

Energy politics: the role of renewables in decreasing dependence and the new balance of power

Renewable energy is often viewed through the green lens of tackling climate change. While the green properties of renewables cannot be denied, their geopolitical potential is often overlooked. If we are on our way to a zero-carbon future, solar-, wind-, and hydropower will significantly alter the global balance of power.

For the past decades, energy resources often formed the cornerstone of complicated relationships between exporting and importing countries. The economy's thirst for fuel has meant that supply disruptions are a key risk. And since the majority of reserves is geographically concentrated, net-importers have been reliant on a few countries, most of which are authoritarian or unstable.

From a security perspective, energy dependency leads to asymmetrical power relations. That power stems from the ability to 'weaponize' oil or gas exports. Unlike instability, supply disruptions in the case of weaponization are a consequence of targeted state policy, rather than a failure thereof. As Robert Dahl explains: 'A has power over B to the extent that he can get B to do something that B would not otherwise do'. Weaponization or threats of weaponization are used by exporters to exert power and influence.

Clear cases of weaponization are the 1973 oil crisis and the current Ukraine war. It is important to note that Russia currently has not fully weaponized its gas exports. Instead, it has decided to only supply what is required from its contractual obligations, which led prices of natural gas to surge. It has prompted European countries to reassess their dependency on Russian gas and foreign energy in general. The alternative is a weakening capacity to freely take political decisions.

Renewables provide a huge potential to decrease dependency. The pursuit of European strategic autonomy, steep rise in fuel prices, relative declining costs for renewables and green agendas, make a quicker transition to renewables all the more likely. It is also worth noting that renewables may be used to curb flows of wealth abroad and even attract wealth through energy exports. The IEA expects that renewables will soon become the biggest source of power generation.

This will have an impact on the global balance of power. New dynamics will emerge along with the transition. In the short-term countries such as Algeria, Azerbaijan, and Qatar will become more relevant as a consequence of decreasing gas imports from Russia. In the long-term, however, geopolitical relevance will shift toward countries with 1) large potential for renewable energy, 2) large deposits of raw materials required for renewables, and 3) a technological advantage in renewable energy.

For major exporters, the transition will be difficult and might result in a relative decline of power. Those that are reliant on the rents of oil and gas and fail to diversify their economies in the long-run, will face

a structural slowdown and eventual decline in demand growth for energy resources. For them, keeping populations content will become more challenging, which might even lead to chaos. Moreover, these countries have to rethink their foreign policy. Decreasing demand might result in less (military) assistance from countries such as the USA. Especially if other regions, such as Asia, become more demanding and relevant. We can already see this happening with Arab countries seeking rapprochement and diplomatic ties with Israel. Meanwhile, Iran will be less prone to market volatility, due to years of heavy sanctions. In comparison, it's economy is more diversified than other major producers in the region. As a consequence, we might see the relative position of Iran grow in the long-term.

More powerful will be those that are influential in the field of renewables. In the case of hydropower, there is the rise of a new weapon - water. The Nile and the Mekong provide examples where damming is ill-received by downstream countries. Dams provide upstream countries the capability to 'turn off the tap', which poses an existential threat to downstream countries and essentially weaponizes water. Unlike oil and gas, there is little possibility to diversify water resources, which makes the risk for 'water wars' more likely.

In the case of solar and wind power, know-how and raw materials will become more important to exert influence in the new energy system. China will play a prominent role, since the country already has a technological edge when it comes to solar energy. But to a large extent also, because it has managed to secure its mineral supply chains. Because of their large mineral reserves, both South America and Central Africa will play more prominent roles in global politics as well. Depending on the country, these resources might be considered as a gift or a curse.

Countries with large potential for renewable energy will also gain a more prominent role in global politics, especially if they are able to export that energy. For countries in North Africa this might be a big opportunity. As projects in the EU face difficulties, due to the regulatory framework and regional backlash – e.g. people not wanting a windmill in their backyard –, North Africa becomes an interesting opportunity to do business. Especially since there is great potential for solar energy and since energy markets will be relatively easy to connect. In the short-term exports will in large part be determined by the relative distance to energy markets.

However, the ability to export will also be shaped by the production of 'green' hydrogen. Although production is currently expensive, green hydrogen has the potential to ship energy to far-off markets. The renewable fuel allows distant countries with a large potential for renewables to participate in the global energy market. It also is an attractive alternative for industries that are hard to electrify. Hence, green hydrogen developments will be important for shaping the new energy system.

The shift in supply chains and energy systems will result in the rising strategic importance of some regions and decline of others. This development is profound for the international security landscape and will shape our foreign policies for the years to come. Although we are still in the beginning phase, new

global dynamics, as a consequence of the transition, will become more visible in the coming ten years. With strategic autonomy high on the agenda, there is reason to assume that (some of) the aforementioned developments become all the more likely and start to appear sooner, rather than later.

By Frank Stengs