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This article has been prepared with the support provided to the [International Relations Council](#) and the [Global Academy](#) by the Heinrich Böll Stiftung Association Turkey Representative within the scope of the project titled 'Foreign Policy for the 21st Century; Peaceful, Equitable, and Dynamic Turkey'.

To cite this work: Emel Akçalı, "Green Option in Turkey's International Energy Policies" Panorama, Online, 05 December 2022, <https://www.uikpanorama.com/blog/2022/12/05/ea/>

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Green Option in Turkey's International Energy Policies

Emel Akçalı

Average temperatures in Turkey, just like anywhere else in the Mediterranean, have been rising and will continue to do so over the coming years. Meanwhile, the Mediterranean region also warms 20 percent faster than the rest of the world. This results in floods, heatwaves, droughts, desertification, and food shortages, leading to massive migration and impacting the lives of 1/3 of the population in the region.

Turkey is an emerging economy with an increasing need for energy. At the same time, it has a great potential for renewable energy due to its geographical location, the primary renewable energy sources being biomass, wind, hydroelectric, solar, waves, and geothermal. Ankara's total energy capacity from renewables has increased steadily over the last decade, reaching [49,398 megawatts by 2020](#). [According to state media](#), Turkey's green energy investments have reached \$66 billion, with renewables constituting over 53 percent of the country's total installed power capacity in September 2021. Despite market logic's growing role over climate policy and rising trends of state control over renewable energy sectors, Turkey's nationally determined contributions to the Paris Climate Agreement are said to reach the target of 26 GW of solar and wind power by 2030. While all these promising developments are taking place, fierce competition for the extraction of fossil fuels, namely natural gas, is also continuing and, at times, even escalating pre-existing tensions with the neighbouring countries in the Mediterranean.

However, despite offshore hydrocarbon discovery ambitions, Turkey needs to deal with climate change and marine protection issues in its energy diplomacy in the Southeastern Mediterranean due to its commitments to the European Green Deal proposal by the EU Commission. In April 2021, the Council of the EU highlighted, for instance, the concept of the [Blue Economy](#), the need for more sustainability in oceans and seas which are the largest ecosystems in the world and which need to be in good ecological and chemical conditions in order to develop their economic and social potential. The Council of EU further underlined "the importance of supporting measures to conserve, protect, restore and sustainably use the rich biodiversity of the Mediterranean basin, a unique center of diversification for fauna and flora species, of ensuring sustainable resource management, including water, and strengthening sustainable food systems." The Blue Economy urges the Mediterranean countries to cooperate and mitigate geopolitical tensions and risks before these result in long-term irrevocable hot conflicts in the region.

As a candidate country, Turkey, therefore, published its National Renewable Action Plan in 2014 and National Efficiency Action Plan in 2017 and adopted the goal of achieving a 30 percent share of renewable energy in the electricity generation mix and 10 percent of renewable energy in the transportation sector by 2023. In October 2021, Turkey finally ratified the Paris Agreement and set a goal to achieve net zero carbon status by 2053 by updating its emission targets in different areas, such as manufacturing, energy, waste, transportation, agriculture, etc. Despite Turkey's abundant renewable resources, the share of renewables in total final energy consumption and the transportation sector was 11.9 percent and 0.7 percent, respectively, in 2018. While renewable energy sources constituted 44 percent of total electricity generation, hydropower constituted 29.2 percent of total electricity generation in 2021. The share of non-hydro renewables in electricity generation was 14.7 percent in 2019 (wind at 7.2 percent, solar at 3.5 percent, geothermal at 2.9 percent, and bioenergy at 1.1 percent). [It is argued](#) that Turkey's low level of renewable energy development is related to several factors, including "a state-

dominated energy market, politicized and weak bureaucracy, opportunistic developers, limited civil society activism, and complicated relations with neighboring countries”.

There are still promising developments toward renewable energy transition in Turkey, however. Turkish engineers have [created a ship](#) that uses “Green Hydrogen”, for instance, and is scheduled to debut in 2025. The vessel will employ green hydrogen as a fuel for the first time in history, in addition to solar and wind power. There won’t be any asbestos in this ship, which is used on other ships and negatively impacts marine life. The International Maritime Organization’s 2050 standards were said to be exceeded by the green ship design. On this ship, wind energy is also utilized as a novel model for renewable energy for the first time. Furthermore, Turkey’s budding EV (Electric Vehicle) manufacturer TOGG has taken a critical step toward a serial production. TOGG released its first test electric cars straight off the lines in the Gemlik Industrial Zone, southeast of Istanbul.

Given the global push toward green energy and the vast potential of solar and wind energy resources in the Mediterranean region, Turkey and neighboring countries should aim to develop solar and wind electricity generation technologies to prevent cross-border conflicts and promote environmental peace-making in the Southeastern Mediterranean. Turkey can easily take the lead in this endeavour with its potential, political will, and elite orientation. To this end, Turkey, as well as the EU and regional countries, should re-consider the impact of their neoliberal and hybrid green energy policies on their current green imagination, democratize their green transformation space, rescue it from the domain of (rentier) business interests only, and be more inclusive of ordinary citizens directly affected by these transformations and environmental activists. Such a move would create more progressive policy orientations, which would have a more considerable potential of enabling environmental cooperation between the countries of the Southeastern Mediterranean.

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