



MITVIM
The Israeli Institute for
Regional Foreign Policies

Cross-Border Power Connectivity

Summary

Bar Rappaport and Yoni Sapir | February 2026

Written by: Bar Rappaport | Yoni Sapir

Graphic Design: Adi Ramot

February 2026

Cross-Border Power Connectivity

Bar Rappaport and Yoni Sapir^{1*}

Summary

¹ **Yoni Sapir**, an energy and climate strategist, is CEO of the climate innovation company Future and chair of "Israel Earth Guardians", an advocacy group promoting clean energy and climate policy.

Bar Rappaport is coordinator of Mitvim Institute's Climate Policy Sustainability Project and a doctoral candidate at the Hebrew University in Jerusalem studying cross-border electricity connectivity.

** This policy brief presents the Summary and Policy Guiding Principles from a comprehensive report originally published in Hebrew. The full report includes background chapters on energy security and resilience, cross-border electricity trade, developments in Israel's energy sector, regional energy transitions in the Middle East, as well as annexes with theoretical foundations, comparative examples, and reference materials.*

Summary

This report examines the advancement of electricity interconnections between Israel and both neighboring and more distant countries. It argues that such connectivity would make a significant contribution to Israel's energy security and could serve as a powerful tool for Israel's integration into the Middle East and for fostering regional stability.

The report discusses the advantages and challenges of cross-border electricity interconnections, drawing on international experience, and then examines trends in electricity connectivity in Israel and across Middle Eastern countries. It proposes concrete steps to be incorporated into Israeli policy to advance the issue and lays the groundwork for a long-term vision of a regional Middle Eastern electricity grid.

The report recommends linking political and energy rationales: beginning with the creation of backup connections to Jordan and Egypt—specifically as a lever for Israel's planned connection to Europe via Cyprus—continuing with the development of regional institutional infrastructure, and embedding the energy vision as part of a broader regional reconstruction process. Involving the Palestinians could encourage Middle Eastern countries to connect with Israel, incentivize state-level investment, and support the development of an independent Palestinian electricity sector, while reducing the burden on Israel's electricity system.

Chapter 6

Guiding Principles for Promoting Energy Security and Resilience and Addressing Israel's Energy Isolation through Regional Electricity Connectivity

This document contends that cross-border electricity connectivity is an important component in achieving security and energy resilience, as well as strengthening Israel's national security and regional stability. The State of Israel is currently a de facto energy island, although ideas for new connectivity projects (each of a different nature) are being explored with Jordan and with Europe through Cyprus. At the same time, interesting developments are emerging for interstate electricity connections in the Middle East. Electricity links between Jordan and Egypt, Saudi Arabian electricity infrastructure to Jordan and Egypt, emerging connections between Jordan and Iraq, and even Turkey's attempts to rehabilitate electricity infrastructure for Syria attest to a significant movement in the region to promote cross-border trade in bilateral and multilateral electricity, and demonstrate that our neighboring countries recognize the value of electricity connectivity.

Israel's place in this emerging dynamic will be determined in the coming years. We argue that the State of Israel should invest in an energy policy that promotes interstate electricity connections, leveraging its physical infrastructure to bolster diplomatic ties and even establish new ties with neighboring countries as part of the overall reconstruction process of the post-war Middle East. Since energy is a critical sustaining infrastructure, the State of Israel would also do well to promote stabilization of the national electricity sectors of its neighbors, preferably as part of a process that creates regional dialogue infrastructures.

1) First Priority: Connections to current peace partners, Jordan and Egypt

Economic advantages have protected Israel's peace and energy agreements with Jordan and Egypt even during times of heavy geopolitical tensions. Investing in electricity connectivity could be an essential step in enhancing diplomatic relations between Israel and these countries after the war, strengthening political and economic ties, and creating healthy interdependence between the countries.

Connecting to Egypt's grid at the present time may seem unnecessary due to the Egyptian electricity shortages, but this shortfall is clearly temporary. Egypt has a higher potential for renewable electricity production than Israel, and it invests heavily in the development of various types of renewable power. Moreover, Israeli gas exports to Egypt could return to Israel as 'clean' electricity and without the environmental costs of the gas being exported to Europe as currently planned.

Similarly, Jordan also generates a larger proportion of electricity from renewable sources than Israel does. It has large areas that can be paved with solar fields, strong solar radiation, and a higher potential for wind-based electricity production than Israel. Notably, the UAE-funded Israeli-Jordanian water for electricity Project Prosperity, which was frozen with the outbreak of the October 7 war, has considerable expansion potential. Israel would be well advised to advance implementation of the project and its subsequent expansion once tensions between the countries subside.

Moreover, the links to both Egypt and Jordan also indirectly connect Israel to the electricity market in Saudi Arabia, since these two countries are promoting electricity trade with Saudi Arabia.

2) Gradual Process Required

Israel should initially strive to devise a backup solution for emergencies in order to ease the isolation that challenges its electricity sector. Various mechanisms will be required to safeguard the interests of all sides and to deal with a lack of trust at the outset. The initial objective will be to purchase electricity only in extreme situations and to use the connection solely for backup purposes, and not continuous and permanent connection, which will address the concern about grid disruptions in Israel. Commercial technological solutions such as automatic disconnection mechanisms in the event of severe voltage fluctuations or intentional disconnection mechanisms in cases of breach of agreement, could be promoted to reduce tensions and advance connections. No network integration is required for the initial stage. Progress can be gradual to allow examination of the process and build trust. Once a common market is created, the multiplicity of interests will serve as a mechanism to mitigate vulnerabilities.

3) Palestinian Role Key to Regional Integration

Israel currently supplies the Palestinian Authority (PA) with power for the West Bank and Gaza Strip, which not only burdens the Israeli grid but also creates Palestinian energy dependence (derived from the political reality) on Israel. The Palestinians seek to promote energy independence as part of their sovereign aspirations, and to sever their dependence on Israel. Although they produce almost no electricity at this time, Palestinian inclusion in the various electricity connectivity projects would be of great political value and encourage additional external investment in these projects.

Therefore, electricity connectivity transcends technical issues. The European Union, for example, would be willing to invest more in an interconnector to Israel if it knew that this process included the Palestinians and provided them with vital infrastructure for the establishment of their own independent state. From the Jordanian perspective, as well as that of possible funding countries – Saudi Arabia, the United Arab

Emirates, the European Union, and others - the connection through the Palestinian Authority, which is also geographically logical, will be perceived as an advantage. The Palestinian context could also serve as a catalyst for building electricity connectivity between Israel and Jordan, both for the Jordanians and for the donor states.

Palestinian' integration into the regional fabric could strengthen their own energy security and that of the region, as well as relations between Israel and its neighbors. For example, expanding the existing electricity connection in the Jericho area between the West Bank and Jordan could serve as a basis for connecting Israel and Jordan through the Palestinian Authority. This connection would increase Palestinian power independence and allow Israel and Jordan to trade electricity directly. Rebuilding the electricity infrastructure between Israel and the Gaza Strip and from there directly to Egypt could serve as another important connection. Linking the two states through the Gaza Strip as part of the reconstruction process will enable the supply of Israeli and Palestinian electricity to Gaza, moderate Israeli and Egyptian moves in the Gaza Strip, and help mobilize fund-raising for the process.

4) Enhancing Viability of Israel-Cyprus to Europe Link

The construction of an electricity interconnector to Cyprus is a worthy project, but it is more expensive and complex and yields fewer advantages than the connection with our immediate neighbors, both politically and economically. Israel is unlikely to expand its power imports from Europe, except for backup in times of need, given the higher price of European electricity. Moreover, Israel is not a large producer of renewable electricity and is not expected to become one. Therefore, the Europeans will not benefit from green electricity through this connection alone, which reduces its attractiveness - unless Israel is connected to its neighbors and enables the flow of the green energy that they produce through the interconnector to Europe. Israel does not have sufficient gas reserves (given the volume of existing and planned exports to Egypt and Jordan), nor excess electricity generation capacity

for the Europeans beyond its own needs, meaning that this bridge will likely serve only for mutual backup. Moreover, Israel is unlikely to opt for local production of fossil fuel, with the pollution it entails, for the purpose large scale power exports.

Nonetheless, it would make sense to build the infrastructure for the expansion of electricity flows to enable an intercontinental bridge to Europe in the future. This will require diplomatic, economic, organizational, regulatory, and commercial efforts, but is expected to yield many benefits for the countries involved. It would also allow Egypt to connect to Cyprus and strengthen its energy security and export green electricity to Europe, thereby accelerating its energy transition.

5) Exploring Possibilities vis-a-vis Lebanon and Syria

The two countries are facing power shortages. There is dialogue at the security level with Israel and Syria, and a desire to strengthen the Lebanese state (while weakening independent military forces, such as Hezbollah). The Israel-Lebanon maritime border agreement (2022) serves as an example of a professional agreement based on mutual interests, with the support of Israel's security establishment. A security agreement with Syria and stability in the relations between Israel and Syria in the coming years could enable examination of electricity connectivity between the countries, under an American umbrella, in order to safeguard the interests of all parties involved. Disarming Hezbollah may enable the cautious advancement of a similar move vis-à-vis Lebanon.

6) Linking the Energy and Political Initiatives

Gradually, as security tensions dissipate and the two-state vision mentioned in the UN-approved Trump plan is promoted, the Palestinian Authority will be able to strive for energy independence and also gradually integrate into this vision of connectivity. Such a development will enable the construction of a regional mutual support network. The advantages of such a network for the countries involved include lower

electricity prices for the Europeans, green electricity for the Europeans and Israel, fortified energy security of the networks involved, reduced surplus and expensive redundancy, strengthened inter-state trade relations, strengthened moderate energy dependence, development of the electricity and employment markets in Jordan and Egypt, an additional source of foreign exchange for debt-burdened Egypt, easing popular Egyptian opposition to Israeli gas imports, enhancing the Egyptian leadership’s motivation for the gas deal due to reciprocity, eliminating Israel’s energy isolation, and more.

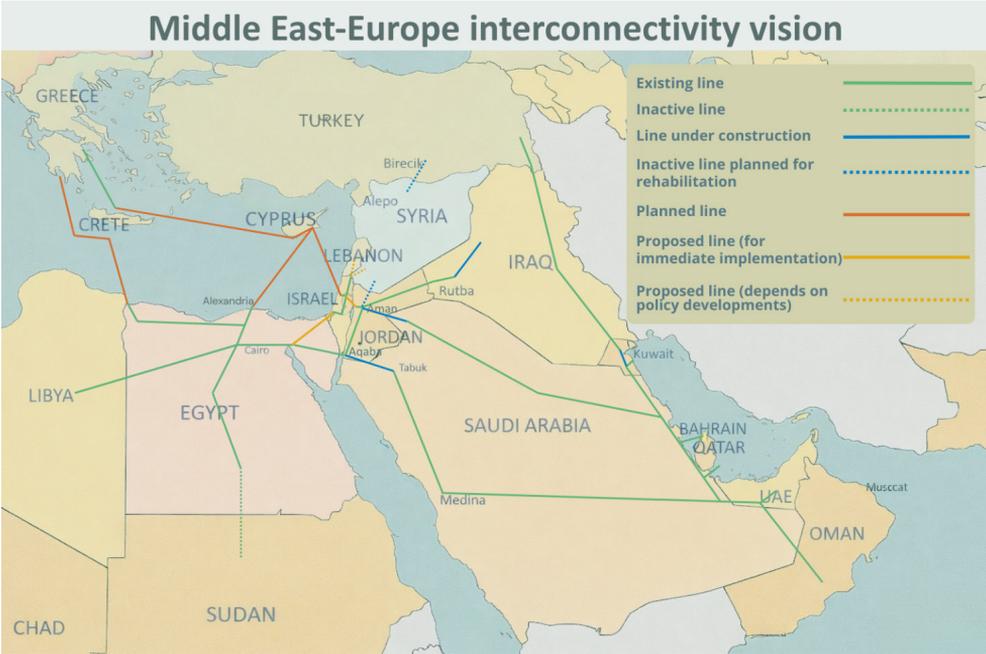


Figure 1: Map of the emerging electricity grid in the Middle East and the Mediterranean Basin, and suggestions for promoting Israel's electricity connectivity

7) Concrete Steps for Gradual Connectivity

- A. Political initiation:** Establishment of a dedicated body/department in Israel's Ministry of Energy and Ministry of Foreign Affairs to lead electricity connections and promote renewable energies. This body will have professional and diplomatic capabilities and communicate with the relevant institutions in the Middle East and the Mediterranean Basin. Consideration should be given to the use of existing platforms, such as the Abraham Accords, the Negev Forum, the IMEC Working Groups, or the EMGF to promote concrete commitments in this field. Such a framework could promote discussion of each country's aspirations and relative advantages it can offer.
- B. Preparing the ground:** Regulatory unification of the electricity sector on the basis of accepted standards with countries potentially interested in a common market or multilateral trade relations, including: Adopting high climate and environmental standards; Standardizing trade agreements; Agreements between countries on excess supply; Encouraging bilateral trade; Examining the commercial-regulatory possibility for companies from one country to provide services to others as well, using variable models agreed upon in advance, including building a mechanism for updating the model; and planning the physical infrastructures from a gradual regional perspective.
- C. Joint research and development:** Joint techno-economic applied research should be conducted to demonstrate the diversity of renewable energy sources and their distribution over a large geographical area in order to create complementarity. Establishing a body such as the European ESTO-N for the purpose of promoting standardization and procedures in the engineering-technological aspect.
- D. Financing:** Various financing models should be examined for the infrastructure construction. Other aspects to be examined include the participation of investors such as private companies, resilient countries or development organizations in the countries

of the region, green bond issuance on world stock exchanges, and more. Decentralizing investors/contractors/holders will improve sovereignty and independent decision making according to state interests. In this context, a maximum holding threshold must be set for the infrastructure company promoting construction of the interconnector in the dedicated consortium built for this purpose, in order to prevent pressure levers on independent decisions of sovereign bodies.

- E. Institutional Infrastructure:** A Middle East Energy Forum should be established to manage a regional market. Consideration should be given to using the platform of the Eastern Mediterranean Gas Forum (EGMF) due to the synergy between the activities and the provision of a broad perspective for those involved in the work. If it is decided to use the EGMF as a platform, consideration should be given to adding other partners to the forum: cities, large transmission companies, electrical manufacturers, electrical system managers, and more. It is important to integrate Turkey, Lebanon, Syria, and the Gulf states into this system in the future, in order to reduce possible points of friction, as was the case in the context of the ISTAMED gas pipeline from Israel to Europe.
- F. Operation:** The standards in the European Union regarding connectivity between electricity grids, including in the context of the control and disconnection mechanisms in extreme cases, should be studied. To that end, joint teams comprising Israeli, Jordanian, Egyptian and European engineering and technological experts should be put together already at the preliminary planning stage. In addition, existing connection points should be incorporated into the network to the extent possible to reduce costs. These could include an Israeli-Palestinian connection to Jordan (via Allenby) as well as an Israeli connection to the Gaza Strip that already exist.



MITVIM

The Israeli Institute for
Regional Foreign Policies

mitvim.org.il