

OCCASIONAL PAPER SERIES 6

REPOWERING THE MEDITERRANEAN:
REFLECTIONS ON GRID INFRASTRUCTURE
DIPLOMACY

EMINE EMINEL SULUN

Peace Research Institute Oslo (PRIO)

Hausmanns gate 7
PO Box 9229 Oslo
NO-0134 OSLO, Norway
Tel. +47 22 54 77 00
Fax. +47 22 54 77 01
Web: www.prio.no



PRIO encourages its researchers and research affiliates to publish their work in peer reviewed journals and book series, as well as in PRIO's own Report, Paper and Policy Brief series. In editing these series, we undertake a basic quality control, but PRIO does not as such have any view on political issues. We encourage our researchers actively to take part in public debates and give them full freedom of opinion. The responsibility and honour for the hypotheses, theories, findings and views expressed in our publications thus rests with the authors themselves.

Friedrich-Ebert-Stiftung (Foundation)

20, Stasandrou, Apt. 401
CY 1060 Nicosia
Tel. +357 22 377336
Website: www.fescyprus.org



The views expressed in this publication are not necessarily those of the Friedrich-Ebert-Stiftung or of the organizations for which the authors work.

© Friedrich-Ebert-Stiftung and Peace Research Institute Oslo (PRIO), 2023. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or utilized in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without permission in writing from the copyright holder(s).

978-82-343-0507-8 (online)

The recent discovery of abundant natural gas reserves in the Eastern Mediterranean has had significant implications for the region's energy market and economic dynamics, fuelling aspirations for geopolitical transformations. There has been a surge in gas diplomacy, as various political actors work to utilize this new energy wealth to foster constructive dialogue among conflict-affected countries in the area. As part of these efforts, the Eastern Mediterranean Gas Forum has been established as a regional platform dedicated to achieving this noble aim. Yet excluded from this forum are a number of important regional actors with relevance to energy-related matters, including Türkiye, Lebanon, and the de facto Turkish Republic of Northern Cyprus (TRNC), which suggests that the forum serves more as a strategic partnership among states that have common energy interests. Moreover, it is important to note that certain initiatives, such as the East Med pipeline project, face challenges in terms of commercial and environmental viability. These facts highlight the need to reconcile the initial high expectations related to the gas discoveries with the complex realities on the ground. These developments have occurred at a crucial juncture, as there is a growing urgency to accelerate regional integration even beyond the eastern Mediterranean, specifically: to facilitate trade flows, reciprocal investments, and improved mobility among the countries of the northern, southern, and eastern Mediterranean regions, as such actions would help foster a sustainable energy transition and economic development.¹

Cooperation on electricity presents a distinctive chance to transform the Mediterranean into a thriving network of trade and development, and especially trade with Europe, where more and eco-friendly energy resources are needed.² There has been a recent rise in grid diplomacy in the wider East Mediterranean region—which points to acknowledgement of the indispensable role of interconnectivity. It is becoming increasingly apparent that energy resources must be developed to promote green energy—its generation, storage, and exportation. Furthermore, it is equally imperative that all interested actors are actively involved in infrastructure initiatives, knowledge dissemination, technological advancements, and progressive governance models.

The paper presents an overview of the current state of grid integration throughout the Mediterranean area, examines several proposed interconnectivity projects, and concludes by proposing guidelines to enhance interconnectivity. The current state of interconnectivity and the future projects are reviewed within the broader vision of an interconnected Mediterranean power system that would foster a low-carbon regional energy framework in the future. Despite the absence of a shared vision for a unified Mediterranean energy market, the framework of climate change and energy transition can serve as a catalyst for forging a common perspective. However, an overarching question remains: How can the existing infrastructure and proposed projects successfully achieve a comprehensive, integrated power grid spanning the entire region when geopolitical concerns dominate the region?

¹ F. Belhaj (2023). Accelerating Mediterranean Integration Through Energy. World Bank Blog, January 3. Retrieved from <https://blogs.worldbank.org/arabvoices/accelerating-mediterranean-integration-through-energy>. See also, International Renewable Energy Agency (IRENA) (2019). A New World: The Geopolitics of the Energy Transformation. Retrieved from https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2019/Jan/Global_commission_geopolitics_new_world_2019.pdf?rev=a12555f7a34b4258bf70de9cb9ca654c; S. Nies (2020). Security of Supply and Risk Preparedness: A New Focus on Electricity. In S. Nies (ed.), *The European Energy Transition: An Agenda for the Twenties* (2nd ed.). Deventer: Claeys & Casteels. pp. 53-78.

² Belhaj, op.cit.

The Current State of Grid Integration

The Mediterranean region's current grid infrastructure, established more than half a century ago, was primarily guided by national energy policies. Today, however, the need for national interests to align with regional/global developments and policies is forcing nations to rethink the existing energy infrastructure and transmission grids.

Unlike oil and gas, which are unidirectional, electricity connections facilitate bidirectional flows, which in turn promote a dynamic and interconnected system.³ Moreover, synchronized electricity grids⁴ can foster a collective sense of responsibility, engendering a community characterized by shared destinies—at least in the realm of electricity.⁵ Yet, in the Mediterranean, with its myriad political, economic, and cultural diversities,⁶ there is nevertheless a heterogeneous landscape in terms of the main electricity interconnection zones.

There are four main grid interconnection zones in the region:

- i. The Continental Europe Synchronous Area, which includes most European countries (e.g., Spain, France, Italy, Greece, Portugal, among others). It is a component of the larger European Network of Transmission System Operators for Electricity (ENTSO-E), which is responsible for maintaining the reliable functioning of interconnected power systems throughout Europe.
- ii. The Maghreb Electricity Synchronous Zone, which comprises the North African countries of Morocco, Algeria, Tunisia, and Libya. These nations have established interconnected power systems that facilitate the exchange of electricity and encourage cooperation in the field of regional energy.
- iii. The Middle East area, where most countries prioritize building their own national infrastructure.
- iv. Türkiye, where the Türkiye Electricity Transmission Company (TEİAŞ) manages the power transmission operations, creating its own synchronous area for connecting the domestic power grid. Despite Türkiye's geographical location spanning both Europe and Asia, its power system primarily operates synchronously with the European Continental Synchronous Area.

There was a first step towards creating a regional market and improving supply security in the 1950s. Then, in the late 1990s, the Maghreb region, except for Libya, was synchronized with the European network through the Morocco and Spain interconnection. Subsequently, connections between Tunisia, Algeria, and Morocco were further enhanced in the 2000s, resulting in the establishment of a total of 15

³ S. Nies (2010). *At the Speed of Light? Electricity Interconnections for Europe*. Gouvernance Européenne et Géopolitique de l'Énergie, Vol. 8. Paris: Institut Français des Relations Internationales (IFRI).

⁴ The term 'synchronous area' refers to an area that is encompassed by interconnected transmission system operators (TSOs) operating in synchronization.

⁵ K. Westphal, M. Pastukhova, & J.M. Pepe (2022). *Geopolitics of electricity: grids, space and (political) power*. SWP Research Paper, 6/2022. Berlin: Stiftung Wissenschaft und Politik - SWP- Deutsches Institut für Internationale Politik und Sicherheit, p.9. Retrieved from https://www.ssoar.info/ssoar/bitstream/handle/document/79067/ssoar-2022-westphal_et_al-Geopolitics_of_electricity_grids_space.pdf?sequence=1&isAllowed=y&lnkname=ssoar-2022-westphal_et_al-Geopolitics_of_electricity_grids_space.pdf

⁶ R. Gillespie & F. Volpi (2018). Introduction: the growing international relevance of Mediterranean politics. In R. Gillespie & F. Volpi (eds.). *Routledge handbook of Mediterranean politics*. Abingdon-on-Thames and New York: Routledge. pp.38-70, p.1.

transmission lines ranging from 130 KV(kilovolt) to 400 KV(kilovolt).⁷ The current infrastructure between Algeria and Tunisia comprises a single transmission line operating at 400 KV(kilovolt), another at 220 KV(kilovolt), one more at 150 KV(kilovolt), and two lines functioning at 90 KV(kilovolt).⁸ This infrastructure allows for an estimated total Net Transfer Capacity of 250 MW(megawatt).⁹ Morocco and Algeria currently share two operational 400 KV(kilovolt) transmission lines and two operational 220 KV(kilovolt) transmission lines,¹⁰ with their Net Transfer Capacity predicted to reach 1000 MW(megawatt) by 2030.¹¹ Furthermore, there are existing cable connections between Tunisia and Libya, as well as between Egypt and Libya, while an intricate network of cables interconnects Egypt, Jordan, Lebanon, and Syria. There is also a cable connecting Syria and Türkiye, along with cables linking Türkiye to Greece and Bulgaria. In the region overall, market development has not kept pace with interconnectivity advances. Import-export trade among these countries remains relatively low in relation to existing capacity and infrastructure. Currently, interconnections primarily serve to ensure a secure power supply. For example, Tunisia imports a small percentage of its electricity consumption from Algeria (6% in 2021) and exports electricity in limited quantities to Libya.¹² Similarly, Libya relies on imports from Tunisia and Egypt to ensure its own power supply.¹³

There is clearly a notable disparity in the level of interconnection among countries within the Mediterranean region. And although the actualization of a regional market is still pending, there exist a number of proposals aimed to facilitate significant cross-border electricity trade and stimulate infrastructure development in the region.

Transformative Grid Interconnection Proposals

In the Mediterranean region, the regional political landscape can go a long way to explain the successful - or lack of successful-- cooperation among regional actors on regional-scale energy matters. There are states that, due to pre-existing peace agreements, benefit from a political and economic stability that enables development of further economic ties.¹⁴ There are also actors who are party to ongoing conflicts, which usually prevents them from engaging in economic activities at the regional level.¹⁵ Still other states in the region, for example, Türkiye, aspire to control energy-related affairs in the eastern Mediterranean.¹⁶ Against this geopolitical background, there are a number of noteworthy projects aimed at transforming the electricity sector in the region. A concise yet comprehensive overview of these projects is presented below.

⁷ Mediterranean Electricity Market Observatory (MEDREG) (2023). National Electricity Systems and Regional Overview – 2021 Data., March, p.29. Retrieved from <https://www.medreg-regulators.org/Portals/default/Skede/Allegati/Skeda4506-731-2023.3.27/ELE-MEMO-Report.pdf?IDUNI=pvhkrsx1bwz1jzb4xwrhh4ix1169>

⁸ MEDREG, National Electricity Systems, p.29.

⁹ Ibid., p.29.

¹⁰ The Mediterranean Transmission System Operators (MED-TSO) (n.d.). Project #1 – MOROCCO – PORTUGAL. Retrieved from https://med-tso.org/wp-content/uploads/2022/02/MA-PT_project_sheet.pdf.

¹¹ Ibid.

¹² MEDREG, National Electricity Systems, Op.cit., p.29.

¹³ Ibid.

¹⁴ International Crisis Group (2023). Rethinking Gas Diplomacy in the Eastern Mediterranean. Middle East Report, Number 240, April 26. Retrieved from <https://www.crisisgroup.org/middle-east-north-africa/east-mediterranean-mena-turkiye/240-rethinking-gas-diplomacy-eastern>.

¹⁵ Ibid.

¹⁶ Ibid.

East-Med Line

The three most notable interconnector projects in the Eastern Mediterranean are the EuroAsia Interconnector,¹⁷ the EuroAfrica Interconnector,¹⁸ and the Türkiye-north Cyprus Interconnector projects. The creation of a comprehensive electricity system in the wider Mediterranean is hindered by various political conflicts in the East Mediterranean; for example, Greece, Cyprus, and Türkiye hold divergent perspectives on maritime zones through which the EuroAsia and EuroAfrica interconnectors are planned to traverse. The Republic of Cyprus (RoC) is not recognized by Ankara, which means that Türkiye does not accept the RoC as signatory to any agreements pertaining to the "exclusive economic zone," nor its right to unilaterally create hydrocarbon plans. Ankara supports the Turkish Cypriots' assertion of shared ownership of the island's natural resources. Because of these projected electricity infrastructure plans, new centers of influence are emerging in the region, such that areas once viewed as peripheral in terms of grids are rapidly transforming into competitive domains, quite similar to the trajectory of hydrocarbon-related matters in the region. Yet, these seemingly contradictory interconnector projects have the potential to be instrumental and mutually beneficial if they are redesigned with a focus on prioritizing principles of integration and interoperability.

Another source of friction lies in the relations between Egypt and Israel. Both states are involved in the EuroAsia and EuroAfrica Interconnectors, and over the past decade they have established a peaceful coexistence and have effectively negotiated gas agreements. And while Israel enjoys significant economic and security-related connections with Egypt, the nation's treatment/ dealings with the Palestinians is a source of concern to Egypt.¹⁹ The deepening of bilateral relations between the two states would likely create public unrest in this context.

The GREGY cable (Greece-Egypt) is also a significant project that is still in the design stage. The project aims to lay a 1000 km-long cable from Egypt to Crete, for transportation of up to 3000 MW (megawatt) of green energy from renewable sources.²⁰ In the context of this cable, it is essential to consider the situation in Libya. In 2019, Ankara, viewing war-torn Libya as a potential ally against the states that had formed the East Mediterranean Gas Forum, supported Tripoli's UN-backed government led by Prime Minister Faiez Serraj and forged an agreement. Under the terms of the agreement Türkiye was granted authority over the maritime regions situated west of the area, which encompasses the islands of Crete and Rhodes— areas that Athens considers part of its continental shelf. Consequently, in 2020, Greece and Egypt signed an agreement defining their respective maritime boundaries in the Eastern Mediterranean Sea. This has led to an international dispute, due to overlapping claims in the two agreements; this situation, theoretically, could constrain Türkiye's activities in the region. Therefore, beyond the GREGY project's potential for transporting green energy to both Greece and Europe, it has geopolitical significance insofar as it could impact consolidation of the sovereign rights of Greece and Egypt regarding their agreement on the definition of their EEZs in the East Mediterranean.²¹

¹⁷ The EuroAsia Interconnector. Official website. <https://euroasia-interconnector.com>.

¹⁸ The EuroAfrica Interconnector. Official website. <https://www.euroafrica-interconnector.com/at-glance/>.

¹⁹ Personal Communication with Professor Dr. Nur Köprülü, at the Near East University, June 5, 2023. Nicosia.

²⁰ M. Wendt & E. Petropoulos (2023). Energy region Greece & Eastern Mediterranean - a region arises as Europe's supplier! KAS Country Reports, March 20. Retrieved from <https://www.kas.de/en/country-reports/detail/-/content/energy-region-greece-eastern-mediterranean>.

²¹ *Ibid.*

Greece-Türkiye line

Another notable interconnector project in the region is the Greece-Türkiye line, where there are plans to complete the second 400 KV(kilovolt) interconnection between Greece and Türkiye by 2029.²² This interconnection, spanning 130 kilometers, will operate in parallel to the existing line and have a capacity of 2 GW.²³ The Independent Power Transmission Operator (IPTO) of Greece reports that this new interconnection will increase capacity by 600 MW(megawatt) in both directions.²⁴ Additionally, in conjunction with other newly established lines, it will facilitate integration of higher levels of renewable energy into the system. While the two nation's conflicting claims over their Eastern Mediterranean EEZs and territorial boundaries in the Aegean would seem to be an impediment, their establishment of a cross-border electricity grid exemplifies the potential for sustained collaboration, albeit in a different energy domain. It is also important to note that once the new nuclear power plant in Akkuyu is operational Türkiye will be able to significantly increase its exports to Europe via the Türkiye-Greece line.

Egypt-Jordan-Iraq Line

Jordan and Egypt recently concluded negotiations to enhance their electricity exchange, effectively doubling it from 500 megawatts (MW) to 1,000 megawatts (MW).²⁵ This significant boost in capacity will enable them to engage in electricity exchanges with neighboring countries. Furthermore, although situated over 800 miles away from Iraq, Egypt has also formulated plans to provide electricity to Iraq by establishing a connection between their power grids through Jordan.²⁶ The Jordanian-Iraqi electrical interconnection project is also underway, and the National Electric Power Company has taken the necessary steps to initiate its implementation. The construction of the new Al-Rishah substation and the electrical interconnection line linking it to the Al-Qaim substation in Iraq is making progress, following the submission of relevant construction bids.²⁷ In the context of the Jordan-Palestine line, a project to increase the supply to Palestine's Jerusalem Electricity Company from the current 40 MW(megawatt) to 80 MW(megawatt) has successfully concluded through the construction of the Ramah substation.²⁸ The deepened collaboration between Iraq and Jordan encompasses various sectors beyond energy, including industry, agriculture, transportation, food security, infrastructure, and investment. Moreover, the two nations have engaged in ambitious initiatives for establishing a power grid, gas network, oil pipeline, and land route that would interconnect their respective countries, fostering further integration and cooperation.

²² H. Aposporis (2023). Greece's IPTO working on interconnections with all neighboring countries. Balkan Green News, February 7. Retrieved from <https://balkangreenenergynews.com/greeces-ipto-working-on-interconnections-with-all-neighboring-countries/>.

²³ Ibid.

²⁴ Ibid.

²⁵ *The Jordan Times* (2021). Jordan, Egypt agree to double electricity capacity, expand regional reach, November 28. Retrieved from <https://www.jordantimes.com/news/local/jordan-egypt-agree-double-electricity-capacity-expand-regional-reach#:~:text=Jordan%20and%20Egypt%20have%20exchanged,a%20capacity%20of%20550%20megawatts>

²⁶ A. Kandil (2022). Egypt, Jordan, Iraq close to completing power link project, setting up industrial city: FMs. *Ahram Online*, June 6. Retrieved from <https://english.ahram.org.eg/News/467496.aspx>.

²⁷ Jordan National Electric Power Company. Official website. Interconnection. <https://www.nepco.com.jo/en/Interconnection.aspx>.

²⁸ B. Ghaith (2022). Jordan to double amount of electricity exported to Palestine— Energy minister. *The Jordan Times*, May 31. Retrieved from <https://www.jordantimes.com/news/local/jordan-double-amount-electricity-exported-palestine---energy-minister%C2%A0%C2%A0>.

These various projects point to an enhanced institutionalization of trilateral cooperation among Jordan, Iraq, and Egypt, states united by a shared interest in avoiding economic crises and ensuring stability for their long-suffering economies.²⁹ Their trilateral cooperation, taken in the aftermath of the Arab Spring, can be viewed as a pragmatic step aimed to address economic challenges effectively.³⁰

The EU-The Middle East and North Africa (MENA) Line

In 2007 the European Commission announced a cohesive climate and energy policy,³¹ which, due to the EU's limited solar and wind potential and scarcity of available land, prompted Europe's growing interest in importing renewable electricity from North Africa. Consequently, the Mediterranean region saw a significant increase in grid expansion efforts. And yet there were a number of significant political issues within the North African countries that impeded establishment of a bi-regional partnership, and thus delayed a wider energy partnership encircling the Mediterranean.³² Furthermore, the Arab Spring, which began in Tunisia at the end of 2010, ignited a period of profound political and social turmoil. The unrest also caused delays in the implementation of the bi-regional partnership arrangements.

Currently, there are several important renewable energy projects and interconnectors across the North African region, with Tunisia (Italy-Tunisia Interconnection, TUNITA)³³ and Algeria (Algeria-Italy Submarine Cable Project) working to connect their solar plants and Europe.³⁴ TUNITA has received investments totalling around € 850 million, with over € 300 million provided by the Connecting Europe Facility (CEF).³⁵ This is the first instance where such funding has been allocated for an infrastructure project involving both a member state and a third country. With these projects, Italy is expected to become a prominent energy hub within Europe.³⁶

Morocco is also examining interconnection projects with neighbouring countries. One such project involves building an electricity interconnection between Morocco and Portugal with a capacity of 1000 MW(megawatt).³⁷ Additionally, in collaboration with the Spanish electricity grid operator, Morocco is evaluating the feasibility of strengthening their electricity interconnection, via construction of a third transmission line with a capacity of 700 MW(megawatt).³⁸ In regard to this the two countries have recently

²⁹ Personal Communication, Prof. Dr. Nur Köprülü. op.cit.

³⁰ Personal Communication, Prof. Dr. Nur Köprülü. op.cit.

³¹ European Commission. (2007). EU Action Against Climate Change. Retrieved from https://unfccc.int/files/kyoto_protocol/application/pdf/brochure_on_eu_post_2012_action.pdf.

³² Westphal et al., Geopolitics of Electricity, op.cit., p.19.

³³ Italy-Tunisia Interconnection (TUNITA). Official website. <https://www.terna.it/en/projects/projects-common-interest/italy-tunisia-interconnection>

³⁴ The Mediterranean Transmission System Operators (MED-TSO). (n.d.). Project #15 Algeria-Italy. Retrieved from https://wordpress.med-tso.com/wp-content/uploads/2022/02/DZ-ITSA_project_sheet.pdf

³⁵ A fund established by the European Union to finance initiatives that enhance energy infrastructure within the EU. See Connecting Europe Facility. Official Website: https://cinea.ec.europa.eu/programmes/connecting-europe-facility_en#:~:text=CEF%20is%20a%20key%20EU,infrastructure%20investment%20at%20European%20level.

³⁶ F. Pascale (2022). EU Commission approves first 'energy corridor' between Italy, Africa. Euractiv., December 12 Retrieved from <https://www.euractiv.com/section/politics/news/eu-commission-approves-first-energy-corridor-between-italy-africa/>.

³⁷ Morocco Minister of Energy Transition and Sustainable Development. Electricity Interconnections. Official website. Retrieved From <https://www.mem.gov.ma/en/Pages/secteur.aspx?e=1&sprj=24>.

³⁸ Ibid.

signed a Memorandum of Understanding (MOU),³⁹ which includes a supplementary agreement to form a strategic partnership in the energy sector. This partnership focuses on the integration of energy grids and markets, the promotion of renewable energy, and the advancement of energy efficiency. The EU and

Morocco also signed, in 2022, the EU-Morocco Green Partnership,⁴⁰ a collaborative initiative aimed at advancing the external dimension of the European Green Deal through practical actions on the ground. The partnership is a prominent component of the EU's Economic and Investment Plan for the New Agenda with the Mediterranean. Additionally, Gibraltar is exploring the possibility of constructing a sub-sea power connection with Morocco.⁴¹ The recent signing by Morocco, Spain, Portugal, France, and Germany to the Sustainable Electricity Trade (SET) Memorandum of Understanding (MoU) during COP27 also underscores the growing momentum of Euro-Mediterranean integration in the energy sector.⁴² Electricity interconnection projects in this area are significant as they have the potential to pave the way for a more integrated regional energy market.

Proposed Guidelines for Enhancing Electricity Grid Interconnectivity

The establishment of a regional market in the Mediterranean is of paramount importance to: guarantee supply security; facilitate the integration of renewable energies; empower the region to actively participate in the European market. In order to fully harness the region's potential to assume a prominent role in energy transition, there are a number of prerequisites, as follows:

- The sustainability of the projects requires a level of political alignment among the involved parties in the region, specifically Egypt, Israel, and Türkiye. Armed clashes and political disagreements pose the greatest challenge, e.g., conflicts such as those between Israel and Palestine, Israel and Lebanon, Cyprus, Türkiye, and Greece, among others. While diplomatic efforts centred around gas have proven ineffective in tackling the root causes of these conflicts so far,⁴³ there is a risk that a similar outcome may result from a new grid infrastructure-driven diplomatic approach.
- Each project should be approached and designed with a broad perspective, taking into account such technical considerations as the national energy systems. Additionally, it is crucial to consider the historical context of bilateral/multilateral cooperation patterns in the realm of energy policy.

³⁹ Red Eléctrica (2019). Spain and Morocco agree on the development of a third interconnection between both countries, February 14. Retrieved from <https://www.ree.es/en/press-office/news/press-releases/2019/02/spain-and-morocco-agree-development-third-interconnection-between-both-countries>.

⁴⁰European Commission (2022). EU-Morocco Green Partnership: Commission adopts a key programme to support the agricultural and forestry sectors in Morocco, October 25. Retrieved from https://ec.europa.eu/commission/presscorner/detail/es/ip_22_6362

⁴¹ *North Africa Post* (2020). Gibraltar considers power link with Morocco – Spanish media, July 24. Retrieved from <https://northafricapost.com/42645-gibraltar-considers-power-link-with-morocco-spanish-media.html>.

⁴² MAP ECOLOGY (2022). Cop27: Morocco, European Partners Sign MOU on Sustainable Electricity Trade Roadmap, December 9. Retrieved from <https://mapecology.ma/en/initiatives-en/cop27-morocco-european-partners-sign-mou-sustainable-electricity-trade-roadmap/>.

⁴³ International Crisis Group (2023). op.cit.

- It is of utmost importance to optimize, modernize, and strengthen the regional electricity infrastructure; as such, all states need to develop an electricity-focused foreign policy in relation to the region.
- To meet the objectives of national as well as regional energy policies, most countries will need to update their infrastructure.
- Besides the technical feasibility of projects, it is vital to establish a solid foundation for political and regulatory cooperation. This involves engaging in bilateral discussions, negotiating agreements, and aligning policies to facilitate the successful development and operation of interconnectors. Cooperation among energy ministers, regulatory authorities, and other relevant stakeholders is essential in this regard.

Conclusion

The paper has presented a comprehensive overview of the existing grid interconnectivity in the Mediterranean and provided updates on the status of new grid infrastructure projects in the region. It has also offered recommendations for fostering regional integration and enhancing the interconnection of grids among Mediterranean countries.

The Mediterranean region serves as a remarkable example of energy spaces that are constantly evolving and adapting. At present the interconnection pathways in the western Mediterranean primarily link North Africa with the European Union; the East Mediterranean presents a more intricate geopolitical landscape due to substantial territorial challenges. Within this context, the EU can greatly influence the reconfiguration of electricity grids in the region, as for non-EU states there is the allure of joining the electricity system of continental Europe, not only to share a collective fate in terms of electricity supply but also to enjoy broader aspects such as security and welfare.

It is imperative for all countries in the region to work collectively towards a shared goal. By integrating interconnections with other technological advancements, such as energy storage initiatives, as well as by investing in renewable energy sources (RES) within the region, a regional framework can be established to facilitate an efficient energy system. Nevertheless, and yet again, it is important to acknowledge that the greatest challenges to achieving this lie in the complex regional geopolitical dynamics and the enduring political conflicts in the region.

References

- Aposporis, H. (2023). Greece's IPTO working on interconnections with all neighboring countries. *Balkan Green Energy News*, February 7. Retrieved from <https://balkangreenenergynews.com/greeces-ipto-working-on-interconnections-with-all-neighboring-countries/>.
- Belhaj, F. (2023). Accelerating Mediterranean Integration Through Energy. *World Bank Blogs*, January 3. Retrieved from <https://blogs.worldbank.org/arabvoices/accelerating-mediterranean-integration-through-energy>
- European Commission (2007). *EU Action Against Climate Change*. Retrieved from https://unfccc.int/files/kyoto_protocol/application/pdf/brochure_on_eu_post_2012_action.pdf.
- European Commission (2022). *EU-Morocco Green Partnership: Commission adopts a key programme to support the agricultural and forestry sectors in Morocco*, October 25. Retrieved from https://ec.europa.eu/commission/presscorner/detail/es/ip_22_6362
- Ghaith, B. (2022). Jordan to double amount of electricity exported to Palestine — Energy minister. *The Jordan Times*, May 31. Retrieved from <https://www.jordantimes.com/news/local/jordan-double-amount-electricity-exported-palestine---energy-minister%C2%A0%C2%A0>.
- Gillespie, R., & Volpi, F. (2018). Introduction: the growing international relevance of Mediterranean politics. In R. Gillespie, R., & F. Volpi (eds.). *Routledge handbook of Mediterranean politics*. Abingdon-on-Thames and New York: Routledge. pp.38-70.
- International Crisis Group (2023). *Rethinking Gas Diplomacy in the Eastern Mediterranean*. Middle East Report, No. 240, April 26. Retrieved from <https://www.crisisgroup.org/middle-east-north-africa/east-mediterranean-mena-turkiye/240-rethinking-gas-diplomacy-eastern>.
- International Renewable Energy Agency (IRENA) (2019). *A New World: The Geopolitics of the Energy Transformation*. Retrieved from https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2019/Jan/Global_commission_geopolitics_new_world_2019.pdf?rev=a12555f7a34b4258bf70de9cb9ca654c
- Kandil, A. (2022). Egypt, Jordan, Iraq close to completing power link project, setting up industrial city: FMs. *AhramOnline*, June 6. Retrieved from <https://english.ahram.org.eg/News/467496.aspx>.
- MAP ECOLOGY (2022). *Cop27: Morocco, European Partners Sign MOU on Sustainable Electricity Trade Roadmap*, December 9. Retrieved from <https://mapecology.ma/en/initiatives-en/cop27-morocco-european-partners-sign-mou-sustainable-electricity-trade-roadmap/>.
- Mediterranean Electricity Market Observatory (MEDREG) (2023). *National Electricity Systems and Regional Overview – 2021 Data*, March. Retrieved from <https://www.medreg-regulators.org/Portals/default/Skede/Allegati/Skeda4506-731-2023.3.27/ELE-MEMO-Report.pdf?IDUNI=pvhkrsx1bwz1jzb4xwrhh4ix1169>.
- Nies, S. (2010). *At the Speed of Light? Electricity Interconnections for Europe*. *Gouvernance Européenne et Géopolitique de l'Énergie*, Vol. 8. Paris: Institut Français des Relations Internationales (IFRI).
- Nies, S. (2020). *Security of Supply and Risk Preparedness: A New Focus on Electricity*. In S. Nies (ed.), *The European Energy Transition: An Agenda for the Twenties* (2nd ed.). Deventer: Claeys & Casteels. pp. 53-78.
- North Africa Post* (2020). *Gibraltar considers power link with Morocco – Spanish media*, July 24. Retrieved from <https://northafricapost.com/42645-gibraltar-considers-power-link-with-morocco-spanish-media.html>.
- Pascale, F. (2022). *EU Commission approves first 'energy corridor' between Italy, Africa*. *Euractiv*, December 12. Retrieved from <https://www.euractiv.com/section/politics/news/eu-commission-approves-first-energy-corridor-between-italy-africa/>.
- Red Eléctrica (2019). *Spain and Morocco agree on the development of a third interconnection between both countries*, February 14. Retrieved from <https://www.ree.es/en/press-office/news/press-releases/2019/02/spain-and-morocco-agree-development-third-interconnection-between-both-countries>.
- The Jordan Times* (2021). *Jordan, Egypt agree to double electricity capacity, expand regional reach*, November 28. Retrieved from <https://www.jordantimes.com/news/local/jordan-egypt-agree-double-electricity-capacity-expand-regional-reach#:~:text=Jordan%20and%20Egypt%20have%20exchanged,a%20capacity%20of%20550%20megawatts>

OCCASIONAL PAPER SERIES 6
REPOWERING THE MEDITERRANEAN:
REFLECTIONS ON GRID INFRASTRUCTURE DIPLOMACY
EMINE EMINEL SULUN

- The Mediterranean Transmission System Operators (MED-TSO) (n.d.). Project #1 – MOROCCO – PORTUGAL. Retrieved from https://med-tso.org/wp-content/uploads/2022/02/MA-PT_project_sheet.pdf.
- The Mediterranean Transmission System Operators (MED-TSO) (n.d.). Project #15 Algeria-Italy. Retrieved from https://wordpress.med-tso.com/wp-content/uploads/2022/02/DZ-ITSA_project_sheet.pdf
- Wendt, M. and Petropoulos, E. (2023). Energy region Greece & Eastern Mediterranean - a region arises as Europe's supplier!. KAS. Country Reports., March 23. Retrieved from <https://www.kas.de/en/country-reports/detail/-/content/energy-region-greece-eastern-mediterranean>.
- Westphal, K., Pastukhova, M., & Pepe, J. M. (2022). Geopolitics of electricity: grids, space and (political) power. SWP Research Paper, 6/2022. Berlin: Stiftung Wissenschaft und Politik - SWP- Deutsches Institut für Internationale Politik und Sicherheit. Retrieved from https://www.ssoar.info/ssoar/bitstream/handle/document/79067/ssoar-2022-westphal_et_al-Geopolitics_of_electricity_grids_space.pdf?sequence=1&isAllowed=y&lnkname=ssoar-2022-westphal_et_al-Geopolitics_of_electricity_grids_space.pdf.