

A ‘Steppe’ into the Void: Central Asia in the Post-oil World



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Abstract Kazakhstan, Turkmenistan and Uzbekistan are petrostates and therefore trapped by the global energy transition. This chapter delves into the nexus between the effects of the energy transition, international stability and regime stability in Central Asia’s fossil-fuel dominated economies—a nexus of increasing theoretical and policy relevance as we enter a post-oil era in world politics. The Central Asian hydrocarbon producers are torn between their own aspirations to shift to a low-carbon economy and the vested interests of their elites, which are embedded in fossil-fuel dependency. Despite making international commitments to energy transition and developing policy frameworks to expand the renewable energy sector, the Central Asian petrostates have continued using foreign policy to seek fossil fuel revenue by forging new international trade and investment relations outside of the region. The chapter particularly highlights an under-researched aspect of the global energy transition, namely the role of informal elites in influencing foreign policy strategies, and in undermining energy transitions at the local level in doing so.

Keywords Petrostates · Energy transition · Central Asia · Vested interests · Foreign policy

1 Introduction

This chapter focuses on the ways in which the Central Asian petrostates have altered their foreign policies, domestic efforts and growth strategies in response to the energy transition, and the repercussions of this for domestic and international stability. It dwells on a pair of related issues: regional energy geopolitics and the regime stability of individual Central Asian states. To investigate the links between these, the study

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engages three bodies of knowledge: energy geopolitics and the shift from hydrocarbons to renewable energy (O’Sullivan et al. 2017; Van de Graaf and Bradshaw 2018; Scholten et al. 2020); domestic regime stability in petrostates (Beblawi and Luciani 1987; Acemoglu and Robinson 2006; Morrison 2009); and the political economy of energy in Central Asia (Skalamera 2017; Shadrina 2020; Vakulchuk and Overland 2021). In doing so, this chapter presents a new framework for understanding the relationship between the effects of the global energy transition and the interests of hydrocarbon producers in the under-studied region of Central Asia.

In the literature on revenue loss in resource-based economies, diversification is often presented as a necessary remedy (Shehabi 2019). These studies often overlook petrostates’ attempts to forestall change and maintain the status quo through strategic foreign policy shifts. In this chapter I argue that there has been a far-reaching shift in energy relations between the Central Asian petrostates and major fossil fuel importers—the EU and China. The two main drivers of this shift are China’s foray into the region as a new energy hegemon and the effects of the energy transition. Regarding the latter, some emphasize the constitutive role of Western climate change thinking in socializing post-Soviet leaders and persuading them—or not—to accelerate their own shift to renewables (e.g. Koch and Tynkkynen 2019). By contrast, I argue that Central Asian leaders’ behaviour has been influenced by the lessons they have drawn from observing the consequences of the energy transition on the hydrocarbon portfolios of major energy companies. I argue in particular that the ongoing energy transition has driven *other* relevant hydrocarbon producers (Russia and the United Arab Emirates) to invest in the Central Asian hydrocarbon sector to decrease the pace of regional decarbonisation. Meanwhile, the Central Asian petrostates themselves have adapted in two contrasting ways: by adopting new ‘green’ identities and policies on the one hand, and by seeking the support of other hydrocarbon producers—and China—for ‘old’ oil and gas investments and sales on the other.

The chapter first reviews the renewable energy (RE) policies and targets set by the three Central Asian petrostates, Kazakhstan, Uzbekistan and Turkmenistan. Because these RE strategies have been discussed in detail elsewhere (e.g. Eshchanov et al. 2019a, b, c, d), I here examine *to what extent* and *how* these policies have been adopted and implemented. I then explain how national leaders and decision-makers have drawn lessons from recent contemporary shifts in the RE portfolios of European countries in ways that have greatly affected their foreign policies, and ultimately, shaped their decisions to turn to China, Russia, Turkey and the Gulf countries for oil, gas and nuclear trade and investment. Ultimately, I shine a light on a critical, yet under-researched, aspect of the energy transition, namely the role of informal elites in undermining local energy transitions by protecting their own fossil-fuel-dependent interests. I conclude that a form of foreign policy decision-making that is highly volatile and unpredictable because it is susceptible to fossil fuel-related revenues is likely in view of the local elites’ dependence on hydrocarbon rents.

2 Renewable Energy Policies and Targets

In response to the global transition to renewable energy, Central Asian states are striving to shake their over-reliance on hydrocarbon-dependent growth. In addition to abundantly available hydropower resources (Eshchanov et al. 2019d), the total amount of solar radiation received by the five Central Asian countries is sufficient to generate 20 times more electricity than they currently generate, (Eshchanov et al. 2019c), while the resource potential for wind power in all the Central Asian countries is even higher (Eshchanov et al. 2019b). Thus far, the high capital costs of RE projects, coupled with a lack of legislative frameworks for the sector, have hindered development. However, RE costs are now falling rapidly and laws are being put in place to foster RE development. Yet, hydrocarbons still dominate domestic electricity generation and the region's wider economies. In Kazakhstan, solar and wind energy are only slowly emerging, while they are entirely new technologies in Uzbekistan and Turkmenistan. Around much of Central Asia, hydropower and oil and gas-fired power plants still account for almost all electricity generation (Dudley 2020).

Between 2019 and 2020, the generation of electricity by renewable sources in Kazakhstan grew by 74% to 3.24 billion kWh (3% of the total energy generated in the country [Energy Central News 2021]). To encourage an attractive investment climate and to establish the framework needed for RE investment, Central Asia is seeing significant structural and regulatory reforms in the electricity sector and wider economies (Wishart and Abidi 2021). Kazakhstan is the first country in Central Asia to pass carbon-pricing legislation and establish a national Emissions Trading Scheme (ETS) (see Abdi et al., this volume).

In addition to current RE use, all countries of the region have precise targets for RE capacity expansion (Eshchanov et al. 2019a).¹ However, the only central Asian state to have developed meaningful amounts of non-hydropower RE to date is Kazakhstan, which has met its target of 3% of the country's energy output from renewable energy sources (RES) by the end of 2020, and aims for RES to generate 10% of its energy needs by 2030 and 50% by 2050. Uzbekistan aims to grow the share of renewables, including hydropower, in its electricity generation to 25% by 2030 (Eurasianet 2021). This suggests that Kazakhstan, and to a lesser degree other Central Asian petrostates, are recognizing the political benefits and opportunities of being at the forefront of the energy transition.

The other Central Asian nations are likely to hasten their own energy transition as incumbents adapt to new conditions or learn from Kazakhstan's experience. Policies that foster renewables have achieved institutional acceptance and successful implementation chiefly when their advocates have been able to link environmental goals with economic ones (Blondeel et al. 2019). However, as I will explore in more detail below, issues of prestige, status and leadership are also critical. The different levels of renewable energy sector development across the countries of Central Asia indicate

¹ Turkmenistan became the last of the five Central Asian republics to introduce a renewable energy strategy and pass a law on renewable energy in March 2021 (Wishart and Abidi 2021).

the importance of individual social and political agents in fostering decarbonisation, even as structural changes (a system-wide energy transition) condition their behaviour. Kazakhstan has been more persuasive than its neighbours in framing green ideas in such a way that they resonate with relevant audiences. Thus, as I demonstrate below, the transition to RE is most likely to lead to tangible results in Turkmenistan and Uzbekistan once the old elites are able to discern a reasonably bright future for themselves in the new social order.

3 A Strengthened Transition Profile: The Role of China

As the Central Asian petrostates expand their renewable energy sectors to varying degrees, the role of Chinese business is set to increase, with disruptive effects on Russia's energy policy in the region. Through its Belt and Road Initiative (BRI) and deepening of energy trade and ties with the former Soviet states, China has rapidly expanded its economic presence in Central Asia. Until recently, BRI energy investment was focused on fossil fuels. Yet, in 2020, even as Beijing's overall BRI spending slowed, renewables overtook fossil fuels for the first time in BRI energy investments, increasing from 38 to 57% in one year (Eurasianet 2021). China's investments have long been influenced by its know-how. China now produces 70% of the world's solar panels and holds a leading position in battery manufacturing, along with access to the raw materials needed to make them, and it is also a major wind turbine manufacturer.

China offered Kazakhstan a taste of its technologies, gifting a 1 MW solar plant to the Alatau Innovation Park near Almaty in a 2011 agreement between the two countries, intending to demonstrate Chinese know-how and encourage Kazakhstan to look east for its green energy needs. These overtures paid off, and in June 2018, Ningbo-based Risen Energy began work on a \$39 million 40 MW solar photovoltaic plant in Karaganda. The same company is building a 63 MW solar photovoltaic power plant in Chulakkurgan, north of Shymkent (Eurasianet 2020). China is also well represented in Uzbekistan's new renewable projects, but it is not the only player.² Firms from Saudi Arabia and the United Arab Emirates (UAE) have also secured contracts to develop solar power projects. In October 2019, the Uzbek Energy Ministry announced that UAE firm Masdar had been awarded a contract to build a 100 MW solar park in Navoi Province.³

² There were reports in September 2019 that Chinese company Liaoning Lide was building a wind farm in the Gijduvan district of Uzbekistan's Bukhara Province.

³ *Renewables Now*, Masdar wins solar tender in Uzbekistan with bid of USD 26.79/MWh, October 7, 2019; Bruce Pannier, Fossil Fuel Giants Kazakhstan, Uzbekistan Slowly Going Green, RFERL, February 8, 2020.

4 Structural Obstacles to the Growth of the RE Sector

For almost three decades, the abundance of oil, gas and other natural resources in Kazakhstan, Uzbekistan and Turkmenistan has underpinned an economic reliance on raw material exports (Vakulchuk and Overland 2021). Now the oil and gas-rich countries, Kazakhstan *in primis*, are making substantial commitments to a 'green economy' through policies, programmes, action plans and public statements at both international and domestic levels. Diversification, however, is easier said than done, particularly when it comes to promoting stronger exports outside the oil and gas sector, as various political forces create pressure to continue investing in fossil fuels.

Thus, despite signs that Central Asian countries are eager to create low-carbon opportunities, a number of barriers hinder the development of the region's renewable energy sector. These include patchy regulatory frameworks, limited infrastructure, difficulties in attracting finance and technical expertise, insufficient public awareness of the benefits of RE policy, and insufficient data and information to evaluate current efforts and future potential (Laldjebaev et al. 2021). The lack of effective policy, however, appears to be the largest impediment. Most crucially, current reforms have failed to spark significant growth in the renewable electricity sector as the laws that have been adopted suffer due to a lack of actionable measures or failure to allocate responsibility for implementation (Shadrina 2020). Reforms wither due to ineffective implementation by economic elites, especially when self-interested networks perceive that turning points, such as the energy transition, will cut them off from access to power and assets (Skalamera Groce 2020).

Despite a flurry of formal strategies and programmes to increase RE deployment in all three countries, the use of informal institutional designs, practices and procedures for implementation means that rules on 'good environmental governance' are much easier to draw up than to enforce. For instance, in Uzbekistan, despite ambitious goals, the only notable progress appears to be the 100 MW wind farm under construction in Navoi Province, while three out of five solar projects that were announced have now been postponed (Eshchanov et al. 2019b). Efforts to promote solar projects have been undermined by a number of factors, including the fact that the state-owned electricity company is yet to be unbundled, while RE policies lack useful goal benchmarks and comprehensive long-term development strategy (Laldjebaev et al. 2021). Similarly, in Turkmenistan, despite a recently adopted law on RE sector development, there is no strategy for the actual development of RE sources. With no roadmap for implementation, there is also no monitoring or follow-up on RE plans (Laldjebaev et al. 2021).

In Kazakhstan, frequent changes in legislation and the slow translation of policy ideas into action deter international investors, while support for fossil fuels in domestic supply and for export remains strong (Skalamera Groce 2020; Wishart and Abidi 2021). Public awareness of (and support for) the energy transition is notably higher in Kazakhstan than in the other Central Asia petrostates, yet corruption among political and economic elites is increasingly severe (Kudaibergenova and Laruelle 2022). Hydrocarbon trade provides significant material benefits to certain groups of

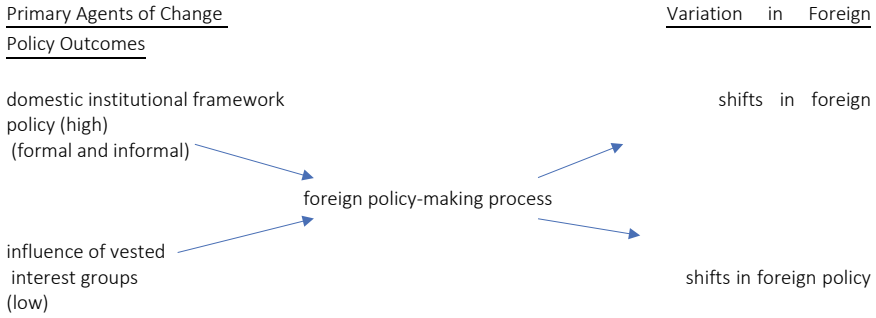


Fig. 1 Foreign policy strategies under conditions of variable hydrocarbon revenues (i.e. energy transition)

people, and actual reform is avoided because of its high opportunity costs, namely, the potential loss of the benefits to those with vested interests (see Fig. 1).

Lucrative oil, gas and raw material rents tend to benefit corrupt leaders and elites, foster corruption, and deepen oppression as leaders and policymakers use them not only to support their own affluent lifestyles but also to expand their political control by subverting opponents and obstructing projects and policies that threaten their source of income (Fattouh et al. 2019). Given the rigidity in government spending, oil policy is ‘elevated’ to a cure-all to boost revenues and address economic turmoil. Meanwhile, oil rents, and thus pre-existing fiscal buffers, tend to erode over time, leading to a vicious cycle that perpetuates the fiscal deficit (Fattouh 2021).

In other words, declining oil and gas revenues limit the government’s capacity to ensure autocratic stability through high social spending commitments and patronage measures targeting the wider population. In January 2022, civil unrest over fuel price hikes in Kazakhstan demonstrated just that; the population had little willingness to accept possible budget cuts and unsubsidized energy prices. This also shows that economic turmoil from plunging hydrocarbon revenues will be disruptive and could lead to political crackdowns and a more volatile foreign policy, as the elites seek to hold on to power (Skalamera, 2020).

5 A Shift in Power Relations

Central Asian state control over a diminishing hydrocarbon market, coupled with the onward global march of the energy transition, may result in a dramatic shift in power relations.⁴ To the long-term structural means of entrenching domestic power and the exercise of influence over other countries will be added the impact of ‘strategic

⁴ Even as strategic hydrocarbons are still essential to industrialized countries, especially in the Asia-Pacific, recent technological innovations have increased the role of renewables. Abundance of global oil and gas supply has also reduced petrostates’ power.

shocks', such as a Dutch court's finding against Royal Dutch Shell and the subsequent order to slash emissions harder and faster than planned.⁵ In this context, the energy transition has resulted in two simultaneous and contradictory responses: a formal response that is broadly supportive of the transition, and an informal response that seeks to preserve individual elite advantage, essentially acting to undermine the transition at the local level. Thus, on the one hand, and despite lagging investment and stalled project timelines, Central Asia is formally embracing the global energy transition (Vakulchuk and Overland 2021), yet plenty of obstacles remain, including weak governance, poor infrastructure and grand corruption that cripple economic development. This brings us to the more informal side of Central Asia's 'adaptation' to the global energy transition.

Informal elites might be in a position to use their influence to switch to alternative buyers of traditional hydrocarbons, looking elsewhere to maintain dependence on the sale of oil, gas and other raw materials, and thus slow the pace of the energy transition. The Central Asian petrostates have focused on strengthening energy, trade and diplomatic ties with other oil and gas-rich countries, such as Russia and Iran, and most significantly, making massive investments into their own untapped hydrocarbon and mineral supplies. This may be a factor contributing to Russia's renewed presence in the region. Oil and gas revenues are then used to build up extensive military-security apparatuses, which are occasionally used for political repression of dissident voices, as we saw in 2021 following the fuel protests in Kazakhstan.

6 Diversifying Hydrocarbon Revenue Sources

While global consumption of all fossil fuels decreased in 2020, with the largest declines in North America (−8.0%) and Europe (−7.8%), the Asia–Pacific region recorded the lowest decrease. China (+2.1%) is the only major country where fossil fuel consumption actually increased in 2020 (BP Statistical Review of World Energy 2021). While many European states have reduced their dependence on oil and gas imports from Central Asia, China has increased its reliance on hydrocarbons from the region. Fossil fuels still account for nearly 84% of global consumption and the Asia–Pacific region alone accounts for nearly 50% of that consumption.⁶ This presents Central Asian petrostates with an alternative market opportunity for the next 10–20 years at least.

Sandwiched between regional powers China and Russia, Kazakhstan, for instance, is looking to diversify its portfolio investments into South East Asia. The government is now investing in start-ups across East Asia in an effort to strategically position itself as the region's financial gateway to Europe and the Middle East. China and

⁵ In May 2021, a civil court in The Netherlands ruled that by 2030 Royal Dutch Shell must cut its CO₂ emissions by 45% compared to 2019 levels (Bloomberg 2021; Reuters 2021).

⁶ Statista, Primary energy consumption worldwide from 2010 to 2020 by region, available at: <https://www.statista.com/statistics/263457/primary-energy-consumption-by-region/>.

Russia, however, still loom large in these efforts to diversify away from Europe. In Kazakhstan, China has a 24% stake in oil production and a 13% stake in gas production. In 2019, it was reported that Kazakhstan would divert some oil from Europe to China and double its gas exports to China (Reuters 2019). Russia has also made itself a useful and enthusiastic ally, not only in delaying the energy transition but in counterbalancing China's heavy energy investments in the region. Kazakhstan and Russia have recently signed an MoU to pursue the construction of energy corridors to China and Europe and to establish joint infrastructure for the sale of compressed natural gas (CNG) (Vestnik Kavkaza 2022). According to the MoU, the energy ministries of Russia and Kazakhstan aspire to promote natural gas as a 'bridge fuel' on the Europe-Western China international transport route.

Russia's burgeoning external influence has focused on spurring joint ventures in hydrocarbon and nuclear energy development. The flow of Russian gas and oil investment to exert control over fuel-dependent Central Asia might now result in a firmer and more combative stance towards the West. As the energy transition advances, Russian companies are developing new and smaller-sized oil and gas fields or purchasing shares from Western companies leaving the region. In October 2021, Kazakhstan's President Tokayev revealed that Russia's oil giant Lukoil would help his country develop Khazar, an oil field located next to the giant Kashagan field in Kazakhstan's portion of the Caspian Sea (Caspian News 2021a). In 2019, Shell scaled back its oil and gas exploration plans for Khazar due to 'the low profitability [...] against the background of high capital expenditures', in what was likely a divestment effort to reduce the company's own emissions profile. Along with Russia's Rosneft, Lukoil is also a lead explorer in Kazakhstan's Karachaganak and Tengiz oil and gas fields.

The Kazakh authorities are also in talks with Russia's state-owned firm Rosatom for the possible construction of a nuclear power plant. Russia is thus using its role as the leading exporter of civilian nuclear reactors to boost its geopolitical influence and shape the rules in the sector (Bordoff 2020). The government of Uzbekistan is also working with Rosatom to add nuclear to its energy balance along with RE.

Turkey is also emerging as a key energy partner for the region. Ankara has long aspired to operate as a gateway and power broker of Eurasian energy supplies. Uzbekistan has recently announced several investments in combined cycle gas turbine (CCGT) power generation assets in the south of the country, with crucial funding from Turkey. And in September 2020, it was announced that Turkey's Cengiz Energy will establish a natural gas combined cycle power plant in Uzbekistan with an investment of US\$150 million (AA Energy 2020).

6.1 Intra-Regional Cooperation

Given that the survival of unpopular oil and gas-reliant elites still depends on the sale of hydrocarbons, we have recently witnessed a rekindled interest *among* Central

Asian hydrocarbon producers too, in forging closer bonds for joint oil and gas investment and trade.

In a remarkable sign of tightening relations, Iran, Azerbaijan and Turkmenistan signed a trilateral natural gas swap deal on the sidelines of the 15th summit of the Economic Cooperation Organization (ECO), in Ashgabat, on 27 November 2021 (Eurasia Review 2022). Iran and Turkmenistan had previously been locked in a gas dispute that hindered cooperation. Azerbaijan and Turkmenistan, too, have resolved their competing claims over oil and gas fields located in the Caspian Sea. Iran cites the pursuit of more active 'gas diplomacy' as the reason for a reconciled relationship with Turkmenistan.

At the same time, part of the driving force behind resolving their long-lasting gas dispute comes from Turkmenistan. As the sixth-largest holder of gas reserves in the world, Ashgabat is pursuing a gas export route diversification policy in four geographical directions: to the North (Russia), East (China), South (Afghanistan and Pakistan), and West (Iran, the Caspian Sea, and Azerbaijan). Turkmenistan, however, faces significant challenges in implementing this strategy. Europe's ambitious 'greening' policies mean that a Trans-Caspian pipeline to supply Turkmen gas to Europe is unlikely, while the country's diversification of revenue sources has stalled. In such circumstances, the resumption of the Turkmenistan-Iran gas agreement will allow Ashgabat to raise hydrocarbon revenues as well as diminish reliance on China, its main gas export market. In line with this diversification drive, President Berdymuhamedow has recently expressed readiness to renew partnerships with Russia in the sphere of oil and gas in the Caspian Sea (Caspian News 2021b).

In sum, given the central role that the oil and gas sectors continue to play in the region's economies, the objective of maximizing fossil fuel revenues will continue to rank highly in any policy decision and act as a constraint on foreign policy choices. Essentially, the oil and gas-producing nations of Central Asia will be more prone to foreign policy volatility to compensate for declining hydrocarbon revenues.

7 Conclusions

Given their heavy reliance on fossil fuel rents, Central Asian petrostates might find it difficult to pursue policies that jeopardize the sectional interests of economic elites. As a result, energy transition is a delicate tightrope for the leaders of these three petrostates to walk. They understand that the elites to which they are beholden rely on fossil fuels, but simultaneously recognize that the future of their economies—and the global economy—depends on renewable energy. Scholarly analysis has not, as yet, systematically addressed the interactions between powerful informal elites and government agendas in pushing through socio-economic reforms in critical transition periods.

This chapter has therefore sought to provide a more nuanced understanding of the interactions between informal elites, the state and new transnational partners in three crucial petrostates as we enter a post-oil era in world politics. In this new

era, the hydrocarbon producers of Central Asia are in a less favourable position. This research, however, suggests that, at least compared to the early years of independence, Central Asian petrostates have both an increased motivation and a greater capacity to ‘go abroad’ in their search for fossil fuel revenues to balance their budgets.

One of the most interesting—and under-studied—effects of the global energy transition is precisely this tangled web of vested interests and addiction to fossil-fuel sales that have bound [Central Asian] hydrocarbon producers ever more tightly to their primary export. Thus, instead of reducing economic overdependence on hydrocarbons—a seemingly logical step, given the inexorable decline in global fossil fuel demand—the energy transition has directly affected foreign policy choices and spurred a desperate search for new hydrocarbon customers.

Thus far, the energy transition has created more volatile and unpredictable foreign policy profiles across the region driven mainly by opportunistic relationships that will last for generations to come. Future research should look deeper into complexities, such as the institutional relationships between the state and elite actors, and how these relationships can be implicated both in domestic political struggles and in the search for new transnational opportunities that the energy transition is unleashing.

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