

Energy Transitions and Environmental Geopolitics in the Southern Mediterranean



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Climate change and environmental degradation pose existential threats to Mediterranean Basin states and the region's vast species and ecosystem diversity. The current ecological footprint of these states is higher than the global average, and its ecological deficit is twice as high,¹ meaning that Mediterranean countries consume approximately 2.5 times more natural resources and ecological services than the region's ecosystems can naturally provide.²

EU institutions and member states have meanwhile made significant decisions on the climate emergency and net-zero transitions. The European Green Deal involves pursuing "green diplomacy" to support the EU's immediate neighbours in their transition to green and more sustainable economies.³ These measures will shape both EU and non-EU societies for generations to come.

While positive to promote adaptation and mitigating strategies needed to tackle the climate emergency, if managed incorrectly such processes can also be expected to create a contested political and economic

¹ Global Footprint Network, *National Footprint and Biocapacity Accounts 2022 edition (Data Year 2018)*, <http://data.footprintnetwork.org>.

² Maria Serena Mancini and Alessandro Galli, "Measuring and Monitoring Sustainability Trends in the Mediterranean: The Ecological Footprint Viewpoint", in *Quaderns de la Mediterrània*, No. 25 (2018), p. 119-126 at p. 121, <https://www.iemed.org/?p=42280>.

³ European Commission, *The European Green Deal* (COM/2019/640), 11 December 2019, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52019DC0640>.

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This article was produced in the framework of the CATS Network project "Environmental Geopolitics in the Southern Mediterranean: The Potential for Cooperation between Turkey, Egypt and Israel", funded by Stiftung Mercator and the German Federal Foreign Office. The Centre for Applied Turkey Studies (CATS) at Stiftung Wissenschaft und Politik (SWP) in Berlin is the curator of CATS Network, an international network of think tanks and research institutions working on Turkey.

environment across Mediterranean Basin states.

Today, as conflict rages in Ukraine and unprecedented financial and energy sanctions are placed on Russia, the challenge and urgency of the energy transition will assume even greater relevance. European states are scrambling to secure alternative supplies, increasingly looking south to expand imports from traditional hydrocarbon exporters while exploring new agreements from emerging producers, particularly in the Eastern Mediterranean. The impact of this disruption on the green energy transition and the ambition to limit polluting fossil fuels remains to be seen, but it seems likely to delay elements of this transition, weakening climate-related commitments across Mediterranean Basin states.

Drawing on findings from eleven months of fieldwork in the region, our research suggests that unless the new Euro-Mediterranean energy cooperation democratises the energy space and is made more inclusive of local populations, rescuing such processes from the domain of rentier business interests, the drive for low carbon transitions among southern and eastern Mediterranean states will narrow the discursive space for environmentalists calling for genuine political action and reform. Combined with the reverberations from the conflict in Ukraine, this may in turn limit the promise of a green transition, creating new challenges in and among Mediterranean Basin states.

Egypt for instance is particularly exposed to the detrimental effects of climate change. Water insecurity, rising sea levels, loss of agricultural lands and rising temperatures are among the most direct climate-related effects that impact the country.⁴ In order to strengthen Egypt's resilience to the effects of climate change and meet the growing demands of a burgeoning population, the government has already begun to diversify its energy mix, increasing the share of renewables as part of its national strategy.

In 2015, the Egyptian government launched its "Egypt Vision 2030" strategy for sustainable development and an Integrated Sustainable Energy Strategy 2035 (ISES). The ISES aims to produce 20 per cent of the country's electricity from renewable resources – solar, wind, concentrating solar power and hydro – by 2022 and 42 per cent by 2035. While coal has been eliminated from the energy mix, the share of nuclear power is planned to reach 3 per cent in 2035.⁵

During the recent COP26 summit in Glasgow, Egypt's Minister of Petroleum and Mineral Resources, also defined the expansion of blue hydrogen in the short and medium-term as another priority for the Egyptian government,

⁴ Online author interview, 20 July 2021; Eliora Goodman, "Dual Threats: Water Scarcity and Rising Sea Levels in Egypt", in *Tahrir Institute Explainers*, 20 August 2021, <https://timep.org/?p=35121>.

⁵ New and Renewable Energy Authority (NREA) website: *Renewable Energy Targets*, <http://nrea.gov.eg/test/en/About/Strategy>. In 2015, Egypt and Russia signed an agreement to build the country's first nuclear plant, El Dabaa Nuclear Power Plant.

with the goal of eventually switching to green hydrogen in the future.⁶ These ambitious climate targets also favoured the choice of Egypt as the host country for the upcoming COP27 Climate Conference in November 2022.

Despite Egypt's commitments on renewable energy development, interviews with Egyptian diplomats reveal that faced with the demands of an increasing population, Egypt will continue its policy of prioritising foreign exchange earnings from hydrocarbon exports, thereby keeping the rentier structure of the economy intact.⁷ Europe's search for new gas supplies in the wake of the war in Ukraine is likely to increase such trends in light of Egypt's new energy resources.

The 2015 discovery of the Zohr gas field, located 150 kilometres off the Egyptian coast, with 850 billion cubic metres of gas, brought fundamental changes in the country's energy policy as well as its regional diplomacy. Egypt is currently Africa's leading non-OPEC oil producer, as well as the continent's third-largest natural gas producer, after Algeria and Nigeria.

Israel, historically an energy importing country until the discovery of two

major offshore gas fields – Tamar (2009) and Leviathan (2010)⁸ – has also become increasingly involved in the Eastern Mediterranean gas market. At the same time however, Israel endorsed a target of generating 20 per cent of the country's electricity from renewable sources in 2025, and 40 per cent in 2030.⁹

Israel is also home to more than a thousand climate innovation companies and excels in water management, reforestation, smart farming, solar energy and alternative protein production. Israel loses only 3 per cent of its water due to leaks in its urban water system and is a world leader in desalination and wastewater reuse technology.¹⁰ Israeli researchers have furthermore contributed to the EU Green Deal by advancing innovative ideas they have put forward for the EU's research and development programmes (Horizon 2020).¹¹

Turning to Turkey, Ankara's total energy capacity from renewables has also increased steadily over the last

⁶ Anna Ivanova, "Egypt Targets 42% Renewables by 2030", in *Renewables Now*, 8 November 2021, <https://renewablesnow.com/news/egypt-targets-42-renewables-by-2030-760315>.

⁷ Author interview, Athens, 14 July 2021; Emel Akçali, Evrim Görmüş and Soli Özel, "Towards A 'Green' Mediterranean? Environmental Geopolitics of Turkey, Egypt and Israel", in *Institut Montaigne Articles*, February 2022, <https://www.institutmontaigne.org/en/node/9282>.

⁸ As well as two other minor fields (Karish and Tanin in 2012 and 2013 respectively).

⁹ Enerdata, "Israel's New Roadmap Targets 40% of Renewable Power Generation by 2030", in *Daily Energy News*, 17 February 2022, <https://www.enerdata.net/publications/daily-energy-news/israels-new-roadmap-targets-40-renewable-power-generation-2030.html>.

¹⁰ Dimiter Tzantchev and Gideon Behar, "EU, Israel Should Advance Green Deal Together for the Climate - Opinion", in *The Jerusalem Post*, 7 November 2021, <https://www.jpost.com/opinion/eu-israel-should-advance-green-deal-together-for-the-climate-opinion-684299>.

¹¹ Some examples are: G2P-SOL (<http://www.g2p-sol.eu>), eForFuel (<https://www.eforfuel.eu>), sys2WHEEL (<https://sys2wheel.eu>), NanoPack (<https://www.nanopack.eu>).

decade, reaching 49,398 megawatts (MW) by 2020.¹² Turkey's clean energy investments have reached 66 billion US dollars with renewables constituting over 53 per cent of the country's total installed power capacity in September 2021, according to state media.¹³

Despite the growing role that market logics have over climate policy and increased trends of state control and consolidation over these sectors, the International Energy Agency's 2021 renewables energy report, projects Turkey's renewable capacity to grow by over 26 gigawatts (GW), or 53 per cent, during the 2021–2026 period, with solar and wind accounting for 80 per cent of the expansion.¹⁴

On the other hand, investments in the wind sector, the second-largest clean energy producer in Turkey, are calculated to have reached around 13 billion US dollars according to state media. This led Turkey's Energy and Natural Resources Ministry to announce in September 2021 that Turkey's wind power capacity exceeded the 10,000 MW threshold in August 2021.¹⁵ Turkey's geothermal

capacity also reached 1,650 MW with an investment of about 6 billion US dollars, while investments in biomass power plants stood at 2 billion US dollars, with a volume of 1,813 MW.¹⁶

While all these promising developments are taking place, fierce competition for the extraction of fossil fuels, namely natural gas, is also continuing between Eastern Mediterranean countries, at times contributing to a dangerous escalation of pre-existing tensions among riparian states. While tensions have subsided lately, the potential for new eruptions remains under the surface.

As Europe now seeks to diversify its natural gas supply from Russia, pipeline politics are more likely to be brought back to life in the Eastern Mediterranean, creating further incentives for cooperation or possible conflict. Following the US's formal withdrawal of support for the EastMed pipeline in January 2022, renewed discussion about the benefits of a potential Turkish-Israeli pipeline have emerged as a viable alternative to convey the Eastern Mediterranean gas to Europe, a scenario made all the more relevant given current events in Ukraine.

The EU Green Deal is meant to inspire and assist its Mediterranean partners through substantial environmental, green energy transmission and climate partnerships. However, many environmentalists in the region are critical of the Deal. They argue that the

¹² Statista, *Total Renewable Capacity in Turkey from 2008 to 2020 (in megawatts)*, <https://www.statista.com/statistics/878801>.

¹³ "Renewables Shine as Turkey's Clean Energy Investments Hit \$66B", in *Daily Sabah*, 16 September 2021, <https://www.dailysabah.com/business/energy/renewables-shine-as-turkeys-clean-energy-investments-hit-66b>.

¹⁴ International Energy Agency, *Renewables 2021. Analysis and Forecasts to 2026*, December 2021, p. 62, <https://www.iea.org/reports/renewables-2021>.

¹⁵ Nuran Erkul Kaya, "Enerji ve Tabii Kaynaklar Bakanı Dönmez: Kojenerasyon tesislerine destek artacak", in *Anadolu Agency*, 29 September 2021, <http://v.aa.com.tr/2377843>.

¹⁶ "Renewables Shine as Turkey's Clean Energy Investments Hit \$66B", cit.

EU wishes to revitalise its economy in the wake of the Covid-19 pandemic through massive implementation of green and digital technology that carries much economic potential for institutions, businesses and investors but neglects the claims of local environmentalists and the needs and the aspirations of ordinary citizens who are directly affected by these transformations.¹⁷

The EU plans to implement the Green Deal by reducing resource and energy use, together with the generation of waste and emissions while increasing the production of goods and services. Yet, the EU's calculations do not include resources used in the production and transport of imported goods from beyond EU borders.¹⁸ The EU's hydrogen strategy, for instance, embraced blue hydrogen in the "transitional phase", and developed support mechanisms for the expansion of blue hydrogen in third countries to be imported into the EU.¹⁹

Blue hydrogen, produced from natural gas with carbon capture and storage, is strongly supported by the gas industry that seeks to retain existing gas infrastructure and pipelines. The EU's current hydrogen strategy, which is based on implementing capital-intensive projects in high resource

countries, therefore continues to transfer the environmental costs of its green transition from the north to the south, particularly during this transitional phase.²⁰

Environmentalists have also pointed out that the EU Green Deal's aim of decoupling economic growth and environmental impacts can only be made possible by outsourcing polluting activities. Renewables, moreover, can create further dependencies on scarce raw materials such as lithium, cobalt, nickel and other rare earth metals mainly imported from the Global South.

Further criticism revolves around the benefits in store for large companies and politically connected businesses. Environmental activists on the Greek islands of Syros and Tinos, for instance, believe that windfarm investment opportunities are mostly directed by the government to a select number of favoured companies. These in turn tend to get easy access to public and protected land to install wind turbines without a genuine engagement with the needs and livelihoods of the local

¹⁷ Alfons Pérez, *Green Deals in a Time of Pandemics. The Future Will Be Contested Now*, Madrid, Libros en Acción, 2021, <https://odg.cat/en/?p=9825>.

¹⁸ Ibid., p. 41.

¹⁹ European Commission, *A Hydrogen Strategy for a Climate-Neutral Europe* (COM/2020/301), 8 July 2021, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020DC0301>.

²⁰ David Adler and Pawel Wargan, "Decarbonization without Democracy: Tennis-Ball Politics and the EU Green Deal", in Kyla Tienhaara and Joanna Robinson (eds), *Routledge Handbook on the Green New Deal*, London/New York, Routledge, 2023 (forthcoming), <https://ssrn.com/abstract=3843125>; Gonzalo Escribano and Lara Lázaro, "Balancing Geopolitics with Green Deal Recovery: In Search of a Comprehensive Euro-Mediterranean Energy Script", in *Elcano Royal Institute Analyses (ARI)*, No. 95/2020 (15 July 2020), <https://www.realinstitutoelcano.org/en/analyses/ari95-2020-escribano-lazaro-balancing-geopolitics-with-green-deal-recovery>.

population.²¹

In Turkey, environmentalists are concerned that while the percentage of renewable energy in total consumption is increasing, this does not mean that the use and exploration of fossil fuels is decreasing. Instead, these two sources are in a sense competing. Such hybridity in the low carbon energy transition within the EU and Eastern Mediterranean consequently narrows the discursive space of environmentalists both within and beyond the Mediterranean for genuine political actions to respond to actual environmental degradation in their local contexts.

In order to prepare societies and individuals for such a consequential political project as the EU Green Deal, the EU should empower citizens within the EU and beyond through popular assemblies and by engaging with local governments to ensure a more democratic energy transition process. Supporting communities most affected by the climate emergency, by developing more sustainable commuting or encouraging the production and sale of food locally are some examples of needed actions. Strengthening local economies, establishing platforms for sustainable consumption, providing services to people affected by climate change and environmental degradation, developing local solutions for sustainable energy access, reclaiming green spaces and implementing healthy waste treatment facilities while protecting worker rights are equally

²¹ Author interviews in October 2021.

fundamental to such processes.²²

In a recent thought-provoking book, *Mémo sur la nouvelle classe écologique*,²³ Bruno Latour and Nikolaj Schultz call for a return to the old notion of class, pointing to the need to support an “ecological class”. The authors argue that such notion can mobilise people towards a common goal, while stressing that the notion of class is not necessarily anti-capitalistic.

This “ecological class” does not need to reject the goal of unmitigated growth, but rather support the notion of shared prosperity generated by this growth. It should also propose a new political and ideological horizon grounded in environmentalism, given that, as noted by Latour, mobilisation without an ideological background is bound to fail.

Ecology therefore may emerge as a new class struggle of our times, one that can empower environmentalists in the Eastern Mediterranean and beyond while helping create a transnational agency above and beyond a mere political-economy and a “corporate social responsibility” approach. This would be the first step to go beyond conventional narratives and unclear long-term plans, and instead initiate a genuine movement towards sustainable environmental geopolitics in the region.

6 April 2022

²² Ibid.

²³ Bruno Latour and Nikolaj Schultz, *Mémo sur la nouvelle classe écologique*, Paris, La découverte, 2022.

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