 (MW).



Electrical Interconnection and import/export:

Jordan has electrical interconnection with Syria, Egypt and Palestine.

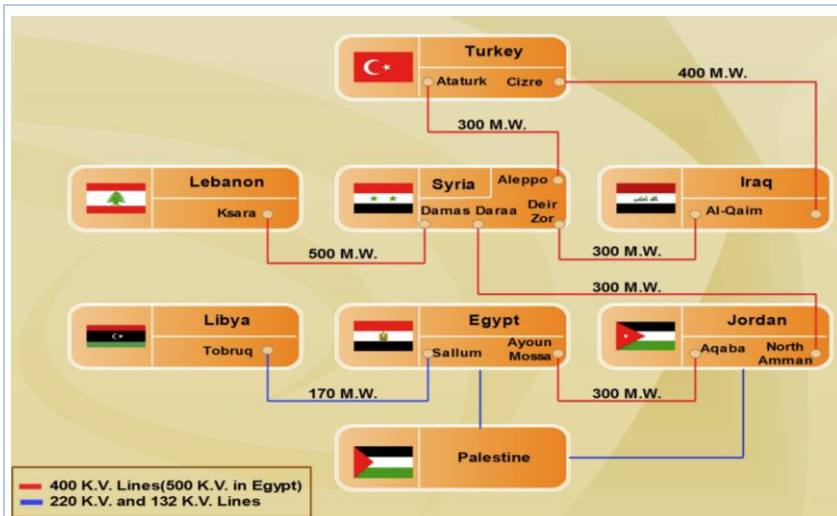


Figure 4. Electrical interconnection in Western Asia (NEPCO 2013).

Market Structure:

The power sector operates as a single buyer model, overseen by the MEMR but now mainly the ESRC since the delegation of power from the 2002 General Electricity Law. More recently, the COM (Council of Ministers) created the executive privatization commission to attract investment, strengthen the local market, install new generation projects to meet local demand.

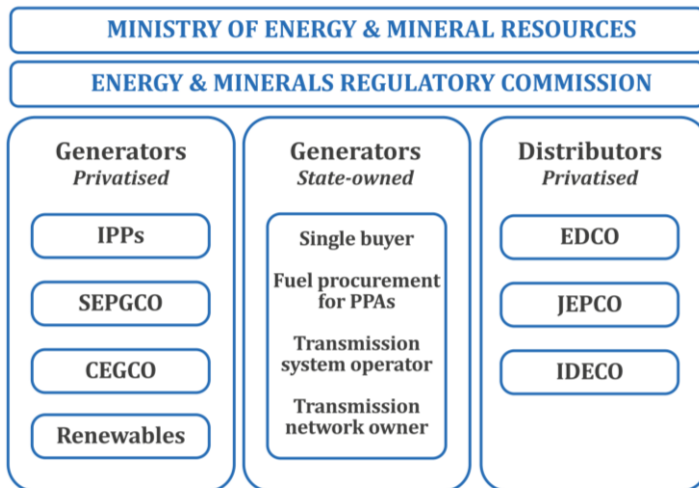


Figure 3. Market structure of Jordan's power sector (Res4Med 2019)

Responsible Government Department: (include key contacts)

Ministry of Energy and Mineral Resources (MEMR) is the main government institution regarding the energy sector and is responsible for the vision, formulation of policy and establishment of targets within the industry.

Energy and Minerals Regulatory Commission (EMRC) regulates the energy sector, with financial and administrative independence. It is also responsible for setting electricity tariff and granting licenses to power providers and distributors.

Electricity Sector Regulatory Commission (ESRC) supports the regulation of the power sector, setting tariffs and charges related to the sale of electricity. It arbitrates between grid operators and consumers and mediates between generators and distributors in the event of disagreement. Its overriding principle is to ensure the interest of the public in the provision of power (GTZ, 2007).

National Electric Power Company (NEPCO) is the state-owned transmission operator and single only authorised energy off-taker at the wholesale level.

(Res4Med 2019)

Existing/Planned Energy Legislation: (is there a CPO)

Renewable Energy and Energy Efficiency Law (REEEL), Law No.13 - passed in 2012 to provide a legal mandate and framework for renewable energy development and energy efficiency initiatives. The law established a favourable market for global and local investors, in conjunction with the obligation to buy renewably sourced electricity through standardised PPAs.

General Electricity Law - passed to create the ESRC in the government's transition to liberalising the power industry (OECD, 2005).

National Strategy for the Development of Renewable Resources – established the framework for increasing the share of renewable energy in Taiwan's installed power capacity. It set the target of 10% by 2020, foreseeing the implementation of 600 MW of wind energy projects and 300–600 MW of solar thermal projects.

(MENA Select 2017)

Environmental Legislation for RE:

Existing/Planned Certificate Systems: (purpose, extent)

I-REC is active.

RE market potential:

Jordan is enriched with abundant solar energy reserves in terms of sunshine duration and intensity. Average solar irradiation in Jordan is 6 kWh/m²/day. The regions of Ma'an and Aqaba have the highest levels of solar irradiance in the country and globally, ranging between 6-7 kWh/m² and 1.2-1.35 kWh/m² for diffuse irradiance (Al-Sayed, 2013). Wind energy is another promising avenue in Jordan's diversification of power supply, with average annual speeds of between 4-6 m/s but many locations achieving up to 12 m/s.

Significantly limited primary energy reserves with a severe import dependency makes renewable energy an attractive investment in security energy security and a greener future.

(Baniyounes 2019)

Market risks and challenges:

A potential concern is the lack of a comprehensive vision beyond the current 2025 targets. Other issues concern grid stability and the capacity to integrate a higher renewable installed capacity.

Extent of Engagement with Government: (brief summary of any contact already made with the national government regarding certification in general and I-REC)

Expected response from Government:

Current Environmental Reporting in Energy:

Any other Relevant Information:

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Preparation Date	

Code Manager Observation