Renewables in Kazakhstan and Russia

PROMOTING "FUTURE ENERGY" OR ENTRENCHING HYDROCARBON DEPENDENCY?

PONARS Eurasia Policy Memo No. 538 August 2018

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Energy and natural resource use has always been a key issue of geopolitics, but as more countries adopt "post-oil" transition policies, environmental sustainability has itself become an important geopolitical issue that is increasingly defining political relations among and within states. Leaders in both Kazakhstan and Russia—two of Eurasia's leading hydrocarbon producers—have been investing in new alternative energy infrastructures, "green economy" development, and certain forms of environmental sustainability. Among these were high-profile initiatives: Kazakhstan recently hosted EXPO-2017 with the theme of "Future Energy" and Russia had "The Year of the Environment 2017."

Iconic or exceptional as many sustainability initiatives may be, these projects shed light on the region's changing energy geographies. They also raise important questions about how and why local leaders have been advancing these policies when both Kazakhstan and Russia's political economies are still so tied to traditional energy extraction. Do new alternative energy projects mark a sea change of promoting "future energy" transitions in Eurasia? Alternatively, do these projects risk further entrenching hydrocarbon dependency in both countries? Whose interests are at stake in such transitions? And how might recent renewable energy initiatives support or challenge prevailing political configurations in Kazakhstan and Russia? While some changes are underway, infrastructure challenges and networks of power-players and rent-seekers, as well as a shallow civic commitment to environmental protection, make it difficult to create new energy capacities based on renewables, despite governmental advocacy of it.

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Why Promote Renewable Energy?

Sustainability is a nebulous concept, and powerful for precisely that reason. A wide range of actors use it to promote an equally wide range of allegedly pro-environment policies. In Russia, however, the term "sustainability" has never been popular. Right from the beginning of when the concept started to gain momentum in the West, from the 1990s onwards, there have been critical accounts of the applicability of the concept in the Russian context, despite the fact that Moscow has signed the sustainability documents fostered by the UN. The main "problem" with sustainability discourse for Russian critics can be found with its social dimension and, in particular, its emphasis on giving voice to local communities to define the course of action concerning the use of space and natural environments. This liberal ideal, built into the concept of sustainability, is largely at odds with the authoritarian power structure that has come to prevail in Russia under Putin. However, sustainability has entered the corporate world to the extent that major Russian companies within the extractive industry, including oil and gas companies, produce sustainability reports on a yearly basis. Still, the official policies, such as the "Year of the Environment 2017," are about the environment and pollution, not about the societally and socioeconomically loaded term, sustainability.

In Kazakhstan, environmental issues have not figured prominently in wider public discussions either, and environmental policy has developed in a decidedly top-down fashion as best illustrated in the "future energy" theme of the EXPO 2017 Astana. The country's "National Concept for Transition to a Green Economy" also sets a bold timeline to move from under 1 percent renewable energy sourcing when it was adopted in 2013 to 3 percent by 2020, 30 percent by 2030, and 50 percent by 2050. These lofty goals may not translate into reality, but policymakers and scholars cannot dismiss these new sustainability initiatives as a farce or irrelevant, as commentators often do; real changes are occurring in both countries' energy landscapes. The increasing rhetoric around promoting renewable energy points to some key transformations underway in both "energy superpowers" of Eurasia, and the similarities between Kazakhstan and Russia are just as telling as their differences.

Who is Promoting Renewable Energy?

In his recent book, <u>The Geopolitics of Renewables</u>, Daniel Scholten writes, "This transition toward renewable energy represents a game changer for interstate energy relations." Geopolitics is, of course, as much an issue of domestic politics as international politics. But when indexing *global* geopolitics, it is clear that efforts to promote renewables in Kazakhstan and Russia are intimately related to how leaders in the two countries seek to position their states in the regional and international sphere. In both countries, using the language of sustainability has been, to some extent, part of the state and corporate sectors' effort to align themselves with the globally dominant narrative about promoting "green economies" and, thus, to promote a positive image of Kazakhstan and Russia as

modern and investment-friendly countries. This image-consciousness is arguably stronger in Kazakhstan, which has consistently accorded more importance than Russia to gaining Western approval since independence in 1991. But to understand why both countries are home to a growing (if disparate) number of sustainability projects, it is necessary to first examine some commonalities and differences around *who* is promoting renewable energy in each of them.

In Kazakhstan, most renewable energy projects have been advanced with the support of international organizations, including the United Nations Development Programme (UNDP), but primarily the European Bank for Reconstruction and Development (EBRD). For example, the EBRD has played a key role in shaping Kazakhstan's legal framework on renewable energy and has provided the lion's share of financing for most of the country's large-scale renewable energy projects, including two major solar projects in Zhambyl, Burnoye Solar-1 and Burnoye Solar-2 (50 megawatts each). Financing for these projects has also come from Samruk-Kazyna Invest, an investment arm of Kazakhstan's sovereign wealth fund and United Green, a private British strategic investment group, while the loans have been guaranteed by Samruk Energy, Kazakhstan's national energy company, which, according to the ERDB, has seen these solar initiatives as a way to diversify its portfolio. A diverse portfolio is also of interest to Kazakhstan's energy decisionmakers, not just in terms of sourcing, but also in terms of international investment. Political leaders especially emphasize the potential of renewable energy projects to attract FDI and they consistently highlight the involvement of foreign firms. This effort to appeal to foreign investors is a key reason that Kazakhstan's leaders seem to focus more on the modern image associated with renewables, which is less noticeable in the case of Russia.

Russia has also seen recent advances in developing a legal framework to enable deploying renewable energy, albeit without the EBRD's involvement. In the Russian case, we see that promoting renewables has largely been tied to energy efficiency. Both the Federal Energy Efficiency Law of 2009 and the Federal Heat Law of 2010 rely on the idea that by promoting renewables, energy efficiency is enhanced. This is probably the case, as renewable energy installations and infrastructure mostly replace outdated coal and heavy-oil power plants. However, the logic here is also linked to Russian energy strategies, which since the early 2000s have positioned renewable energy sources as a substitute for fossil fuels (primarily oil and coal), which are then freed up for foreign export, which in turn constitutes the more "efficient" use of these resources. Improving energy efficiency in energy extraction, transport, and consumption was justified originally by economic, environmental, and foreign-policy (soft power) gains, especially during the Dmitry Medvedev-era push for modernization (2008-12). The conservative turn in Russian domestic and foreign policies, experienced since Putin's 2012 re-election, have basically dropped the latter two justifications out of the equation, leaving money as the primary reason to enhance energy efficiency.

Despite efforts to construct a normative basis for renewables in Russia, there are still major problems related to legal issues--the system is non-transparent and full of loopholes--that are impossible to tackle by small- and medium-sized business players. Furthermore, Russia's energy sector is dominated by colossal parastatal companies and state corporations (e.g., Gazprom, Lukoil, Rosneft, Rosatom). In this institutional setting, it is extremely difficult to promote renewables. In some settings, such as the taiga (coniferous) zones of Russia, however, it is more plausible to carry out projects that substitute oil and coal with biofuels. Since the forest industry is a powerful actor in these regions, local actors have an interest in expanding bioenergy. According to national energy strategies, the Far North is a pilot area that would lead the way for wider bioenergy deployment across the country. However, power-plant projects using bioenergy have been scarce. They have been hindered largely by the fact that the forestry-based regions of Russia are tied to the Northern Delivery system (severnyi zavos) that transports heavy oil and coal from outside the region for local power plants. The networks of power and the rents involved in the system make it difficult to build new energy capacities based on renewables, despite the nudge from the central government to adopt a more environmentally and financially sustainable energy system.

Both Kazakhstan and Russia are so dominated by colossal fossil-energy industries that deploying renewables is also a major infrastructural challenge. In Kazakhstan, approximately 87 percent of electricity is generated from hydrocarbon-powered plants (75 percent coal-fired stations and 12 percent gas-fired plants), with the remainder coming from hydroelectric power stations. In Russia, in concrete infrastructural terms, the obstacles are especially related to the central role of gas, which represents half of the country's energy consumption. Historically, the switch from coal and heavy oil in many Russian industrial centers has been a boon for human health and the environment, as emissions have decreased. Yet, this infrastructurally determined dependence on gas has turned into a major barrier to de-carbonizing Russia.

Moreover, the *Gazifikatsiia Rossii* program aiming to expand the gas-pipeline system to the national (the Far East) and regional (countryside towns and villages) peripheries of Russia is squeezing the space for renewables. Therefore, the actors that have been able to build renewable energy capacities today are big domestic and foreign actors, not regional or local energy companies that could revolutionize the energy market from below. For example, the Russian state corporation Rosatom, which is responsible for nuclear power as well as weapons, entered the renewables scene with large-scale investments in wind power. Fortum Oyj, based in Finland, is also advancing both wind and solar power in Russia, having won the right to build 110 MW of solar capacity and 823 MW of wind capacity at a Russian Capacity Supply Agreement (CSA) auction in June 2018.

The Geopolitics of Renewables

Russia and Kazakhstan are becoming home to more renewable energy schemes. The pace of change and the scale of alternative energy sectors vis-à-vis hydrocarbon sources is impossible to predict. Nonetheless, policymakers and scholars alike should be paying attention. As the Kazakhstani and Russian projects demonstrate, individuals and institutions in both states are making strategic decisions based on the world's shifting energy economy, which is starting to see growing interest and investment in renewables. Yet these cases show that so far only big actors are able to push forward renewable energy projects on a scale that has any significance. Together the online capacity (200 megawatts) and ongoing wind-power investments (1,800 megawatts) in Russia constitute about 2,000 megawatts, which is an extremely low figure for the world's largest country with enormous wind-power potential. Tellingly, China currently has more than 150 times that wind-power capacity online, while the United States has about 80 times more. However, a 2016 governmental decree aims to build more than a dozen wind farms larger than 100 megawatts with an objective to gain a total wind-power capacity of 4.5 gigawatts by 2030. Yet, such an objective requires transparent rules of the game for all actors, small and large. Otherwise, the plan is subject to governmental detrimental pivots in policy endemic to the boom-and-bust cycles of resource-dependent economies.

Recent developments in Russia and Kazakhstan also point to the myopia of some Western commentators who uncritically advance environmental sustainability as something inherently positive. Indeed, when brandished by these Euro-American policymakers, intellectuals, and activists, sustainability is often understood to advance, or at least operate within, a particularly liberal democratic set of norms. Yet in both Russia and Kazakhstan, sustainability agendas do not derive their legitimacy from or resonate with a broader popular consensus about the need to protect the natural environment as has long been found in the West (though perhaps increasingly defined around a dissensus, the public debate about environmental policy in the West is boisterous and far-reaching rather than limited and largely muted). Rather, Russian and Kazakhstani actors promoting sustainability have actively mobilized their discursive hegemony to narrow the contours of the conversation to focus on a slim and politically palatable set of issues. For example, this choice is evident in the way environmental awareness and citizenship is promoted within the "Year of the Environment 2017": the Russian Geographical Society, previously an independent academic society turned into a shell-NGO of the Putin regime, is portrayed as the envoy of popular worries and sentiments concerning the environment.

By strategically highlighting the positive, modern, and allegedly progressive image of a state advancing a "green" agenda, the hype being conjured around renewables also works to push aside more sensitive questions about Kazakhstan and Russia's extraordinarily inefficient energy systems. So too are the countries hamstrung by

"business as usual" approaches in the energy sector, failing or completely lacking infrastructures, regional development inequalities, widespread poverty among citizens, and painful foreign policy challenges that might appear to undermine state sovereignty. All of these challenges demand huge political and financial capital to address properly, but none appear as reasonable targets for shortsighted political and financial elites who, as anywhere, tend to prefer quick returns on their investments.

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