

RESEARCH ARTICLE

China's Belt and Road Initiative and Its Impact on the Energy Independence of the European Union

Paolo Davide Farah^{1,2} , Davide Giacomo Zoppolato^{2,3} and Tivadar Ötvös^{2,4}

¹Eberly College of Arts and Sciences, Rockefeller School of Policy and Politics, West Virginia University, Morgantown, WV, USA, ²gLawcal - Global Law Initiatives for Sustainable Development, Essex, UK, ³Department of Geology and Geography, West Virginia University, Morgantown, WV, USA and ⁴Baker & McKenzie Attorneys-at-Law, Budapest, Hungary

Corresponding author: Paolo Davide Farah; Email: paolofarah@yahoo.com

Abstract

In 2013, President Xi Jinping announced the ambitious *Belt and Road Initiative* (BRI), aimed at positioning China at the forefront of the global economy. Central to the BRI is the pursuit of energy security—a long-standing priority linked to diplomacy and essential for China's continued growth. To meet its rising energy needs, China has launched numerous infrastructure development projects, with energy playing a key role within the broader BRI framework. Similarly, since the oil crisis of the 1970s, the European Union (EU) has prioritised energy security through investments in alternative energy sources and resource diversification. This article explores the shared interests of these two economic powers in securing and investing in alternative energy. It focuses on a central question: how might the BRI align with the EU's Neighborhood Policy to strengthen energy independence across Eurasia and generate mutual benefit? This analysis examines both the challenges and the opportunities for collaboration and synergy.

Keywords: China; European Union; Belt and Road Initiative (BRI); energy independence; energy security

1. Introduction

Historically, this is not the first time China has embarked on an ambitious initiative like the Belt and Road Initiative (BRI). To appreciate the significance of this infrastructural ambition, one needs only to look to the Han Dynasty. This period was marked by mystery, wealth, and cultural diversity, during which some of the world's most ancient and vital trade routes were established—routes that became known as the “Silk Road.” The demand for silk and other goods from China was so high that economic cooperation became a cornerstone of the era's global prominence (Hansen, 2012; Liu, 2010). During this time, cooperative relations between China and the West became essential, establishing China as “the world's factory” and fundamentally transforming the dynamics of global diplomacy.

Today, similar connectivity between the Asian and European continents endures. A simple geographical examination of the relationship between Central Asia and Europe—both over land and sea—shows the continuity of this connection. Such an analysis makes Chinese President Xi Jinping's ambitious goal appear grounded. In 2013, he laid the foundation for this initiative in Central Asia (Indeo, 2018, p. 142). He announced the revival

of China's "peripheral diplomacy" (Qiu, 2014; Swaine, 2014) in the form of an economic integration project, which would later be known as the Belt and Road Initiative (BRI). This initiative focused on the strategic inclusion of nations located primarily in Central Asia, often referred to as "Eurasia." Peripheral diplomacy dates back to the twentieth century, when its foundations were established to address national security concerns and promote economic development in territories bordering China (Qiu, 2014; Swaine, 2014).

In the broader context, such a goal is not entirely unique. For example, the European Union (EU) has a similar objective: expanding its influence over nearby, less prosperous nations and those surrounding the EU, with the aim of supporting the development and stabilisation of their economies. In essence, the EU seeks to facilitate and unify trade relations with countries that are not formally part of the union, thereby extending its boundaries. This initiative is known as the European Neighborhood Policy (ENP) (Wesselink and Boschma, 2017). Additionally, there is a more subtle goal that the EU seeks to achieve—securing new trade routes, much like China. This would help meet the growing demand for raw materials and primary goods, while also providing opportunities to exploit markets in Central Asia and throughout the Mediterranean region. Both the BRI and the ENP are large-scale initiatives with significant implications. Both aim to assist and invest in developing nations or economies in transition, creating opportunities for all involved, including potential benefits for the "economic giants" in return for their investments. However, in their current forms, the initiatives are competing with one another. China and the EU share overlapping geopolitical interests in the Caspian and Central Asian regions, further intensifying their rivalry.

This article examines "energy" as one of the most critical drivers of external commercial, political, and economic expansion. It centres on a key overarching question: To what extent will the implementation of the BRI and ENP positively or negatively impact energy independence, and how can a win-win outcome be achieved? This question demands careful examination for several compelling reasons.

The Central Asian and Caspian regions have long been recognised for their abundant untapped reserves of oil and natural gas (Bahgat, 2009; Dorian et al., 1999). Additionally, these regions hold significant potential for renewable energy generation (Nabiyeva, 2018; Yang, Liu and Jing, 2015).

These factors underscore the strategic importance of energy access, which serves as a primary motivator for both the EU and China's engagement in the area. Achieving compromise, however, poses a considerable challenge.

The BRI extends China's influence over neighbouring countries in a manner comparable to the ENP's efforts within its regional framework. This overlap introduces significant complications, as it is unlikely for any single country to simultaneously align itself with two distinct and potentially conflicting regional strategies. Given the global implications of these competing political and economic initiatives, an in-depth evaluation of their consequences is both necessary and timely. Yet, such analysis is often overlooked, despite its importance in addressing the broader ramifications for energy security and geopolitical stability.

This article explores multiple facets of the BRI in relation to the ENP. First, it analyses the perception of Chinese economic and political expansion along the BRI (particularly its land-based component) and assesses how the EU's role is viewed within ENP countries. Second, it draws a comparative analysis of Chinese and European investments in infrastructure development, underscoring key differences and overlaps. Lastly, it examines, from a legal perspective, the Central Asia-China Gas Pipeline (CACP) Agreements and the Energy Community for South-East Europe (ECSEE), exploring their implications for regional energy security.

The article seeks to address the question of energy independence within the context of these two initiatives and their potential alignment, with the ultimate goal of avoiding conflict and achieving a win-win scenario for all stakeholders.

The structure of the article is as follows. Section 2 examines the positions and strategies of China and the EU in their efforts to secure energy independence. Sections 3 and 4 provide an in-depth analysis of the diverging interests, priorities, and approaches of the two blocs in their cooperation with neighbouring regions, highlighting key similarities and differences. Section 5 compares two significant legal frameworks on energy: the CACP legal framework and the establishment of the ECSEE. Both frameworks reflect the intentions of China and the EU to promote energy independence while simultaneously fostering regional cooperation.

Although the BRI and ENP represent competing and, at times, conflicting initiatives, this article argues that energy independence can be realised through the alignment and potential integration of the two frameworks. Such integration would help avoid conflict and secure a mutually beneficial outcome for all actors engaged in ensuring energy security across Eurasia.

2. The race for energy

Global energy demand is steadily increasing, driven primarily by recently industrialised nations, most of which are located in Asia. Projections indicate that energy consumption will increase significantly over the next 10–30 years, prompting serious concerns (International Energy Agency, 2019). In this context, it is crucial for both developing and developed nations to enhance their energy security and independence (Farah, 2015). In fact, we are in the midst of a race for energy security. “Energy security” refers to ensuring a sufficient and affordable energy supply, while “energy independence” denotes a broad, domestically diverse energy portfolio that reduces reliance on external sources.

The concept of energy independence gained prominence following the energy crisis of the 1970s, when many Western countries faced disruption in their energy supply affecting both commercial and private sectors. These crises were triggered by the geopolitical fallout of Western support for Israel during the Yom Kippur War and the 1973 OPEC oil embargo. The resulting supply shortages and unprecedented spikes in oil prices highlighted vulnerabilities in energy systems. Although oil prices stabilised within a decade, the crises served as a wake-up call for nations worldwide. In response, countries adopted policies to fortify their energy independence. Key measures included the establishment of Strategic Petroleum Reserves (SPR) (Andrews and Pirog, 2012; Beaubouef, 2007) and the diversification of energy import sources, reducing dependency on OPEC member states (Corbett, 2013; Zulkifli and Haqem, 2022). These strategies laid the basis for greater energy security and remain essential in addressing the challenges of constantly growing energy demands (Farah, 2020).

The energy crisis spurred significant advancements in renewable energy, energy efficiency, and environmental protection in both the Global North (Ross, 2013; Jacobs, 2016; Wallace, 2021; Wellum, 2017) and the Global South (Li, 2007; Pendse, 1979, 1980). These policies were motivated not only by ecology and environmental considerations but also by the strategic need to leverage innovations in the energy sector to lower energy costs and achieve energy independence. At the onset of the crisis, then-President Richard Nixon underscored the urgency of achieving energy independence, declaring: “The United States will not be dependent on any other country for the energy we need” (Nixon, 1974). This vision was grounded in the pragmatic recognition that energy exporters—many of which, especially following decolonisation movements, were outside Western influence—could unilaterally halt exports at their discretion. Rather than adopting a multilateral and cooperative approach, energy has been closely tied to national priorities and security, often at the expense of global community goals. Recent geopolitical developments, such as Russia’s invasion of Ukraine, have reignited the focus on energy independence in

government agendas. In response, states have actively negotiated new energy deals and diversified their supply chains (Ateed, 2024; Hosseini, 2022; Skalamera, 2023). Whether through biofuels, fracking, shale gas, or renewables, energy independence has increasingly become “securitized,” positioning at the heart of competition among national states (Özcan, 2013).

As Sica and Huber illustrate in their analysis of fracking in Pennsylvania, the powerful discourse surrounding energy independence “legitimizes opening up internal territory to international investment” and thus enables “the state [to actively encourage] foreign interdependence through the extraction of energy and by allowing it to move into global circuits of investment capital and exchange” (Sica and Huber, 2017). While the authors emphasise that such practices often lead to extractive and environmentally harmful outcomes, we argue that, in the context of EU–China energy competition, energy independence is an essential foundation for achieving win-win solutions.

Unlike the US, where energy independence is framed predominantly as a national issue aimed at reducing reliance on foreign entities, both the EU and China integrate broader policy objectives into their energy strategies. For these actors, energy independence is designed to function effectively only when it simultaneously strengthens and aligns neighbouring countries. This approach is necessary because both blocs remain heavily dependent on energy imports from external sources.

As explored in this article, energy independence extends beyond the mere securing of energy sources to encompass broader strategic interests, particularly for China and the EU (Ibrahim et al., 2025). Although their approaches differ in language, terminology, and legal strategies—ranging from bilateral to regional frameworks—their objectives share common ground. The EU emphasises human rights and social cohesion, while China prioritises win-win cooperation, shared development, and economic growth. Despite these distinctions, both entities pursue energy independence in parallel with fostering positive developments in their neighbouring regions.

Securing energy independence is an ambitious goal for China. The People’s Republic of China (PRC) is actively pursuing strategies to ensure energy security and independence. Achieving this objective requires significant improvements in domestic energy infrastructure and investments, alongside extensive international efforts. China has been a major player in financing and developing both fossil-fuel energy and renewable energy projects across the Global South (Ibrahim, 2023; Zoppolato and Jiang, 2023). These efforts include bolstering relationships with neighbouring countries and strengthening trade ties with key partners such as Russia, Saudi Arabia, Central Asia, and Africa.

China’s energy infrastructure initiatives are not confined to fossil fuels but also extend to renewable energy sources. The PRC has openly declared its ambition to become the global leader in green energy generation, as reflected in its energy policies and regulations, particularly in the electricity sector (Cherni and Kentish, 2007; Wang, Yin and Li, 2010; Wu et al., 2016). Simultaneously, China must address its domestic demand for oil and gas, necessitating secure and reliable access to natural resources in regions targeted by the BRI (Mustafić, 2016, pp. 158–159). These multifaceted efforts underscore China’s dual focus on securing sufficient energy supplies while positioning itself as a global leader in sustainable energy development.

As elaborated further in this article, China is actively expanding its geopolitical influence, a strategy that has led some scholars to characterise its approach as neocolonialism (Antwi-Boateng, 2017, pp. 179–180). While this term is most commonly applied in the context of China’s activities in Africa, similar dynamics are evident in Eastern Europe and Central/Southeast Asia, where the BRI is being implemented. These regions reflect parallel patterns of influence, driven by extensive investment, infrastructure development, and trade agreements under the BRI framework.

From the perspective of EU energy independence, the regions targeted by the ENP—including Central Asia—are crucial for reducing reliance on energy imports from Russia, Egypt (Furlan and Charisi, 2017, p. 7), Algeria, and the Middle East (Bilgin, 2009; Farah and Tremolada, 2015, pp. 566–568). Since the early 2000s, a growing rivalry has emerged between the EU and China, with both powerhouses striving to invest in energy infrastructure and secure access to oil and natural gas supplies. Egypt holds a strategic position among the states on the EU's energy radar, with the potential to emerge as a leading energy exporter and a key natural gas hub. This is largely due to its vast resources in the ZOHR field and its advantageous geographical location between the Red Sea and the Mediterranean (Furlan and Charisi, 2017, p. 7).

The approaches adopted by China and EU differ significantly. Since the inception of the Baku Initiative and the launch of the ENP—essentially an alternative to EU enlargement—the EU has prioritised governance support by shaping policies and regulatory frameworks in accordance with European principles and values. This alignment not only brings these countries closer to EU Member States but also creates pathways for potential integration.

In contrast, China's approach begins with financial loans or other types of investments, often extended through its State-Owned Enterprises (SOEs) and Banks, such as the China Development Bank and the Export-Import Bank of China. These loans or other instruments are strategically linked to major infrastructure projects, including energy pipelines, power plants, renewable energy initiatives, and transportation networks. Subsequently, China leverages these initial financial commitments by deploying its SOEs to carry out these projects, ensuring not only that Chinese companies benefit economically but also that the infrastructure aligns with China's broader strategic interests. This model creates a cycle of dependency, as recipient countries often struggle to repay these loans, leaving them economically and politically dependent on Beijing.

While the EU focuses on attracting investment into the region (Denison, 2009, pp. 1–5), by encouraging private sector involvement and fostering regulatory reforms that align with European standards, China takes a more centralised and direct approach. Beijing positions itself as a reliable and immediate provider of capital, establishing its presence through infrastructure projects and financial incentives and bypassing the often slow and bureaucratic processes associated with EU-led initiatives. Through its BRI, China offers swift financing and technical support, which appeals to countries with urgent infrastructure needs but limited access to traditional Western funding sources. This divergence in strategy reflects the broader ideological and practical differences between the two global actors in their quest for energy security and influence.

The EU's approach emphasises long-term structural reforms, good governance, and the promotion of democratic values, aiming to build institutional capacities in alignment with European norms. China, on the other hand, prioritises pragmatic, results-driven partnerships focused on mutual economic gains, often downplaying governance reforms and human rights considerations. Consequently, while the EU's strategy seeks to integrate partner countries more closely into its sphere of influence through alignment with European principles, China's model relies on creating economic interdependencies and expanding its geopolitical influence through targeted infrastructure investments and financial leverage.

This strategic dichotomy reflects the broader geopolitical competition between the EU and China, where energy security and infrastructure development become tools for advancing their respective global agendas.

Before the launch of the BRI, China's economic priorities in Central Asia were primarily centred on enhancing its national energy security by securing access to the oil and natural gas reserves of Kazakhstan, Turkmenistan, and Uzbekistan. This focus dates back to 1997, when Kazakhstan and the China National Petroleum Corporation (CNPC) signed a landmark agreement granting the company extensive access to Kazakhstan's

infrastructure (Wang, 2015, p. 15). Initially framed as a “collaboration,” this agreement laid the foundation for China’s long-term involvement in the region’s energy sector. This relationship was further entrenched with Kazakhstan’s formal inclusion in the BRI, underscoring the initiative’s strategic role in consolidating China’s influence. One of the central objectives of the BRI is to enhance connectivity between participating countries through the development of robust infrastructure networks. These include transportation corridors, energy pipelines, and communication trunk lines such as cross-border optical cables (Zeng, 2016, p. 518). By integrating Kazakhstan into its broader BRI framework, China not only expanded its access to critical energy resources but also positioned itself as a key driver of regional integration and development. This approach aligns with China’s broader strategy of using the BRI to secure vital supply chains while fostering economic dependencies that strengthen its geopolitical influence across Central Asia and beyond.

The BRI is not an isolated endeavour aimed at solidifying China’s influence in the region but rather part of a broader, multi-dimensional framework for cooperation. This framework includes mechanisms such as the Shanghai Cooperation Organization (SCO) (Wang, 2015, p. 14) and the Asian Infrastructure and Investment Bank (AIIB), which collectively enhance China’s strategic and economic footprint. Although the SCO has been widely criticised as “the most populous multilateral organization in the world, a pioneer in the rise of non-Western arenas for global governance, and even a new paradigm of international relations,” it is also frequently discussed in connection with the BRI and its prospects for successful implementation (Cooley, 2018; Grace, 2018; Rab and He, 2019).

A central goal of the BRI is “regional economic integration” with neighbouring countries, aimed at addressing economic disparities between these regions and China. Historical precedent suggests that such objectives are attainable, as the ancient Silk Road facilitated economic development and reduced inequalities in countries along China’s western borders, a dynamic exemplified by the modern China-Pakistan Economic Corridor (CPEC). The BRI also targets the development of China’s less economically advanced provinces, such as Xinjiang, by providing direct access to maritime trade routes. For example, the initiative has laid the groundwork for constructing a pipeline that would facilitate the direct transport of oil and natural gas from Iran to Pakistan and then to China (Irshad, 2015, p. 203). This pipeline would offer a more direct and secure alternative to the current maritime route through the Strait of Malacca and the South-China Sea, which remains the primary channel for the majority of China’s imported oil and gas. The over-reliance on this marine route necessitates additional East-West-bound transportation across mainland China, adding logistical complexity and potential vulnerabilities (Len, 2015, p. 7).

By diversifying transport routes, the BRI not only strengthens China’s energy security but also fosters greater regional interconnectivity and economic integration.

Despite the undeniable economic and political benefits generated since the launch of the BRI, China’s expanding presence in Central Asia, ENP Eastern Partnership countries, and certain EU Member States remains controversial and is often perceived negatively (Kavalski, 2018, 2020). In the EU, planned Chinese investments have primarily targeted Central European countries, particularly Hungary and Romania, with a focus on transport and energy infrastructure. However, the benefits for these EU Member States remain uncertain, especially when weighed against the clear strategic advantages for China in the region—most notably, the high-speed rail project connecting Hungary and Serbia (Romania-insider, 2018; Vörös, 2018).

For the purpose of this analysis, we will set aside the challenges associated with the fragile internal situation in some BRI-participating countries, such as Afghanistan, Pakistan, the parts of the Middle East. Infrastructure development in such regions can contribute to alleviating one of the primary drivers of conflict: poverty. However, in fragile states, poorly planned or politicized infrastructure projects (including those under the BRI) can eventually benefit mostly elites or particular groups, fueling resentment; lead to land

grabs, displacement, or environmental degradation; and be targeted by militants, becoming a liability rather than a solution. Whether infrastructure alleviates poverty depends on who builds it, how it's financed, and who benefits. As mentioned, BRI projects have sometimes faced criticism for lacking transparency, creating debt burdens, or failing to generate local employment.

Instead, this discussion will focus on analysing regional perceptions of the BRI in areas where Chinese and European interests intersect and often conflict, particularly in Central Asia. We will also explore whether these perceptions are justified by examining the dynamics of BRI implementation alongside direct investments from both the EU and China. This comparative analysis will provide insights into their respective approaches and allow us to draw conclusions regarding the EU's energy independence.

3. Peripheral Priorities? Are China's BRI and the EU's ENP Serving Eurasian Interests?

Perceptions of the BRI are partly shaped by the question of whether there is a discrepancy between Chinese policymakers' vision of the BRI and the actions of Chinese investors, companies, and traders in participating countries. It is also essential to further examine how China's approach to market expansion, export intensification, and satisfying domestic demand through developing economies differs from that of other leading global economies. Specifically, when examining energy investments, the focus should be on the types of investments made by the EU and China in energy infrastructure, as well as the win-win scenario promoted by the European external energy policy and the Chinese BRI.

The initial resistance to China and its governance in Central Asia is a lingering remnant of Soviet-era propaganda. However, these countries have quickly moved past this prejudice, largely due to China's demilitarised policies and its initiatives to open up, including the creation of cooperation platforms such as the SCO. A strong military presence and defensive foreign policies became unnecessary with the weakening of the once formidable Soviet military force, replaced by the new, independent states. Seen as an opportunity for economic development, this shift has fostered increased cooperation between some Commonwealth of Independent States (CIS) countries, particularly Kazakhstan, and the PRC. Another example of this cooperation is the Gateway Dry Port of Khorgos, located within the Kazakh-Chinese tax-free border zone. The Khorgos dry-port is a key location when it comes to one of the most important transport routes within BRI through the Caspian region towards Europe (Büchenbacher and Zhang, 2018). Once a sparsely populated rural area, it has already seen initial infrastructure development, financed by China, aimed at establishing a regional trade hub. While Sino-Central Asian cooperation and trade has deep historical roots predating the BRI, the launch of the BRI in 2013 has significantly intensified China's economic engagement and attention in the region (Kazantsev, Medvedeva and Safranchuk, 2021; Hulsewé, 2022; Karrar, 2016). Local shops are now stocked with Chinese goods flowing in from across the border. This collaboration illustrates the PRC's small-scale economic hegemony, a development that raises concerns among Central Asian countries and others both within and outside the BRI (Kirişçi and Le Corre, 2018; Pieper, 2021).

These signs of increasing Chinese economic dominance (Harper, 2017, p. 13) in Central Asia have sparked a wave of politically influential Sinophobia, gaining traction among certain political leaders and becoming increasingly prevalent within domestic populations and economic sectors—particularly among manufacturers of consumer goods (Gerber and He, 2022; Kyzy, 2021). The fear of a hegemony rising in Eurasia dates back to the beginning of the twentieth century and came with Mackinder's "heartland theory," warning of such a scenario based on the rich natural resources of the continent and pointing mainly at China

and Russia (Harper, 2017, p. 13). In 2022, 80–90% of Chinese exports to Central Asia consisted primarily of consumer and capital goods, a trend that has remained largely unchanged since 2016 (WITS, 2016, 2022). Conversely, raw material exports from the PRC to Central Asia accounted for only about 1–2% during the same period, while raw materials continue to dominate the trade flow from Central Asia to China (WITS, 2016, 2022). This trade imbalance can partly be attributed to the fact that many Central Asian countries are rich in natural resources, making it neither logical nor necessary for them to import such materials from abroad. However, the flow of consumer and capital goods from Central Asia to China remains minimal, especially from resource-rich countries like Turkmenistan and Kazakhstan, whose export portfolios are heavily weighted towards energy (Peyrouse, 2016). On the other hand, Chinese policymakers often stress the metaphorical and abstract nature of the BRI, contrasting it with its widespread perception as merely a geopolitical tool aimed at reshaping the power dynamics in Eurasia (Ahl, 2021; Zhang and James, 2023).

Chinese scholars and policymakers argue that the BRI is not a rigid network of economic trade routes strictly mirroring the historical Silk Road. Instead, they present it as a flexible, win-win platform open to all interested countries, designed to enhance cooperation, trade, and economic relations among participants and the PRC (Gloria, 2021; Sidaway and Woon, 2017, pp. 3–4).

The narratives surrounding the BRI undoubtedly hold appeal for the small, emerging economies of Central Asia. However, it is crucial to recognise certain realities. When it comes to energy resources, demand far outweighs supply—further compounded by the high sunk costs associated with resource-specific infrastructure required for transportation. Conversely, in case of consumer goods, capital, or finished products, supply is generally more accessible and secure due to the forces of globalisation. In this context, our statement is a general one, acknowledging the challenges faced by least developed countries, where the supply of these goods is problematic—just as access to energy, freshwater, and other essential commodities remains a significant issue. In other words, Central Asian countries endowed with abundant natural resources can readily identify alternative markets with high demand and profitability. On the other hand, China faces a narrower range of untapped markets for its goods. Moreover, Chinese goods and services are often interchangeable with those of producers from other countries, such as those in the EU. This dynamic has led to some perceptions of the BRI as creating an unbalanced “double win” for China, potentially at the expense of the less developed countries along the Silk Road. Specifically, China gains access to their natural resources while also securing new markets to address its excess production capacity. Regarding this latter point, while cross-border flows of consumer goods to neighbouring countries are significant, they are far from being China’s sole export. Heavily subsidised industries, such as steel, contribute to massive production surpluses that exceed domestic demand.

These surpluses often lead to a tendency to engage in practices such as dumping—selling products below cost in foreign markets—a practice that violates international trade rules and can escalate into trade disputes or wars. While China has made ongoing efforts to reduce overproduction (Lu, 2017), it is important to acknowledge that excess steel capacity remains a global issue (Alami, Copley and Moraitis, 2024; Liu, 2024; Price et al., 2016). BRI’s efforts to foster economic integration and create smaller, regionally interconnected clusters within Asia undoubtedly offer significant benefits for all participants (Ullah et al., 2021). These benefits are often likened to those provided by the ENP. However, challenges arise when political influence is exerted to exploit weak governance structures through the use of soft power. While China’s foreign policy officially emphasises peaceful development and cooperation with developing countries under the principles of “friendship, equality [...] reciprocity and inclusiveness” (Swaine, 2015), concerns remain about the potential for exploitative practices and the limitations of purported win-win scenarios. Although China explicitly rules out direct intervention in

the domestic affairs of Central Asian countries, issues of reciprocity have raised red flags. For instance, despite the BRI's stated goal of gradual market liberalisation, asymmetries persist, particularly in accessing the Chinese market. Sectors such as telecommunications and e-commerce often face significant regulatory and bureaucratic barriers, which are tightly maintained by the Chinese central government (Djankov and Miner, 2016; Fernández and Li, 2018). The energy sector presents similar challenges, with China's SOEs increasingly consolidating their role and influence (Cunningham, 2015, p. 43). The double standard—where China seeks access to the markets of developing countries while protecting certain segments of its own market from foreign competition—risks undermining the overall perception of BRI as a mutually beneficial initiative (Farah and Zoppolato, 2022). If such practices persist, they could erode trust and cooperation, casting doubt on the inclusivity and fairness of the initiative (Stec, 2018).

A similar dynamic can be observed in the context of the ENP, albeit with notable differences in approach. Horký-Hlucháň and Kratochvíl suggest that the ENP could be conceptualised as a subtle form of neocolonialism by EU (Horký-Hlucháň and Kratochvíl, 2014, p. 201). This perspective is further supported by a case study on the Mediterranean ENP, which highlights how the EU's pursuit of energy independence often prioritises its own strategic interests over fostering genuine socio-economic development in the region. Such actions risk perpetuating the *status quo* and reinforcing existing power imbalances (Cobarrubias, 2020).

The literature also debates the extent to which the EU's external policies serve as tools for gaining political influence over countries outside its immediate core. Scholars question whether these policies represent a neocolonial exercise aimed at erasing cultural and political differences to maintain the EU's dominance in neighbouring regions, or if they genuinely promote human and social development (Horký-Hlucháň and Kratochvíl, 2014; Langan, 2015, 2020). This tension reflects broader concerns about the EU's role in shaping relationships with its neighbours and the long-term implications of its external strategies.

Compared to China, ENP countries tend to favour closer ties with the EU for several reasons. First, while China generally refrains from interfering in internal affairs, the EU engages with ENP countries across multiple levels and dimensions, particularly emphasising support for civil society and non-profit organisations. Second, the benefits of the ENP are more tangible for the general population. For instance, signing an Association Agreement can provide visa-free access and educational opportunities, whereas China's approach tends to concentrate benefits within the elite strata of society. Third, the EU's longer history of engagement and more regulated interaction with ENP countries, though it may slow the advancement of EU interests, fosters a more inclusive and welcoming approach.

Both the BRI and ENP employ a variety of political, economic, and social mechanisms to advance the strategic interests of China and the EU, respectively. This dynamic is especially pronounced in the energy sector, as explored further in this article. While these initiatives are ostensibly designed to support partner countries, the primary focus remains on the interests of the initiating blocs. As a result, both the BRI and the ENP are often perceived by targeted countries in Eurasia as strategically self-serving initiatives, with regional benefits appearing secondary and more as indirect by-product than as primary objective.

4. Investments – volume, features, gains, risks

In the light of the key objectives of the BRI mentioned above, it is not surprising that since its launch, there has been a significant increase in Chinese foreign direct investments (FDIs), both through “greenfield” investments and mergers and acquisitions (M&As). From the early years of the BRI, there has been a boom in M&As—particularly in acquiring full or majority ownership of companies, as well as purchasing SOEs within BRI countries (Barbieri *et al.*, 2021; Du, 2021; Du and Zhang, 2018, pp. 195–197; Li, Li and Zhao, 2022).

However, in terms of investment inflows to Central Asia, some European countries, notably the Netherlands and Switzerland, have also ranked among the top sources of FDI, alongside China and the USA (Chupilkin, Javorcik and Plekhanov, 2023).

Over the years, the majority of these investments have been directed towards the Kazakh economy (Asian Development Bank, 2017, p. 29).

It is important to note that while the Netherlands was the largest investor, particularly in the mining and oil production sectors in Central Asia since the early 2000s, it gradually lost its dominance following the launch of the BRI. By the first quarter of 2014, countries such as the USA, Canada, and France had overtaken the Netherlands in equity-based involvement in strategic sectors (Dyussebekova, 2016; Tengri News, 2014). However, China has quickly caught up, particularly in terms of the total number of investments and contracts between 2013 and 2024. These investments and contracts, which were concentrated in the energy sector across Central Asia (Kazakhstan, Uzbekistan, Turkmenistan, and Kyrgyzstan), totalled approximately \$10.43 billion.

The fragmented nature of Chinese investment trends and their relative stability over the years can be attributed to a combination of structural and economic factors. A key prerequisite for profitable energy investments is the presence of robust transportation and infrastructure networks. This was evident in Uzbekistan, where, following the launch of the BRI, all Chinese foreign direct investment initially flowed into the transportation sector rather than energy, underscoring the foundational role of infrastructure in facilitating broader economic engagement.

Additionally, the high fixed costs associated with energy-related investments contribute to the slower pace of annual growth, particularly in countries with limited economic capacities. Unlike sectors that can rapidly expand with incremental investments, energy projects require substantial upfront capital and long-term commitments, which naturally temper their yearly fluctuations. At the same time, questions remain about whether China's declining investment in Russia's raw material industries will lead to a reallocation of resources to the CIS. While this could create opportunities for increased investment in the region, existing government restrictions may limit the extent to which such capital shifts take place (Mukhina, Baranova and Porokhova, 2017).

As of 2024, the intensity of Chinese energy investments in Central Asia continues to vary across countries. While Kazakhstan remains the primary recipient of Chinese FDI in the region, the volume of investments has fluctuated significantly. Between 2005 and 2024, China invested approximately \$39 billion in Kazakhstan, primarily in energy and infrastructure sectors. The earlier peak in 2013, with \$5 billion in FDI (American Enterprise Institute, 2019), was followed by lower annual figures in subsequent years, totalling \$2.4 billion (Scissors, 2025).

In contrast, the energy investment boom in Kyrgyzstan and Turkmenistan was delayed until 2014, reaching \$2.4 billion and \$600 million, respectively (American Enterprise Institute, 2019). However, Chinese projects in Kyrgyzstan have increasingly focused on infrastructure, such as the expansion of the Pamir Highway by the China Road and Bridge Corporation, which enhances connectivity for Chinese trade routes (McLean and Mountains, 2024).

In Uzbekistan, major Chinese investments in the energy sector were concentrated in 2016–2017, amounting to \$350 million (American Enterprise Institute, 2019). More recently, China has collaborated with international financial institutions such as the AIIB and Masdar on energy projects, including new gas power plants (Harris, 2024).

Meanwhile, Tajikistan has seen growing Chinese involvement in energy and infrastructure projects, with a strong emphasis on strategic road networks. The expansion of the Pamir Highway has been a key initiative, reinforcing China's BRI ambitions in the region (McLean and Mountains, 2024).

Overall, from 2005 to 2024, China's total investment and construction activities in Central Asia have reached approximately \$56 billion, reflecting the region's strategic importance to Beijing's long-term energy security and trade expansion efforts (Scissors, 2025).

Moving towards the western shores of the Caspian Sea and the Southern Caucasus, initiatives aimed at building cooperation channels and investing in energy-transition-producing countries like Georgia, Armenia, and Azerbaijan are vital from the perspective of the PRC (Avdaliani, 2023). These countries are increasingly opening up to the East, not only in terms of free trade but also in attracting FDIs. As seen in other nations following the launch of the BRI, Georgia experienced a significant surge in Chinese investments. The China-Georgia Free Trade Agreement (FTA), effective since 1 January 2018 (Kovziridze, 2017), has significantly altered trade dynamics between the two nations. Upon implementation, Georgia eliminated tariffs on approximately 96.5% of goods imported from China immediately, covering 99.6% of the total imports from China. Conversely, China maintained tariffs on about 10% of goods from Georgia, with 4% of these tariffs set for gradual elimination over a five-year transition period (ADB, CAREC Unit, 2024). Originally, China announced that it would impose zero tariffs on 93.9% of Georgian products, covering 93.8% of China's total imports from Georgia. Of these, 90.9% (accounting for 42.7% of imports) would be subject to immediate tariff elimination, while the remaining 3% (representing 51.1% of imports) would gradually reach zero tariffs over a five-year period (Ministry of Commerce of the People's Republic of China, 2018). This asymmetry in tariff reduction schedules has raised concerns about the reciprocity of the agreement, suggesting that the BRI may not fully embody a two-way exchange, especially with less developed economies.

In the years following the FTA's enactment, China and Georgia have continued to strengthen their economic and strategic ties (Avdaliani, 2023; Kovziridze, 2017). Notably, on 31 July 2023, both countries elevated their relationship to a strategic partnership, underscoring Georgia's growing significance in China's BRI and its role in the Middle Corridor transit route. This deepening partnership reflects China's broader strategy to enhance connectivity and economic integration across the Eurasian continent, positioning Georgia as a pivotal link between East and West.

In Georgia, Chinese investments have flowed into sectors such as energy, real estate, banking, and infrastructure. Despite these investments, China was the ninth-largest investor in Georgia in 2023 (Kovziridze, 2017; Rekhviashvili and Lang, 2024).

Similarly, Azerbaijan has followed a comparable trajectory, attracting substantial capital inflows. In 2018 alone, Chinese companies invested \$800 million in Azerbaijan (Israfilbayova, 2018). In 2024, China and Azerbaijan also signed a joint declaration establishing a strategic partnership to further their bilateral ties. The Azerbaijani government has actively promoted its investment opportunities, particularly in industrial sectors in regions such as Shenzhen and Hong Kong (Jafarov, 2018). Armenia, however, has lagged slightly behind in this progress due to its size, lack of significant energy resources, and ongoing conflicts with neighbouring countries, particularly Turkey and Azerbaijan (Cornell, 2017). Nevertheless, both the EU and China recognise Armenia's strategic importance as a transit hub between the Persian Gulf and the Black Sea, providing an alternative energy route that bypasses Russia (Wayne, 2018; Meister, 2023). Until 2014, China's investments in Armenia accounted for less than 1% of its total FDI in the region, primarily focusing on soft power initiatives to influence geopolitical dynamics. However, these investments have significantly expanded since then (German, 2022; Sahakyan 2023). However, since the launch of the BRI, China's interest in Armenia's renewable and alternative energy infrastructure—particularly solar and wind—has gradually increased (Inan and Yayloyan, 2018, pp. 54–57). This shift reflects a broader trend of prioritising sustainable energy investments in strategically significant regions.

FDI plays an undeniably significant role in energy development, but equal attention must be given to other forms of foreign investment, such as loans, grants, and equity funding for energy-related projects. Examining the scale and nature of these financial flows between the EU and the PRC is critical for understanding the evolving energy

landscape, identifying current development trends, and assessing the associated risks. Multilateral financial institutions from both sides provide significant support for energy projects along the BRI. On the Chinese side, the Asian Development Bank (ADB) and the AIIB dominate. On the EU side, the European Investment Bank (EIB), the European Bank for Reconstruction and Development (EBRD), and the Investment Facility for Central Asia (IFCA) are key players. While numerous additional multilateral and bilateral institutions are also actively involved in regional energy development, this analysis will focus on the aforementioned institutions to highlight the distinctive characteristics of their operations, and the risks associated with these types of funding. By narrowing the focus, we can better understand how these institutions shape energy projects and their broader implications for sustainable development in the region.

In general, the operations of the EU are characterised by their ability to combine various sources of financial support. This approach involves not only granting loans from budgetary funds but also blending these with additional public and private financing. Such “blending operations” effectively mobilise reluctant, high-risk capital flows by providing extra guarantees, thereby distributing the overall financial burden and creating a more balanced funding structure. Furthermore, involving domestic, public, and external private sources reduces the influence of any single institution within a country, as highlighted in earlier scenarios.

The IFCA projects provide an excellent example of this approach. The EU’s regional blending facilities include the IFCA, the Asia Investment Facility (AIF), and the Investment Facility for the Pacific (IFP). These financial instruments strategically use EU development funds to mobilise additional resources from European and regional financial institutions, as well as private sector partners, to advance essential projects within their respective regions. For instance, the IFCA initiatives were implemented as a Sustainable Energy Financing Facility in Kazakhstan, primarily aimed at promoting energy efficiency and renewable energy technologies (EBRD, 2008; European Commission: Directorate-General for International Cooperation and Development, 2019). The EBRD and the EIB acted as supporting domestic financial institutions, offering loans to private sector investments in sustainable energy and energy efficiency (European Commission: Directorate-General for International Cooperation and Development, 2019; Motohashi, 2019). Similar blending operations have been executed since 2007 in other Caspian and Central Asian countries (Hultquist, 2015).

On the one hand, the EU indirectly secures loans for public and private investors through domestic financial institutions, maintaining a degree of separation from direct interference in a country’s internal affairs. On the other hand, more direct initiatives also exist, offering financial schemes to developing countries. These initiatives, such as the Development Cooperation Instrument (DCI), focus on general objectives and principles, including economic support for countries that promote fundamental energy-related values such as sustainability, good governance, and corporate social responsibility.

In light of these European initiatives and the context outlined so far, the financial mechanisms associated with the BRI exhibit notable differences (Kazantsev, Medvedeva and Safranchuk, 2021; Siddi and Kaczmarek, 2021; Vasić, Pekić and Šimić, 2023). First and foremost, the primary funding for infrastructure development in developing countries has historically come from the World Bank, but even more significantly from the ADB, which is led by Japan, and, since the inception of the BRI, from the China-dominated AIIB. The ADB provides a range of financial packages to its developing member countries, with rates determined by their gross national income (GNI) per capita and creditworthiness. It also offers technical assistance. This approach is broadly similar to that of European financial institutions.

Between 2017 and 2018, the ADB initiated eight new energy-related projects in the Central Asian and Caspian regions (ADB, 2017). These projects focused on areas such as

solar power development in Azerbaijan and Kyrgyzstan, corporate transformation of public energy utilities in Uzbekistan, renewable energy integration into national grids, and improvements in power generation efficiency. Notable projects include: (1) Floating Solar Energy Development (52079-001); (2) Uzbekneftegaz Corporate Transformation (52182-001); (3) Regional Cooperation on Renewable Energy Integration to the Grid (51148-001); (4) Power Generation Efficiency Improvement Projects (49253-003) (ADB, 2025). By 2024, a review of the ADB's project database indicates a consistent level of project initiation. For instance, in October 2024, the ADB approved the Central Asia Regional Economic Cooperation (CAREC) Program: The Caspian Sea Green Energy Corridor Project (58386-001), aiming to enhance regional energy cooperation and establish a foundation for cross-border electricity trade among Azerbaijan, Kazakhstan, and Uzbekistan (ADB, CAREC Unit, 2024; ADB, 2025). The establishment of the CAREC Program highlights the ADB's commitment to fostering sustainable energy development and enhancing regional cooperation in the Central Asian and Caspian regions (ADB, CAREC Unit, 2024). The primary form of support in these projects is technical assistance, which plays a key role in helping the involved countries develop their energy infrastructure (ADB, 2017; ADB, 2025; ADB, CAREC Unit, 2024; Dent, 2008).

One possible explanation for the creation of the AIIB could be its role as a response to criticism of the BRI, which was initially perceived as too vague and conceptual (Brombal, 2018; Hameiri and Jones, 2018). Launched in January 2016, the AIIB was established with significant contributions from PRC, which remains its leading member. As outlined in the AIIB Articles of Agreement, the PRC holds a 26% voting share, granting it veto power over critical structural decisions (Yu, 2017, p. 359). The AIIB has faced widespread scepticism as a multilateral development bank. It is often seen as a key instrument of the Chinese government, designed to advance its external economic policies and challenge the authority of existing development-oriented financial institutions, such as the World Bank and the ADB (Destradi and Gurol, 2022; Murray, 2022). Critics have questioned why China did not simply increase its contributions to these existing institutions, of which it is already a member. The Chinese government has addressed these inquiries by emphasising the need for infrastructure development and citing the growing demand for greater speed and flexibility in decision-making processes (Litsegård and Mattheis, 2024; Wilson, 2019). This raises an important question: Have these stated requirements translated into tangible outcomes in the field of energy infrastructure development over the past years?

In the early years following its establishment, AIIB's energy infrastructure projects were relatively modest in scale. According to data from the relevant years, the volume of energy infrastructure projects funded by the AIIB remained limited. One of the most notable projects, initiated in 2016, is the Southern Gas Corridor Program, specifically the Trans-Anatolian Natural Gas Pipeline (TANAP). The pipeline is designed to transport natural gas from the Shah Deniz 2 field in Azerbaijan through Türkiye to Europe. The project benefits from the technical and financial support of the ADB and a significant loan from the EIB. The total funding for TANAP amounts to \$8.6 billion, with 37.2% coming from loans provided by multilateral development banks, while the remainder is sourced from public commercial entities and the borrower's own contribution (Asian Infrastructure Investment Bank, 2016).

Two additional energy projects co-financed by the AIIB include the Nurek Hydropower Rehabilitation in Tajikistan, launched in 2017, and the Turkey Gas Storage Expansion Project, initiated in 2018 (Asian Infrastructure Investment Bank, 2025). In 2018, the AIIB Board of Directors endorsed the "Energy Sector Strategy: Sustainable Energy for Tomorrow," updated in 2022, which prioritises enhancing the bank's energy sector engagement, including developing its project pipeline and future subsector initiatives (Asian Infrastructure Investment Bank, 2022). This renewed focus has led to the approval of sustainability-focused projects between 2018 and 2024, such as one in the Maldives, which finances the construction of a modern waste-to-energy plant, and a project to support renewable energy deployment in India (Asian Infrastructure Investment Bank, 2024).

Despite these efforts to improve energy infrastructure along the BRI, the AIIB has struggled to meet the high expectations set at its inception. It has not yet demonstrated the ability to rival other global scale multilateral development banks, either in scope or in the speed of approving new projects. The overall commitments provided by the ADB and AIIB combined in 2023 was approximately \$50 billion (\$18.5 billion from AIIB and \$30.9 billion from ADB). However, only a small portion of this financing is allocated to energy, as the majority continues to focus on broader infrastructure development. Therefore, one cannot even raise the issue of intense competition between these banks as the reason for the limitations (Babones, 2018). Despite the limited positive impact of the AIIB on the energy infrastructure expansion in BRI countries within Central Asia and the Caspian region, the loans provided—whether sovereign and non-sovereign—are tied to long-term debts that can significantly shape a country's economic landscape and political relationship.

Two critical points must be underscored in this context: first, the vulnerability of developing economies to external shocks such as financial crises or budgetary deficits; and second, the distinctive nature of financial support provided by the AIIB to countries along the historical Silk Road, which follows the model established by the Chinese development banks.

A central concern, widely acknowledged in scholarly literature, is the heightened debt risk faced by developing countries and the sustainability of debt repayment within their domestic economies. Why is this the case? The AIIB was envisioned as an innovative institution, offering new financial mechanisms to support infrastructure development. One such approach is the use of “resource-financed infrastructure projects”—a scheme previously employed in China and identified by the World Bank as a potential solution to address infrastructure deficits in Asia and beyond (Gabusi, 2017, p. 32; Lin and Wang, 2016; Ogwang and Vanclay, 2021). Similar to oil-backed lending, resource-financed infrastructure (RFI) arrangements are financial models in which a government commits future revenues from a resource development project to repay a loan used for infrastructure construction. This approach enables countries to leverage their natural resources to fund critical infrastructure projects, often without immediate fiscal strain (Beardsworth et al., 2014).

Under this model, the lender effectively pre-purchases future profits from the exploitation of energy resources, while the borrowing government provides guarantees regarding the project's long-term profitability. This structure relies on the assumption that sufficient economic growth and revenue will be generated to fully repay the debt over time. However, this assumption can be overly optimistic in the case of countries with credit ratings from lower-medium (Kazakhstan) to highly speculative (Tajikistan) (Hurley, 2018; Trading Economics, 2019). Furthermore, in terms of loan flexibility, China and the AIIB actively promote a shift away from the traditional conditions imposed by other multilateral development banks. Specifically, they deemphasise the requirement for recipient countries to adhere to free-market principles, privatisation, and deregulation processes. Likewise, financial support from China and the AIIB is not contingent on addressing social issues such as democracy, freedom, climate change, or public (Lim, Lim and Chan, 2016, pp. 183–184). This approach aligns with the soft power strategies China employs in its foreign policy, which emphasise non-interference in the sovereign affairs of other nations. By excluding social conditions from financial agreements, China and the AIIB make loans more accessible to countries. Recipient nations are not required to undertake reforms in areas that are ostensibly unrelated to the primary purpose of the financial support, such as energy infrastructure development. This approach appeals to countries seeking streamlined financial assistance by addressing immediate infrastructure needs without requiring broader structural reforms. However, it raises critical questions about long-term economic viability, the perpetuation of systemic issues, and the potential geopolitical dependencies created by such debt arrangements.

Despite this, it is important to recognise that social issues such as widespread corruption and so called “cronyism” can hinder project success by wasting resources and exacerbating the significant environmental footprint already associated with some energy infrastructure projects (Ascensão *et al.*, 2018, pp. 206–207; Guliyev and Akhrarkhodjaeva, 2009). This phenomenon is widely observed in both contemporary politics and the corporate sector, where national leaders and private energy companies are closely intertwined. Such connections, often favouring domestic firms, can facilitate the implementation of energy projects and the resolution of related conflicts of interest—not necessarily in the public’s best interest, but rather for the benefit of selecting individuals. A notable example is the Trans-Caspian energy route, which involves Kazakhstan, Azerbaijan, and Georgia, as well as major geopolitical players like the USA and Russia (Guliyev and Akhrarkhodjaeva, 2009). When geopolitical and corporate interests diverge from public needs—such as broad energy access and fair market competition, rather than the dominance of oligopolies or state-controlled enterprises—energy project implementation can be hindered. These challenges are particularly pronounced in economically and socially vulnerable countries, where such tendencies are more likely to flourish (Guliyev and Akhrarkhodjaeva, 2009). Delegating responsibility for these issues entirely to the states or territories implementing the projects may be reasonable in countries with well-developed governance structures and robust legal and policy frameworks. However, many nations along the ancient Silk Road involved in current energy projects are still undergoing social development and governance transitions.

As a result, it would be more advantageous if the pathway from full-scale exploitation of comparative advantages to economic welfare also incorporated policy expectations from more influential actors such as China and the EU. While the general criteria for evaluating energy investments remain consistent for both China and the EU (Duan *et al.*, 2018), researchers recommend that passive risk aversion, which focuses primarily on future market development, should be complemented by the promotion of certain shared values (Duan *et al.*, 2018, p. 545). Otherwise, the PRC and Chinese companies may face significant challenges in securing debt repayment, while recipient countries could risk losing control over critical domestic infrastructure if they fail to meet their debt obligations. This scenario could ultimately lead to increased Chinese ownership and control of key assets, a concern that highlights the importance of proactive governance and value-driven policy strategies (Adarov, 2018).

5. Legal analysis of the Central Asia-China Gas Pipeline (CACP) Agreements and the EU Energy Community Treaty

As discussed in the previous section, both China and the EU pursue energy independence and connectivity through strategies that align with their respective national interests. These strategic priorities are particularly evident in the realm of energy laws and regulations, where their differing approaches become even more pronounced. In this final section, we analyse and compare two major initiatives undertaken by the EU and China within the energy sector: the CACP and the ECSEE. These initiatives illustrate how both China and the EU aim to secure energy independence while simultaneously fostering cooperation and financing infrastructural development in neighbouring regions. After presenting a brief overview of these two initiatives, we delve into the legal frameworks and strategies employed by the EU and China to achieve energy independence. This section aims to demonstrate that, rather than existing in opposition, these initiatives—despite their differing legal structures and approaches—could, if integrated, pave the way for cooperation and create a mutually beneficial outcome in the energy sector across broader Eurasia.

5.1. The Central Asia-China Gas Pipeline (CACP)

The CACP, initially discussed since 2006 and under construction prior to the launch of the BRI, fits seamlessly within the BRI's objectives of fostering energy cooperation and connectivity. This pipeline facilitates China's access to Central Asian gas resources and involves key countries in the region, including Kazakhstan, Turkmenistan, Uzbekistan, Tajikistan, and Kyrgyzstan. The CACP was constructed shortly after the completion of China's landmark West-East Gas Pipeline project, with the aim of integrating it into the national pipeline network to provide additional gas supplies to meet the growing energy demands of China's coastal regions (Petelin, 2011; Yu, 2023). Completed in 2014, the CACP consists of three parallel lines with varying capacities. Lines A and B were inaugurated in 2009, followed by Line C in 2014. The primary objective of the pipeline was to connect the Galkynysh (South Yolotan) gas field—one of the largest in the world—to China's national gas pipeline system, enhancing the country's energy security and diversifying its gas supply sources (Deng and Farah, 2020; Pirani, 2012; Tang and Joldybayeva, 2023).

By integrating with the existing East-West pipeline, China has successfully diversified its gas imports, reducing its dependence on domestic resources and enabling the transport of natural gas from Central Asia's resource-rich regions to its coastal cities. Designed to supply 55 billion cubic metres (bcm) of gas annually, the pipeline currently provides slightly less than 15% of China's total annual gas consumption, which stands at 358 bcm. Natural gas accounts for 8.49% of China's overall energy portfolio (Enerdata, 2024). This pipeline represents a significant step in China's broader strategy to diversify and secure its energy supplies. Other notable examples of China's energy cooperation efforts include the construction of the Power of Siberia gas pipeline with Russia (Lei and Sui, 2023; Paik, 2015; Weitz, 2014), the development of the Southeast Asia pipeline, and increased imports of natural gas from countries such as Australia and Qatar (Arase, 2016; Carroll and Sovacool, 2010; Delina, 2021). These initiatives collectively underscore China's commitment to strengthening its energy security and diversifying its energy sources to meet the growing demands of its economy (Deng and Farah, 2020).

The CACP, a cornerstone of China's broader energy diversification strategy, was constructed in under three years from the signing of the first agreement. Notably, this ambitious project involved coordination among three different countries and various stakeholders under the leadership of the CNPC. Spanning 1,833 kilometres, the pipeline traverses geologically challenging terrain prone to earthquakes and other natural hazards, all while operating in a politically unstable environment. This remarkable achievement led Hu to describe the project as the "Amu Darya miracle in pipeline construction," drawing a parallel to the expansive irrigation systems built during the Soviet era (Hu, 2014). The pipeline's rapid completion was made possible through extensive legal and diplomatic collaboration between China and the Central Asian nations, a relationship strengthened in the years following their independence,

All Central Asian countries formalised diplomatic relations with China within three weeks of the Soviet Union's collapse. Shortly thereafter, China actively pursued trade and investment agreements with the region. This began with the signing of a Bilateral Investment Treaty (BIT) with Kazakhstan on 10 August 1992 (China-Kazakhstan BIT, 1992a), marking China's first such treaty with a Central Asian nation. Similar agreements followed in the same year with Turkmenistan (China-Turkmenistan BIT, 1992e), Uzbekistan (China-Uzbekistan BIT, 1992b), and Kyrgyzstan (China-Kyrgyzstan BIT, 1992c), and in 1993 with Tajikistan (China-Tajikistan BIT, 1993d). These BITs established a framework for cooperation that extended beyond energy, encompassing the management of transboundary water resources, the strengthening of economic and commercial ties, agricultural collaboration, natural resource management, and even plant quarantine and protection. These agreements laid the legal and diplomatic groundwork for projects like the CACP, fostering long-term partnerships in the region.

At the bilateral level, China–Kazakhstan relations are often regarded as the strongest within Central Asia. This strength is partly rooted in Kazakhstan’s early opposition to East Turkestan independence movement and its swift condemnation of separatist activities following the collapse of the Soviet Union. Additionally, the high levels of trade and cooperation between the two nations have reinforced their close ties. Energy cooperation has been a central pillar of their relationship. A 1997 agreement explicitly mentions the need to construct the first pipeline, stating that:

The two sides support the construction of an oil pipeline connecting West Kazakhstan and western China. The Chinese side agrees that the feasibility study and construction of the project will be organized and financed by China National Petroleum Corporation. The Kazakh side agrees to provide land and security for the construction of the pipeline (China–Kazakhstan).

This foundational agreement underscored the mutual commitment to energy infrastructure development and laid the groundwork for further collaboration. China’s energy cooperation with Kazakhstan also served as a catalyst for other Central Asian countries, encouraging them to strengthen their own energy partnership with China. This momentum ultimately contributed to the development of the CACP, which involved a series of specific agreements and coordinated effects. In addition to bilateral treaties with Kazakhstan, China has signed intergovernmental agreements with Turkmenistan and Uzbekistan, alongside numerous memoranda of understanding to address and manage issues arising from these energy projects. Each Central Asian country signed specific bilateral agreements with China governing their respective sections of the CACP. The first of these was the China–Turkmenistan Intergovernmental Agreement, signed in 2006 (Socor, 2006), followed by the China–Kazakhstan Intergovernmental Agreement in 2007 (Agreement Between the Government of the Republic of Kazakhstan and the Government of the People’s Republic of China, 2007), and the China–Uzbekistan Intergovernmental Agreement (Baigin, 2007). These agreements, while interconnected, have distinct scopes. The agreement with Turkmenistan is particularly notable for its detailed provisions. Article 2 specifies the annual purchase of 30 bcm of natural gas annually for 30 years starting in 2009. It also includes terms for joint exploration and development of gas fields, particularly on the right bank of the Amu Darya River. In contrast, the agreements with Uzbekistan and Kazakhstan focus more on the technical and operational aspects of the pipeline, outlining specific construction requirements, operational responsibilities, and implementation schedules. To ensure the pipeline’s construction proceeded smoothly, the governments of these countries enacted various resolutions. For instance, in 2008, Uzbekistan adopted a resolution titled “On Measures to Implement the Project for the Construction and Operation of the Uzbekistan–China Gas Pipeline.” This resolution established a detailed project timeline and introduced temporary facilitation measures to expedite construction. These measures included visa facilitation for foreign workers and a temporary import regime for equipment, vehicles, spare parts, and components belonging to foreign contractors and their subcontractors (Article 4). Additionally, the resolution directed various ministries to fulfil their responsibilities promptly and instructed regional authorities to prioritise land allocation for the project. Specifically, it stated: “The khokimiyats of Kashkadarya, Bukhara, and Navoi regions, within a month after the submission of the necessary materials by NHC ‘Uzbekneftegaz’, shall carry out allotments of land plots for the construction of facilities” (Article 8). These coordinated efforts highlight the comprehensive and multi-layered approach taken by Uzbekistan and its neighbouring countries to facilitate the successful construction and operation of the pipeline.

In line with the goal of accelerating the construction of the CACP—the China–Kazakhstan Agreement includes provisions to facilitate project implementation. Article 10 explicitly exempts the project from adhering to Kazakhstan’s regulations concerning the acquisition or purchase of goods until the gas pipeline is completed. Additionally, Article 11 grants tax exemptions, stating that the project will be “exempt from the payment of

corporate income tax and property tax until the date of completion of the return of borrowed funds raised for the construction” (Article 11).

Despite their shared objective, the three intergovernmental agreements—between China and Turkmenistan, Kazakhstan, and Uzbekistan—do not explicitly reference one another. Instead, they share only a general compatibility clause, recognising alignment with other international agreements without directly acknowledging the other pipeline-related accords. This approach results in what scholars have termed a “national connected pipelines” regime, wherein each pipeline segment operates independently under the domestic jurisdiction of the respective host states (Aminjonov and Dovgalyuk, 2023). The primary points of connection between these agreements lie in China’s bilateral diplomatic engagements with the three countries and the supervisory and coordinating role played by the Chinese SOE, the CNPC. Legally, the CACP operates through a bilateral framework involving multiple actors at various levels. While the governments of the three Central Asian countries establish the general obligations and understandings through their agreements, the operational responsibilities are handled by the CNPC—and joint ventures (JVs) formed between CNPC and respective SOEs from Turkmenistan, Kazakhstan, and Uzbekistan.

The CNPC has played a pivotal role in Central Asia since the late 1990s, engaging in exploration, construction, and transportation activities to secure China’s energy needs.

Globally, CNPC has been instrumental in advancing China’s energy security strategy. While the Chinese government avoids direct involvement beyond forums like the SCO and bilateral platforms specific to each Central Asian country—likely to prevent potential friction with Russia—CNPC has taken proactive measures to enhance coordination. By 2010, CNPC had established an informal engagement group tasked with three key objectives: (1) strengthening coordination among the governments of resource-hosting countries; (2) creating transnational coordination mechanisms; and (3) ensuring the alignment of resource development with the construction of strategic energy channels (Hu, 2014). This multi-layered approach underscores the strategic importance of the CACP and highlights CNPC’s role as a bridge between China’s energy needs and Central Asia’s resources.

The pipeline’s extensive stretch across Turkmenistan, Kazakhstan, and Uzbekistan makes it highly susceptible to maintenance challenges and potential terrorist attacks. Despite this, the agreements governing the CACP lack robust dispute settlement mechanisms. They rely solely on vague provisions, such as “negotiations and consultations” (Turkmenistan Agreement, Article 12) or “appropriate consultations with a view to making mutually acceptable decisions on overcoming the obstacles encountered and ensuring the implementation of this Agreement” (Kazakhstan Agreement, Article 14). These general references fail to outline concrete procedures to address disruptions effectively. Disruptions, however, are a recurring issue in the region, caused by extreme weather conditions, political instability, and technical problems. The absence of detailed provisions for managing such incidents forces the parties involved to rely on informal cooperation and *ad hoc* solutions, a practice that has become the norm over the years.

A comparative analysis of the three intergovernmental agreements reveals a clear rooting in China’s broader energy strategy. As Song observes in the Central Asian context, China’s engagement with international partners tends to be highly tailored rather than universal. This approach is particularly evident in the energy sector. While the CACP is often portrayed as a regional connectivity initiative, its regulation does not reflect cohesive regional integration. Instead, each agreement focuses on securing specific bilateral arrangements to serve China’s energy needs. The CACP underscores its critical role in China’s pursuit of energy security. China has committed significant financial resources and collaborated closely with its Central Asian partners on the pipeline’s construction, management, and maintenance to ensure its long-term functionality. However, these efforts

remain limited to addressing immediate operational needs rather than fostering deeper regional cooperation. There are no attempts to create a unified energy market or harmonise legal frameworks between China and Central Asia. Instead, legal instruments have been used primarily to expedite the pipeline's construction, reflecting China's pragmatic focus on securing energy independence over long-term regional integration.

5.2. Energy Community for South-East Europe (ECSEE)

The second case under consideration examines the EU's efforts in the energy sector to support neighbouring countries. An Energy Community between the EU and South-East European countries (ECSEE or Energy Community) was established through the 2005 Energy Community Treaty. This Treaty created a legal framework to facilitate the integration of energy markets between the EU and South-East European countries (Energy Community, 2005). Initially composed of six members, the ECSEE has since expanded to include additional contracting parties, such as Georgia and Armenia. Though created as an international organisation, the ECSEE reflects the ENP by seeking to streamline and rationalise external relations. Unlike the broader ENP, which includes countries in North Africa, the ECSEE focused on nations within the Eastern Partnership and candidates for EU enlargement. The Energy Community's founding treaty obligates its members—South-East European countries—to adopt EU energy sector legislation, commonly referred to as the EU *acquis* (Article 3) (Energy Community, 2005).

Since its inception, the development of a sector-specific *acquis* has been central to aligning neighbouring countries with the EU's core interests and policies in the energy sector (Farah and Tremolada, 2015, pp. 559–580). Article 2 of the founding treaty outlines its primary objective to “create a stable regulatory and market framework capable of attracting investment in gas networks, power generation, and transmission and distribution networks, so that all parties have access to a stable and continuous energy supply” (Article 2) (Energy Community, 2005). The framework is integral to achieving the dual objectives of diversifying and securing energy supplies. The initiative accomplishes these goals by establishing robust legal and regulatory frameworks that underpin projects aimed at eventually integrating neighbouring countries into the EU energy market. Armenia stands out among the member states, having received recognition from the EU Parliament for its dedication to implementing the Comprehensive and Enhanced Partnership Agreement (European Union, 2018). Beyond Armenia's case, the broader objective of the ECSEE is to build a cohesive legal and economic framework for Network Energy, such as electricity and natural gas, delivered through transnational infrastructure. This fosters stronger ties between member states and the EU and underscores the EU's strategic use of legal instruments and market-based frameworks to ensure energy security and regional cooperation.

The establishment of the ECSEE with the Energy Community Treaty built upon the cooperative framework developed under the Athens process, initiated by the EU Commission. This initiative aimed to gradually align neighbouring countries with EU standards and practices, with the long-term goal of fully integrating them into the EU energy market (Karova, 2011). The underlying rationale for this project draws from the EU's own successful integration model, which began with technical and sector-specific collaboration before expanding to encompass broader topics as part of the integration process (Renner, 2009).

In stark contrast to the EU's legal framework, the ECSEE's founding treaty did not establish a comparable system of juridical cooperation. Instead, it explicitly deferred all legal interpretation to EU legislation and case law, effectively creating a dependency mechanism on the EU (Renner, 2009). This arrangement underscores the asymmetry of the relationship, with ECSEE member states required to conform to EU norms without

participating in their formulation. Dispute settlement within the ECSEE is governed by Articles 91 and 92 of the founding treaty. These provisions allow cases of non-compliance to be referred to the Ministerial Council, which has the authority to impose sanctions including the suspension of rights and exclusion from meetings for serious and persistent breaches (Articles 91–92) (Energy Community, 2005). This enforcement mechanism highlights the EU's emphasis on maintaining regulatory alignment and compliance within the framework of the Energy Community. As of this writing, 35 cases have been resolved during preliminary proceedings, 44 have been concluded with a Ministerial Council decision per Article 91, and only 5 cases have been addressed under the stricter enforcement measures of Article 92 (Energy Community, 2024).

The institutional framework of the ECSEE reflects the highly technical and structured nature of the EU. The Ministerial Council is responsible for setting overall policy directions, while the Secretariat manages day-to-day operations. Additionally, a Permanent High-Level Group convenes quarterly to ensure ongoing coordination and oversight. The ECSEE operates on a budget funded by member contributions, amounting to €5 million in 2023, with the EU providing a substantial 94.78% of the total through the EU4Energy initiative.

The recent evaluation of the ECSEE's implementation reported an average compliance score of 53%. Notably, no Contracting Party demonstrated an improvement in its overall implementation score during the assessment period (*State of Implementation* 2023). Among the evaluated areas, energy security scored the lowest, largely due to challenges posed by the Russian invasion of Ukraine and other regional developments. These geopolitical factors underscored the difficulty of achieving robust energy security. Furthermore, much of the relevant EU *acquis* in the energy security sector has yet to be fully transposed by ECSEE member states, reflecting significant gaps in implementation.

Title II of the ECSEE mandates that contracting parties align with the EU *acquis*, structured into four key areas: energy, environment, competition, and renewables (Title 2) (Energy Community, 2005). This alignment seeks to foster regulatory consistency and sectoral integration, outlining steps towards full integration with the EU energy market. Energy independence and security, central to this framework, are tied to broader EU policy goals. These goals extended beyond ECSEE members, aiming to enhance the security of supply within a unified regulatory space. The energy framework is conceptualised through two dimensions: connectivity and an extractive vision. The connectivity dimension emphasises the development of links to gas reserves in the Caspian region, North Africa, and the Middle East. This vision is embodied in significant investments in the Southern Gas Corridor, a project envisioned by the EU in 2008. The corridor aims to deliver gas from Caspian and Middle Eastern sources to reduce the EU's reliance on Russian imports. The extractive vision, on the other hand, focuses on utilising indigenous energy sources such as natural gas, coal, and hydropower and integrating them into the EU energy market. Similar to China's strategy with the Central Asian Gas Pipeline, the ECSEE strengthens the EU's energy independence. However, the EU offers ECSEE members the added incentive of potential EU membership, reinforcing the alignment process. The gradual alignment of ECSEE members with EU legislation has played a critical role in bolstering the EU's energy independence. It has been observed that "alignment with a sectoral *acquis* can be the result of the EU's purposeful action through conditionality or institutions with legally binding authority over third countries" (Herranz-Surrallés, 2016). This contrasts sharply with China's approach, which favours a faster and more pragmatic model. Rather than emphasising legal alignment, China focuses on providing financing, expertise, and technology to secure its energy independence. The comparison underscores the EU's emphasis on legal harmonisation versus China's direct and flexible strategy in pursuing energy security.

6. Conclusion

The preceding analysis highlights key characteristics of energy infrastructure development supported by China and the EU in the resource-rich Caspian region and Central Asia. A discernible trend suggests China's growing dominance in private mergers and acquisitions (M&As), FDIs, and the financing of energy projects, primarily through sovereign loans. This shift necessitates a closer examination of the more permissive national conditions surrounding foreign investments, as well as related legal aspects, including environmental, social, and general governance (ESG) regulations. These factors are often intertwined with the inherently higher investment risks associated with developing countries.

Profit-driven companies frequently exploit these conditions under the guise of “ad-hoc non-interference,” disregarding ESG standards during risk assessment and structuring mergers or acquisitions to capitalise on regulatory gaps. This underscores the vital role of the state in strengthening regulatory framework to mitigate such exploitation. However, when substantial financial support from foreign entities promises to spur regional or national economic growth, considerations such as environmental and social concerns often take a back seat. In this context, support from developed nations through targeted initiatives for legal, social, and economic modernisation is essential. Such efforts are crucial to fostering the political will necessary for implementing meaningful reforms within governments. Moreover, these reforms can be reinforced through the conditionality attached to loans and financial grants, ensuring that energy projects align with sustainable development goals and responsible governance practices.

This brings us to a critical aspect of the BRI's impact on EU energy independence. As previously noted, the financial support provided by the EU institutions, such as the EIB and the EBRD, is often accompanied by stringent procedural and conditional requirements. These demands stand in stark contrast to the comparatively lenient conditions imposed by the AIIB and, more notably, the CDB. The CDB, in particular, separates economic assistance from the promotion of democracy, human rights, climate change mitigation, environmental protection, and similar values. This distinction makes its loan conditions less restrictive and its funds more accessible to recipient countries. However, when such financial support is tied to gaining control over key energy infrastructure—whether through ownership of construction companies or their local subsidiaries—it risks creating unwelcome dependence on an external political power, in this case, China. At its extreme, this dynamic could allow foreign entities to exert significant influence over national legislatures, shaping future investment environments and regulatory frameworks to serve their own interests. Such control could lead to elevated risks, including market isolation and reduced competition within the energy market. For instance, the imposition of higher entry barriers could significantly constrain access for European energy companies. If these developments occur under China's influence, the consequences could be severe. European investments in key energy infrastructure might be entirely excluded, jeopardising the EU's efforts to diversify energy supplies and reduce its reliance on Russian imports. Such a scenario would not only undermine the EU's energy independence but also weaken its strategic position in the global energy market. Fortunately, the situation has not yet reached such drastic extremes. However, the analysis of the interplay between private M&As, greenfield investments, and external public funding in the Caspian and Central European regions—particularly when comparing these measures as implemented by China and the EU—clearly highlights the problematic areas and the potential threats, including an increasingly direct challenge to European energy independence. While the EU does not have alternative avenues for resource diversification, such as partnerships in the Mediterranean region (e.g. Egypt, Algeria, Libya, etc.), there is a pressing need for strategic steps to preserve geopolitical balance along the ancient Silk Road. These steps must

consider not only immediate energy needs but also long-term stability, fostering a sustainable approach to maintaining energy security and mitigating external dependencies.

It is important to clarify that while channelling additional capital into energy projects in developing countries, abandoning the application of legal, social, and environmental values would be counterproductive. Although such an approach provides an initial economic boost, neglecting these values would likely lead to unmet project objectives, ecological damage, deepening poverty, and a decline in overall welfare over time. A potential solution lies in establishing long-term milestones for reforms tied to financial support repayment. In the short term, the emphasis could shift towards enforcing stricter conditions for project implementation at the local level. Requiring compliance with higher environmental and labour standards—beyond existing national regulations—during infrastructure modernisation and natural resource exploitation, supervised and guaranteed by the implementing companies, could strike a balance. This approach maintains the flexibility of financial frameworks while fostering the potential for gradual, sustainable reforms within the recipient country over time.

Second, European private investors can maintain their competitive position among the infrastructure developers—not only through individual M&A and greenfield investments—but also by forming Sino-European joint ventures. Such partnerships, primarily focused on operational and capability sharing, could help secure strategic positions in countries critical to the EU's long-term energy independence. However, the success of these joint ventures is not without challenges. Potential conflicts may arise due to cultural and managerial differences between European and Chinese parent companies. For example, Chinese managers often view European management methods as overly rigid and authoritarian, while European partners may struggle with issues such as cronyism and corruption at lower managerial levels, where the parent company's influence is limited. Furthermore, technology transfer—such as mutual staff training and knowledge sharing—can be also contentious area (Zhu, Speece and So, 2002, pp. 11–26). With the implementation of appropriate management tools and a willingness to compromise, these challenges can be addressed. Effective communication, transparent governance structures, and collaborative problem-solving strategies can foster a cooperative environment, ultimately ensuring a win-win outcome for all parties involved.

The conclusions of our analysis cannot be considered exhaustive when assessing the impact of the BRI on EU energy independence. A significant area that requires further research is China's ambition to transition from exporting products to exporting technology and setting international standards on a global scale. Such a shift would fundamentally alter capacity-building dynamics along the BRI and could complicate and increase the cost of securing additional energy sources for the EU (Hornby and Kynge, 2018; Kennedy, 2015).

While both the CACP Agreements and the EU Energy Community Treaty aim to enhance energy cooperation, their approaches and objectives differ markedly. The CACP Agreements are project-specific, emphasising bilateral cooperation without a focus on broad regulatory harmonisation or strong environmental safeguards. By contrast, the EU Energy Community Treaty takes a more holistic approach, promoting regional integration, regulatory alignment, and sustainable energy practices. This treaty provides a comprehensive framework for energy cooperation and market integration, reflecting the EU's commitment to balancing energy security with environmental and social considerations.

We argue that achieving a win-win outcome is possible only by fostering dialogue between regional energy security efforts in Eurasia. By bridging the gap between these differing approaches—China's project-specific bilateralism and the EU's framework-driven multilateralism—both regions can work towards sustainable and mutually beneficial energy cooperation.

In conclusion, the BRI has undeniably had a significant impact on the EU's energy independence strategies. However, little integration has been achieved—or even pursued between the two approaches. Both the BRI and the EU's energy strategies share the dual goals of promoting their energy independence and strengthening regional cooperation. While these strategies often compete and conflict, we argue that energy independence could potentially be achieved through the alignment and integration of the BRI and the ENP. Such an approach could help avoid unnecessary conflicts and create a win-win scenario for all actors involved in Eurasian energy security. Ultimately, whether this impact proves positive or negative will depend on the policies implemented in the near future. These policies will shape the extent to which the EU and its companies can find common ground and effectively respond to the intense competition posed by China in strategic Silk Road regions. The current presence of Chinese expansion and competition in these regions is undeniable and must not be overlooked.

References

- Adarov, A. (2018). *China's Belt and Road Initiative: Opportunity or threat?* Available at: <https://wiiw.ac.at/n-338.html> (Accessed: 22 February 2025).
- Agreement Between the Government of the Republic of Kazakhstan and the Government of the People's Republic of China. (2007). 'Cooperation in construction and operation of the gas pipeline Kazakhstan–China', 18 August. Available at: <https://cis-legislation.com/document.fwx?rgn=61216>.
- Ahl, B. (2021). 'Chinese positions on global constitutionalism, community of common destiny for mankind, and the future of international law', *The Chinese Journal of Comparative Law*, 9(3), pp. 304–327.
- Alami, I., Copley, J. and Moraitis, A. (2024). 'The 'wicked trinity' of late capitalism: Governing in an era of stagnation, surplus humanity, and environmental breakdown', *Geoforum*, 153, 103691.
- American Enterprise Institute (2019). *China global investment tracker*. Available at: <https://www.aei.org/china-global-investment-tracker/> (Accessed: 22 February 2025).
- Aminjonov, F. and Dovgalyuk, O. (2023). 'Central Asia–China gas pipeline (line A, line B, and line C)', *The People's Map of Global China*. Available at: <https://thepeoplesmap.net/project/central-asia-china-gas-pipeline-line-a-line-b-and-line-c/> (Accessed: 15 March 2025).
- Andrews, A. and Pirog, R. (2012). 'The strategic petroleum reserve: authorization, operation, and drawdown policy', *Congressional Research Service*, 18 June. Available at: https://digital.library.unt.edu/ark:/67531/meta_dc96718/m1/1/high_res_d/R42460_2012Jun18.pdf (Accessed: 14 February 2025).
- Antwi-Boateng, O. (2017). 'New world order neo-colonialism: A contextual comparison of contemporary China and European colonization in Africa', *Africology: Journal of Pan African Studies*, 10(2), pp. 177–195.
- Arase, D. (ed.) (2016). *China's rise and changing order in East Asia*. New York, NY: Palgrave Macmillan (Politics and Development of Contemporary China).
- Ascensão, F., Fahrig, L., Clevenger, A. P., Corlett, R. T., Jaeger, J. A. G., Laurance, W. F. and Pereira, H. M. (2018). 'Environmental challenges for the Belt and Road Initiative', *Nature Sustainability*, 1(5), pp. 206–209.
- Asian Development Bank (ADB) (2017). *Asian Economic Integration Report 2017*. Available at: <https://www.adb.org/publications/asian-economic-integration-report-2017> (Accessed: 22 February 2025).
- Asian Development Bank (ADB) (2024). *Central Asia Regional Economic Cooperation (CAREC) Unit, Georgia's Free Trade Agreements*. Available at: <https://www.adb.org/what-we-do/topics/regional-cooperation/carec> (Accessed: 19 March 2025).
- Asian Development Bank (ADB) (2025). *Projects & tenders, official website*. Available at: <https://www.adb.org/projects/sector/energy-1059> (Accessed: 22 February 2025).
- Asian Infrastructure Investment Bank (2016). *Republic of Azerbaijan: Trans Anatolian natural gas pipeline (TANAP) project*. Available at: https://www.aiib.org/en/projects/approved/2016/_download/trans-anatolian/document/tanap-project-document.pdf (Accessed: 22 February 2025).
- Asian Infrastructure Investment Bank (2020). *Republic of Maldives: Greater Malé waste-to-energy project*. Available at: <https://www.aiib.org/en/projects/details/2020/approved/Maldives-Greater-Male-Waste-to-Energy-Project.html> (Accessed: 22 February 2025).
- Asian Infrastructure Investment Bank (2022). *Energy sector strategy update: Sustainable energy for tomorrow*. Available at: https://asia/content/index/_download/AIIB-Energy-Sector-Strategy-Update_Final_Nov-2022.pdf (Accessed: 22 February 2025).

- Asian Infrastructure Investment Bank (2024). *Republic of India: ENGIE solar power project*. Available at: https://www.aiib.org/en/projects/details/2024/_download/India/AIIB-PSI-P000768_India_ENGIE-Solar-Power-Project-2024-05-15_Updated.pdf (Accessed: 22 February 2025).
- Asian Infrastructure Investment Bank (2025). *Our Projects*. Available at: <https://www.aiib.org/en/projects/approved/index.html> (Accessed: 22 February 2025).
- Ateed, E. H. (2024). 'The impact of Russia-Ukraine war on the global energy crisis', in Özcan, M. S. Ö. (ed) *Analyzing energy crises and the impact of country policies on the world*. Hershey: IGI Global, pp. 119–138.
- Avdaliani, E. (2023). 'What's behind China's strategic partnership with Georgia?', *Carnegie Politika*, 17 August. Available at: <https://carnegieindia.org/russia-eurasia/politika/2023/08/whats-behind-chinas-strategic-partnership-with-georgia?lang=en¢er=russia-eurasia> (Accessed: 22 February 2025).
- Babones, S. (2018). 'China's AIIB expected to lend \$10–15B a year, but has only managed \$4.4B in 2 years', *Forbes*, 16 January. Available at: <https://www.forbes.com/sites/salvatorebabones/2018/01/16/chinas-aiib-expected-to-lend-10-15b-a-year-but-has-only-managed-4-4b-in-2-years/> (Accessed: 22 February 2025).
- Bahgat, G. (2009). 'The geopolitics of energy in Central Asia and the Caucasus', *The Journal of Social, Political, and Economic Studies*, 34(2), pp. 139–153.
- Baigin, S. (2007). 'Uzbekistan, China sign major gas pipeline deal', *Reuters*, 30 April. Available at: <https://www.reuters.com/article/markets/oil/uzbekistan-china-sign-major-gas-pipeline-deal-idUSN30445549/>.
- Barbieri, E., Huang, M., Pi, S., Pollio, C. and Rubini, L. (2021). 'Investigating the linkages between industrial policies and M&A dynamics: Evidence from China', *China Economic Review*, 69, 101654.
- Beardsworth, J., Halland, H., Land, B. C. and Schmidt, J. (2014). 'Resource financed infrastructure: A discussion on a new form of infrastructure financing'. Available at: <http://documents.worldbank.org/curated/en/394371468154490931> (Accessed: 22 February 2025).
- Beaubouef, B. A. (2007). *The strategic petroleum reserve: US energy security and oil politics, 1975–2005*. College Station, TX: Texas A&M University Press.
- Bilgin, M. (2009). 'Geopolitics of European natural gas demand: Supplies from Russia, Caspian and the Middle East', *Energy Policy*, 37(11), pp. 4482–4492.
- Brombal, D. (2018). 'Planning for a sustainable Belt and Road Initiative (BRI): An appraisal of the Asian Infrastructure Investment Bank (AIIB) environmental and social safeguards', in Shan, W., Kimmo, N. and Zhang, K. (eds) *Normative readings of the Belt and Road Initiative: Road to new paradigms*. Cham: Springer, pp. 129–145.
- Büchenbacher, K. and Zhang, X. (2018). 'Signing of the convention on the Caspian Sea's legal status affirms China's B&R initiative', *Global Times*, 13 August. Available at: <https://web.archive.org/web/20200809032108/http://www.globaltimes.cn/content/1115119.shtml> (Accessed: 19 March 2025).
- Carroll, T. and Sovacool, B. (2010). 'Pipelines, crisis and capital: Understanding the contested regionalism of Southeast Asia', *The Pacific Review*, 23(5), pp. 625–647.
- Cherni, J. A. and Kentish, J. (2007). 'Renewable energy policy and electricity market reforms in China', *Energy Policy*, 35(7), pp. 3616–3629.
- China - Kazakhstan Bilateral Investment Treaty - BIT (1992a). Available at: <https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bilateral-investment-treaties/920/china-kazakhstan-bit-1992->
- China - Uzbekistan Bilateral Investment Treaty - BIT (1992b). Available at: <https://investmentpolicy.unctad.org/international-investment-agreements/treaty-files/3357/download> and at <https://investmentpolicy.unctad.org/international-investment-agreements/treaty-files/6551/download>.
- China-Kyrgyzstan Bilateral Investment Treaty - BIT (1992c). Available at: <https://edit.wti.org/document/show/db67060d-90d7-463a-baf5-590b4cebbe49>.
- China-Tajikistan Bilateral Investment Treaty - BIT (1993d). Available at: <https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bilateral-investment-treaties/980/china-tajikistan-bit-1993->
- China-Turkmenistan Bilateral Investment Treaty - BIT (1992e). Available at: <https://edit.wti.org/document/show/5703b50d-598b-4102-bf90-388dd556535f?textBlockId=18925f16-6234-4fc2-b46e-a66890cfebe&page=1> and also available at: <https://investmentpolicy.unctad.org/international-investment-agreements/treaty-files/6567/download>.
- Chupilkin, M., Javorcik, B. and Plekhanov, A. (2023). 'The Eurasian roundabout: Trade flows into Russia through the Caucasus and Central Asia', *EBRD Working Paper*, 28 February. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4368618 (Accessed: 21 February 2025).
- Cobarrubias, S. (2020). 'Beyond the European Union's neighbourhood: Liberation geographies in the Mediterranean', *Geopolitics*, 25(4), pp. 887–915.
- Cooley, A. (2018). *What's next for the Shanghai Cooperation Organization?* Available at: <https://thediplomat.com/2018/06/whats-next-for-the-shanghai-cooperation-organization/> (Accessed: 21 February 2025).
- Corbett, M. (2013). *Oil shock of 1973–74*. Available at: <https://www.federalreservehistory.org/essays/oil-shock-of-1973-74> (Accessed: 14 February 2025).

- Cornell, S. E. (ed.) (2017). *The international politics of the Armenian-Azerbaijani conflict: The original “frozen conflict” and European security*. New York: Palgrave Macmillan.
- Cunningham, E. A. (2015). ‘The state and the firm: China’s energy governance in context’, *Global Economic Governance Initiative Working Paper*, March. Available at: <https://ash.harvard.edu/wp-content/uploads/2024/02/chinas-energy-working-paper.pdf> (Accessed: 21 February 2025).
- Delina, L. L. (2021). ‘Promises and pitfalls of China-Southeast Asia energy connectivity’, *Energy Strategy Reviews*, 33, article no. 100574.
- Deng, H. and Farah, P. D. (2020). ‘China’s energy policies and strategies for climate change and energy security’, *Journal of World Energy Law & Business*, 13(2), pp. 141–156.
- Denison, M. (2009). ‘The EU and Central Asia: Commercializing the energy relationship’, *EUCAM Working Papers*, July. Available at: <http://aei.pitt.edu/11477/1/1883.pdf> (Accessed: 21 February 2025).
- Dent, C. M. (2008). ‘The Asian Development Bank and developmental regionalism in East Asia’, *Third World Quarterly*, 29(4), pp. 767–786.
- Destradi, S. and Guroi, J. (2022). ‘South-South cooperation: Between cooperation at eye level and accusations of neo-colonialism’, in Rüländ, J. and Carrapatoso, A. (eds) *Handbook on global governance and regionalism*. Cheltenham: Edward Elgar Publishing, pp. 160–170.
- Djankov, S. and Miner, S. (eds) (2016). *China’s belt and road initiative: Motives, scope, and challenges*. Washington, DC: The Peterson Institute for International Economics.
- Dorian, J. P., Abbasovich, U. T., Tonkopy, M. S., Jumabekovich, O. A. and Qiu, D. (1999). ‘Energy in Central Asia and Northwest China: Major trends and opportunities for regional cooperation’, *Energy Policy*, 27(5), pp. 281–297.
- Du, J. and Zhang, Y. (2018). ‘Does One Belt One Road initiative promote Chinese overseas direct investment?’, *China Economic Review*, 47, pp. 189–205.
- Du, M. (2021). ‘Cross-border M&A performance of Chinese enterprises in the context of the Belt and Road Initiative’, *Chinese Political Science Review*, 6(2), pp. 228–250.
- Duan, F., Ji, Q., Liu, B. Y. and Fan, Y. (2018). ‘Energy investment risk assessment for nations along China’s Belt & Road Initiative’, *Journal of Cleaner Production*, 170(1), pp. 535–547.
- Dyussebekova, Z. (2016). ‘Kazakhstan attracts \$2.7 billion in FDI in Q1’, *The Astana Times*, 6 September. Available at: <https://astanatimes.com/2016/09/kazakhstan-attracts-2-7-billion-in-fdi-in-q1/> (Accessed: 22 February 2025).
- Enerdata (2024). *Global energy trends 2024*. Available at: <https://www.enerdata.net/publications/reports-presentations/world-energy-trends.html> (Accessed: 19 March 2025).
- Energy Community (2005). *Treaty establishing energy community*. Available at: <https://www.energy-community.org/legal/treaty.html> (Accessed: 22 February 2025).
- Energy Community (2024). *Energy community cases*. Available at: <https://www.energy-community.org/legal/cases.html> (Accessed: 22 February 2025).
- European Bank for Reconstruction and Development (2008). *KAZSEFF – Kazakhstan sustainable energy financing facility*. Available at: <https://www.ebrd.com/work-with-us/projects/psd/kazseff-kazakhstan-sustainable-energy-finance-facility.html> (Accessed: 22 February 2025).
- European Commission: Directorate-General for International Cooperation and Development (2019). *IFCA Investment Facility for Central Asia, AIF Asia Investment Facility, IFP Investment Facility for the Pacific – 2017–2018 operational report*. Available at: <https://op.europa.eu/en/publication-detail/-/publication/214b86a6-6415-11ea-b735-01aa75ed71a1> (Accessed: 22 February 2025).
- European Union (2018). *Comprehensive and Enhanced Partnership Agreement between the European Union and the European Atomic Energy Community and their Member States, of the one part, and the Republic of Armenia, of the other part*. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A22018A0126%2801%29> (Accessed: 22 February 2025).
- Farah, P. D. (2015). ‘Energy security, water resources, environmental concerns and economic development in Central Asia’, in Farah, P. D. and Rossi, P. (eds) *World scientific reference on globalisation in Eurasia and the Pacific Rim: Volume 3: Energy: Policy, legal and social-economic issues under the dimensions of sustainability and security*, Singapore: World Scientific, pp. 179–193.
- Farah, P. D. (2020). ‘Strategies to balance energy security, business, trade and sustainable development: Selected case studies’, *The Journal of World Energy Law & Business*, 13(2), pp. 95–99.
- Farah, P. D. and Tremolada, R. (2015). ‘Offshore natural gas resources in the Eastern Mediterranean in the relations to the European Union: A legal perspective through the lenses of MedReg’, *The Journal of World Energy Law & Business*, 8(6), pp. 559–580.
- Farah, P. D. and Zoppoloto, D. G. (2022). ‘Public ownership and the WTO in a post-Covid-19 era: From trade disputes to a ‘social’ function’, *West Virginia Law Review*, 125(2), pp. 645–690.

- Fernández, J. I. and Li, R. (2018). *Is the Belt & Road Initiative a two-way street? The case of China's trillion-dollar e-commerce market*. Available at: <https://beltandroad.ventures/beltandroadblog/2018/01/28/is-the-belt-road-initiative-a-two-way-street-the-case-of-chinas-trillion-dollar-e-commerce-market> (Accessed: 21 February 2025).
- Furlan, S. and Charisi, E. (2017). 'Natural gas balance: A future oversupply? Integrating geopolitical analysis for the Mediterranean case', *Energy in Eurasia: Economic Perspectives on Challenges, Risks and Opportunities, 2nd IAAE Eurasian Conference*, 12–14 October 2017. Zagreb: International Association for Energy Economics, pp. 1–20.
- Gabusi, G. (2017). "Crossing the river by feeling the gold": The Asian Infrastructure Investment Bank and the financial support to the Belt and Road Initiative', *China & World Economy*, 25(5), pp. 23–45.
- Gerber, T. P. and He, Q. (2022). 'Sino-Phobia in Russia and Kyrgyzstan', *Journal of Contemporary China*, 31(133), pp. 38–56.
- German, T. (2022). 'Russia and the South Caucasus: The China challenge', *Europe-Asia Studies*, 74(9), pp. 1596–1615.
- Gloria, E. V. (2021). 'The Silk Road Spirit: China's BRI discourse and its pursuit for great power status', *Asian Politics & Policy*, 13(4), pp. 493–510.
- Grace, A. (2018). 'The lessons China taught itself: Why the Shanghai Cooperation Organization matters', *China Brief*, 18(11), pp. 11–14. Available at: <https://jamestown.org/wp-content/uploads/2018/06/Read-the-6-19-2018-CB-Issue-in-PDF.pdf> (Accessed: 24 February 2025).
- Guliyev, F. and Akhrarkhodjaeva, N. (2009). 'The Trans-Caspian energy route: Cronyism, competition and cooperation in Kazakh oil export', *Energy Policy*, 37(8), pp. 3171–3182.
- Hameiri, S. and Jones, L. (2018). 'China challenges global governance? Chinese international development finance and the AIIB', *International Affairs*, 94(3), pp. 573–593.
- Hansen, V. (2012). *The Silk Road: A new history*. Oxford: Oxford University Press.
- Harper, T. (2017). 'Towards an Asian Eurasia: Mackinder's heartland theory and the return of China to Eurasia: How China's policies have opened a new chapter in the struggle for Eurasia', *Cambridge Journal of Eurasian Studies*, 1, CRZXUW.
- Harris, L. (2024). 'What is the \$100bn Asian Infrastructure Investment Bank funding?', *Financial Times*, 2 October. Available at: <https://www.ft.com/content/a69fe65e-af78-497e-a58e-d9a4fd427733> (Accessed: 21 February 2025).
- Herranz-Surrallés, A. (2016). 'Energy cooperation: The leading light of the revised European neighbourhood policy? Drivers and limits of the EU's functionalist extension', in Bouris, D. and Schumacher T. (eds) *The revised European neighbourhood policy: Continuity and change in EU foreign policy*. London: Palgrave Macmillan, pp. 241–261.
- Horký-Hluchán, O. and Kratochvíl, P. (2014). "Nothing is imposed in this policy!": The construction and constriction of the European neighbourhood', *Alternatives*, 39(4), pp. 252–270.
- Hornby, L. and Kynge, J. (2018). 'China eyes role as world's power supplier', *Financial Times*, 6 June. Available at: <https://www.ft.com/content/bdc31f94-68aa-11e8-b6eb-4acfcfb08c11> (Accessed: 22 February 2025).
- Hosseini, S. E. (2022). 'Transition away from fossil fuels toward renewables: Lessons from Russia-Ukraine crisis', *Future Energy*, 1(1), pp. 2–5.
- Hu, B. (2014). 'Oil and gas cooperation between China and Central Asia in an environment of political and resource competition', *Petroleum Science*, 11(4), pp. 596–605.
- Hulsewé, A. F. P. (1979). *China in Central Asia: The early stage*. Leiden: E. J. Brill.
- Hulsewé, A. F. P. (2022). *China in Central Asia: The early stage*. Leiden, The Netherlands: Brill. <https://doi.org/10.1163/9789004482876>.
- Hultquist, I. (2015). Mapping of EU blending. Available at: <https://cdn.sida.se/publications/files/sida61956en-mapping-of-eu-blending-project-sida-and-eu-blending.pdf> (Accessed: 22 February 2025).
- Hurley, J. (2018). *Examining the debt implications of the Belt and Road Initiative from a policy perspective*. Available at: <https://www.cgdev.org/sites/default/files/examining-debt-implications-belt-and-road-initiative-policy-perspective.pdf> (Accessed: 22 February 2025).
- Ibrahim, I. A. (2023). 'Introduction-Ensuring access to affordable, reliable, sustainable and modern energy in the MENA region: Legal, institutional and policy developments', *The Journal of World Energy Law & Business*, 16(2), pp. 73–76.
- Ibrahim, I. A., Baack, F., Aukes, E., Sanderink, L., Coenen, F., Helfrich, F., Votsis, A. and Hoppe, T. (2025). 'Local energy autarky: What it means and why it matters', *Energy Research & Social Science*, 120, 103920.
- Inan, F. and Yayloyan, D. (2018). 'New economic corridors in the South Caucasus and the Chinese One Belt One Road', *The Economic Policy Research Foundation of Turkey*, April. Available at: https://www.researchgate.net/publication/324485259_New_Economic_Corridors_in_the_South_Caucasus_and_the_Chinese_One_Belt_One_Road (Accessed: 22 February 2025).
- Indeo, F. (2018). 'The impact of the Belt and Road Initiative on Central Asia: Building new relations in a reshaped geopolitical scenario', in Zhang, W., Alon, I. and Lattemann, C. (eds) *China's Belt and Road Initiative: Changing the rules of globalization*. Cham: Palgrave Macmillan, pp. 135–153.

- International Energy Agency (2019). World energy outlook 2019. Available at: <https://iea.blob.core.windows.net/assets/98909c1b-aabc-4797-9926-35307b418cdb/WE02019-free.pdf> (Accessed: 14 February 2025).
- Irshad, M. S. (2015). 'One Belt and One Road: Does China-Pakistan economic corridor benefit for Pakistan's economy?', *Journal of Economics and Sustainable Development*, 6(24), pp. 200–207.
- Israfilbayova, S. (2018). 'Chinese companies invest about \$800M in Azerbaijan', *AzerNews*, 16 July. Available at: <https://www.azernews.az/business/134838.html> (Accessed: 22 February 2025).
- Jacobs, M. (2016). *Panic at the pump: The energy crisis and the transformation of American politics in the 1970s*. New York: Hill and Wang.
- Jafarov, S. (2018). 'Azerbaijan's investment opportunities presented in Shenzhen, China', *Azertac*, 8 September. Available at: https://azertag.az/en/xeber/Azerbaijans_investment_opportunities_presented_in_Shenzhen_China-1192719 (Accessed: 14 February 2025).
- Karova, R. (2011). 'Regional electricity markets in Europe: Focus on the Energy Community', *Utilities Policy*, 19(2), pp. 80–86.
- Karrar, H. H. (2016). 'The resumption of Sino-Central Asian trade, c. 1983–94: Confidence building and reform along a Cold War fault line', *Central Asian Survey* 35(3), pp. 334–350.
- Kavalski, E. (2018). 'China's Belt and Road Initiative in Central and Eastern Europe', *Asian International Studies Review*, 19(2), pp. 13–31.
- Kavalski, E. (2020). 'The unexpected consequences of China's cooperation with Central and Eastern Europe', *International Studies*, 57(1), pp. 1–19.
- Kazantsev, A., Medvedeva, S. and Safranchuk, I. (2021). 'Between Russia and China: Central Asia in Greater Eurasia', *Journal of Eurasian Studies*, 12(1), pp. 57–71.
- Kennedy, S. (2015). *Made in China 2025*. Available at: <https://www.csis.org/analysis/made-china-2025> (Accessed: 22 February 2025).
- Kirişçi, K. and Le Corre, P. (2018). *The new geopolitics of Central Asia: China vies for influence in Russia's backyard*. Available at: <https://www.brookings.edu/blog/order-from-chaos/2018/01/02/the-new-geopolitics-of-central-asia-china-vies-for-influence-in-russias-backyard/> (Accessed: 21 February 2025).
- Kovziridze, T. (2017). *Georgia-China FTA: A side effect of the EU-Georgia DCFTA?* Available at: <https://3dcftas.eu/publications/ge-china-fta-a-side-effect-of-the-eu-ge-dcfta> (Accessed: 22 February 2025).
- Kyzy, A. S. (2021). 'Discussing Sinophobia in Kyrgyzstan', *Central Asian Affairs*, 8(1), pp. 58–82.
- Langan, M. (2015). 'Budget support and Africa-European Union relations: Free market reform and Neo-colonialism?', *European Journal of International Relations*, 21(1), pp. 101–121.
- Langan, M. (2020). 'Neo-colonialism, Nkrumah and Africa-Europe ties', in Rabaka, R. (ed) *Routledge handbook of Pan-Africanism*. London: Routledge, pp. 101–111.
- Lei, Y. and Sui, S. (2023). 'China-Russia strategic partnership and the oil and gas collaboration', *Innovation: The European Journal of Social Sciences*, 37(4), pp. 1224–1243.
- Len, C. (2015). 'China's 21st Century Maritime Silk Road Initiative, energy security and SLOC access', *Maritime Affairs: Journal of the National Maritime Foundation of India*, 11(1), pp. 1–18.
- Li, C., Li, H. and Zhao, Z. (2022). 'Geographic proximity and M&As: Evidence from China', *Emerging Markets Review*, 51, 100892.
- Li, M. (2007). 'Peak oil, the rise of China and India, and the global energy crisis', *Journal of Contemporary Asia*, 37(4), pp. 449–471.
- Lim, T. W., Lim, W. X. and Chan, H. H. L. (2016). *China's One Belt One Road Initiative*. Singapore: World Scientific.
- Lin, J. Y. and Wang, Y. (2016). 'New structural economics and resource financed infrastructure', *Pacific Economic Review*, 21(1), pp. 102–117.
- Litsegård, A. and Mattheis, F. (2024). 'Broadening the concept of interregionalism: Beyond state-centrism and Eurocentrism', *Third World Quarterly*, 45(7), pp. 1273–1290.
- Liu, M. (2024). 'Amplified state capitalism in China: Overproduction, industrial policy and statist controversies', *Development and Change*, 55(2), pp. 191–218.
- Liu, X. (2010). *The Silk Road in world history*. Oxford: Oxford University Press.
- Lu, Z. (2017). *China's excess capacity in steel: a fresh look*. Available at: <https://www.piie.com/blogs/china-economic-watch/chinas-excess-capacity-steel-fresh-look> (Accessed: 21 February 2025).
- McLean, J. and Mountains, P. (2024). 'China's 'electric Silk Road' tests local loyalties to Moscow', *The Times*, 13 October. Available at: https://www.thetimes.com/world/asia/article/chinas-electric-silk-road-tests-local-loyalties-to-moscow-vxqb3zv2d?utm_source (Accessed: 22 February 2025).
- Meister, S. (2023). 'Geopolitics of infrastructure and connectivity in the South Caucasus: The case of Armenia and Azerbaijan', *Caucasus Analytical Digest*, 132, pp. 21–25.
- Ministry of Commerce of the People's Republic of China (2018). *China-Georgia FTA comes into force today*. Available at: http://fta.mofcom.gov.cn/enarticle/chinageorgiaen/chinageorgiaennews/201801/36885_1.html (Accessed: 22 February 2025).

- Motohashi, M. (2019). *Disclosable restructuring paper – Kazakhstan energy efficiency project – P130013 (English)*. Available at: <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/586021553634948187> (Accessed: 22 February 2025).
- Mukhina, M., Baranova, V. and Porokhova, N. (2017). *Chinese capital outflow restrictions give way to new opportunities for CIS countries*. Available at: <https://acra-ratings.ru/research/344/?lang=en> (Accessed: 21 February 2025).
- Murray, C. (2022). 'An analysis of China's Belt and Road Initiative and its neocolonial ambitions', *Routes*, 2(3), pp. 176–182.
- Mustafić, A. (2016). 'China's One Belt, One Road and energy security initiatives: A plan to conquer the World?', *Inquiry-Sarajevo Journal of Social Science*, 2(2), pp. 107–134.
- Nabiyeva, K. (2018). 'Central Asia's green horizons', *Energy Transition*, 13 June. Available at: <https://energytransition.org/2018/06/central-asias-green-horizons/> (Accessed: 13 February 2025).
- Nixon, R. (1974). *Address on the state of the Union delivered before a joint session of the Congress*. Available at: <https://www.presidency.ucsb.edu/documents/address-the-state-the-union-delivered-before-joint-session-the-congress> (Accessed: 21 February 2025).
- Ogwang, T. and Vancly, F. (2021). 'Resource-financed infrastructure: Thoughts on four Chinese-financed projects in Uganda', *Sustainability*, 13(6), 3259.
- Özcan, S. (2013). 'Securitization of energy through the lenses of Copenhagen School', *West East Journal of Social Sciences*, 2(2), pp. 57–72.
- Paik, K. W. (2015). *Sino-Russian gas and oil cooperation: Entering into a new era of strategic partnership?* Available at: <https://www.econstor.eu/bitstream/10419/246531/1/978-1-78467-029-0.pdf> (Accessed: 22 February 2025).
- Pendse, D. R. (1979). 'The energy crisis and Third World options', *Third World Quarterly*, 1(4), pp. 69–88.
- Pendse, D. R. (1980). 'Energy crisis and its impact on energy consumers in Third World: I', *Economic and Political Weekly*, 15(3), pp. 107–116.
- Petelin, E. (2011). 'China's energy monologue in Central Asia', *Security Index: A Russian Journal on International Security*, 17(4), pp. 29–46.
- Peyrouse, S. (2016). 'Discussing China: Sinophilia and Sinophobia in Central Asia', *Journal of Eurasian Studies*, 7(1), pp. 14–23.
- Pieper, M. (2021). 'The linchpin of Eurasia: Kazakhstan and the Eurasian Economic Union between Russia's defensive regionalism and China's new Silk Roads', *International Politics*, 58(3), pp. 462–482.
- Pirani, S. (2012). *Central Asian and Caspian gas production and the constraints on export*. Oxford: Oxford Institute for Energy Studies.
- Price, A. H., Weld, C. B., El-Sabaawi, L. and Teslik, A. M. (2016). *Unsustainable: Government intervention and overcapacity in the global steel industry*. Available at: https://www.wiley.law/media/publication/204_Unsustainable-Government-Intervention-and-Overcapacity-in-the-Global-Steel-Industry-April-2016.pdf (Accessed: 21 February 2025).
- Qiu, F. (2014). 'Meiguo chongfan yatai hou zhongguo zhoubian wajiao de tiaozhan yu yingdui [China's peripheral diplomacy: Challenge and response after U.S. returned to Asia-Pacific]', *Liaodong Xueyuan Xuebao (Shehui Kexue Ban) [Journal of Eastern Liaoning University (Social Sciences)]*, 16(4), pp. 15–22.
- Rab, A. and He, Z. (2019). 'China and Shanghai Cooperation Organization (SCO): Belt and Road Initiative (BRI) perspectives', *International Journal of Humanities and Social Science*, 9(2), pp. 166–171.
- Rekhviashvili, L. and Lang, T. (2024). 'Chinese investments as part of infrastructure-led development: Multi-scalar contestations around Georgia's flagship infrastructure projects', *Eurasian Geography and Economics*, pp. 1–30. <https://doi.org/10.1080/15387216.2024.2311712>.
- Renner, S. (2009). 'The Energy Community of Southeast Europe: A neo-functionalist project of regional integration', *European Integration Online Papers (EIoP)*, 13. Available at: <https://ideas.repec.org/a/erp/eiopxx/p0167.html> (Accessed: 15 March 2025).
- Romania-insider.com (2018). 'Romanian nuclear power producer aims to finalize negotiations for new reactors this year', *Romania Insider*, 19 July. Available at: <https://www.romania-insider.com/nuclearelectrica-finalize-negotiations-new-reactors> (Accessed: 21 February 2025).
- Ross, M. L. (2013). 'How the 1973 oil embargo saved the planet', *Foreign Affairs*, 15 October. Available at: <https://www.foreignaffairs.com/articles/north-america/2013-10-15/how-1973-oil-embargo-saved-planet#> (Accessed: 15 February 2025).
- Sahakyan, M. (2023). *China and Eurasian powers in a multipolar world order 2.0: Security, diplomacy, economy and cyberspace*. New York: Routledge.
- Scissors, D. (2025). *\$2.5 trillion: 20 years of China's global investment and construction*. Available at: <https://www.aei.org/wp-content/uploads/2025/01/2.5-Trillion-20-Years-of-Chinas-Global-Investment-and-Construction.pdf> (Accessed: 22 February 2025).
- Sica, C. E. and Huber, M. (2017). 'We can't be dependent on anybody': The rhetoric of "energy independence" and the legitimization of fracking in Pennsylvania', *The Extractive Industries and Society*, 4(2), pp. 337–343.

- Sidaway, J. D. and Woon, C. Y. (2017). 'Chinese narratives on 'One Belt, One Road' (一帶一路) in geopolitical and imperial contexts', *The Professional Geographer*, 69(4), pp. 591–603.
- Siddi, M. and Kaczmarek, M. (2021). 'The EU and China in Central Asian energy geopolitics', in Fabienne, B. and Bart, D. (eds) *The European Union, China and Central Asia: Global and regional cooperation in a new era*. London: Routledge, pp. 161–178.
- Skalamera, M. (2023). 'The geopolitics of energy after the invasion of Ukraine', *The Washington Quarterly*, 46(1), pp. 7–24.
- Socor, V. (2006). 'Turkmenistan–China Gas Agreement Unrealistically Ambitious', *Eurasia Daily Monitor*, no. 3, issue 69, Jamestown Foundation, 10 April. Available at: <https://jamestown.org/program/turkmenistan-china-gas-agreement-unrealistically-ambitious/>.
- Stec, G. (2018). *China's asymmetric FDI policies threaten the success of the Belt and Road Initiative*. Available at: <https://thedi diplomat.com/2018/02/chinas-asymmetric-fdi-policies-threaten-the-success-of-the-belt-and-road-initiative/> (Accessed: 22 February 2025).
- Swaine, M. D. (2014). *Chinese views and commentary on periphery diplomacy*. Available at: <https://www.hoover.org/sites/default/files/research/docs/clm44ms.pdf> (Accessed: 13 February 2025).
- Swaine, M. D. (2015). *Xi Jinping on Chinese foreign relations: the governance of China and Chinese commentary*. Available at: https://www.hoover.org/sites/default/files/research/docs/clm48ms_0.pdf (Accessed: 13 February 2025).
- Tang, W. and Joldybayeva, E. (2023). 'Pipelines and power lines: China, infrastructure and the geopolitical (re) construction of Central Asia', *Geopolitics*, 28(4), pp. 1506–1534.
- Tengrinews.kz (2014). 'Netherlands no longer biggest investor into Kazakh economy', *Tengri News*, 23 July. Available at: <https://en.tengrinews.kz/finance/netherlands-no-longer-biggest-investor-into-kazakh-economy-254983/> (Accessed: 22 February 2025).
- Trading Economics (2019). *Credit Rating*. Available at: <https://tradingeconomics.com/country-list/rating> (Accessed: 22 February 2025).
- Ullah, A., Chen P., Ullah S. and Hashmi S. H. (2021). 'Nexus of regional integration, socioeconomic determinants and sustainable development in Belt and Road Initiative countries', *PLoS One*, 16(7), e0254298.
- Vasić, B., Pekić, I. and Šimić, G. (2023). 'Energy security of the European Union and corruption in Central Asia as the main challenges for the European sustainable energy future', *Energy, Sustainability and Society*, 13(1), 31.
- Vörös, Z. (2018). *Who benefits from the Chinese-built Hungary–Serbia Railway?* Available at: <https://thedi diplomat.com/2018/01/who-benefits-from-the-chinese-built-hungary-serbia-railway/> (Accessed: 21 February 2025).
- Wallace Jr., H. D. (2021). 'Inventing in a crisis: Lighting the United States after the 1973 oil embargo', *Technology and Culture*, 62(4), pp. 1143–1171.
- Wang, F., Yin, H. and Li, S. (2010). 'China's renewable energy policy: Commitments and challenges', *Energy Policy*, 38(4), pp. 1872–1878.
- Wang, Z. (2015). *Securing energy flows from Central Asia to China and the relevance of the energy charter treaty to China*. Brussels: Energy Charter Secretariat.
- Wayne, S. (2018). 'China's OBOR Initiative', *Georgia Today*, 4 July. Available at: <http://gtarchive.georgiatoday.ge/news/11071/China%E2%80%99s-OBOR-Initiative> (Accessed: 22 February 2025).
- Weitz, R. (2014). 'The Russia–China gas deal: Implications and ramifications', *World Affairs*, 177(3), pp. 80–86.
- Wellum, C. (2017). 'The ambivalent aesthetics of oil: Project Documerica and the energy crisis in 1970s America', *Environmental History*, 22, pp. 723–732.
- Wesselink, E. and Boschma, R. (2017). 'European neighbourhood policy: History, structure, and implemented policy measures'. *Tijdschrift voor economische en sociale geografie [Journal of Economic and Human Geography]*, 108(1), pp. 4–20.
- Wilson, J. D. (2019). 'The evolution of China's Asian Infrastructure Investment Bank: From a revisionist to status-seeking agenda', *International Relations of the Asia-Pacific*, 19(1), pp. 147–176.
- WITS (2016). *China trade balance, exports and imports by country and region 2016*. Available at: <https://wits.worldbank.org/CountryProfile/en/Country/CHN/Year/2016/TradeFlow/EXPIMP> (Accessed: 22 February 2025).
- WITS (2022). *China trade balance, exports and imports by country and region 2022*. Available at: <https://wits.worldbank.org/CountryProfile/en/Country/CHN/Year/2022/TradeFlow/EXPIMP> (Accessed: 22 February 2025).
- Wu, G., Zeng, M., Peng, L., Liu, X., Li, B. and Duan, J. (2016). 'China's new energy development: Status, constraints and reforms', *Renewable and Sustainable Energy Reviews*, 53, pp. 885–896.
- Yang, Y., Liu, Y. and Jin, F. J. (2015). 'Study on energy cooperation between China and the Central Asia and Russia under the view of energy geopolitics', *Geographical Research*, 34(2), pp. 213–224.
- Yu, H. (2017). 'Motivation behind China's 'One Belt, One Road' Initiatives and establishment of the Asian Infrastructure Investment Bank', *Journal of Contemporary China*, 26(105), pp. 353–368.
- Yu, K. (2023). *China's energy security in the twenty-first century: The role of global governance and climate change*. Hong Kong: Hong Kong University Press.

- Zeng, L. (2016). 'Conceptual analysis of China's Belt and Road Initiative: A road towards a regional community of common destiny', *Chinese Journal of International Law*, 15(3), pp. 517–541.
- Zhang, E. and James, P. (2023). 'All roads lead to Beijing: Systemism, power transition theory and the Belt and Road Initiative', *Chinese Political Science Review*, 8(1), pp. 18–44.
- Zhu, G., Speece, M. W. and So, S. L. M. (2002). 'Conflicts in Sino-European joint ventures', in Selmer, J. (ed) *International management in China*. London: Routledge, pp. 28–42.
- Zoppoloto, D. G. and Jiang, S. (2023). 'China-MENA energy cooperation under the Belt and Road Initiative: Megaprojects, economic planning, and a pragmatic approach to the 'green' transition', *The Journal of World Energy Law & Business*, 16(2), pp. 143–159.
- Zulkifli, N. and Haqeeem, D. (2022). 'The OPEC oil shock crisis (1973): An analysis', *Asian Journal of Research in Business and Management*, 4(1), pp. 136–148.