



Universiteit
Leiden
The Netherlands

The distributional effects of the EU's and China's climate diplomacy in Central Asia

Skalamera, M.

Citation

Skalamera, M. (2025). The distributional effects of the EU's and China's climate diplomacy in Central Asia. *International Environmental Agreements: Politics, Law And Economics*. doi:10.1007/s10784-025-09680-2

Version: Publisher's Version
License: [Creative Commons CC BY 4.0 license](https://creativecommons.org/licenses/by/4.0/)
Downloaded from: <https://hdl.handle.net/1887/4245888>

Note: To cite this publication please use the final published version (if applicable).



The distributional effects of the EU's and China's climate diplomacy in Central Asia

Morena Skalamera¹

Accepted: 11 April 2025
© The Author(s) 2025

Abstract

This article focuses on the cases of Kazakhstan and Uzbekistan, the two economic powerhouses of Central Asia, to provide an alternative account of the distributional effects of the EU's external climate policy, with a specific focus on the European Green Deal (EGD). By stressing both *vertical* state-society relations *within* the local realities of Kazakhstan and Uzbekistan and *horizontal* interstate power relations *among* states, this framework links local and national perceptions of the EU's and China's climate action in Central Asia through a novel approach. The alternative model hypothesizes that China has had more success in appeasing Central Asian fossil fuel-addicted elites while at the same time addressing the major distributional conflicts that decarbonization has caused in the vulnerable areas of Kazakhstan and Uzbekistan. The article relies on documentary analysis (including policy, business, and media sources) and in-depth interviews with local stakeholders to examine the links between (i) the effects of the different policies of the EGD, and the Carbon Border Adjustment Mechanism (CBAM) in particular, on national and cross-border environmental initiatives of countries in Central Asia, and (ii) China's goal of becoming a global leader in the energy transition partly through solutions for Central Asia's green development, including financing and expanding renewable energy technologies and equipment while simultaneously invoking a 'just energy transition' through support for traditional energy security.

Keywords EU · European Green Deal · CBAM · China · Climate Policy · Distributional effects

Abbreviations

BRI	Belt and Road Initiative
BRICS	Brazil, Russia, India, China and South Africa
CBAM	Carbon Border Adjustment Mechanism
EBRD	European Bank for Reconstruction and Development
EGD	European Green Deal
EU	European Union
GDP	Gross Domestic Product

✉ Morena Skalamera
m.skalamera@hum.leidenuniv.nl

¹ Institute for History, Leiden University, Leiden, The Netherlands

NGO	Non-Governmental Organization
RE	Renewable Energy
SCO	Shanghai Cooperation Organization

The economic literature has long recognized and discussed the wider economic implications of climate policy-making (Jenkins, 2014; Monasterolo et al., 2019). Among the factors that hinder climate legislation in the EU's external partner countries are reliance on the export of carbon-intensive commodities by the elites (Skalamera, 2020) and resistance among groups in society that oppose the perceived effects of EU's 'unjust' external climate action (Grimm et al., 2021a).

Kazakhstan and Uzbekistan, like the rest of Central Asia, are highly vulnerable to the impacts of climate change. While both countries understand the need to attract foreign investors for renewable energy (RE) funding and technology provision, the bulk of energy investment is still in oil and gas extraction, with too little investment in RE sources. Both Kazakhstan and Uzbekistan's economies routinely rank among the most carbon- and energy-intensive in the world. Coal consumption has increased in recent years and fossil fuel investment has not abated even as both countries simultaneously invested in clean energy.

Still, as air pollution, droughts, floods, and water scarcity gain social and political recognition as urgent priorities, the resulting energy transition has spurred new ways of thinking about regional security and geopolitics: (i) for one, a political recognition of climate change and its impact on water resources is spurring much overdue regional cooperation, (ii) the EU's Carbon Border Adjustment Mechanism (CBAM) brings new challenges for the region (though not all countries feel the effects equally: Kazakhstan, with its reliance on carbon-intensive exports, is set to bear the heaviest burden under the new policy, while Uzbekistan, which also exports lower-carbon goods, will experience somewhat more moderate impacts), and (iii) both countries continue to employ energy pricing that is not cost-reflective and have retained high subsidies for fossil fuels. Recently, Kazakhstan has made some progress in putting a price on carbon through its KAZ ETS emissions trading system and is considering a carbon tax to cover the industries and emissions not included in the KAZ ETS.¹ In Uzbekistan, the European Bank for Reconstruction and Development (EBRD) predicts that ongoing tariff reforms will help cut energy subsidies and reduce public expenditures by an estimated 1.5 percentage points of GDP.² These policy measures by both states are related to their accelerating transition to cleaner energy sources.

There is, however, a gap in research on how local communities and business and political elites in both countries perceive global climate policies and the resulting low-carbon energy transition. The article aims to answer the following questions: *What are the effects of the EU's and China's climate policies on both vertical equity (across income groups in Kazakhstan and Uzbekistan) and horizontal equity (within business and policy partners in said countries), and how do such effects influence local societal support for their climate policies? Relatedly, the paper asks what are the external dimensions of (in)equity associated with the EU's EGD and more recent CBAM policy?*

¹ Srk.com "Carbon Accounting in Kazakhstan's New Environmental Code" December 2022.

² EBRD, "Central Asian economies to record strong growth despite natural disasters in the region", 15 May 2024.

What specifically constitutes just energy transition from the perspective of social equity is subject to lively debate (Dolšák & Prakash, 2022; Sovacool, Hess, et al., 2022; Sovacool, Newell, et al., 2022) and is probably best understood in the contexts in which transition efforts emerge and are developed rather than in abstract or a priori (Newell et al., 2022). Although there will always be short-term losers from transitions, including in low-carbon contexts, an EU-led 'just energy transition' is defined by the author as one that deepens dialogue and participation with external stakeholders subject to social inequalities and distributional impacts resulting from the EU's climate action. What the socioeconomic effects of the EU's climate policies are on Central Asia and how they affect local support for EU-led climate policies are ultimately empirical questions, which the paper addresses through comparative analysis of the EU's and China's energy and climate policies in Kazakhstan and Uzbekistan.

A burgeoning literature has engaged with local perceptions of global climate policies and/or the resulting low-carbon energy transition. Sovacool, Hess, et al. (2022) and Sovacool, Newell, et al. (2022) examine a wide range of cases of social opposition to clean energy infrastructure. Similarly, Bridge et al. (2013) make a case for examining energy transition as a geographical process, involving the often contested reconfiguration of current patterns and scales of economic and social activity. O'Sullivan et al. (2020) argue that given the dominance of 'external forces' in energy transition processes, economically fragile rural communities hold low capacities to internalize benefits, resulting in an 'uneven energy transition.' Given that local opposition to the deployment of RE technologies has been significantly higher than expected, Lennon et al. (2019) map community perceptions and implementation of the energy transition across five European democracies. Thombs (2019) argues that democratization of the social sphere is necessary to facilitate a 'just transition,' with a focus on decentralizing social participation processes within democracies. A common feature of this body of scholarship is a focus on local oppositions to RE technologies within (mature) democracies and pathways for greater citizen engagement in low-carbon energy transition. Yet, little systematic empirical evidence exists on how climate obstructionism has not only reshaped political alignments *across* mature democracies but also *within* authoritarian regimes. Scant emphasis has been placed on calls for a delayed 'just' energy transition by different population groups in authoritarian contexts who stand to lose from climate change policies.

Another gap in the conceptualization of local perceptions of global climate policies common to these works may be noted. They discuss at length the *vertical relations* of regions, that is, relations between local communities and national governments, but none devotes enough attention to the *horizontal relationships* of greening nations/regions with their external trade and investment partners. Specifically, insufficient attention has been paid to the distributional problems and opposition practices that the EU's climate goals generate *within* Central Asia—a region that has also become the geographic linchpin of the EU's 'strategic autonomy' energy policy in the wake of a parallel decoupling from Russia. It is important to understand how the EGD and its CBAM are perceived both within Kazakhstan and Uzbekistan's elite circles and its less engaged communities, especially in the structurally weak regions dependent on carbon-intensive industries that will be most affected by the energy transition.

In recent years, the Shanghai Cooperation Organization (SCO) and the BRICS, two multilateral organizations whose members are wary of the West's economic and political dominance and are underpinned by the membership of Russia, China, and India, have become new sites of Central Asian climate change contestation and obstructionism. They both are important means in the hands of Central Asian states to oppose Western climate action outright

and/or *socialize* it through norm setting (Acharya, 2004). For instance, the SCO's Samarkand statement on climate change adopted in September 2022 advocates for "maintaining an inclusive and non-discriminatory regime based on principles of voluntary climate action." It also pushes back on the EU's CBAM, a policy to levy taxes on the import of carbon-intensive products. With reference to the efforts by these groupings to redefine climate policies in terms of a 'more just' international climate order, the following hypotheses might be considered: the SCO and the BRICS as regional organizations have played an identifiable causal role in Central Asian countries' discourse about the West's 'climate agenda' to justify delayism and inaction while framing such pushback as a form of South-South cooperation. Dannreuther (2022) discusses how in the area of international justice it is oil that has been linked with the history of colonialism and imperialism, with dispossession and oppression, and with the continuing struggle between the Global North and the Global South. If this article's proposition is confirmed, however, further comparative research would be fruitful to determine whether a new post-colonial, Global South-centered discourse by some of the largest carbon-intensive commodity producers masks local resistance to, and socialization of, global climate policies.

Drawing on a model of actor interactions across 'vertical' and 'horizontal' groups in Central Asia, the article examines the EU's and China's climate policies in Kazakhstan and Uzbekistan—its constituent mechanisms, distributive effects and public perception—to discuss a typology of resistance to the EU's climate action cutting across income groups and urban and rural divides (vertical inequity), and within the EU's business and policy partners in Central Asia (horizontal vulnerabilities). A framework integrating (i) the *horizontal* interstate relations of Kazakhstan and Uzbekistan with the external powers of the EU and China and (ii) the influence of these external economic partners on *vertical* state-society relations within the local realities of Kazakhstan and Uzbekistan argues that theorists of 'uneven energy transition' ought to be more attentive to the actors, strategies, and responses involved in a halting embrace of the energy transition among authoritarian regimes reliant on the export of carbon-heavy exports, such as those of Kazakhstan and Uzbekistan. By so doing, the article adds to a nascent literature in International Political Economy (IPE) that emphasizes the ways in which climate action and obstruction in (post-Soviet) authoritarian settings are distinct from those in liberal democracies but are by no means linear or static processes. As elsewhere, such processes are contingent and must be understood contextually. They have to be designed, financed, enforced, constructed, and socially accepted (Poberezhskaya and Bychkova (2021); Wu & Martus, 2021; Korppoo et al., 2023).

To sum up my approach, opposition to EU-led climate action emerges through a *process* with substantial *bottom-up* initiative by disadvantaged communities in peripheral areas tied to the fossil fuel economy, rather than a single *top-down act* by local fossil fuel-reliant elites or a few oligarchs. At the same time, the article uncovers that through retraining, compensation, and simultaneous investment in both renewables and fossil fuel regimes, China has placed itself as a regional actor better equipped to work within local realities to placate the tensions in equity across demographic and spatial dimensions that the 'Western' energy transition has generated.

1 Vertical and horizontal equity

Drawing on criteria elucidated in the preceding discussion, I operationalize 'horizontal interstate relations' as the *capacity of states vis-à-vis each other* in the climate governance process as measured by (i) input into agenda-setting and (ii) effect on policy outcomes. The

former renders the extent to which external states or blocs, such as China or the EU, can shape the climate agenda of their partner countries: how climate topics are framed and the concrete institutional format of the climate change debate itself. The latter focuses on the effects and consequences of stakeholder participation: namely how successfully the participation of these external stakeholders in policy debates feeds into the 'receiving' national policy processes.

Vertical state-society relations are operationalized as the capacity of regional subunits (for example, *akimats* in Kazakhstan or *mahallas* in Uzbekistan) to shape climate policies vis-à-vis their own societies in terms of rural-urban, marginalized-privileged, and impoverished-wealthy divides that are common in the highly centralized post-Soviet autocracies. In this case, local authorities and their external partners (a) employ combinations of material, institutional, and discursive power to ensure that changing socio-technical configurations in energy do not disrupt prevailing social relations and distributions of political power and/or (b) ensure that shifts which do occur in green energy infrastructure garner high levels of support and the successful deflection of challenges to the viability and desirability of their preferred business models. Successful external actors exercise innovative power, based on their capacity to invent and create new strategies, tactics, or techniques to co-opt local elites and address the distributional conflicts that decarbonization brings to vulnerable areas of receiving states, such as Pavlodar in Kazakhstan and/or the Surkhandarya and Kashkadarya regions in Uzbekistan. Renewables may as well alter arenas of energy interaction, transforming markets and shifting trade partners (Scholten et al., 2020), but patterns of cooperation and conflict in energy diplomacy are here to stay in both the vertical and horizontal models of actor interactions.

This is where an account incorporating insights from critical political economy (Kern & Markard, 2016; Kuzemko et al., 2018) can improve upon our understanding of processes of resistance to energy transition and change. This article conceptualizes relations between Central Asian policymakers and external actors (national governments and energy firms) as an alliance at the regime level, which often resists significant change. In doing so, this political economy framework suggests that alliances between local policymakers and external national governments (and energy firms) can become dominant or hegemonic when they are legitimated by local interest groups (Levy & Newell, 2002).

The key elements of the argument are spelled out in Table 1.

The starting point of this analysis is that even in authoritarian contexts, politics is highly contingent and that the concerns of local "losers" of energy transition affect how decisions are made at the nation-state level. These considerations lead to the second hypothesis that thus far China has had more success with the problems of compensation and distribution *within* Central Asian countries—e.g., it has electrified energy-poor regions, offered alternatives for coal-dependent communities, and helped local coal workers with retraining and relocation in exchange for their support for China-led RE investments. I will test this hypothesis by creating a new dataset of issues and stakeholder positions based on (i) documentary analysis (including policy, business and media sources) and (ii) in-depth interviews with national and local stakeholders (energy companies, planning authorities, NGOs).

Generally, the coverage of energy transition and climate change policies in Kazakhstan and Uzbekistan is rather limited in the local mass media. As a first step, all of the media articles were divided into two basic categories. The first category contained purely informative articles on Kazakhstan's and Uzbekistan's energy situations, such as their energy mix, the government strategies on energy transition, and the obstacles they face in implementing these strategies. This category also included those articles that included only a brief

mention of the EU or China or those in which the EU or China were listed as one of several states/blocs cooperating in energy with the two countries without any other further specification of their role or interest. The second category, which is the more important one to assess the interactions and influence of these external actors, consisted of articles containing references to the EU or China as the main actor with which Kazakhstan and/or Uzbekistan engage in energy trade or cooperation to achieve energy transition.

As a caveat, it has to be mentioned that the role of the media in foreign policy is debatable and context-dependent, ranging from a linkage between the elites and the public to a more independent and proactive role. Thus, news from the elites, especially in authoritarian contexts, comes already framed, and how the media presents the news produces 'framing effects' (Kratochvíl et al., 2011). This is why the present study triangulates media analysis with extensive documentary analysis of online resources, including official and semi-official policy pronouncements issued in the EU and China concerning their energy diplomacy vis-à-vis the two Central Asian countries, as well as pronouncements by key representatives of the ruling elites about the status of energy transition in their countries, interstate agreements and multilateral treaties, and policy papers and reports, as well as insights obtained from participation in seminars and events with practitioners.

Finally, semi-structured interviews conducted with national and local stakeholders between 2022 and 2024 (including representatives of trade unions, environmental associations, the energy industry, academia, business organizations, public administration, and the affected regions) supplemented the textual analysis. Given the challenges of doing highly sensitive research in authoritarian environments, this multi-method strategy attempts to provide the best data possible while also recognizing its inherent limitations.

2 The effects of global climate policies on Central Asia

According to an International Renewable Energy Agency (IRENA) report, the countries of Central Asia, along with the Middle East, North Africa, and Russia, are the most exposed to a reduction in revenues from carbon-intensive commodities due to energy transition.³ Some of these countries, such as Kazakhstan, have net fossil fuel exports accounting for more than a quarter of their GDP. A loss in oil rents in fossil fuel-reliant countries with weak governance, such as those of both Kazakhstan and Uzbekistan, is expected to lead to fractures in society and concerns about regime stability. In addition to this, the EU, which remains the second largest trading partner, largest foreign investor, and number one donor to the highly exposed region of Central Asia,⁴ has recently approved the bloc's new carbon border tax: the so-called CBAM, part of the EU's flagship EGD plan to make its economy carbon-neutral by 2050. The landmark measure adds a pollution price on certain carbon-intensive imports to the EU. Exporters of fossil fuels with a large share of emissions-intensive exports to the EU, such as iron and steel, cement, aluminum, and fertilizers, are highly susceptible to the CBAM. This concerns Kazakhstan and Uzbekistan, as their exports to the EU largely focus on a few resource and raw material commodities, particularly crude oil, gas, metals, and cotton fiber.⁵ Moreover, their national carbon pricing schemes are still

³ International Renewable Energy Agency (2019, p. 32).

⁴ EU-Central Asia trade, Council of the European Union, <https://www.consilium.europa.eu/en/infographics/eu-central-asia-trade/>.

⁵ European Commission: Trade, "Central Asia-EU trade relations with Central Asia." Facts, figures and latest developments."

under-developed, which makes them subject to greater distributional impact once the EU's CBAM is implemented.⁶ Companies from countries where certifying carbon emissions is only slowly emerging will need to buy certificates to cover emissions generated by the production of goods imported into the EU based on calculations linked to the EU's own carbon price. One of the risks is that clean energy capacity in Central Asia may simply be shifted to the production of goods exported to the EU while industry aimed at local consumption relies on dirty fuels, given that implementing a system of green certificate trading in resource-producing countries remains a "challenge."⁷

The EU carbon measure could lead to a loss of competitiveness of carbon-intensive economies, as well as negative impacts on their most vulnerable groups, exacerbating distributional inequities between advanced economies and emerging and developing-market countries and *within* the latter countries as well. Recent research has found that key climate policy tools such as carbon taxes for different fuels can be regressive (Zachmann et al., 2018). This is also the case for CBAM, where the landmark legislation is expected to have regressive effects for poorer households, which will spend a greater proportion of their income on the tax than more affluent households (Eurofound, 2021). As the companies from carbon-intensive countries are expected to pass on the cost of the purchase of carbon certificates down to low-income households through price increases in the (as of now) heavily subsidized domestic fossil fuel markets, price increases will have a regressive effect as well (Fragkos et al., 2021; Landis et al., 2021).

Kazakhstan's January 2022 unrest over fuel price hikes showed that "greening" schemes that are regressive for domestic consumers may face violent political and societal backlash. This is why many experts have recently warned that in order to combat increasing inequality and improve the political acceptability of the CBAM among the EU's external trade partners, negative distributive effects need to be addressed (Fredriksson & Zachmann, 2021; Smith et al., 2023; Zachmann et al., 2018). Conversely, diplomatic conflict may occur if the EU attempts to shift the costs of the energy transition to carbon-intensive partner countries (Grimm et al., 2021b) whose elites are expected to place a disproportionate share of their imported tax burden on vulnerable communities, especially on those in rural areas.⁸

In particular, many experts have focused on the need for the EU to offer help to the region in fostering an energy transition that would be perceived by its society as just, affordable, and rich with opportunities. Several key aspects of such an equitable transition, where the EU could help alleviate the pressures of CBAM, may include: (i) exporting clean energy technologies, techniques, and business know-how in energy sectors such as solar, wind, hydro, geothermal, and bio; (ii) providing EU support for financing such a pathway; and (iii) ensuring that the region takes advantage of the transition's economic opportunities in areas where Central Asia holds competitive advantages, such as critical raw minerals, hydrogen, and nuclear energy.

The next section analyses the main developments in EU climate and energy policy toward Central Asia since 2007, when the EU's first Central Asia Strategy was adopted to the EU's recent mercantilist turn in climate and energy diplomacy (Andersen et al., 2017; Goldthau, 2021), exemplified by the EGD's role 'in a changing world.'⁹

⁶ Author phone interview with Kazakh energy policy expert, New York, May 2023.

⁷ Ziady, H. EU agrees to the world's largest carbon border tax, CNN, December 19, 2022.

⁸ Personal communication with Central Asian economist, Almaty, March 2022.

⁹ European Commission and High Representative. (2022) EU External Energy Engagement in a Changing World. JOIN(2022) 23 final, 18.05.2022.

3 The CBAM and the EU's climate and energy diplomacy toward Central Asia

The EU has been active as a donor in the region since the early days of post-Soviet independence. In 2007 Brussels launched its first Central Asia Strategy, which tackled a wide range of issues, from regional cooperation, (energy) security, and environmental concerns to human rights and the rule of law. While the strategy played an important role in enhancing the EU's economic and political impact in Central Asia, backed up by a significant increase in funding and resulting in a more strategic approach to the EU's engagement with the region (Bossuyt, 2021; Dzhuraev & Muratalieva, 2020), it achieved limited progress toward the crucial goals of spurring (i) wider intra-regional cooperation around the water-energy-climate nexus, and (ii) energy sector cooperation between the EU and Central Asia. In 2007–2013 EU development assistance to Central Asia amounted to roughly €750 million, one-third to regional programs and two-thirds to bilateral initiatives, and it was planned to increase to €1 billion for the period 2014–2020 (Boonstra, 2015, p. 4). In the end, the actual budget of €1.1 billion for 2014–2020 exceeded this goal.¹⁰ In addition to EU-funded projects, individual EU member countries have provided development assistance to Central Asian countries; however, EU financial assistance in total was dwarfed by the \$40 billion pledged by China for the Belt and Road Initiative.

The strategy was also criticized for allocating limited resources across an overly broad range of priorities.¹¹ In a detailed study of the outcomes of the 2007 Strategy, Bossuyt (2021) concludes that in the area of development assistance, despite having spent a considerable amount of funding in the region throughout the past two decades, the net economic and political impact of the EU's projects has been small. Facing criticism about the broadness of its previous strategy, in 2019 the EU adopted a new strategy toward Central Asia, pledging to strengthen its diplomatic presence based on concrete dialogue tailored to the differing and specific exigencies of the countries in the region. The EU's new Central Asia Strategy, adopted in 2019, devoted more attention to climate change, while the emphasis on fossil fuels was toned down compared to the 2007 Strategy (Kaczmarek & Siddi, 2021). Between 2014 and 2020, funding under the EU's Development Cooperation Instrument amounted to €1.1 billion (\$1.2 billion) in grant funding, technical assistance, and direct budget support, making the EU the largest donor in the region.¹²

Despite a greater focus on good governance, and regional cooperation on water, energy, and climate, the EU's public profile in Central Asia remained low, at least as compared to that of Russia and especially that of China (Matveeva, 2023). The rotating six-month chair of the EU Council inhibited a consistent policy position as some member countries continued to have greater interest in Central Asia than others.

Then the Ukraine war changed the speed and direction of the EU's energy transition. In terms of speed, policies to implement the energy transition in the EU have strongly accelerated, making potential disruptions to global supply chains of critical materials a more immediate concern and elevating Central Asia as a region that could provide the critical materials for clean energy applications that the EU will increasingly need. At the same

¹⁰ European Union External Action, "The EU Development Priorities in Central Asia," March 16, 2022, available at: https://www.eeas.europa.eu/eeas/eu-development-priorities-central-asia_en***.

¹¹ See EU Parliament assessment briefing by Martin Russell, "The EU's new Central Asia Strategy", January 2019: [http://www.europarl.europa.eu/RegData/etudes/BRIE/2019/633162/EPRS_BRI\(2019\)633162_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2019/633162/EPRS_BRI(2019)633162_EN.pdf).

¹² European Union External Action, "The EU Development Priorities in Central Asia."

time, the war has also changed the geographic direction of the EU's external energy partnerships. It has pushed the EU to cut imports of Russian fossil fuels and seek to diversify trade partners, again raising the strategic profile of Central Asia. The REPowerEU plan,¹³ the new External Energy Strategy,¹⁴ and the Green Deal Industrial Plan¹⁵ exemplify this shift as they combine green objectives and an inward-looking geopolitical posture (Siddi, 2023).

In line with this geopolitical turn, the EU has stepped up its engagement in Central Asia, including on regional cooperation, energy, and connectivity. At the EU-Central Asia Connectivity Summit in Samarkand in November 2022, EU foreign policy chief Josep Borrell told leaders “We must deepen our ties with the region and tap into the vast potential it has to offer, in terms of energy supplies, critical raw materials and new transport corridors that do not depend on Russia (to so-called Middle Corridor or Trans Caspian Corridor),”¹⁶ essentially presenting the region as a place that can support the EU's energy security and energy transition through the provision of Russia-free polluting fossil fuel supplies and critical raw materials to fulfill the EU's energy needs. On the other hand, in its quest to boost energy efficiency and accelerate the energy transition, the EU has also partly eschewed fossil fuels through a new energy strategy, RePowerEU, which is far more aligned with EU climate goals and has linked them to external trade through CBAM. Ideally, these combined measures would accelerate the attainment of EU climate goals while simultaneously enhancing energy security.

Yet, as seen from the perspective of fossil fuel-producing partners, the EU's external energy policies are seen as increasingly inconsistent.¹⁷ The double shift, featuring attempts to tap into Central Asia's vast fossil fuel, uranium, and critical mineral potential in the wake of partial decoupling from Russia and China and a parallel imposition of the EU's climate agenda through trade, is also perceived as “unfair.”¹⁸

Scholars have long interrogated the reasons for apparent inconsistencies in the EU's policy toward Central Asia. Moisé and Sorbello (2022) argue that while the EU has repeatedly shown interest in the region and some individual EU energy companies have maintained a high profile in individual Central Asian countries, overall scarce profitability and no control over their economic ventures resulted in a loss of interest. With China and Russia acting more assertively, Winn and Gänzle (2022) discuss a pragmatic recalibration of the EU's foreign policy toward Central Asia resulting from a recognition of Chinese and Russian economic presence and proximity.

One reason for the EU's failure to sufficiently live up to its commitments is an unresolved tension between (i) the EU's initiatives and proclamations through which it has purposefully sought to promote its ‘green’ values and (ii) its actions in key areas that demonstrate that, despite declarations otherwise, the EU reasons and acts geopolitically in this

¹³ European Commission. (2022) REPowerEU: Joint European Action for More Affordable, Secure and Sustainable Energy. COM (2022) 108 Final, 08.03.2022.

¹⁴ European Commission. (2022) REPowerEU: Commission Establishes the EU Energy Platform Task Force to Secure Alternative Supplies. Press Release, 25.05.2022.

¹⁵ European Commission. (2020) A New Industrial Strategy for Europe. COM 102 final, 10.02.2020.

¹⁶ European Union External Action “Central Asia's growing importance globally and for the EU”, November 20, 2022. Available at: https://www.eeas.europa.eu/eeas/central-asia%E2%80%99s-growing-importance-globally-and-eu_en

¹⁷ Author's online interview with senior advisor, Ministry of Energy of Uzbekistan, April 2023.

¹⁸ Interview with World Bank advisor in Central Asia, Almaty, April 2023; Interview with EBRD representative, Tashkent, February 2024.

contested region (Fawn, 2021). Fawn concludes, “That the EU is often outmaneuvered does not diminish this subtle yet discernible geopolitical conduct.” The overall picture of the EU’s engagement in Central Asia then remains one of limited and inconsistent impact despite accelerating efforts since 2019 to raise its profile (Boonstra, 2015).

Recently, the war in Ukraine and China’s increasingly assertive industrial policies, along with its control of clean energy supply chains, have created demand for an even more geopolitical Europe (Kuzemko et al., 2022). In its intensified engagement in Central Asia, the EU has emphasized (i) connectivity through the so-called Middle Corridor for East–West freight trade and the Trans-Caspian pipeline corridor for Central Asian gas deliveries to Europe. In reality, little progress has been made on either front. The lack of infrastructure has thus far ruled out the EU from sourcing natural gas from Central Asian countries. For the key stakeholders in the Central Asian energy sector, who wish to continue to capitalize on revenues from the trade in coal, gas, oil, and nuclear, Russia and China have therefore proven to be more reliable and stable partners. China, the biggest lender to the region, has been far more successful in building ‘equity’ by actively building horizontal business and political ties in the region’s still-dominant hydrocarbon sector. (This aspect will be discussed in more detail in the next sections.)

Over the course of 2022, the EU also decided to deepen its strategic engagement in the region for (ii) the wealth and diversity of its mineral base, including reserves of most materials important for clean energy transition.¹⁹ Kazakhstan stands out as the individual country with the world’s largest reserves of chromium (used in wind turbines) and also as its second-largest producer, while Uzbekistan contributes copper and silver (both necessary for solar energy). In 2020 the European External Action Service concluded an agreement with Kazakhstan on an Enhanced Partnership and Cooperation, further expanded in 2022 with an MoU on Critical Raw Materials, Batteries and Renewable Hydrogen, demonstrating the seriousness of the EU’s geopolitical pursuit of new partners to strategically de-risk from China. That said, some individual EU countries’ involvement in specific projects have triggered ad hoc political actions which are not part of a comprehensive EU-policy, such as France’s recent push for a stronger position in Kazakhstan’s nuclear and uranium sectors,²⁰ despite the EU’s ambivalent stance on nuclear as a tool of decarbonization.

The next two sections examine *to what extent* and *how* the EU’s EGD has material distributional impacts that motivate local resistance, undermine the EU’s policy legitimacy, and shape new discourses across Central Asia.

3.1 Vertical equity

Despite providing resources and assistance in bearing the brunt of the EU’s ambitious climate policies, Central Asian marginalized groups and local authorities perceive the EU as an actor insufficiently concerned about shifting the costs of the CBAM to developing and emerging partner countries, smaller energy communities, and vulnerable groups.²¹ Instead of shielding the most vulnerable communities, its trade perspective has tended to emphasize top-down clean energy technology and know-how transfer (Smith et al., 2023), while

¹⁹ European Commission (2020a) *Critical Raw Materials Resilience: Charting a Path Towards Greater Security and Sustainability*, COM 474 Final.

²⁰ Kazakhstan, France discuss partnership in nuclear energy and high-tech industries, Interfax, 6 Nov 2024.

²¹ This observation is based on dozens of informal interviews conducted with Central Asian stakeholders between 2022 and 2024. These interviews included representatives of the public administration, environmental associations, Western NGOs and representatives from the affected regions.

failing to successfully implement “on the ground” projects. The EU’s aid is perceived as too “spread out” across different fields rather than being geared toward promoting vertical equity across income groups in Central Asia. When it comes to implementing concrete measures, such as (i) assisting in developing protective measures for vulnerable energy consumers in small energy communities, (ii) emergency plans to offset the impacts of raising energy bills, or (iii) retraining programs due to loss of employment for coal workers in towns built around coal mining sites, the EU has had mixed results at best, as these actions have not been part of a consistent EU or EU Commission-led policy.²² Crucially, the EU should step in as a “helper” of energy transition through capacity-building, policy support, and consultation with local governments to ensure social protection measures shield vulnerable populations from the fallout of job losses as Central Asian countries transition away from coal, oil, and gas.

Meanwhile, China has delivered RE projects quickly and effectively. Most significantly, China has succeeded in electrifying energy-impooverished rural communities, such as with the 63 MW Chulakkurgan solar photovoltaic power plant that Risen built north of Shymkent, China Power International Holding Ltd’s investment of \$150 million in a wind power project in the Zhambyl region of southern Kazakhstan (Interfax, 2023), and CEES Energy China’s plans to invest \$2bn to build 2GW of solar power plants in Uzbekistan across the regions of Kashkadarya, Bukhara, and Samarkand (Investment Monitor, 2023). Chinese investments in renewables, particularly in Uzbekistan, have grown exponentially in recent years. European money is involved in financing many of these projects. And yet, the EU’s assistance to the region has so far failed to have a significant impact on the ground, a fact acknowledged by EU High Representative Josep Borrell in his address in Samarkand, where he noted that [the EU is] “coordinating our efforts among EU institutions, member states and financial institutions—to have a bigger impact.”²³ At the same time, Chinese investment in both large and smaller solar and wind farms that could be connected to major power grids, particularly in poorer and rural areas, has been praised for helping to electrify energy-poor regions, develop sustainable economic alternatives for coal-dependent communities, and aid local workers with retraining and relocation.²⁴ In 2024, a consortium of Chinese companies invested in Kazakhstan’s first tungsten processing plant in the Almaty region, a \$300 million project that is expected to generate up to 1,000 local jobs for specialists in rare earth metals.²⁵ China’s investors are also committing a substantial \$2.7 billion toward developing copper and silver deposits the Bobotog area in Uzbekistan. This investment has been touted as being not just about minerals but about economic transformation, with a promise of creating 2,000 jobs, a vital boost for the local workforce.²⁶

As further discussed by Sharifli, the intention of China’s state-owned State Power Investment Corporation to begin manufacturing equipment for wind power plants in

²² Author’s interview with Western NGO member, Almaty, April 2023; interview with UNDP representative, Astana, February 2024; Interview with Ministry of Foreign Affairs official, Tashkent, February 2024.

²³ European Union External Action (2022, November 18). “Opening remarks by High Representative/Vice-President Josep Borrell at the EU-Central Asia Connectivity Conference: Global Gateway,” Samarkand: https://www.eeas.europa.eu/eeas/opening-remarks-high-representativevice-president-josep-borrell-eu-central-asia-connectivity_en.

²⁴ Author online interview with local environmental and human rights activist, New York, March 2023. See also *Eurasianet*, “Beijing making soft power push in Central Asia with vocational training initiative,” Dec 15, 2023.

²⁵ Kazakhstan Launches First Tungsten Plant in Almaty Region, *Astana Times*, 4 November 2024.

²⁶ Kun.uz “China proposes \$2.7 billion investment in copper and silver mines in Surkhandarya”, November 23, 2024.

Kazakhstan and China's Liaoning Lide Investment Holdings' RE equipment in Uzbekistan are illustrative examples of Chinese companies bringing in capital and (re-)training assistance, thereby adapting to local government requirements.²⁷

3.2 Horizontal equity

In recent years, high-level political meetings between EU and Central Asian leaders have multiplied, as both sides have looked to diversify their political and economic relations. A new Team Europe Initiative (TEI) on climate, water, and energy was presented at the 2022 EU-Central Asia Connectivity Summit in Samarkand.²⁸ The initiative is backed by an initial pooling of adopted and ongoing projects worth around €700 million from the EU budget and from participating Member States, the European Investment Bank (EIB), and the EBRD, proving the EU's long-standing status as the largest donor to the region and supporter of the green transition.²⁹ Yet, China's specialization in the clean energy supply chain from innovation to manufacturing and adoption has created a comparative advantage over the provision of cheap RE equipment in Central Asia (Sharifli, 2023). Local governments are also deterred by the EU's normative agenda and the level of bureaucracy and technical knowledge associated with preparing applications for EU grants and projects.³⁰ In contrast, China's assistance is devoid of conditionalities, blueprints, or models. Instead, in most cases China asks the local leaders what areas require Chinese funding and prioritizes the types of assistance and investment that best address local development levels and needs (Bossuyt, 2019, p. 17). This means working through local actors and institutions while adapting and assimilating local and traditional forms, norms, and practices (Kassenova, 2022). The EU has struggled to deliver effective social protection measures for local coal miners and oil and gas workers. In order to be more effective in these areas, it would need to work with local elites who have thus far shown limited interest in a systematic phasing out of fossil fuels.³¹ Under conditions of authoritarian elite politics in Central Asia, China's forging of flexible yet stable interpersonal ties with the host country regimes and their informal patronage networks has proven more effective in cooperating with local governments at the provincial, prefectural, county, and township levels to create more 'balanced' policies tailored to regional circumstances.³²

Since it has been suggested that the local populations in Central Asia may have an ambivalent view of China's Belt and Road Initiative (Lemon et al., 2024; Vakulchuk & Overland, 2019), and that the Chinese government and businesses are adapting by increasing security cooperation and image management, a caveat is in order. For example, a recent study on China's renewable investments through the BRI in Kazakhstan concludes that

²⁷ Kazinform, "China's SPIC to Launch Production of Equipment for Wind Power Stations in Kazakhstan" May 18, 2023. Kazinform "Karakalpakstan and China implement promising joint projects" November 24, 2023. Cited in Sharifli (2024).

²⁸ Team Europe Initiative, European Union: https://capacity4dev.europa.eu/resources/team-europe-tracker/partner-countries/middle-east-asia-and-pacific/water-energy-climate-change-central-asia_en.

²⁹ "EU Seeks to Empower Central Asia's Sustainable Water and Energy Future," April 13, 2023 <https://astanatimes.com/2023/04/eu-seeks-to-empower-central-asias-sustainable-water-and-energy-future/>.

³⁰ Author's phone interview with Uzbek political expert and researcher, September 2022; Author's interview with former Kazakh government advisor, Bishkek, April 2023.

³¹ Author's interview with Western diplomat, Astana, February 2024.

³² Interviews with representatives from public administration, business organizations and academia in Almaty, Bishkek, and Tashkent, 2022–2024.

not only society but also the expert community remains under-informed and prejudiced about Chinese investment. The study laments that local communities have only a vague and insufficient understanding of foreign companies operating in their regions. As a result, “a whole mythology can form and take root in communities around Chinese projects.”³³

Due to these prejudices and an increase of Sinophobia that, in the words of a representative of Kazakh renewable energy association, “is not directly and realistically related to the activities of foreign investors,” local executive bodies have dismissed these concerns and instead argue that “China is demonstrating rapid development in solar and wind energy. By 2023, China has become the leader in the installed capacity of solar panels and wind turbines, surpassing all other countries. The country is developing not only generation but also technological solutions for energy storage, which solves the problem of instability of renewable sources, and opens up new local jobs in cutting-edge technologies.”³⁴

However, participation of vulnerable local residents (i.e. women, the elderly) in the decision-making processes regarding foreign investment projects is still extremely limited, to the extent that local akims in single-industry towns (like Zhanatas) do not even bother to exhaustively inform local communities about the positive support and environmental impact of Chinese investment in their communities (PaperLab, 2022). Indeed, China and local Central Asian elites are finding common ground on the problem of ‘just transition.’ An emerging shared discourse about the EU’s ‘unjust’ interventionism through the CBAM reflects the material distributional conflicts arising from it and serves to justify the local elites’ strategy of opposing or delaying climate action.

4 China’s climate and energy diplomacy toward Central Asia

Traditionally, Beijing has preferred to invest in massive infrastructure and fossil fuel projects in Central Asia. In recent years, however, China has begun shifting its investment priorities from infrastructure development and resource extraction to overall industrialization and RE infrastructure. China’s specialization in clean energy supply chains has created a comparative advantage over its geopolitical rivals in Central Asia, including the EU.

4.1 Vertical equity

With the price of renewables plummeting around the world, the potential for developing countries to ‘leapfrog’ from traditional energy sources, such as wood and charcoal, directly to emissions-free renewables, such as wind and solar, has become more realistic and cost-effective. In this context, the availability of cheap RE equipment has been a boon for Chinese companies to fill the Central Asian green energy market.

It has been argued that by leapfrogging the traditional fossil fuel-based systems, developing countries can tackle climate change while also addressing social inequity and advancing living standards. The approach not only bypasses the fossil fuel phase but also offers a decentralized power generation model, promoting local economic growth and job creation (IRENA, 2019; Levin & Thomas, 2016). By utilizing its increasing dominance in clean energy manufacturing value chains—in turn made possible by a

³³ PaperLab ‘Rasshifrovyyaja vosprijatije kitajskogo prisutstvija v Kazahstane: upravlencheskoe, social’noe i jekologicheskoe izmerenija,’ 30 December 2022.

³⁴ Author’s interview with Kazakh RE expert and member of a RE association, Astana, February 2024.

competitive renewable equipment manufacturing industry, large-scale investment in technologies, and state development banks that are able to provide large sums of money and are aligned with the government's strategy—China has placed itself in a unique position to capitalize on Central Asia and other peripheral regions' nascent energy transitions. In recent years, by providing financial aid and technical expertise, China has diffused electrification throughout Central Asian rural areas.

One might ask why hydrocarbon-rich Central Asian states are energy-poor in the first place. Even Kazakhstan, by far the most developed economy of the region, displays patterns characteristic of other petrostates; over the years, the government has spent its petroleum wealth on turning the new capital city into a would-be regional stock market and financial hub while failing to bring running water and stable electricity to many villages that lack them throughout the country (Tutumlu & Aminjonov, 2023).

While China has been criticized for its role in the extraction of critical minerals in Africa and elsewhere amid contested references to 'green colonialism,' (Ayers, 2013) it is undeniable that with its competitive advantages China is electrifying poor marginalized regions at a larger scale and speed than its Western competitors. This is why some scholars have observed that efforts to decouple clean energy supply chains from China would slow the clean energy transition and increase the cost of deployment (Colgan, 2020), thereby affecting the Global South's ability to transition to low-carbon economies (Lewis, 2024). China, with its many ambitious low-carbon energy projects, demonstrates that democracy is not necessary for climate action (Szulecki & Overland, 2020).

For the most part, however, Central Asia remains a region tied to the fossil fuel economy. Kazakhstan, the most "progressive" of Central Asian countries, has one of the highest rates of household coal use in the world (IEA, 2022); coal accounts for around 50% of energy supply, over 70% of its electricity generation, and over 20% of final consumption. Coal-dependent regions such as Pavlodar and Karaganda in Kazakhstan may feel unjustly targeted as aggressive global decarbonization policies could lead to the loss of their jobs and livelihoods. This is why compensation policies to reduce the economic costs borne by fossil fuel-reliant communities should accompany climate mitigation. Such structural adjustment policies could include funding for 'green' infrastructure development and, crucially for the Central Asia region, job retraining (i.e. policies to reskill, reequip, and revitalize fossil fuel-reliant communities) (Green & Gambhir, 2020; Newell, 2021; Sovacool, 2016).

In the wake of the Ukraine war, the EU has faced criticism for exporting its climate goals through trade, while simultaneously outsourcing its need for critical raw materials and polluting fossil fuels to Central Asia.³⁵ These contrasting policies have left Europe open to accusations of hypocrisy (Kuzemko et al., 2022). Conversely, China has had more success in appeasing Central Asian fossil fuel-addicted elites while at the same time addressing the major distributional conflicts (Aklin & Mildenerger, 2020) that decarbonization has caused in the vulnerable areas of their countries.

³⁵ See EEAS, "Central Asia's growing importance globally and for the EU", Nov 20, 2022. See also S&P Global "EU refiners turn to Kazakh, Azeri, Norwegian crudes to plug Russian supply gap", Dec 15, 2022 and CPC "Kazakhstan to Expand Oil Exports to Germany Via Russian Pipelines", Jan 30, 2023.

4.2 Horizontal equity

While China aggressively invests in the region's RE market, posing a challenge to Western competitors, it has also cast itself as a promoter of a more balanced and 'just' energy transition.

The second component of its 'balanced' regional energy strategy has revolved around support for a more gradual phase-out of fossil fuels, through horizontal equity measures and the forging of ties with local elites whose personal livelihoods continue to rely greatly on the investment and export of coal, natural gas, and oil. Due to the authoritarian nature of Central Asia's political systems, the net result is to tie China's views of and approach to the region's energy policy to the needs of local fossil fuel-reliant elites (Kassenova, 2022; Skalamera Groce et al., 2021). As Zhou (2023) has noted, China and Central Asian governments share concerns over the interlocking triangle of energy security, environmental crisis, and economic development. They envision a coordinated, balanced energy system in which renewables and cleaner fossil fuels coexist to generate affordable energy while fossil fuels are gradually and safely phased out. While many analysts anticipate a growing Chinese footprint in Central Asia's green energy sector (Avdaliani, 2024), for the ruling elites of both China and Central Asia supporting renewables has not meant abandoning fossil fuels.

China's embrace of a just transition agenda in sync with 'local needs' also serves to safeguard the personal interests of local fossil fuel-dependent elites, as evidenced by the joint SCO's Samarkand statement on climate change adopted in September 2022. The Summit in Samarkand concluded with the signing of five documents by the heads of China, India, Pakistan, Russia, and the five Central Asian countries, including a joint statement on energy security and one on climate change.³⁶ In the statement, SCO leaders said they were calling for a "balanced approach between emissions reduction and development, supporting a fair transition" to a greener economy (Reuters, 2022). The group also slammed using "the climate agenda to introduce measures that would limit trade and investment cooperation" with an obvious reference to the EU's projection of its own normative agenda through "protectionist" and "coercive trade measures." Some countries have gone so far as to describe the EU's attempts to impose its climate objectives through trade as a new form of 'colonialism'³⁷ (Financial Times, 2020).

The paper argues that one of the unintended effects of the EU's EGD on the countries of the region is that China has emerged as a counterweight to the EU's 'too extreme' climate agenda. Beijing has always been eager to ensure that the SCO developed a strong economic aspect, but since the launching of the EU's EGD the Beijing-sponsored organization has also focused on resetting and reshaping global climate governance narratives, often under the banner of a more equitable multipolar world order.

Recently, the BRICS (which 34 countries have expressed interest in joining)³⁸ has become another site of Beijing's opposition and socialization of global climate governance

³⁶ XIV Brics Summit (2022, May 24). Joint Statement issued at the BRICS High-level Meeting on Climate Change.

³⁷ While an extensive discussion of these 'new forms of colonialism' is beyond the scope of the article, scholars have recently invoked the term 'resource colonialism' to describe extraction of 'critical minerals' from regions such as Central Asia (Bridge, 2018; Howlett and Lawrence, 2019). A greater engagement with these literatures can complement the accounts on the histories of energy transitions (Wrigley, 2010).

³⁸ Among which most notably for the purposes of this paper, some key commodity producers such as Azerbaijan, Saudi Arabia, and Turkey, but also Algeria, Colombia, Argentina and Malaysia.

to advance its 'balanced' concept. The 2024 summit in Kazan was the first meeting of the expanded BRICS (whose membership has grown from Brazil, Russia, India, China, and South Africa to also include Egypt, Ethiopia, Iran, and the United Arab Emirates). During this summit China's (and Russia's) positioning against global climate policies as a 'Western tool of dominance' (Poberezhskaya & Martus, 2024, p. 230) achieved even greater rhetorical buy-in.

In an ensuing declaration leaders of the BRICS group reaffirmed their rejection of "unilateral, punitive and discriminatory protectionist measures, that are not in line with international law, under the pretext of environmental concerns, such as unilateral and discriminatory carbon border adjustment mechanisms (CBAMs)" [...] and condemned "unilateral protectionist measures, which deliberately disrupt the global supply and production chains and distort competition."³⁹

The Kazan Declaration, indeed, expresses great confidence in China and Russia's transformative vision of climate governance, and there is significant momentum behind their demand for change among members of BRICS and the SCO, as well as among nondemocracies and commodities producers seeking to hedge against the Global South's exposure to any "unilateral" climate policies. According to Russia's Foreign Ministry, the Kazan Declaration has been approved by all member nations and endorsed by all partner countries, such as Kazakhstan and Uzbekistan.⁴⁰

Kazakhstan and Uzbekistan, who have been elevated to BRICS partner status as the alliance expands, are precisely the states most open to China's and Russia's vision of global climate governance transformation given that they feel either hurt or ignored by the EU's climate agenda.

In line with these statements recognizing the negative consequences of climate change and the need for urgent action, but also calling for increased investment in oil and gas production and exploration, China has since continued to concentrate on fossil fuels, particularly oil and gas, in Central Asia. In this respect, it has been much more effective than its Western competitors in assuaging the concerns of fossil fuel-reliant local elites who officially recognize the need to decarbonize their energy sectors but, due to a weak track record in actually delivering reforms in the sector (Skalamera Groce, 2020), have a strong vested interest in China's "balanced" approach.

In May 2023, China's President Xi Jinping reaffirmed Beijing's support for fossil fuel development in Central Asia at the first-ever summit of Central Asian leaders, hosted by China in Xi'an. While shunning "external interference," Xi unveiled an ambitious plan to help elevate Central Asia to the next level of development—from building large infrastructure networks to boosting fossil fuel trade. Ahead of the meeting, a key BRI project under discussion was the "Line D" natural gas pipeline from Turkmenistan to China to feed Beijing's massive long-term gas needs, along with a railway connecting China to Kyrgyzstan and Uzbekistan.⁴¹ During the summit, Xi called on China and Central Asia to increase oil and gas trade, develop energy cooperation across industrial clean energy chains, and boost cooperation on nuclear energy.⁴²

³⁹ XVI BRICS Summit *Kazan Declaration*, "Strengthening Multilateralism for Just Global Development and Security", *Kazan*, Russian Federation, 23 October 2024, p. 22.

⁴⁰ Joint Statement of the BRICS Ministers of Foreign Affairs/International Relations, Nizhny Novgorod, Russian Federation, 10 June 2024.

⁴¹ Euractiv (2023, May 19). China's Xi unveils grand development plan with Central Asia states.

⁴² Aljazeera (2023, May 19). China's Xi presents development plans for Central Asia.

Reflecting a critical position for the fossil fuel-dominated economies of Central Asia and for China, Xi reaffirmed Beijing's support for a "deeply complementary and high-level win–win cooperation" in jointly fostering "clean [...] technologies in the energy sector, including the clean and highly efficient use of fossil fuels" (Reuters, 2023). Most notably, he called for "jointly fostering a new paradigm" that includes the peaceful rise of nuclear energy. This builds common ground with Central Asian countries, specifically Kazakhstan, which has been eagerly awaiting an opening for its uranium to support China's energy transition.⁴³ Meanwhile, some European countries, most notably Germany, decided to phase out nuclear power in the aftermath of the Fukushima nuclear accident. Others, such as Spain, Switzerland, and Italy, scrapped plans to add new nuclear plants (Bordoff, 2022; CNN, 2023). Others still, such as France, have strengthened cooperation with Kazakhstan in the nuclear sector, showing that this has not been part of a consistent EU policy.

In sum, China has made a strong push to build its own horizontal elite networks in Central Asia, assert influence over its component states' resource wealth, and capitalize on the distributional consequences of the EU's climate agenda—and the obstructionist reactions they have generated. This multi-pronged approach has allowed it to boost its 'soft power' outreach, solidify its long-term influence over the region's energy sector, and denounce Europe's turn to 'climate protectionism.'

5 Conclusion

On the back of its formidable economic rise and massive long-term energy needs, China has adopted a forceful stance in international relations and a leadership role in resource-rich Central Asia. Meanwhile, the EU's partial turn to strength projection and geopolitics have been driven by China's new assertiveness, its control over clean energy supply chains, the Sino-Russian relationship, and Russia's war in Ukraine. Still, increased energy efficiency and saving and an accelerated energy transition have also constituted the EU's response to new external risks. For Central Asia, a region that is gradually embracing the energy transition but still eager to market on its resource-wealth, the blurred boundaries of the EU's dual approach have appeared seldom congruent in recent years.

Regional experts have argued that rather than being seen as "neighbors of neighbors" with valuable minerals to extract, Central Asian elites would much prefer to draw on Europe as a source of inspiration as far as regional integration and "strategic autonomy" are concerned, particularly around the water-energy-climate-change nexus (Kassenova, 2023). But they have also lamented that the EU has thus far failed to ensure that the cost burdens of its energy transition are fairly distributed not only *within* the EU, particularly in the face of persistently high energy prices, but also, critically, *across* partner countries. Along with Fawn et al. (2022) this article argues that EU studies should take more interest in Central Asia, given that the EU's larger external relations and security agenda extends to this region. Similarly, it shows that Central Asian studies can benefit from the analysis of the region's horizontal and vertical interactions with external actors, including the EU. This article has focused on one key area of such interactions: the relationship between local communities in Kazakhstan and Uzbekistan in clean energy policy and powerful actors from outside and from within.

⁴³ Kazakhstan exports around half of its uranium to China. Recent deals have consolidated its position as a critical supplier of nuclear fuel to China's rapidly growing nuclear energy market. See "Kazakhstan's Kazatomprom signs key uranium supply deal with China's CNNC and CNUC" Daryo, October 15, 2024.

The EU has made commitments in its Strategy on Central Asia (2019) to help the region transition toward a low-carbon economy with energy efficiency and to foster projects in RE, electricity interconnections, and “cooperation on implementing the Paris climate commitments” (Council of the European Union, 2019, p. 7). The EU can do little to fundamentally alter Central Asia’s lack of democracy, pervasive corruption, and weak institutions, which in part have hampered the EU’s efforts in comparison with those of China, Russia, and other regional actors. Yet what the EU can offer the Central Asian countries is not just assistance in fulfilling the declarations from the Paris Agreement, but also concrete business activity, job opportunities, and joint work on targets to spur the industrialization of Central Asian countries both through clean technology innovations and also, critically, through “on the ground” establishment of energy-efficient industries, job creation, and skill-upgrading for displaced coal workers.

The EU must do more to address the distributional concerns of its emerging partner countries while preserving its reputation as a legitimate international climate leader. This paper closes by arguing that it is not too late for the EU to address the distributional problems that its EGD has generated among and within Central Asian countries. Some spheres that might be less attractive for competitors include joint projects in capacity-building, in energy project management, and in finance, and projects to boost societal resilience to climate change in Central Asia—by supporting the ability of local social actors to self-organize and utilize local strengths and knowledge of available resources and infrastructure (Bossuyt, 2023). Consistent funding that also targets such initiatives could improve the EU’s legitimacy as an actor willing to share responsibilities with local communities and its credibility in increasing the ability of vulnerable groups to withstand the impacts of climate change. Rather than promoting broad “green” ideas and principles that essentially offer technology transfer to encourage decarbonization, the EU needs to develop more meaningful partnerships with individual countries aimed at their local socio-economic development. If it fails to do so, Central Asia’s pushback against the distributional effects of the EU’s Green Deal is likely to expand and intensify, and so are accusations of ‘green protectionism,’ or worse, climate ‘colonialism.’

In this respect, sometimes, at least, other regional actors, most notably Russia and China, have used the developing countries’ discourse about the EU’s ambitious climate agenda to justify delayism and inaction, while framing their own pushback as a form of South-South cooperation. If this impression is confirmed, it would anchor the study of distributional conflicts arising from Western climate policy more in the field of postcolonialism, and additional research is needed into how post-colonial narratives mix with the West’s ideas and leadership in climate politics in new, interesting ways. This involves further research to identify conditions that lead local communities to challenge (or endorse) external influence in climate policies and theorizing about the different forms such resistance can take, at both the state and the societal level.

Data availability The data generated by the expert interviews analyzed during the current study are available upon request. Some personal identifiers may not be shared openly to protect study participant privacy.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article’s Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article’s Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

- Acharya, A. (2004). How ideas spread: Whose norms matter? Norm localization and institutional change in Asian regionalism. *International Organization*, 58(2), 239–275.
- Aklin, M., & Mildenberger, M. (2020). Prisoners of the wrong dilemma: Why distributive conflict, not collective action, characterizes the politics of climate change. *Global Environmental Politics*, 20(4), 4–27.
- Andersen, S. S., Goldthau, A., & Sitter, N. (2017). Conclusion: Liberal mercantilism? In S. S. Andersen, A. Goldthau, & N. Sitter (Eds.), *Energy Union. Europe's new liberal mercantilism?* Palgrave Macmillan UK.
- Avdaliani, E. (2024, February 27). China goes green in central Asia. Choice. <https://chinaobservers.eu/china-goes-green-in-central-asia/>
- Ayers, A. J. (2013). Beyond myths, lies and stereotypes: The political economy of a 'new scramble for Africa.' *New Political Economy*, 18(2), 227–257.
- Boonstra, J. (2015). Reviewing the EU's approach to central Asia. EUCAM Policy Brief No. 34. <http://www.eucentralasia.eu>
- Bordoff, J. (2022). *3 Reasons nuclear power has returned to the energy debate*. Foreign Policy.
- Bossuyt, F. (2019). The EU's and China's development assistance towards Central Asia: Low versus contested impact. *Eurasian Geography and Economics*, 59(5–6), 606–631.
- Bossuyt, F. (2021). Sketching the context: A comparative overview of the EU's and China's engagement with Central Asia. In F. Bossuyt & B. Dessein (Eds.), *The European Union, China and Central Asia. Global and regional cooperation in a New Era* (pp. 54–74). Routledge.
- Bossuyt, F. (2023). The importance of boosting societal resilience in the fight against climate change in central Asia. Springer briefs in climate studies. In R. Sabyrbekov, I. Overland, & R. Vakulchuk (Eds.), *Climate change in Central Asia*. Springer.
- Bridge, G. (2018). Exploiting: Power, colonialism and resource economies. In *Companion encyclopedia of geography* (pp. 861–881). Routledge.
- Bridge, G., Bouzarovski, S., Bradshaw, M., & Eyre, N. (2013). Geographies of energy transition: Space, place and the low-carbon economy. *Energy Policy*, 53, 331–340.
- CNN. (2023, April 15). 'A new era': Germany quits nuclear power, closing its final three plants. CNN.
- Colgan, J. (2020, September 14). The climate case against decoupling. *Foreign Affairs*.
- Council of the European Union. (2019, 17 June). *Council conclusions on the new strategy on central Asia*. Council of the European Union. <https://www.eeas.europa.eu/sites/default/files/st10221-en19.pdf>
- Dannreuther, R. (2022). Oil and international relations: Theory, materiality and the political. In R. Dannreuther & W. Ostrowski (Eds.), *Handbook on oil and international relations*. Edward Elgar Publishing.
- Dolšák, N., & Prakash, A. (2022). Three faces of climate justice. *Annual Review of Political Science*, 25, 283–301.
- Dzhuraev, E., & Muratalieva, N. (2020). *THE EU strategy on Central Asia*. The Friedrich Ebert Foundation. <https://library.fes.de/pdffiles/bueros/bischkek/16168.pdf>
- Eurasianet. (2023, December 15). *Beijing making soft power push in Central Asia with vocational training initiative*. Eurasianet.
- Eurofound. (2021). *Distributional impacts of climate policies in Europe*. Publications Office of the European Union.
- Fawn, R. (2021). 'Not here for geopolitical interests or games': The EU's 2019 strategy and the regional and inter-regional competition for Central Asia. *Central Asian Survey*, 41(4), 675–698.
- Fawn, R., Kluczevska, K., & Korneev, O. (2022). EU–Central Asian interactions: Perceptions, interests and practices. *Central Asian Survey*, 41(4), 617–638.
- Financial Times. (2020, January 29). The EU's carbon border tax plan is risky but needed. *Financial Times*.
- Fragkos, P., Fragkiadakis, K., Sovacool, B., Paroussos, L., Vrontisi, Z., & Charalampidis, I. (2021). Equity implications of climate policy: Assessing the social and distributional impacts of emission reduction targets in the European Union. *Energy*, 237, Article 121591.
- Fredriksson, G., & Zachmann, G. (2021). Assessing the distributional effects of the European Green Deal. In *CESifo Forum* (Vol. 22(05), pp. 03–09). ifo Institut-Leibniz-Institut für Wirtschaftsforschung an der Universität München.
- Goldthau, A. (2021). Widening the EU's geoeconomic and regulatory approach to climate policy. In *The EU and climate security: Toward ecological diplomacy* Olivia Lazard, Richard Youngs (pp. 33–40). Carnegie Endowment for International Peace.
- Green, F., & Gambhir, A. (2020). Transitional assistance policies for just, equitable and smooth low-carbon transitions: Who, what and how? *Climate Policy*, 20, 902–921.

- Grimm, S., Reiners, W., Helwig, N., Siddi, M., & Mourier, L. (2021a). *The global dimension of the European Green Deal: The EU as a green leader*. The Multinational Development Policy Dialogue, KAS.
- Grimm, S., Helwig, N., Reiners, W., & Siddi, M. (2021b). Leadership and partnerships for the European Green Deal: EU relations with (re)emerging economies. *L'Europe En Formation*, 393, 40–63.
- Howlett, C., & Lawrence, R. (2019). Accumulating minerals and dispossessing Indigenous Australians: Native title recognition as settler-colonialism. *Antipode*, 51(3), 818–837.
- IEA. (2022). *Kazakhstan 2022*. IEA. <https://www.iea.org/reports/kazakhstan-2022>
- Interfax. (2023, May 31). *China Power to invest \$150 mln wind power project in Kazakhstan*. Interfax.
- IRENA. (2019). *A new world: The geopolitics of the energy transformation*. IRENA.
- Jenkins, J. D. (2014). Political economy constraints on carbon pricing policies: What are the implications for economic efficiency, environmental efficacy, and climate policy design? *Energy Policy*, 69, 467–477.
- Kaczmarek, M., & Siddi, M. (2021). The EU and China in Central Asian energy geopolitics. In F. Bossuyt & B. Desein (Eds.), *The European Union, China and Central Asia. Global and regional cooperation in a new era*. Routledge.
- Kassenova, N. (2022). *How China's foreign aid fosters social bonds with central Asian ruling elites* (pp. 1–35). Carnegie Endowment for International Peace.
- Kassenova, N. (2023). *Strategic autonomy for Central Asia: Drawing inspiration and support from the European Union*. CAPS Unlock.
- Kern, F., & Markard, J. (2016). Analysing energy transitions: Combining insights from transition studies and International Political Economy. In T. Van de Graaf (Ed.), *The Palgrave handbook of the international political economy of energy* (pp. 291–318). MacMillan.
- Korppoo, A., Tynkkynen, N., & Tarusina, I. (2023). Conceptualizing “Green economy” in Russian academic debate. *Eurasian Geography and Economics*, 64(6), 758–780.
- Kratochvíl, P., Cibulková, P., & Beník, M. (2011). The EU as a ‘framing actor’: Reflections on media debates about EU foreign policy. *JCMS: Journal of Common Market Studies*, 49(2), 391–412.
- Kuzemko, C., Blondeel, M., Dupont, C., & Brisbois, M. C. (2022). Russia's war on Ukraine, European energy policy responses & implications for sustainable transformations. *Energy Research & Social Science*, 93, Article 102842.
- Kuzemko, C., Watson, M., & Lawrence, A. (2018). The international political economy of energy: Specificities, interactions and change. *Review of International Political Economy*. <https://doi.org/10.1080/09692290.2018.1553796>
- Landis, F., Fredriksson, G., & Rausch, S. (2021). Between-and within-country distributional impacts from harmonizing carbon prices in the EU. *Energy Economics*, 103, Article 105585.
- Lemon, E., & Jardine, B. (2024). Securing the belt and road and establishing hierarchy in Central Asia. In E. Schatz & R. Silvey (Eds.), *Seeing China's belt and road*. Oxford University Press.
- Lennon, B., Dunphy, N. P., & Sanvicente, E. (2019). Community acceptability and the energy transition: A citizens' perspective. *Energy, Sustainability and Society*, 9(1), 1–18.
- Levin, T., & Thomas, V. M. (2016). Can developing countries leapfrog the centralized electrification paradigm? *Energy for Sustainable Development*, 31, 97–107.
- Levy, D., & Newell, P. (2002). Business strategy and international environmental governance: Toward a neo-Gramscian synthesis. *Global Environmental Politics*, 2(4), 84–101.
- Lewis, J. I. (2024). The climate risk of green industrial policy. *Current History*, 123(849), 14–19.
- Matveeva, A. (2023, April 13). *A new opening for EU–Central Asia relations? Europe's East*. Carnegie Europe.
- Moisé, G. M., & Sorbello, P. (2022). The EU and European transnational companies in Central Asia: Relocating agency in the energy sector. *Central Asian Survey*, 41(4), 770–787.
- Monasterolo, I., Roventini, A., & Foxon, T. J. (2019). Uncertainty of climate policies and implications for economics and finance: An evolutionary economics approach. *Ecological Economics*, 163, 177–182.
- Investment Monitor. (2023, May 18). *Chinese companies invest in Uzbekistan solar farms*. Investment Monitor.
- Newell, P. (2021). *Power shift: The global political economy of energy transitions*. Cambridge University Press.

- Newell, P. J., Geels, F. W., & Sovacool, B. K. (2022). Navigating tensions between rapid and just low-carbon transitions. *Environmental Research Letters*, 17(4), Article 041006.
- O'Sullivan, K., Golubchikov, O., & Mehmood, A. (2020). Uneven energy transitions: Understanding continued energy peripheralization in rural communities. *Energy Policy*, 138, Article 111288.
- Poberezhskaya, M., & Bychkova, A. (2021). Kazakhstan's climate change policy: Reflecting national strength, green economy aspirations and international agenda. *Post-Communist Economies*, 34(7), 894–915.
- Poberezhstaya, M., & Martus, E. (2024). Climate obstruction in Russia: Surviving a resource-dependent economy, an authoritarian regime, and a disappearing civil society. In R. J. Brulle, J. T. Roberts, & M. C. Spencer (Eds.), *Climate obstruction across Europe*. Oxford University Press.
- Reuters. (2022, September 16). China and India among SCO states urging 'balance' in climate approach. *Reuters*.
- Reuters. (2023, May 19). China's Xi unveils grand development plan for Central Asia. *Reuters*.
- Scholten, D., Bazilian, M., Overland, I., & Westphal, K. (2020). The geopolitics of renewables: New board, new game. *Energy Policy*, 138(111059), 768.
- Sharifi, Y. (2023, July 18). *Eclipsing Russia: China's green energy expansion into Central Asia*. The China Project.
- Sharifi, Y. (2024, April 19). *Green new wave: How China adapts to Central Asia's renewable energy landscape*. Carnegie Endowment for International Peace.
- Siddi, M. (2023, May). *Europe's policies for a green transition—the European Commission's geopolitical turn and its pitfalls*. Finnish Institute of International Affairs Briefing Paper.
- Skalamera, M. (2020). The 2020 oil price dive in a carbon-constrained era: Strategies for energy exporters in central Asia. *International Affairs*, 96(6), 1623–1642.
- Skalamera Groce, M. (2020). Circling the barrels: Kazakhstan's regime stability in the wake of the 2014 oil bust. *Central Asian Survey*, 39(4), 480–499. <https://doi.org/10.1080/02634937.2020.1812530>
- Skalamera Groce, M., & Köstem, S. (2021). The dual transformation in development finance: Western multilateral development banks and China in post-Soviet energy. *Review of International Political Economy*, 31(1), 47–73.
- Smith, I. D., Overland, I., & Szulecki, K. (2023). The EU's CBAM and Its 'significant others': Three perspectives on the political fallout from Europe's unilateral climate policy initiative. *JCMS: Journal of Common Market Studies*, 62(2), 603–618.
- Sovacool, B. (2016). How long will it take? Conceptualizing the temporal dynamics of energy transitions. *Energy Research & Social Science*, 13, 202–215.
- Sovacool, B. K., Hess, D. J., Cantoni, R., Lee, D., Brisbois, M. C., Walnum, H. J., Dale, R. F., Rygg, B. J., Korsnes, M., Goswami, A., & Kedia, S. (2022b). Conflicted transitions: Exploring the actors, tactics, and outcomes of social opposition against energy infrastructure. *Global Environmental Change*, 73, Article 102473.
- Sovacool, B. K., Newell, P., Carley, S., & Fanzo, J. (2022). Equity, technological innovation and sustainable behaviour in a low-carbon future. *Nature Human Behaviour*, 6(3), 326–337.
- Szulecki, K., & Overland, I. (2020). Energy democracy as a process, an outcome and a goal: A conceptual review. *Energy Research & Social Science*, 69, Article 101768.
- Thombs, R. P. (2019). When democracy meets energy transitions: A typology of social power and energy system scale. *Energy Research & Social Science*, 52, 159–168.
- Tutumlu, A., & Aminjonov, F. (2023, December 1). Central Asia's great energy paradox. *The Diplomat*.
- Vakulchuk, R., & Overland, I. (2019). *China's belt and road initiative through the lens of Central Asia*. Taylor & Francis.
- Winn, N., & Gänzle, S. (2022). Recalibrating EU Foreign Policy *Vis-à-vis* Central Asia: Towards principled pragmatism and resilience. *Geopolitics*, 28(3), 1342–1361.
- Wrigley, E. A. (Ed.). (2010). *Energy and the English industrial revolution*. Cambridge University Press.
- Wu, F., & Martus, E. (2021). Contested environmentalism: The politics of waste in China and Russia. *Environmental Politics*, 30(4), 493–512.
- Zachmann, G., Fredriksson, G., & Claeys, G. (2018). The distributional effects of climate policies. *Bruegel Blueprint Series*, 28, 2018.
- Zhou, Y. (2023, March). *Greener pastures: China's clean energy engagement in central Asia*. RETCA Project, Program on Central Asia, Davis Center for Russian and Eurasian Studies.