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COMPETING GREEN VISIONS: THE EU, CHINA, AND THE FOREIGN POLICY DILEMMAS FOR SERBIA

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Abstract: The global energy transition has elevated energy policy to a strategic geopolitical issue, intensifying the competition between great powers while reshaping the international order. China has emerged as a key actor in this "new energy race," positioning itself as a green superpower through large-scale investments in renewable energy and a strategic integration of green diplomacy into its foreign policy. Similarly, the European Union has advanced a normative and regulatory model of sustainability, promoting a green agenda both domestically and globally. However, both actors face internal contradictions: China remains heavily reliant on coal, while the EU faces with internal fragmentation and geopolitical dependence. These green superpowers are redefining global influence through competing energy visions, raising critical questions for small states such as Republic of Serbia. Situated at the crossroads of global power shifts, Serbia faces complex foreign policy challenges in aligning with or balancing between these actors' green strategies. This paper analyses the dual nature of the EU's and China's green leadership. Using the conceptual frameworks of green superpower and green foreign energy policy, the study critically examines the implications for Serbia's foreign policy, highlighting strategic dilemmas and risks in navigating an increasingly multipolar and environmentally securitized global landscape. This in-depth descriptive study is based on a critical literature review, qualitative content analysis of key energy-related strategies and policies, and secondary data analysis.

Keywords: Green superpower, green foreign energy policy, EU, China, Serbia, foreign policy dilemmas.

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INTRODUCTION**

The ongoing energy transition – which is understood as the shift from fossil fuels to renewable energy sources (RES) and low-carbon technologies – has placed energy issues at the forefront of both academic and public debates. Since the launch of the UN Agenda 2030 and the Paris Agreement in 2015, renewable energy (RE) has gained significant momentum. Global data indicates sharp increase in installed renewable power capacity – by the end of 2024, RES accounted for 46% of global installed power capacity (IRENA, 2025). However, the deployment of renewable capacity remains highly uneven: China, the United States, and the EU accounted for 83.6% of all new renewable capacity installed in 2024 (IRENA, 2025). These figures clearly indicate which actors are at the forefront of the energy transition.[1] Over time, RES and low-carbon technologies have evolved from peripheral elements of development policies into key strategic assets in great power competition and defining components of the global energy transition.

The emerging global "new energy race" to lead the energy transition has intensified competition among established powers, while also creating openings for emerging players (Šekarić Stojanović, 2022). Although some "traditional" challenges related to fossil fuels – such as resource scarcity, security of supply, and weaponization of energy resources – are less applicable to RES (Prontera, 2024, p. 3), new challenges are arising from the characteristics of RE production and distribution, as well as from the material foundations of low-carbon technologies. The most prominent place in this context belongs to critical materials – such as lithium, nickel, cobalt, copper, aluminium, rare earth elements – which are essential for the development of solar photovoltaics, wind turbines, battery storage,

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[1] At the same time, China, the US and the EU are responsible for more than a half of global GHG emissions (Prontera, 2024, p. 6).

and other renewable technologies. In 2022, European Commission President von der Leyen, said that "lithium and rare earths will soon be more important than oil and gas" (European Commission, 2022), highlighting thus their strategic relevance. Forecasts suggest that the global demand for these materials will triple by 2030, and quadruple by 2040 (UN PCETM, 2024, p. 3). According to the United Nations Conference on Trade and Development's data, China currently processes more than half of the world's aluminium, cobalt, and lithium, and nearly 100% of natural graphite (UNCTAD, 2024), making it the global leader in the low-carbon technology supply chain. By contrast, although the EU has historically been at the forefront of developing climate and energy policies, it remains heavily dependent on China for renewable energy equipment and raw materials. Consequently, critical materials have quickly emerged as one of the most significant geopolitical assets of the 21st century.

In addition, developing countries hold the bulk of global critical mineral reserves – Africa alone possesses 48% of global cobalt reserves, 22% of natural graphite, 6% of copper, 6% of nickel and 1% of lithium reserves (UNCTAD, n.d.). In Europe, the largest lithium deposits are found in Germany and Czechia, followed by Serbia (Momčilović, 2023). Serbia is not only rich in RES potential, but also represents a site of overlapping EU and Chinese energy investments. As a candidate country under the EU's energy umbrella, Serbia is obliged to align its legislation with the EU's energy *acquis communautaire*. Simultaneously, it is the leading recipient of Chinese energy-related investments in the Western Balkans. This *state-of-play* wouldn't be unique if Serbia doesn't hold the position of the country with most undefined foreign policy course towards great powers among all other Balkan countries (Lipovac, 2016, p. 17). As such, Serbia provides a revealing case of how the intersection of competing green foreign energy policies can generate specific dilemmas within a complex geopolitical context.

The purpose of this chapter is twofold: first, to compare green visions of the two green superpowers, and second, to identify Serbia's foreign policy dilemmas at the intersection of these competing approaches. Accordingly, the chapter is structured in two main sections. The first section provides a conceptual and analytical framework for understanding

the notion of green superpower and the core features of the EU's and China's green foreign energy policies. The second section remains central part of the analysis as it serves for mapping the EU's and China's distinctive green foreign energy approaches in Serbia. It also highlights main foreign policy dilemmas for Serbia as outcomes of the EU's and China's green agendas' intersection. The chapter ends with conclusion remarks.

THE CONCEPT OF GREEN SUPERPOWER AND GREEN FOREIGN ENERGY POLICY

As the ongoing energy transition highly influences contemporary international relations, recent years saw increased "greening" of an energy-foreign policy nexus. The concept of a "green superpower" (Prontera, 2024), thus, has emerged in response to the growing role of RE and low-carbon technologies in reshaping global power dynamics. Unlike traditional energy superpowers whose influence was rooted in the control of fossil fuel resources and supply routes, green superpowers derive their status from leadership in the development, deployment, and diffusion of renewable technologies, green finance, and sustainability norms. As the ongoing energy transition profoundly reshapes contemporary international relations, recent years have witnessed an intensified "greening" of the energy-foreign policy nexus. This transformation reflects a broader shift in the nature of power and influence in the international system – away from fossil fuel dominance toward technological innovation and environmental leadership.

Green foreign energy policy, as a relatively new analytical concept, captures the ways in which states embed energy transition objectives into their external strategies. According to Prontera (2024, p. 29), "tools of economic statecraft and diplomacy will be more relevant to the nascent green foreign energy policy". These include financial instruments, trade agreements, investment policies, development aid, and technology transfers – all aimed at securing strategic advantages in a rapidly evolving energy landscape. As Prontera further emphasizes (2024, p. 30), "managing low-carbon technology supply chains is a constitutive element of national green foreign energy policy." This entails leveraging all available

diplomatic, economic, and regulatory tools to gain influence at every stage of the supply chain – whether domestically or abroad.

In this context, green power strategies illustrate the efforts of major international actors to achieve the strategic goals of green foreign energy policy while enhancing their geopolitical influence in the emerging low-carbon world (Prontera, 2024, p. 45). Unlike traditional geopolitical competition centred on access to fossil fuels, "the new green energy game is mainly a matter of technological innovation and industrial partnerships, rather than patrolling international oil market choke points or extending control over fossil fuel–rich territories" (Prontera, 2024, p. 29). As such, the energy transition introduces new patterns of international relations and power projection, shifting the focus from territorial control to technological leadership, supply chain management, and normative influence in global sustainability governance.[2]

RES and low-carbon technologies can be understood both as foreign policy objectives and as instruments of foreign policy (Prontera, 2024, p. 29). Given that these technologies lie at the heart of the global energy transition while simultaneously serve as part of a country's foreign policy approach, it is not surprising that great powers incorporate green component within their foreign policy strategies. This "component" manifests in various forms: promoting RES abroad and endorsing a global low-carbon vision, investing in RES and low-carbon technologies, or deploying strategies to secure access to critical materials essential for the development of RE technologies.

Since the 1970s, the green dimension has gradually become an integral part of national foreign energy policies. Prontera (2024, pp. 34-35) identified four issue areas as key drivers of developing green foreign energy policy: climate, energy, industry, and trade and investments (see Table 1). Each of these domains engages with RES and low-carbon technologies from distinct vantage points, yet collectively they converge

[2] As further explained, military tools, used traditionally to control fossil fuels resources due to their territoriality, now hardly apply to low-carbon supply chains technology (Prontera, 2024, p. 29), bypassing thus traditional geopolitical confrontation over energy resources (but creating new forms of dependencies though).

to shape the broader framework of green foreign energy policy. Variety of tools at the state's disposal to pursue its own green foreign energy policy, from the other hand, could be classified into diplomatic, regulatory, and economic instruments (Prontera, 2024, p. 36). The intersection of these issue areas and policy tools – alongside the modes of engagement and geographical reach – defines the operational character of a state's green foreign energy policy.[3] In this context, a green superpower possesses and strategically deploys all four dimensions to varying extents.

Table 1: Issue areas of a green foreign energy policy explained

Issue Area	**Focus**	**Key objectives**
Climate	Climate diplomacy, CO_2 mitigation via RES	Emission reductions, RES diffusion, multilateral climate cooperation
Energy	RE cooperation and energy security	Promote RES abroad, energy diversification, import infrastructure (e.g., hydrogen)
Industry	Green industrial internationalization	Support green firms, build supply chains, foster industrial partnerships
Trade & Investments	Trade/FDI in green tech and critical inputs	Secure materials, promote exports, IP protection, shape trade regimes

Source: Author's own elaboration based on: Prontera, 2024.

As Prontera elaborates (2024, pp. 36-37), diplomatic tools refer to diverse methods and practices used by state to pursue international objectives through negotiation, cooperation, and influence. These include government-to-government dialogue, public diplomacy, government support to national companies in international markets, engagement of a wider set of actors (public, private, local, international), promoting rules and standards etc. Regulatory instruments refer to mechanisms such as

[3] Modes of engagement could vary along the unilateral-multilateral spectrum, while geographical reach refers to regional or global dispersion of power (Prontera, 2024, p. 37).

market-based instruments, regulatory harmonization, diffusion of domestic rules to third countries (often via trade or institutional cooperation), use of trade agreements to export domestic regulatory frameworks abroad, standard-setting in emerging technologies etc. Lastly, economic instruments include foreign aid, investment guarantees, subsidies, preferential tariffs, FDIs, state-owned companies used as tools of economic diplomacy and investment, development loans and grants etc. As could be seen, diplomatic instruments focus on negotiation and influence, regulatory ones are about setting and promoting rules and standards, whilst economic tools include financial and material incentives like aid, investment, and subsidies. While in practice these tools may overlap and are not always easily distinguishable, this categorization serves as a useful analytical framework for identifying the predominant mechanisms through which great powers implement their green foreign energy policies.

In summary, the concept of green superpower is multilayered and requires dedication to sustainable development, environmental protection and climate change combat. It sublimates all energy- and climate-related goals required for the energy transition process and undertaking specific means and tools in order to achieve these goals.

Positioning the EU and China as Green Superpowers

Building on the conceptual framework of green foreign energy policy, it is crucial to examine how the EU and China position themselves as green superpowers within the global energy transition. This subsection, thus, maps their positioning through the lens of their domestic commitments, foreign policy engagements, and global power projection in the low-carbon domain.

China has positioned itself as a global leader in the renewable energy sector, demonstrating a remarkable shift from a carbon-intensive economy to a key driver of the global energy transition. Its domestic commitment to sustainable development has influenced its foreign policy (Šekarić Stojanović & Zakić, 2024). As part of its energy strategy, China has embedded green energy diplomacy into its global engagements,

reinforcing its status as a major player in the energy transition. However, China's continued reliance on fossil fuels – particularly coal – creates a structural paradox: it is simultaneously one of the world's foremost RE investors and one of its largest greenhouse gasses (GHG) emitters. China continues to construct coal-fired power plants while making massive investments in renewable technologies. This dual approach reflects a broader pattern wherein great powers prioritize national energy security and development goals alongside long-term transition objectives (Šekarić Stojanović & Zakić, 2024). As such, China's green foreign energy strategy reflects an intersection of economy-driven national interests and climate-oriented ambitions.

Beginning in the early 2000s, China gradually integrated a green component into its foreign policy.[4] Subsequent Five-Year Plans and legislative acts identified RES as key tools for achieving energy transition and climate-related targets. This state-led shift towards low-carbon technologies, supported by cross-sectoral commitments to sustainable development, resulted with placing China at the top of the world's fort runners of energy transition process. China's leadership is particularly evident in its dominance over solar panel, wind turbine and electric vehicle production, together with investing into critical materials, green finance and dominance over low-carbon technology supply chain. According to the Australian Strategic Policy Institute (ASPI), China now leads in 57 of 64 critical technologies (Wong Leung, Robin & Cave, 2024).[5] Supported by state policies, Chinese companies have become global leaders in the energy transition, in part due to their survival and growth in a highly competitive domestic market (Kattrup, 2025). Nevertheless, fossil fuels – especially coal – continue to play a central role in China's energy system.

[4] The Environmental Impact Assessment Act from 2003 and the establishment of the Ministry of Ecology and Environment in 2008 marked shift towards environmentally responsible technology, while subsequent five-years plans made the rise of RES an obligatory development goal (Šekarić Stojanović & Zakić, 2024).

[5] According to this report, within the period 2003-2007, the US led in 60 of 64 critical technologies, while China led in just 3 of 64 critical technologies within the same period. However, within the last five-years period (2019-2023), the US is leading in just 7 of 64 critical technologies (Wong Leung, Robin & Cave, 2024).

In 2023, coal accounted for 61.3% of electricity generation, followed by hydropower (13.5%), wind (9.3%), solar (6.1%), nuclear energy (4.6%), and other sources (IEA, 2023). This energy mix reflects China's strategy of maintaining energy security while gradually phasing out coal. The continued construction and modernization of coal-fired power plants coexists with strong support for RES development, illustrating the complexities of China's transitional pathway.

The European Union, by contrast, represents a normative power, with the European Green Deal (EGD) serving as its flagship initiative for energy transition. Since the 1970s, the EU has developed climate-related policies, putting the protection of the natural environment as a subject of fundamental treaties. What began as the initiative of individual member states gradually evolved, from the 1990s onward, into a coordinated supranational effort to promote renewable energy and low-carbon technologies.[6] The EU is thus historically recognized as a pioneer in integrating climate and energy policies (Šekarić Stojanović, 2024). Over the past two decades, the EU has intensified its promotion of RES through a series of strategies, action plans, and legislation. The European Green Deal (2019) introduced a comprehensive set of instruments aimed at achieving climate neutrality by 2050 and reducing GHG emissions by 55% by 2030 compared to 1990 levels. The REPowerEU Plan (2022) further accelerated these efforts by setting ambitious goals to end dependence on Russian fossil fuels, promote clean energy production, and speed up the energy transition (European Commission, n.d.). However, the EU's dependency on imported critical raw materials – particularly from China, which supplies around 95% of global demand for rare earth elements (Radovanović, Filipović & Šimić, 2025) – significantly limits its strategic autonomy in this domain.

[6] As stated in the literature, key events in adopting supranational approach in promoting RES were releasing of the 1996 Commission Green Paper on RES and White Paper "Energy for the Future: Renewable Sources of Energy" in 1997 (Solorio & Bocquillion, 2017), which set the first goals and mechanisms for introducing RES into different sectoral politics.

MAPPING THE EU'S AND CHINA'S GREEN FOREIGN ENERGY POLICIES IN SERBIA

Building upon the established profiles of the EU and China as emerging green superpowers, this section maps their distinct green foreign energy policy strategies as manifested in the Serbian context. To analyse the green presence of the EU and China in Serbia, this section applies the four-dimensional framework for mapping green foreign energy policy developed by Prontera (2024). This framework conceptualizes issue areas, modes of engagement, policy tools, and geographical reach as the principal building blocks of a great power's green foreign energy strategy, as already elaborated. It provides a comprehensive analytical tool for evaluating how states project their green agendas beyond their borders. In the case of Serbia, the framework is applied with a focus on two dimensions – issue areas and policy tools (see Table 2).[7] This narrowed approach allows for a more targeted analysis of the specific ways in which the EU and China operationalize their green foreign energy policies within Serbia's energy landscape.

[7] Modes of engagement and geographical reach are logically excluded: the choice of Serbia inherently entails a geographically defined context and reflects primarily bilateral forms of engagement.

Table 2: Mapping EU's and China's green foreign energy policy in Serbia

Issue areas				
Tools	***Climate***	***Energy***	***Industry***	***Trade & Investments***
Diplomatic		EU Green Deal (2019)		China's Green Investment Principles for the Belt and Road (2018) China-Serbia Comprehensive Strategic Partnership Agreement (2016, renewed 2024)
Economic		China's MoU on strategic cooperation in energy sector in Serbia (2024)	EU's (EBRD) Economic and Investment Plan for the Western Balkans (2020) EU's Regional Energy Efficiency Programme (REEP) for the Western Balkans (2013)	EU's Energy Support Package (2022) EU's Critical Raw Materials Act (2024)
Regulatory	EU's project Development of the Biomass market in the Republic of Serbia (2024) EU and EBRD for energy efficiency in Belgrade (2021) EU's Green Agenda for the Western Balkans – EU for Green Agenda in Serbia (2022)	EU's Energy Community's Renewable Energy Coordination Group (2005)		

Source: Author's own research.

The EU and China have recently emerged as the principal foreign energy investors in Serbia. While the EU functions primarily as a normative power – given Serbia's candidate status and obligation to harmonize its legislation with the EU energy *acquis communautaire* – China has become the second-largest energy investor in the country, with RE investments assuming an increasingly prominent role.

Through the Energy Support Package of EUR 165 million (2022), the EU has cumulatively invested over EUR 1 billion in Serbia's energy sector between 2000 and 2024 (EU Projects in Serbia, n.d.a), targeting diversification of energy sources and routes, energy security, market liberalization, and energy transition. Additionally, the EU allocated EUR 31 million for the construction of the Kostolac wind farm, currently underway, and EUR 16.1 million for the revitalization of the Vlasina hydropower plant (EU Projects in Serbia, n.d.a). An overview of active EU-funded climate- and RE-related projects in Serbia is provided in Table 3.

Table 3: Active EU-funded climate- and RE-related projects in Serbia[8]

No.	Project	Value (EUR)	Implementation period
1.	Construction of Municipal Wastewater Treatment and Collection System in Niš	38,088,811	2022-2026
2.	Rehabilitation of Bistrica Hydropower Plant	7,722,671	by 2027
3.	Improvement of Energy Efficiency and Integrated Energy Management of the Campus of Technical Faculties in Belgrade	21,544,983	2023-2027
4.	Development of the Biomass market in the Republic of Serbia	9,000,000	2024-2029
5.	Support to the Energy Efficiency Administration	5,000,000	2023-2027
6.	The Trans-Balkan Electricity Corridor	31,200,000	2009-
7.	EU and EBRD Action for Energy efficiency in Serbia	4,500,000	by 2027

[8] The research focused on selected criteria 'environment' and 'energy' on the portal #EUforyou.

No.	Project	Value (EUR)	Implementation period
8.	Medical Military Academy reconstruction to meet energy efficiency, health and safety standards	5,000,000	2021-2025
9.	Promotion of Energy Efficiency in Public Buildings	26,000,000	2021-2026
10.	EU for Green Agenda in Serbia	7,200,000	2022-2026
11.	Kostolac Wind Farm construction	31,200,000	by mid 2025
12.	Reconstruction of Vlasina Hydropower Plant	16,100,000	by 2028
13.	EU PPF Programme – preparation of technical and tender documentation for infrastructure projects related to energy, environment and transport sectors	21,000,000	-
14.	EU for Kraljevo Wastewater Collection and Treatment	11,900,000	2021-2026
15.	Improving Chapter 27 planning and implementation	1,999,800	2023-2026
16.	SCADA Platform for Gas Distribution System Operator project	1,694,515	2023-2026
17.	EU for Circular Economy in Serbia	700,000	2025-2027
18.	The Bio-Waste 5 Regions project	14,100,000	2025

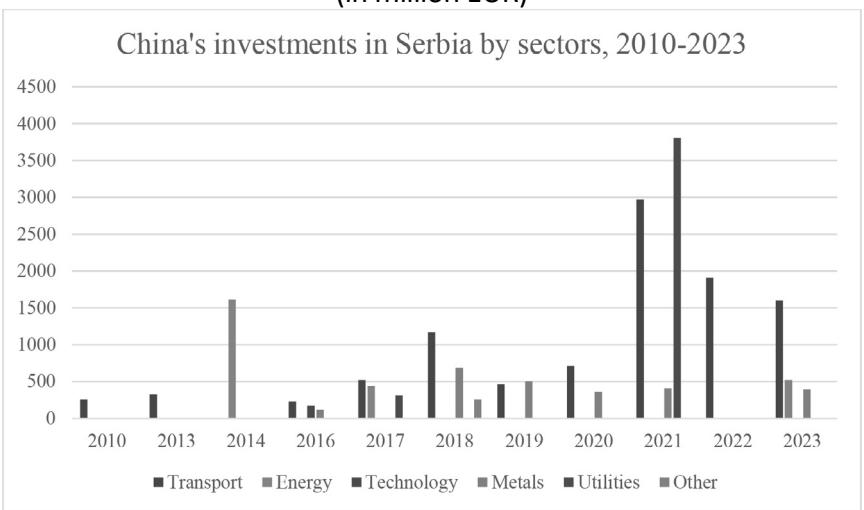
Source: Author's own research (based on: EU Projects in Serbia, n.d.b)

Although the signing of the Framework agreement on economic and technological infrastructure cooperation in 2009 marked revival of contemporary relations between Serbia and China (Vladisavljev, 2023), these relations further deepened through Serbia's involvement in the Belt and Road Initiative in 2013 and the China-Central and Eastern European countries (CEECs) cooperation format (see Graph 1). Since then, the economic component of these relations was the most prominent one and was marked by three directions of development: changes in trade patterns, the volume of loans, and the inflow of Chinese investments

(Ivanović & Zakić, 2023, p. 65). The Free Trade Agreement with China that Serbia signed in 2023 "merely codified what have been developing over the past five to six years" – a rise in trade exchange from over $2 billion in 2019 to an estimated $6.8 billion (Alimpijević, 2025).

Energy sector has appeared as one of the most important regarding Chinese investments in Serbia. When it comes to China's presence in Serbia's RE sector, this presence was not visible until recently since, at first, China has been investing into fossil fuels Serbian facilities. Nowadays, China's RE-related projects in Serbia are estimated at 5 bilion dollars (Ristović, 2024). Apart of several modest solar and wind projects, China signed memorandum of understanding (MoU) with Serbia at the beginning of 2024 which envisages the biggest RE investment in the Western Balkans so far. This MoU was signed between the ministry and China's Shanghai Fengling Renewable Co Ltd and Serbia Zijin Copper, a local subsidiary of Zijin Mining, providing $2.18 billion to build wind and solar power plants and a hydrogen production facility in Serbia by 2028 (Reuters, 2024).

Graph 1: China's investments in Serbia by sectors, 2010-2023 (in million EUR)



Source: AEI, 2025.

Notably, several RE projects in Serbia, such as "Agrosolar", "Maestrale Ring" and "Vetrozelena", are being operated jointly by EU and Chinese companies (Ristović, 2024). This convergence is driven by both economic and political rationales: Chinese RE equipment is competitively priced, while Serbia's EU candidate status offers a slightly more permissive environment regarding the EU's regulatory standards.

Meanwhile, access to critical materials and control over low-carbon supply chains have emerged as core components of green foreign energy policy, as already stated. Great powers are employing a combination of regulatory, diplomatic, and economic tools – such as "friend-shoring" – (re)directing some supply chains' segments towards allies or political aligned countries (Vivoda & Matthews, 2024; Prontera, 2024, p. 30) to secure these vital inputs. In Serbia, this competition unfolds in the realm of resource extraction. While China has consolidated its position in Eastern Serbia through mining operations, the EU has pushed forward the controversial Jadar project in Western Serbia. As some authors highlighted, this project became "a focal point for environmental activism, national politics, and geopolitical manoeuvring" (Vivoda & Loginova, 2025).

China's mining activities in Eastern Serbia resulted with rising utility sector from third to second place of overall Chinese investments in Serbia which, consequently, lowered energy sector from second to third place (see Graph 1). These activities are integral to China's strategy of securing raw materials essential for green technology manufacturing. However, the extracted resources are entirely exported to China, effectively reducing Serbia's role to that of a resource provider – top one exporters from Serbia in 2024 were Zijin Copper and Zijin Mining which operate copper mines in Eastern Serbia (Alimpijević, 2025).[9] China's Zijin Mining Group acquired a majority stake (63%) in Serbia's RTB Bor in 2018, becoming thus Serbia Zijin Copper, and continue to mine primarily copper and gold in Eastern Serbia (Baletic, 2024). Apart from hard investing (see Graph 1), China's mining activities in Eastern Serbia are followed by many controversial

[9] The second and third companies that were among top three Chinese exporters from Serbia in 2024 were HBIS (operating steel in Smederevo) and Linglong (producing various types of wires in Zrenjanin) (Alimpijević, 2025).

issues regarding violations of labour rights (China Labor Watch, 2025), operating without significant environmental licences and polluting the environment (Baletic, 2025; Alimpijević, 2025) which have sparked widespread public opposition and environmental protests.

In parallel, the EU's attempt to secure lithium through the Jadar project has become one of the most politically charged and environmentally contested issues in Serbia.[10] This project has brought to the fore the biggest environmental protests in Serbia so far, resulting in using this case as one of the most important political tools for opposing current political regime. Although mining corporation, Rio Tinto, founded subsidiary in Serbia in 2001 for conducting geological and mining activities, the last five years saw the "ecological uprising" against building the mine (Balkan Green Energy News, 2024). Public organised into protests, scientific community gathered to speak against the project and about its harmful environmental and health impact, several public debates and scientific conferences were organised, resulting with annulling Government's Decree on the spatial plan for mine in 2022, just before April elections. However, Rio Tinto initiated reopening of project activities – Serbian Government reinstated Rio Tinto's spatial plan licence in 2024 and the project continued to be supported by ruling party so far. In June 2025, European Commission declared Jadar project in Serbia one of its strategic projects for critical raw materials, which has met great criticism in Serbia reinforcing fears of Serbia becoming a "mining colony" (EWB, 2025). Nevertheless, the final decision on granting the operating permit remains with domestic authorities and is still pending.

As could be seen, the EU dominates Serbia's renewable energy sector in terms of investments. However, China appears as significant green superpower, particularly through its pivot from fossil fuels to renewable investments. The EU and China pursue their green foreign energy policy towards Serbia through distinct modes – the EU as a regulatory power and China as an economic power. Their "green power", thus, reflects broader

[10] Jadar Valley also holds significant content of jadarite mineral that contains lithium and boron, also needed for RE technologies.

geopolitical objectives and spring from different tools, modes of engagement and energy transition perspective.

Serbia at the intersection of the EU's and China's green foreign energy policy

Historically, Serbia has been situated at the crossroads of geopolitical interests, often between East and West – traditionally between Russia (and, more recently, China) on one side, and the EU and the United States on the other. This geopolitical ambivalence continues to shape Serbia's foreign policy, especially as the country attempts to navigate the growing competition between the EU and China in the realm of green foreign energy policy. The contrast between the EU's regulatory, norm-driven model and China's economically pragmatic, infrastructure-led approach presents Serbia with both opportunities and dilemmas.

On one hand, Serbia is bound by its status as a candidate for EU membership and its obligations as a contracting party of the Energy Community. These frameworks require alignment with the EU's energy *acquis communautaire*, particularly in the RE domain and environmental standards. Significant legislative progress has been made in this direction: Serbia adopted a package of RE-related laws in 2021 (amended in 2024), alongside two pivotal strategic documents – Integrated National Energy and Climate Plan for the period up to 2030 with a vision to 2050, and the Energy Sector Development Strategy of the Republic of Serbia up to 2040 with Projections up to 2050, both finalized in 2024. These significant strategic and legislative documents focus on increasing share of RES, enhancing energy efficiency, and attracting foreign investments, among others. Additionally, the scale and scope of EU-funded energy projects previously mentioned affirm that the EU's regulatory framework continues to serve as the principal external context shaping Serbia's energy transition.

At the same time, Serbia maintains close economic relations with China, whose investments in energy infrastructure are significant but less burdened by political or environmental conditionalities. This flexibility is attractive to Serbian policymakers facing urgent investment needs in a country still heavily reliant on coal, burdened by outdated infrastructure, and home to

energy-intensive industries. Thus, Serbia finds itself balancing between the regulatory pull of the EU and the economic pragmatism of China. This raises first dilemma: how to balance regulatory convergence with the EU while maintaining economic diversification and diplomatic autonomy.

However, while Serbia is generally open to RE investments regardless of origin, the other dimension of green foreign energy policy – namely, access to critical raw materials – has generated widespread public resistance. This highlights a clear divergence between elite preferences and societal attitudes, particularly when it comes to foreign-led mining projects. Environmental activism in Serbia, which has become increasingly organized and influential, has emerged as a vocal opponent to government-led deals involving strategic resource exploitation. Notable cases include public protests against the EU-supported Jadar project and growing dissatisfaction with China's environmentally controversial mining operations in Eastern Serbia. Thus, other significant dilemma arising from the intersection of the EU's and China's green foreign energy policies lies is so-called investment vs. sovereignty dilemma. Namely, foreign investments – especially in mining – can result in a loss of control over strategic resources. Serbia faces the challenge of maximizing green growth opportunities without ceding control over national assets or compromising environmental protection. Environmental protection in Serbia thus rises as the biggest concern of applied EU's and China's green foreign energy approaches, making urgent the need for institutionalizing environmental governance and strategic resource management as pillars of Serbia's foreign policy. Risk of being perceived as merely resource provider or a project host thus need to be carefully managed.

Reaching energy- and climate-related goals in accordance with undertaken energy transition commitments is binding strategy. These commitments must be pursued in ways that align with domestic development priorities and environmental protection standards. For small states like Serbia, aligning with dominant international energy transition strategies is essential for global credibility. Yet, such alignment should not come at the cost of environmental degradation, social discontent, or loss of strategic autonomy. Achieving a balance between regulatory

convergence and economic diversification is therefore not merely a technical challenge but a fundamental foreign policy question.

CONCLUSION

This chapter examined the competing green visions of two green superpowers – the EU and China – on the case of Republic of Serbia. Competing green visions of great powers have contributed to the fragmentation of the established international order, and small states like Serbia are not exclusion from this notion. On the contrary, Serbia represents a solid example of how state's undefined foreign policy trajectory positions it simultaneously as both a partner and a battleground in new energy race.

Renewable energy sources and low-carbon technologies have emerged as critical drivers of contemporary international relations and foreign policy strategies. In Serbia, while RE investments are largely welcomed for their role in modernization and decarbonization, the extractive dimension of green foreign energy policies – especially in the context of lithium and copper mining – has raised deep and legitimate concerns. Strong grassroots opposition to the Jadar project and Chinese-operated mining activities in Eastern Serbia reflects growing societal awareness that environmental costs cannot be externalized in the name of energy transition. Environmental degradation, in this context, becomes the highest price to pay, particularly given that truly sustainable development requires a careful balance among environmental, social, and economic dimensions.

As illustrated by the EU and China – where their green foreign energy strategies are deeply intertwined with (supra)national energy and economic interests – Serbia must also draw lessons. While mining projects potentially lead to economic benefits, their effects on the environment remain questionable. In this regard, energy transition should satisfy not only the economic dimension, but also social and environmental ones as they together comprise truly sustainable development. Bearing in mind the risk of being perceived as simultaneously the site of RE investment

and extractive exploitation, Serbia should benefit from formulating a coherent energy and foreign policy strategy.

Although elaboration of green foreign energy policy approaches of the EU and China on the example of one small state may appear analytically reductive, Serbia is a solid illustration of how the intersection of these green energy approaches influences small state's foreign policy preferences and domestic governance. While the investment component of both EU's and China's strategies is broadly embraced by policymakers, regardless of origin, environmental implications of these approaches have generated public resistance, revealing a clear disconnect between elite preferences and grassroots concerns. Public opposition to projects like Jadar and to Chinese mining operations in Eastern Serbia has emerged as a key fault line in Serbia's RE cooperation with the EU and China.

Finally, this analysis should not be understood as an attempt to portray Serbia as a passive recipient of external pressures or to deny its agency in shaping policy decisions. Rather, it underlines the complexity of securitized and competitive global energy environment and the need of small states to balance between competing green superpowers while securing its own environmental integrity and long-term energy resilience.

REFERENCES

[AEI] American Enterprise Institute. (2025). China Global Investment Tracker, retrieved from https://www.aei.org/china-global-investment-tracker/. Accessed 3 August 2025.

Alimpijević, V. (2025, June 18). Metal friendship under Western scrutiny: Economic cooperation between Serbia and China, NIN, retrieved from https://www.nin.rs/english/news/80687/steel-friendship-under-western-scrutiny-economic-cooperation-between-serbia-and-china. Accessed 3 August 2025.

Baletic, K. (2024, April 11). Chinese Mining Giant Expands in Serbia Despite Pollution Fears, *Balkan Insight,* retrieved from https://balkaninsight.com/2024/04/11/chinese-mining-giant-expands-in-serbia-despite-pollution-fears/. Accessed 2 August 2025.

Baletic, K. (2025, February 19). BIRN Reality Check: Chinese-Run Mine in Serbia Operating Without Waste Licence, *Balkan Insight,* retrieved from https://balkaninsight.com/2025/02/19/birn-reality-check-chinese-run-mine-in-serbia-operating-without-waste-licence/. Accessed 2 August 2025.

Balkan Green Energy News. (2024, September 20). Jadar project timeline: a full overview of the most controversial investment in Serbia's recent history, retrieved from https://balkangreenenergynews.com/jadar-project-timeline-a-full-overview-of-the-most-controversial-investment-in-serbias-recent-history/. Accessed 30 July 2025.

China Labor Watch (2025, January 7). China Labor Watch's Response to Zijin Mining Statement, retrieved from https://chinalaborwatch.org/china-labor-watchs-response-to-zijin-mining-statement/. Accessed 2 August 2025.

EU Projects in Serbia. (n.d.a). Energy, retrieved from https://www.euzatebe.rs/en/sectors/energy/about. Accessed 27 June 2025.

EU Projects in Serbia. (n.d.b). Active/completed projects, retrieved from https://www.euzatebe.rs/en/projects. Accessed 31 July 2025.

European Commission. (n.d.). REPowerEU: Affordable, secure and sustainable energy for Europe, retrieved from https://commission.europa.eu/topics/energy/repowereu_en. Accessed 28 July 2025.

European Commission. (2022, September 14). Critical Raw Materials Act: securing the new gas & oil at the heart of our economy, statement /22/5523, *European Commission*, retrieved from https://ec. europa.eu/commission/presscorner/api/files/document/print/en/statement_22_5523/STATEMENT_22_5523_EN.pdf. Accessed 23 June 2025.

[EWB] European Western Balkans. (2025, June 5). European Commission approves controversial Serbian lithium project as strategic for the EU, retrieved from https://europeanwesternbalkans.com/2025/06/05/european-commission-approves-controversial-serbian-lithium-project-as-strategic-for-the-eu/. Accessed 30 July 2025.

[IEA] International Energy Agency. (2023). China – Energy mix, *IEA*, retrieved from https://www.iea.org/countries/china. Accessed 30 July 2025.

[IRENA] International Renewable Energy Agency. (2025). *Renewable capacity statistics 2025*. Abu Dhabi: IRENA.

Ivanović, V. & Zakić, K. (2023). Belt and Road investments in Serbia: Is China a new saviour or a new threat?. Međunarodni problemi, 75(1), 65-92. https://doi.org/10.2298/MEDJP2301065i

Kattrup, J. (2025, March 31). Wakeup call: China's green supremacy, *danwatch*, retrieved from https://danwatch.dk/en/newsletter/wakeup-call-chinas-green-supremacy/. Accessed 23 June 2025.

Lipovac, M. (2016). *Nacionalna bezbednost Republike Srbije u regionalnom bezbednosnom potkompleksu Zapadni Balkan* (doctoral dissertation). Belgrade: Faculty of Security Studies.

Momčilović, P. (2023, June 13). Serbia's Lithium: Sacrifice Zones or Opportunity for Europe's Peripheries?, *Green European Journal,* retrieved from https://www.greeneuropeanjournal.eu/serbias-lithium-sacrifice-zones-or-opportunity-for-europes-peripheries/. Accessed 12 June 2025.

Prontera, A. (2024). *Green Superpowers: China, the European Union, and the United States in the Global Energy Transition*. Oxford, Oxford University Press.

Radovanović, M., Filipović, S. and Šimić, G. (2025). When energy resources, transit routes, critical minerals and the interests of great powers meet in the Western Balkans: do citizens have a voice?. *Energy Research & Social Science, 126*, 104153. https://doi.org/10.1016/j.erss.2025.104153

Reuters. (2024, January 26). Serbia secures $2.2 bln investment from China for renewable energy facilities, retrieved from https://www.reuters.com/business/energy/serbia-secures-22-bln-investment-china-renewable-energy-facilities-2024-01-26/. Accessed 26 July 2025.

Ristović, A. (2024, December 3). Rivalstvo Kine i Zapada u oblasti OIE ne važi u Srbiji, Bloomberg Adria, retrieved from https://rs.bloombergadria.com/green/zelena-tehnologija/70303/rivalstvo-kine-i-zapada-u-oblasti-oie-ne-vazi-u-srbiji/news. Accessed 30 July 2025.

Solorio, I., & Bocquillon, P. (2017). EU renewable energy policy: A brief overview of its history and evolution. In: I. Solorio and H. Jörgens (eds),

A guide to EU renewable energy policy: comparing Europeanization and domestic policy change in EU member states (pp. 23-42). Cheltenham: Edward Elgar Publishing. https://doi.org/10.4337/9781783471560.00011

Šekarić Stojanović, N. (2022). The geopolitics of renewables and the place of the Western Balkans. *The Review of International Affairs, 73*(1186), 105-124. https://doi.org/10.18485/iipe_ria.2022.73.1186.5

Šekarić Stojanović, N. (2024). Energetska diplomatija Evropske unije: razvoj, stanje i perspektive. *Međunarodna politika, 75*(1191), 345-366. https://doi.org/10.18485/iipe_mp.2024.75.1191.4

Šekarić Stojanović, N. & Zakić, K. (2024). Renewable energy as a connecting spot between China and Central and Eastern European countries: status, directions and perspectives. *Energy, Sustainability and Society, 14*, 10. https://doi.org/10.1186/s13705-024-00439-2

[UNCTAD] United Nations Conference on Trade and Development. (2024). The emerging geopolitical challenges and critical minerals, retrieved from https://unctad.org/publication/digital-economy-report-2024. Accessed 12 June 2025.

[UNCTAD] United Nations Conference on Trade and Development. (n.d.). Critical minerals, retrieved from https://unctad.org/topic/commodities/critical-minerals. Accessed 12 June 2025.

[UN PCETM] UN Secretary-General's Panel on Critical Energy Transition Materials. (2024). Resourcing the Energy Transition: Principles to Guide Critical Energy Transition Minerals Towards Equity and Jusitce, retrieved from https://www.un.org/sites/un2.un.org/files/report_sg_panel_on_critical_energy_transition_minerals_11_sept_2024.pdf. Accessed 12 June 2025.

Vivoda, V. & Matthews, R. (2024). "Friend-shoring" as a panacea to Western critical mineral supply chain vulnerabilities. *Mineral Economics, 37,* 463-476. https://doi.org/10.1007/s13563-023-00402-1

Vivoda, V. & Loginova, J. (2025). Lithium at the crossroads: geopolitical, economic, and socio-environmental complexities of the Jadar project in Serbia. *Mineral Economics*, 1-17. https://doi.org/10.1007/s13563-025-00517-7

Vladisavljev, S. (2023, August 8). How Did China Become the Largest Investor in Serbia?, *Choice*, retrieved from https://chinaobservers.eu/how-did-china-become-the-largest-investor-in-serbia/. Accessed 3 August 2025.

Wong Leung, J., Robin, S. & Cave, D. (2024, August 28). ASPI's two-decade Critical Technology Tracker: The rewards of long-term research investment, *Australian Strategic Policy Institute*, retrieved from https://www.aspi.org.au/report/aspis-two-decade-critical-technology-tracker/. Accessed 23 June 2025.