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22 – 24 APRIL 2024
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Mitigation Enabling Energy Transition in the MEDiterranean region

Strengthening Green Investments in Jordan

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Amman - Jordan

22nd April 2024

Hammamet, Tunisia



الجمعية العلمية الملكية
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Contents

- The Current Status of the Energy Sector in Jordan
- The Jordanian Energy Strategy (2020-2030)
- The National Energy Efficiency Action Plan (NEEAP)
- The Energy Sector Challenges and Opportunities
- Green Investments in Jordan through GEF Programme
- Green Hydrogen Common Infrastructure Development in Jordan
- Conclusions

The Current Status of the Energy Sector in Jordan

- The *economic growth* in Jordan is directly influenced by the energy sector.
- Jordan depends on imported *fossil-fuel sources* (93% in 2021).
- The *Renewable Energy and Energy Efficiency Law No. 13 of 2012* and its amendments was established.
- The *capacity of renewable energy systems* feeding into the power grid in Jordan reached 2,445 megawatts (MW) in 2021, approximately 20% of the national electricity mix.
- Jordan has significant potential to succeed in scaling up its use of *renewables*, particularly in electricity generation, which could reduce energy prices for consumers and improve energy security.
- In 2022, *Jordan ranks third* among countries in the Arab world in renewable energy capacity to meet domestic needs.
- The *energy efficiency* of various sectors is anticipated to increase by 9% in 2030 compared to 2018.

The Jordanian Energy Strategy (2020-2030)

To increase domestic resources (especially renewable energy sources) and energy consumption efficiency.

To reduce the economy's dependence on imported energy sources (security of supply) and energy consumption (efficiency of consumption).

Energy intensity, energy consumption per economic output, is the primary long-term indicator for the energy efficiency policy.

The National Energy Efficiency Action Plan (NEEAP)

A short-term national plan to meet energy efficiency targets, contributing to the energy strategy and the objectives of energy transition and climate protection.

It includes all the necessary programmes and projects in the shape of measures concerning energy efficiency implemented by ministries and all concerned stakeholders in a close cooperation.

Jordan's Energy efficiency has improved since 2011 through the first and second NEEAPs and the adopted energy strategies.

The First NEEAP (2012-2014)

Focused on energy efficiency measures in the residential, public, industrial, commercial and water sector alongside some individual measures.

In total, it comprised of 11 measures and set the target to save 806 GWh of electricity, a 7.6% improvement compared to the average electricity consumption from 2006-2010.

By the end of the first NEEAP period, approx. 40% (324 GWh) of the intended energy savings were reached.

The second NEEAP (2018-2020)

Aimed at 1975 GWh of cumulative energy savings, a 17.6% target compared to average electricity consumption from 2006-2010, through the implementation of 35 sectoral and crosscutting measures within the residential, commercial, tertiary, industrial, water, street lighting, public and transport sector.

By the end of the NEEAP period, approximately 46.3% (914.26 GWh) of the intended energy savings were reached.

The Third NEEAP for 2024-2026

The Ministry of Energy and Mineral Resources (MEMR) publishes this third NEEAP for 2024-2026 based on the energy strategy (2020-2030) and building on the first and the second NEEAPs.

Furthermore, Medium- and long-term strategies and measures in all sectors are considered and endorsed in preparing the third NEEAP.

The Jordanian-German Energy Partnership supported the development of the third NEEAP through Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) in collaboration with the German Energy Agency (dena).

The Third NEEAP for 2024-2026

The energy efficiency measures included in the third NEEAP were developed in close cooperation with stakeholders from all relevant sectors and with the support of further local and international experts.

The process of the third NEEAP development and methodology considered the Arab Guideline for Improving Electricity Efficiency of the Arab League and international good practices.

As such, as a guidance, a wide range of measures from other countries were evaluated in terms of their eligibility for Jordan. During the process, a large number of meetings ensured the involvement of stakeholders who had the opportunity to bring in their impulses. Thus, the ideas and contributions of many stakeholders from all sectors in Jordan were integrated in the development of the third NEEAP.

The Energy Sector Challenges and Opportunities

Despite these achievements, challenges persist on both technical and regulatory fronts.

Addressing regulatory barriers, particularly the legal framework for Independent Power Producers (IPPs) to engage in Renewable Energy (RE) Third-Party Supply, remains crucial.

Technical challenges, such as limited grid capacity, directly impact the sector's growth.

However, Jordan is actively working to overcome these obstacles, investing in research for grid integration and seeking solutions to expedite adoption.

As the nation navigates these challenges, it stands poised as a promising international hub for renewable energy investments and initiatives.

After resolving grid-related issues, the country plans to conduct future rounds of direct proposal submissions, presenting a significant opportunity for prospective investors.

Green Investments in Jordan by GEF Programme

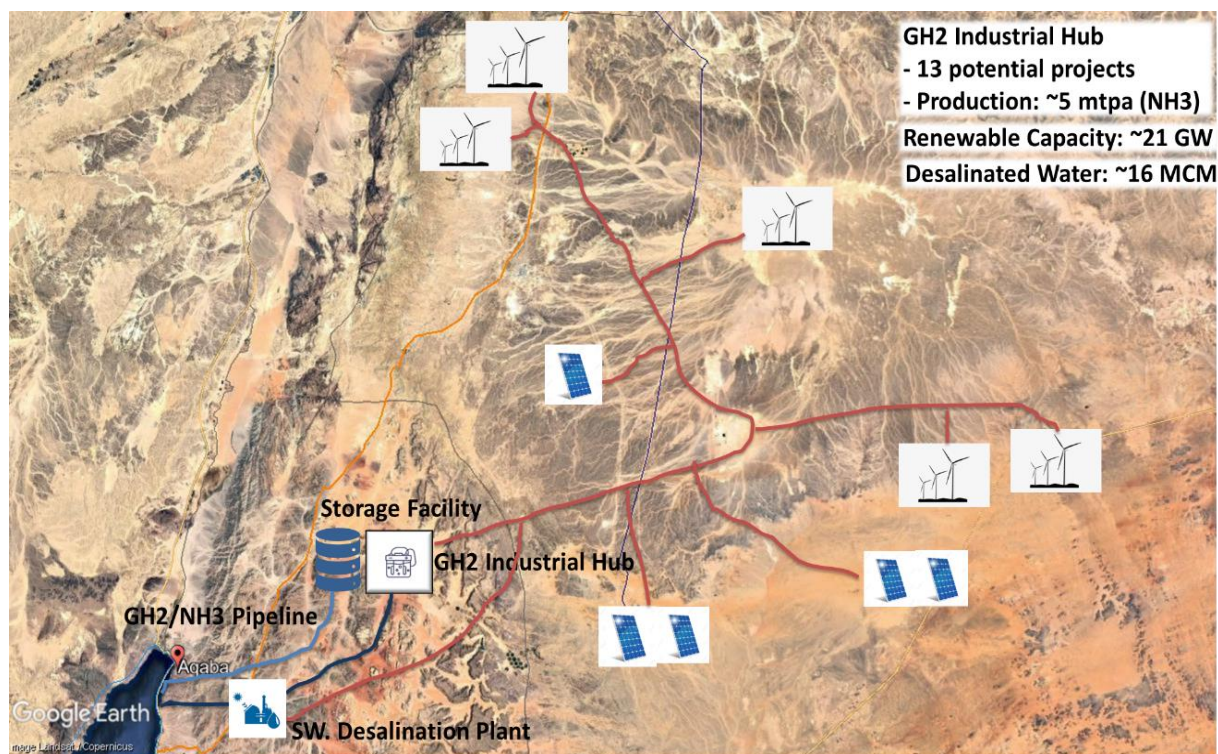
The European Bank for Reconstruction and Development (EBRD), the European Union (EU) and the Green Climate Fund (GCF) have launched the Green Economy Financing Facility programme (GEFF) in Jordan in an effort to support the country's transition to a greener economy.

Jordan is the latest country to join the GEFF programme in the southern and eastern Mediterranean (SEMED) region. Under the programme, the EBRD, GCF and EU will provide a total of **USD \$40 million** in financing to local financial institutions, such as banks, microfinance institutions and leasing companies, to on-lend to the private sector for investment in high-performance technologies and services. In 2022, three GEFF facilities, worth a total of US\$ 22 million, have been signed with Cairo Amman Bank, Etihad Bank and the Microfund for Women.

Since it started investing in Jordan in 2012, the EBRD has provided more than €1.9 billion in financing through 67 projects across the country, including financial support for the Jordanian banking sector in the form of MSME loans, subordinated debt and trade finance facilities.

Green Hydrogen Common Infrastructure Development in Jordan

A recent Initiative funded by EBRD to assign a consultant who will provide advice considering the local context as well as relevant international practices, if necessary conducting a limited high-level review of relevant practices in other jurisdictions.



Conclusions

While the Jordanian government's support through JREEEF has been instrumental in promoting renewable energy, progress in the energy efficiency sector has been comparatively limited.

This highlights the need to explore additional solutions, such as Super ESCOs, which can attract private sector involvement and foster innovation.

By combining governmental support with the expertise and resources of Super ESCOs, Jordan can accelerate its energy efficiency efforts and pave the way for a greener and more sustainable future.

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Mitigation Enabling Energy Transition in the MEDiterranean region
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MEETMED WEEK 2024

Third Edition - Tunisia

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This project is funded
by the European Union



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