



SCALING UP RENEWABLE ENERGY INVESTMENT IN JORDAN

With some of the strongest solar potential in the world, as well as significant wind resources, Jordan can harness great benefits from its transition to a more renewables-based energy mix. Among others, these benefits include energy independence and the possibility of meeting Jordan's growing energy demand in a sustainable and cost-effective way. In recent years, market reforms and legislative frameworks have stimulated large solar and wind capacity additions at favourable prices. Such developments, in addition to a strong commitment by the government, place the country on track to meet or exceed its target of 20% renewable electricity production by 2025.

The IRENA Coalition for Action Business and Investors Group, which brings together leading renewable energy businesses and investors, sees great potential for investments in Jordan. The group represents significant renewable energy assets worldwide and is in the coming years planning to contribute substantial additional investment needed for a green economic recovery post covid-19 and to reach global climate objectives. From an industry point of view and based on its engagement in the Jordanian market, the Business and Investors Group has put together the following key recommendations that the government may consider to reach higher shares of renewable energy:

- **Enhance clarity on long-term renewable energy targets and implementation strategies**

The Business and Investors Group welcomes Jordan's ambitious renewable energy targets. In particular, the expected renewable energy strategies for 2030 and 2050 should facilitate decision-making on longer-term investments. In this context, the Business and Investors Group encourages Jordan to establish a predictable long-term outlook for its generation mix, including various renewable energy sources as well as a regional power system approach/plan. Furthermore, increased policy clarity around Jordan's implementation strategy, such as through renewable energy tenders, would be favourable.

- **Ensure stability of regulatory renewable energy frameworks**

Rapid policy changes and discontinuity in the regulatory framework could undermine investors' confidence in Jordan's long-term strategy. The main areas of concern for private sector players in this regard include unexpected cancellations of tenders, as well as proposed and potential changes to local content requirements. Although designed to sustain the country's domestic industry and foster job creation, sudden changes to local content requirements may prove challenging for both investors and local supply chains.

- **Strengthen support for finding adequate deployment sites for renewable energy projects**

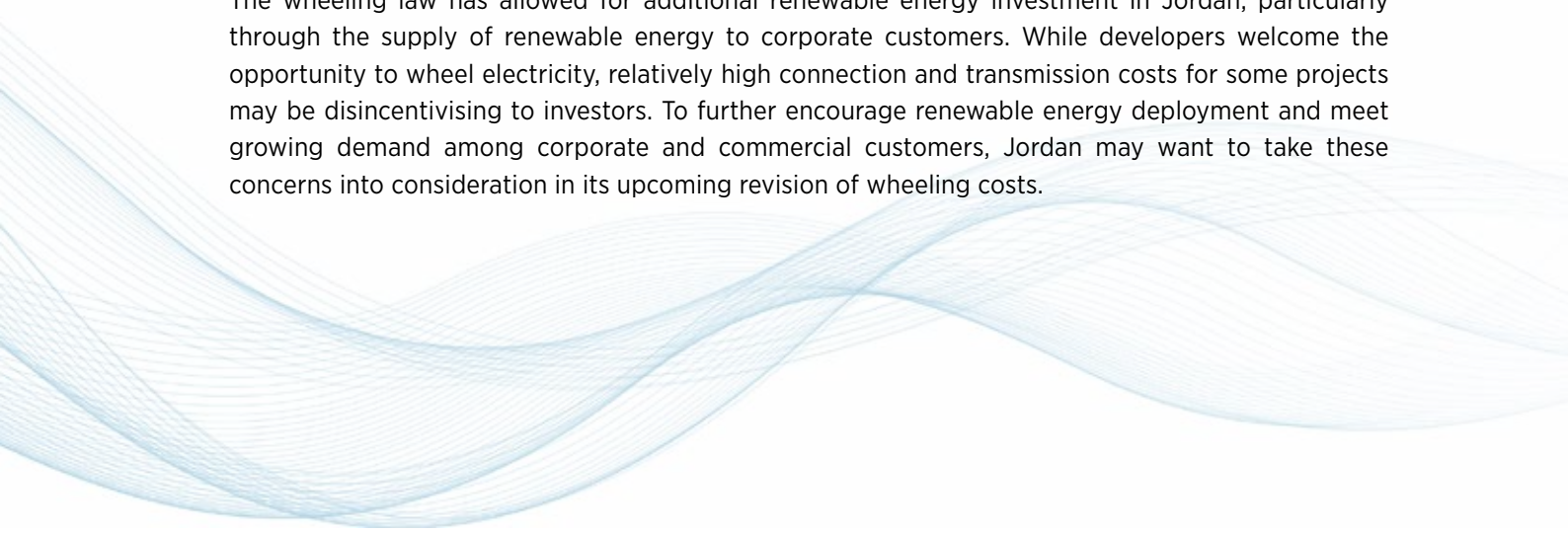
Land tenure is a critical component of renewable energy project development, and ambiguity regarding the law and rules of land control can be a complex and terminal challenge in project development. The private sector is currently experiencing some difficulties in identifying appropriate deployment sites in Jordan – particularly for wind projects – and is concerned about the need to purchase land as well as relatively long permitting procedures. The Business and Investors Group believes that increased efforts to designate zones suitable for renewable energy development, or perhaps site specific auctions, could help facilitate land use and streamline administrative and permitting procedures.

- **Enhance capacity to integrate larger shares of renewables into the grid**

Given rising concerns with regard to grid stability and flexibility, the Business and Investors Group welcomes Jordan's current efforts in assessing this topic. From an industry perspective, the strengthening of grid codes through the increased use of international standards should be a key priority in enhancing Jordan's capacity to integrate larger shares of variable renewables into the grid. Further adoption of international standards in grid codes would provide some guarantee to manufacturers and developers that technical grid requirements in Jordan have been tested and reviewed in other markets, thus making it less risky and more cost-efficient to engage in Jordan.

- **Consider examining the cost of wheeling arrangements for renewable energy projects**

The wheeling law has allowed for additional renewable energy investment in Jordan, particularly through the supply of renewable energy to corporate customers. While developers welcome the opportunity to wheel electricity, relatively high connection and transmission costs for some projects may be disincentivising to investors. To further encourage renewable energy deployment and meet growing demand among corporate and commercial customers, Jordan may want to take these concerns into consideration in its upcoming revision of wheeling costs.



Coalition for Action Business and Investors Group Members

ABB	Graded	Rahimafrooz Renewable Energy
Abengoa Solar	Iberdrola SA	Renewable Energy and Energy Efficiency Partnership (REEEP)
Access Power	International Council for Local Environmental Initiatives (ICLEI)	RES4Africa Foundation
Acciona	International Geothermal Association	Revelle Group
Alliance for Rural Electrification	International Hydropower Association	Ryse Energy
AMEA Power	International Renewable Energy Agency (IRENA)	Siemens Gamesa Renewable Energy
Boston Consulting Group	International Network for Sustainable Energy (INFORSE)	Skypower
Clean Energy Business Council MENA	kiloWattsol	SolarPower Europe
Dii Desert Energy	Mainstream Renewable Power	SolarCoin Foundation
Dulas	MAKE/Wood Mackenzie	Syndicat des Énergies Renouvelables
Enel Green Power	Masdar	TERI School of Advanced Studies
Energy Watch Group	Middle East Solar Industry Association (MESIA)	The Climate Group/RE100
European Geothermal Energy Council (EGEC)	National Solar Energy Federation of India	Trina Solar
Falck Renewables	Novozymes	Vestas Wind Systems
Finergreen	Orsted	World Bioenergy Association (WBA)
First Solar	Qway Energy	World Wind Energy Association (WWEA)
FTI Consulting		Yellow Door Energy
Global Solar Council		
Global Wind Energy Council (GWEC)		

About the IRENA Coalition for Action

The IRENA Coalition for Action brings together leading renewable energy players from around the world. The Coalition facilitates global dialogues between public and private sectors to develop actions to increase the share of renewables in the global energy mix and accelerate the global energy transition. Within the Coalition, the Business and Investors Working Group is chaired by the Global Wind Energy Council (GWEC) and SolarPower Europe. The Group puts forward analysis and recommendations based on on-the-ground experiences of some of the leading private sector players in the renewable energy field. IRENA acts as the Secretariat of the Coalition. <https://coalition.irena.org>

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