

Understanding China's Belt and Road Initiative and SDG 7 from an International Relations Perspective: The Case of Kazakhstan

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ABSTRACT

The purpose of this study is to examine the specifics of Beijing's Belt and Road Initiative, Kazakhstan's place and role in it through the prism of compliance with the United Nations (UN) Sustainable Development Goals (SDGs). Kazakhstan is one of the most important partners and elements of this initiative in many areas, in particular, in the formation of clean and affordable energy sources – thanks to its resource endowment and natural potential. It is also possible for Kazakhstan to achieve mutually beneficial cooperation with other states by following the UN SDGs, for example, through Goal 7 "Ensure universal access to affordable, reliable, sustainable and modern energy for all". In the process of analysing international contacts in recent years, it was emphasized that the Chinese initiative and the UN SDGs have many common points of convergence, which allows us to speak about their prospects from the point of view of a tool for developing strong foreign policy cooperation in many areas. The results of the work can be used in research on this topic, as well as in the context of forming strategies and plans for the development of an independent energy efficiency system in the country.

Keywords: Sustainable Development Goals, Natural Potential, Green Energy, Belt and Road Initiative, Energy Access.

INTRODUCTION

The third millennium is characterized by numerous conflicts, social and economic problems, and general instability in virtually all spheres of life and state structure. The vast majority of countries are actively working to find solutions to these problems in order to eliminate the consequences and minimize future risks. To this end, the 2030 Agenda for Sustainable Development was signed in 2015 with the assistance of the United Nations Development Group (UNDG), forming an integrated approach to address the issue based on the three dimensions of sustainable development (economic, social and environmental) (Lewis, X. Yang, Moise, Roddy, 2021). It is correlated with the Sustainable Development Goals (SDGs). The Belt and Road Initiative, developed in 2013 by China, also contains a plan for the sustainable development of the region and the world as a whole (Z. Wang, 2021). Given Beijing's growing influence in the international arena and its weight among neighbouring countries, the state's assistance in implementing the principles and norms of the Agenda will have significant results. Studying the impact of these strategies is an extremely relevant and timely task, because the alignment of the Chinese initiative with the SDGs, and harmonization of economic and social structures can bring significant benefits to the countries participating in these projects, including the Republic of Kazakhstan. Astana's prudent and balanced participation can present it with significant benefits for transformation and sustainable growth in

the near future.

Given the ever-increasing number of climate, ecological, environmental and biodiversity issues and the impossibility of controlling and solving them all in the same way, a sustainable development model, with a steady flow of financial support and legal controls, can ensure long-term prosperity and development for the vast majority of the world's countries. The UN SDGs were designed to focus globalization development on green transition and sustainable development. China's Belt and Road Initiative aims to ensure equitable economic growth in all countries. These projects have differences and some divergences, but at the same time are based on similar principles – building a sustainable model of a future society based on affordable, safe and green technologies. Therefore, it is crucial to carefully consider the peculiarities and specifics of the two agendas in order to form the clearest possible picture of their opportunities, prospects, strengths, and weaknesses through the prism of forming mutually beneficial and friendly interstate contacts at the international level.

The global projects of the XXI century – China's Belt and Road Initiative and the United Nations SDGs – according to the findings of J. Li, Van Assche, X. Fu, L. Li, and G. Qian (2022), are the basic tools for the formation of new foreign policy ties, strengthening existing cooperation through the implementation of joint international projects. The main task of SDGs, according to Arora and Mishra (2022), is equal and harmonious development of all countries of the world in the context of a stable and sustainable transformation process through international cooperation. X. Xu, W. Dai, Muhammad, and T. Zhang (2023) considered that because the key vector of joint activity of the Chinese initiative countries is to maximize the use of clean energy, following the Sustainable Development Goals will be much more effective because they also form a call for a green transition and energy efficiency. The process of realizing a sustainable energy transition in Central Asia, according to Radovanović, Filipović, and Andrejević Panić (2021), can be more effective if international projects under the Belt and Road Initiative keep carbon consumption low while monitoring the environment. Items and norms of SDG 7 – on affordable and clean energy for all – are enshrined in official documents and regulations of the Republic of Kazakhstan, which according to the conclusions of Alpeissova, Bulkhairova, and Kizimbayeva (2022), significantly simplifies the process of foreign policy dialogue of the country in the international arena, because the norms of the Goal are followed by the vast majority of states.

It is important for Kazakhstan to use all the mechanisms and tools available to the Belt and Road Initiative and the SDGs, because at the beginning of the third millennium, the Republic has moved to the forefront of the foreign policy interests of many world powers, and it is imperative to use this advantage wisely. “Green” diplomacy, as noted by Kukeyeva, Christopher, and Zhekenov (2020), will contribute to the establishment of close political and economic contacts of Astana with the countries of the European Union. In order to balance Kazakhstan's activities in projects under the auspices of the Belt and Road and compliance with SDG 7, according to Shakeyev, Baineyeva, Kosherbayeva, Yessenova, and Zhanseitov (2023), the country's leadership needs to harmonize national legislation along the lines of international best practices. Kazakhstan's participation in the work on global decarbonization until 2060 and the expansion of transport and logistics routes across the continent will help to build a strong and reliable image of Astana in the international arena (Raihan & Tuspekova, 2022; Rakhmetulina & Karipova, 2019).

The analyzed sources somewhat miss the significance and key role of Astana in the implementation of Chinese projects within the framework of the Belt and Road Initiative and the way in which the Republic seeks to follow the principles of Goal 7 on the basis of its activities in these projects. Therefore, the purpose of this paper is to examine the specifics of the formation of international activities of the Republic of Kazakhstan by analyzing the peculiarities of the country's search for consensus between cooperation within the framework of China's Belt and Road Initiative and the implementation of the UN SDG 7.

MATERIALS AND METHODS

The formation of a more holistic and logical view of the factor of influence of the Chinese Belt and Road Initiative and SDGs on strengthening international cooperation, in particular, in the practice of Kazakh foreign policy relations – the use of various qualitative and quantitative indicators became a strong basis for further consideration of the topic. In the process of analyzing the peculiarities of the construction and gradual transformation of the form and semantic content of bilateral and multilateral cooperation of the countries within the framework of the Chinese initiative “Belt and Road” in the context of their division by time periods, some specific factors characteristic of certain spheres of cooperation (logistics, transport, air communication) were emphasized.

Comparisons of various characteristic features and distinctive features that formed the factors contributing to the development of international relations of the Republic of Kazakhstan with other states were an important

element of this study. With their help, the basic principles of the Republic's interaction in the international arena since the country's independence have been formed. In order to present a complete picture of the sphere of international cooperation within the framework of the Chinese initiative and UN Goals through the prism of achieving a balance in the sector of clean and affordable energy sources, such components as the object, functionality, and features of this activity in Kazakhstan, are disassembled and summarized in the work. The modelling of the general situation in the sphere of bilateral and multilateral cooperation of states in the international arena by considering the SDGs in the context of their relevance in the process of implementation of certain projects within the framework of the Chinese initiative "Belt and Road" was effective.

For a more detailed analysis of the issue under study, namely, the impact of the constituent elements and the specifics of the implementation of the set objectives according to the items of China's Belt and Road Initiative and the Sustainable Development Goals developed by the United Nations, the following materials were collected, reviewed and analyzed: Decree of the President of the Republic of Kazakhstan No. 577. "On the concept for the transition of the Republic of Kazakhstan to a "Green Economy"" (2013), Decree of the President of the Republic of Kazakhstan No. 121. "On approval of the strategy for achieving carbon neutrality of the Republic of Kazakhstan until 2060" (2023), China's route to carbon neutrality: Perspectives and the role of renewables (2022), Sustainable development report 2024: The SDGs and the UN summit of the future (United Nations, 2024); Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan (2020); SDG 7 and the 2030 agenda: An EU-funded regional SDG platform for Central Asia launched (United Nations Development Programme, 2024). These inputs provided practical support for the research work presented and for the broad and relevant results and conclusions.

RESULTS

The Belt and Road and the SDGs as Global International Programmes

In the third millennium, international relations are based on the principles of equality, transparency, mutual benefit and trust. Members of the UN, which includes 193 countries, interact on the basis of international law, based on the principles and norms outlined in the basic normative documents (Guiry, 2024). Interstate cooperation is also characterized by the cooperation of countries within the framework of humanitarian, economic or political initiatives, the developers, and ideologists of which are individual states. For example, the implementation of joint international projects in different regions of the planet within the framework of China's Belt and Road Initiative (Table 1).

Table 1. United Nations Member States Participating in International Projects under the Belt and Road Initiative at the Beginning of 2024

Region/Combined Group	States
Organization for Economic Co-operation and Development	Czech Republic, Estonia, Greece, Hungary, Israel, Latvia, Lithuania, Poland, Poland, Slovakia, Slovenia, Turkey
Eastern Europe and Central Asia	Afghanistan, Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Croatia, Cyprus, Czech Republic, Estonia, Georgia, Hungary, Latvia, Lithuania, Kazakhstan, Kyrgyzstan, Moldova, Montenegro, Poland, Romania, Russia, North Macedonia, Serbia, Slovakia, Slovenia, Tajikistan, Turkey, Turkmenistan, Ukraine, Uzbekistan
East and South Asia	Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, India, Indonesia, Laos, Malaysia, Maldives, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, Thailand, Timor-Leste, Vietnam
Middle East and North Africa	Bahrain, Egypt, Islamic Republic of Iran, Iraq, Israel, Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, United Arab Emirates, United Arab Emirates, Yemen

Source: Compiled by the Authors based on Li et al. (2022), Liu et al. (2023), W. Yin (2019), S. Ibrahim, Agbor, and Arabaci (2021), and S. Zhang, Butt, Iqatish, and Zulfiqar (2023).

In the autumn of 2013, during a diplomatic tour of Central and Southeast Asian countries, Chinese President Xi presented the Belt and Road Initiative. Xi presented the "Belt and Road" initiative, the main goal of which he identified as the creation of conditions for overall uniform economic growth in all countries of the world based on the concept of the New Silk Road, or Eurasian Land Bridge – a transport and logistics system for the transfer of

goods and commodities by land routes from China to Europe via Asian countries (D'Alessio, 2021). Summarized, the initiative aims to sustainably connect different geographical regions through the creation of new infrastructure (railways, hydroelectric power plants, payment systems) through international treaties, memoranda, road maps, strategies, and plans. As of the early 1920s, the Chinese project is the largest, covering more than 4.5 billion people, with over \$25 trillion in sales in nearly 80 countries, and with more than 200 active international projects and programs (Table 2).

Table 2. Structure of the Belt and Road Initiative in the Context of the Direction of International Projects under Implementation and Funding in 2023

Direction	Quantity, pcs.	% of the Total Number of Projects	Financing, bln USD	% of the Total Number of Projects
Nuclear power plants	4	1.1	-	-
Power lines	6	1.6	-	0.7
Pipelines	7	1.9	22.4	4.5
Solar energy	7	1.9	-	1
Wind power	22	5.9	-	1
Hydropower	24	6.4	32.5	6.5
Power plants fuelled by crude oil	-	0.8	-	1.3
Gas-fired power plants	20	5.3	-	2.1
Coal-fired power plants	66	17.6	64.23	12.9
Intermodal transport*	12	3.2	44.59	8.9
Seaports	26	7	39.13	7.8
Roads	102	27.3	68.05	13.6
Railway routes	75	20.1	198.31	39.7

Note: Transporting cargo using multiple modes of transport.

Source: Compiled by the Authors based on Z. Wang (2021), X. Cao et al. (2023), and Coenen, Bager, Meyfroidt, Newig, and Challies (2021).

One of the key tasks in the sphere of implementation of the Belt and Road Initiative's points for successful achievement of Beijing's goals is the conformity and harmonization of the norms and principles outlined therein with the key theses of the SDGs formed by the UN (Domingo-Posada, González-Torre, & Vidal-Suárez, 2024). There are 17 goals in total, and each of them covers a certain sphere of social, economic or political development. One of the most promising in terms of successful synergy and implementation in the context of the Belt and Road Initiative is SDG 7 on affordable, safe and clean energy for all (Table 3).

Table 3. 17 Sustainable Development Goals Adopted by the United Nations in 2015

No.	Short Title	Full Title
1	Zero poverty	Ending poverty in all its forms everywhere
2	Zero hunger	Ending hunger, achieving food security and improved nutrition, and promoting sustainable agriculture
3	Good health and well-being	Guaranteeing a healthy lifestyle and well-being for everyone in every age category
4	Quality education	Ensuring inclusive, equitable and quality education, promoting lifelong learning opportunities for all
5	Gender equality	Achieving gender equality and empowerment of all female representatives
6	Clean water and sanitation	Ensuring accessibility and sustainable management of water and sanitation for all
7	Affordable and clean energy	Ensuring access to clean and reliable energy for all
8	Decent work and economic growth	Promoting sustained and inclusive economic growth, full and productive employment and decent work for all
9	Industry, innovation, and infrastructure	Building sustainable infrastructure, promoting inclusive and sustainable industrialization and supporting innovation
10	Reducing inequalities	Reducing inequalities at the national and inter-State levels
11	Sustainable cities and	Making cities and human settlements inclusive, safe, resilient and

No.	Short Title	Full Title
	communities	sustainable
12	Responsible consumption and production	Ensuring sustainable consumption and industry patterns
13	Climatic actions	Taking the necessary measures to counter climate change and its impacts
14	Life under the sea	Conserving and sustainably use the oceans, seas, and marine resources for sustainable development
15	Life on land	Protecting, restoring and promoting sustainable use of terrestrial ecosystems, sustainably managing forests, combatting desertification, halting and reversing land degradation and halting biodiversity loss
16	Peace, justice and strong institutions	Promoting peaceful and inclusive societies for sustainable development, ensuring free access to justice for all and building effective, accountable and inclusive institutions at all levels
17	Strengthening the means of implementation and revitalizing the global partnership to achieve the Sustainable Development Goals	Strengthening the means of implementation and revitalizing the global partnership for sustainable development

Source: Compiled by the authors on the basis of Arora and Mishra (2022), Selmier (2022), and Chien, Hsu, Y. Zhang, Tran, and L. Li (2022).

In late 2020, China's leadership announced its intention to minimise its carbon emissions by 2030 and become a fully carbon-neutral state by 2060, in line with the objectives of the New Development Vision (International Renewable Energy Agency, 2022; Kufeoglu, 2022; Rygh, Chiarapini, & Segovia, 2022), which seeks to create a green production system, improve energy efficiency, increase the use of renewable energy sources, minimise harmful gas emissions, and develop systems to automatically sequester carbon in the natural environment. Discussions have begun on whether Beijing will increase investment and intensify its efforts to achieve SDG 7, the essence of which is almost identical to the goals outlined in China's New Development Concept. It is worth noting that in recent years, the intensity of China's direct participation or partial support of international projects aimed at achieving SDG 7 within the framework of the Belt and Road Initiative has been very significant. The number of such activities is constantly growing, and the volume of investments in them is also increasing (Table 4).

Table 4. Some International Projects under the Belt and Road Initiative in Line with SDG 7 for the Period 2015-2023

Title	Location	Period, Years	Cost, mln USD	Relevant SDGs
Construction of the UEP wind farm	Pakistan	2015-2016	250,000	1, 3, 7, 8, 9, 10, 11, 13
Construction of the Sachal wind farm	Pakistan	2015-2017	134,000	1, 3, 7, 8, 9, 10, 11, 13
Modernization of Tarbela hydro power plant 5	Pakistan	2023-2025	300,000	1, 7, 8, 9, 10, 11, 13
Construction of the Hassian coal-fired power plant (third phase of construction)	United Arab Emirates	2020-2023	1,800,000	3, 7, 8, 9, 11, 13
Electricity distribution system modernization and expansion project	Nepal	2018-2025	112,300	1, 7, 8, 9, 10
Upper Trishuli-1 Hydropower Project	Nepal	2018-2023	90,000	1, 7, 8, 9, 11, 13
Turkey Development Bank's Draft Renewable Energy and Energy Efficiency Re-lending Facility for the Development Bank of Turkey	Turkey	2018-2024	200,000	3, 7, 8, 9, 10, 11, 13
Trans-Anatolian Natural Gas Pipeline Project (TANAP)	Azerbaijan	2015-2018	600,000	7, 8, 9, 17
225 MW combined cycle gas turbine power plant (CCGT) project	Myanmar	2016-2018	20,000	1, 7, 8, 9, 10

Source: Compiled by the Authors based on Lewis et al. (2021), Ibrahim et al. (2021), J. He, Y. Yang, Z. Liao, A. Xu, & Fang (2022), Turcsany and Kachlikova (2020), and Hafez, Umar, Yap, and Mekhilef (2021).

Role and Place of the Republic of Kazakhstan in International Programs

The Republic of Kazakhstan is one of the key countries that underpins many of China's transport, logistics, economic and other links with Europe through the Belt and Road Initiative (Raihan & Tuspekova, 2022). Kazakhstan's rich natural resources and wide range of renewable energy sources have made it a very attractive and favourable partner for many leading European players, as well as for countries from Asia and the Americas. However, many environmental problems related to natural resources, mainly water resources (e.g. shoaling of river sources, increasing desertification) create both difficulties for the Republic on the way of SDGs implementation and pave the way for expanding international contacts in this area. In line with SDG 7 – ensuring free access to sustainable, safe and reliable energy for all – Astana is reforming relevant sectors of the economy (investing in green projects in enterprises and launching energy efficiency programmes for the population) (I. A. Ibrahim, 2023). Kazakhstan, as well as China, has voiced its intention to become a carbon-neutral state by 2060, which is in line with the principles of SDG 7. Thus, according to the Sustainable Development Index for 2023, the Republic ranks 66th out of 166 for the level of success and efficiency of reform and transformation of the energy and related sectors (United Nations, 2024) (Table 5). However, experts assess the country's success as mediocre, saying that many of the stated objectives have not been achieved. Although, at the same time, it is said that there are activities aimed at addressing the challenges of SDG 7 (Radovanović et al., 2021; Shakeyev et al., 2023).

Table 5. Ranking of Countries according to the Sustainable Development Index for the Period 2022-2023

Country	SDG 7* Performance Targets in 2023 (Deliverables)	Place in 2023/2022 (Total Score*)
Finland	Achieved, in progress	1 (86.35) / 1 (86.8)
Sweden	Achieved, in progress	2 (85.7) / 2 (86)
Denmark	Achieved, in progress	3 (85) / 3 (85.7)
Germany	Partially achieved, some challenges remain	4 (83.45) / 4 (83.4)
France	Partially achieved, some challenges remain	5 (82.76) / 6 (82)
Austria	Partially achieved, in progress	6 (82.55) / 5 (82.3)
Norway	Achieved, in progress	7 (82.23) / 7 (82)
Croatia	Partially achieved, in progress	8 (82.19) / 12 (81.5)
UK	Partially achieved, some challenges remain	9 (82.16) / 11 (81.7)
Poland	Partially achieved, major challenges remain	10 (81.69) / 9 (81.8)
Kyrgyzstan	Partially achieved, in progress	48 (74.19) / 45 (74.4)
Kazakhstan	Predominantly not achieved, in progress	66 (71.11) / 66 (71.6)
China	Partially achieved, in progress	68 (70.85) / 63 (72)
Uzbekistan	Predominantly not achieved, key challenges remain	82 (69.24) / 69 (71.1)
Tajikistan	Achieved, in progress	89 (68.09) / 85 (69.2)
Turkmenistan	Predominantly not achieved, key challenges remain	94 (67.13) / 91 (68.5)

Note: Goal 7 – Affordable and Clean Energy: Ensure access to Affordable and Reliable Energy for All; ** – is Shaped by Factors such as the Level and Quality of Reforms Undertaken, the Transformation of Existing Infrastructure, and the Overall State of the Political and Economic System.

Source: Compiled by the Authors based on United Nations (2024), and Hernandez, Lopez, and Pacheco (2022).

Reforming Kazakhstan's production, economic and social sectors towards energy efficiency and green development started in the early 2000s with the signing of the Environmental Code (2007), the Law on Renewable Energy Sources (2009) and the adoption of the Kazakhstan-2050 Strategy (2012) (Alpeissova et al., 2022). The Concept for Transition to a Green Economy, presented in 2013, outlined plans to gradually increase the scale of renewable energy sources in production and households by a maximum of 50% by 2050 (Decree of the President of the Republic of Kazakhstan No. 577, 2013). Thus, since 2015 the state has made tangible progress in this context (Table 6).

Table 6. Overall Situation in Strategic Planning and Reforms in the Republic of Kazakhstan according to SDG 7 for the Period 2015-2022

	2015	2016	2017	2018	2019	2020	2021	2022
Number of households that use clean fuels and technologies (mostly), %	42.98	46.35	47.38	49.68	51.47	53.07	57.67	59

	2015	2016	2017	2018	2019	2020	2021	2022
Number of enterprises operating on energy efficiency principles, %	9.7	29.01	39.82	49.96	41.7	34.7	33.7	73.6
Percentage of renewable energy sources in total energy consumption, %								
Including large hydroelectric power plants (HPPs)	10.3	12.7	11.3	10.2	10.4	11	-	-
Akmola	9.7	17.3	19.3	15.7	21.4	37.2	-	-
Aktobe	-	-	-	-	-	2.7	-	-
Almaty	58.7	72.2	71.1	64.9	65.9	64.8	-	-
Atyrau	-	-	-	-	3.4	3	-	-
East Kazakhstan	75.9	79.3	75.7	74.3	70.6	69.5	-	-
Zhambyl	4.4	9.2	10.1	19	17	23	-	-
Karaganda	-	-	-	-	1.1	2.1	-	-
Kyzylorda	0.1	0.1	0.1	0.1	0.2	7.8	-	-
Mangistau	-	-	-	-	0.8	1.6	-	-
Pavlodar	-	-	-	-	0	-	-	-
North Kazakhstan	0.7	0.7	0.6	0.7	0.6	0.7	-	-
South Kazakhstan	51.7	35.4	62.5	-	-	-	-	-
Turkestan	-	-	-	95.8	96.6	97.5	-	-
Astana city	-	-	-	-	0	-	-	-
Almaty city	5.8	6.6	6.2	6	5.9	5.1	-	-
Shymkent city	-	-	-	-	0.6	0.5	-	-
Excluding large HPPs	0.77	0.98	1.3	1.3	1.6	3	-	-

Source: Compiled by the Authors based on Bureau of National Statistics Agencies for Strategic Planning and Reforms of the Republic of Kazakhstan (2020).

After Kazakhstan signed the SDGs (2015) and the Paris Agreement (2016), the Astana International Financial Centre opened, which, in addition to stimulating and supporting the development of green innovations and new safe technologies, aims to manage the energy sector in accordance with the principles of the SDGs, in particular SDG 7 (Kukeyeva et al., 2020; Sheraz, Deyi, Mumtaz, & Ullah, 2021). In 2021, the Environmental Code was reformed, according to which, based on the rules and regulations of the Organization for Economic Co-operation and Development and the European Union (EU), enterprises using non-renewable energy sources in their activities are obliged to switch to green technologies by 2025. The same target was stated in the National Development Plan until 2025 (United Nations Development Programme, 2024), and the Strategy for Achieving Carbon Neutrality until 2060 stated that in order to increase green consumption in enterprises, it is essential to attract large amounts of investment, both in the domestic market and in the external market (Decree of the President of the Republic of Kazakhstan No. 121, 2023). Within the framework of the Belt and Road Initiative, Sino-Kazakh cooperation is one of the closest and most effective relationships. Thus, since the initiative was launched in 2015, 55 projects with different levels of compliance with SDG 7 have been implemented between the two countries, of which: 19 – high level, 12 – medium level, and 24 – low level. An essential factor shaping cooperation between China and Kazakhstan is the existence of similar strategic programs in terms of direction and implementation vectors – China’s Belt and Road and the Bright Path – a new economic policy proposed by former Kazakh President N. Nazarbayev in 2014 (Alpeissova et al., 2022). Its essence was to ensure sustainable development, stable economic growth and the formation of modern energy infrastructure.

Based on the two programs, multiple meetings were held between the Chinese and Kazakh sides to discuss plans for the implementation of joint major projects and programs. The key areas of these projects are: the construction and expansion of energy-efficient infrastructure; introduction of green technologies; decarbonization; and development of renewable energy sources. All of them are aligned with the strategic sectors of SDG 7 and are aimed at minimizing the negative impacts of uncontrolled use of fossil fuels and environmental pollution. One of the key vectors under the Belt and Road Initiative has been the improvement of transport and transport logistics. After independence, this sector was extremely underdeveloped in Kazakhstan, so Chinese investments became a serious support for the development of the sector and prioritized this type of cooperation. An important stage of cooperation here was the construction of the 8.5-thousand-kilometre-long Bilateral Western Highway, which started back in 2008 (the Chinese section of the road was completed in 2017 and the Kazakh section in 2023) (Shakeyev et al., 2023). Air transport is one of the most promising vectors of bilateral cooperation between the countries. In 2013, the government of Lianyungang City in Jiangsu Province and the Kazakhstan State Railway

Company Limited signed an agreement to establish a joint logistics centre for the transport of goods (Rakhmetulina & Karipova, 2019). Construction soon began and as of the end of 2023, the centre is one of the key hubs for the transport and transshipment of goods from China through Kazakhstan to Europe and the American continent and vice versa. Also, the construction of a dry port in the Special Economic Zone “Korgos – Eastern Gate” was completed in 2014 and its infrastructure will be modernized in 2019, and the construction of the Special Economic Zone of the Atyrau and Taraz State Petrochemical Industrial Parks was completed. In the context of cooperation in railway transport, an example of a successful project is the construction of the Karamay-Bakhto-Ayaguz railway with a key railway hub in the Kazakh city of Ayaguz. The project was approved in July 2022 and preparations for construction are underway (Shakeyev et al., 2023).

Trade and finance are also showing positive dynamics. Since 2014, Beijing and Astana have signed about 100 diverse agreements and treaties to ensure uninterrupted trade flow from Europe to Asia and vice versa (Kukeyeva et al., 2020). New agreements in the field of e-commerce and information technologies signed in the 20s of the 21st century have qualitatively renewed cooperation within the framework of the Belt and Road Initiative. Energy cooperation between the countries is also gaining momentum. Numerous projects for multi-billion-dollar contracts in the field of energy efficiency and clean energy sources are characterized by stability and efficiency of implementation. In early 2020, during the onset of the COVID-19 corona virus outbreak and in the following years, the level of energy cooperation remained almost at the same level and China’s imports to Kazakhstan even increased (X. Xu et al., 2023). However, apart from the positive aspects of SDG 7 norms and standards, there is a situation where the largest amounts of Chinese investments are channeled into joint projects with Kazakhstan with low SDG 7 compliance (e.g., the joint large-scale construction of a network of hydro power plants in China’s border areas threatens the mass extinction of many fish and mammal species living in those areas), which also results in Astana’s low overall SDG compliance rate. This explains the Republic’s desire for closer cooperation with European countries, as European countries have a much higher level of compliance with SDG 7, which Kazakhstan also aspires to. Having considered some features and analyzed specific features of Kazakhstan’s cooperation with the countries participating in the Belt and Road Initiative and their activities aimed at meeting the requirements and norms of SDG 7 on affordable and clean energy, the following strengths of such cooperation can be highlighted in the sphere of international relations. Firstly, the Chinese initiative is not just a green energy development project, but a full-fledged programme to develop and improve environmental infrastructure based on energy efficiency principles worldwide. This fact allows Astana to establish and strengthen international relations with partners in almost all areas of economic and industrial development. Also, Kazakhstan’s participation in the initiative, in particular, after intensification of contacts with its participants in the EU, contributed to the rapid transition of industrial organizations, production facilities and individual households of the state to environmentally friendly and affordable energy sources, thus gradually fulfilling the conditions of SDG 7.

The main drawbacks and weaknesses of cooperation between countries within the framework of the Belt and Road Initiative in terms of compliance with SDG 7 include the fact that China, as the main driving force of the initiative, prefers to invest in large-scale industrial projects that have a high level of environmental impact and, therefore, poorly meet the requirements of SDG 7. Therefore, there are situations when the basic principles of the initiative come into conflict with the basics and norms of the SDGs. In particular, in Kazakhstan, in recent years, there has been a decline in the intensity of SDG implementation, precisely because of the intensification of participation in Chinese large-scale projects that are harmful to the environment (e.g. Astana’s participation in the construction of power plants in Pakistan using old and inefficient coal production technologies). In addition, due to the effectiveness of international cooperation in the implementation of joint projects within the framework of the initiative, the geography of the participants is expanding, and the vector of their main foreign policy ties is shifting. Thus, there is a situation that speaks of Beijing’s aspirations to expand its strategic dominance in other regions (and this, in turn, increases conflict and tension in rather turbulent territories). For example, Astana has long ago reoriented the main vector of its international orientations towards China, which is the main strategic partner and security guarantor for Kazakhstan. At the same time, the intensity, and frequency of Kazakhstan’s international cooperation with the EU countries is rapidly increasing. Speaking about the trends and factors that will shape the situation in the international arena in the coming years, we can highlight some aspects. Kazakhstan sees and assesses possible risks from active involvement in Chinese large-scale projects in terms of contradiction to the principles of SDG 7, so the country is actively developing bilateral and multilateral cooperation with other states, mainly from the European continent, but also with the USA and India. Thus, Astana balances within the framework of the initiative, simultaneously creating obstacles to the growth of negative environmental impact from the implementation of international projects, and facilitating the expansion of the geography of the initiative, involving an increasing number of new participants in it.

Also promising is the work of the Republic aimed at developing new strategies and concepts for the

development of green energy and the establishment of energy efficiency principles by synergizing a number of SDGs. e.g. SDG 6 (Clean Water and Sanitation), SDG 9 (Industry, Innovation, and Infrastructure), SDG 12 (Responsible Consumption and Production), SDG 13 (Climate Action). Analysing the quality and nature of bilateral cooperation between Beijing and Astana, it can be said that both countries have, to a greater or lesser extent, taken the SDG principles as a basis for the implementation of joint projects under the Belt and Road Initiative. Activities related to green transition, energy efficiency and independence are key (most of the projects have a focus in this direction). Also, the different level of technological development and innovative components of Kazakhstan and China creates preconditions for a certain departure from the prioritization of their strategic partnership. For example, the EU is already the largest trade partner and investment investor of Astana (this is due, among other things, to the transition to European principles and norms of the production process).

DISCUSSION

Having considered the peculiarities and specifics of building international contacts in the course of cooperation within the framework of China's Belt and Road Initiative and the United Nations SDGs, in the context of increasing energy efficiency and maximum open and free access to clean and safe energy sources, several conclusions can be drawn. Studying the aspects of external cooperation through the implementation of joint projects in transport, logistics, as well as economics, finance and IT-sphere is an extremely topical and rather discussed issue in the XXI century, as in the third millennium it is possible to achieve sustainable development and progress in various issues in most cases only through cooperation with other states. Experts from such countries as China, Italy, and the Czech Republic (Z. Wang, 2021; D'Alessio, 2021; Turcsanyi & Kachlikova, 2020) have mainly focused their research on the factors of how global programs and projects (like the SDGs) contribute to the rapid transition of the world to more environmentally friendly ways of production. Central Asian scholars, mainly from Kazakhstan (Rakhmetulina & Karipova, 2019), mainly studied how the Republic manoeuvres in the international arena by implementing joint projects within the framework of the Belt and Road and, at the same time, without violating the principles and norms of the SDGs, in particular, Goal 7. Based on the results of the experts' work, we can say that the China Initiative and the United Nations programme continue to be the main platforms for international cooperation and foreign policy dialogue for the future development of the world in the global dimension.

This study pointed out that the largest amount of Chinese investment under the Belt and Road Initiative is in large industrial projects, which may be a sign of both uneven local management, insufficient bureaucratization of the state apparatus, and some deviation from SDG principles in terms of the development of environmental legislation and environmental protection. Sheraz et al. (2021) have voiced a similar view, saying that the political leadership of both China and other states needs to restructure the financial system, the specifics of energy consumption and the use of non-renewable resources in order to normalize the balance in the financing of large and potentially environmentally damaging programs. However, in the authors' opinion, this should be done without international consultation in order to minimize harm to national interests. Compliance with the norms and standards of the SDGs developed by the United Nations, especially Goals such as Goal 7 on affordable and safe energy for all, will contribute to a qualitative "clean transition" and the creation of a "green" financial and economic system. This idea, which was voiced in the paper, is similar to the position of Selmier (2022), who spoke about the reasonable distribution of budget flows for energy and industrial infrastructure as a prerequisite for the successful process of decarbonization of the world's countries. At the same time, spending on other areas that are of secondary importance to the energy sector can be reduced for a while in order to achieve rapid results. The aspect that China's Belt and Road Initiative is of global significance for an overwhelming number of countries was voiced in the paper, in the context of analyzing the future prospects and trends of transformational processes on the Asian continent. D'Alessio (2021) expressed similar ideas, saying that, thanks to large-scale projects and grandiose programs within the framework of the initiative, the countries of Central Asia, primarily the Republic of Kazakhstan, were able to step out of the shadow of their larger neighbouring countries and create a strong image and positive image in the eyes of partners in international activities. At the same time, the expert emphasized that without Beijing's assistance in this process, Astana would hardly be able to independently build the current system of foreign policy and trade in the country.

The problems of ecology, biodiversity conservation, and environmental protection, which were listed in this paper as the main problems at the beginning of the third millennium, are most likely to be solved only by uniting the efforts of all states on the basis of international platforms and programs, such as the United Nations SDGs. Yin (2019) expressed similar ideas and emphasized that, given the challenges of climate change and related environmental pressures, a sustainable development model based on investment and programme solutions based

on consensus of all international actors is needed to ensure long-term prosperity and sustainable growth. In order to achieve steady progress and gradual development of low-carbon industries and shift industries to more environmentally neutral ways of working, there is a need to harness the combined efforts of all energy actors in the state. According to Rygh et al. (2022), such decisive actions in some countries and regions of the world, including Central Asia, have enabled such states to develop more successfully, forming the basis for the transformation of other areas of life, primarily the social sector. But with the total dominance of the financial aspect in almost all international projects, even those directly related to SDG 7 on clean and affordable energy, there is no talk of mass reform in the Central Asian region. Energy is the centre for all industrial, economic, social and other processes in all countries of the world, which was pointed out in the paper as a characteristic feature of the world of the model of the XXI century. Kufeoglu (2022) expressed similar theses, saying that, although the innovation process is now in full swing, fundamentally new tools, systems, and mechanisms are being created to guarantee energy efficiency and “reasonable” consumption, still about 30% of the population do not have access to energy at all, which creates a bias in the sphere, creates difficulties and generates discussions on whether affordable energy is needed by all inhabitants of the planet or only a certain number of them. Although the author has argued in favour of the fact that without the principles of carbon neutrality, energy can be harmful even if used by a limited number of consumers.

In the process of researching the impact of global programs and initiatives, such as the Belt and Road and the SDGs, on the formation of modern international relations of the third millennium, some aspects have been highlighted. It was determined that this topic has an increased demand among the representatives of authorities at all levels of control – both within the framework of national states, and at regional and global scales. On this basis, the demand for research on the topic is extremely high, and the number of such studies will only increase, with the quality of such works depending on the situation in the sphere as a whole. One of the reasons for the increased interest in this issue may be the fact that, as of the end of 2023, the situation in the field of ecology, climate protection, energy efficiency and biodiversity conservation remains extremely tense, the number of threats is constantly increasing, and the chances of eliminating the problems and normalizing the situation are decreasing. Therefore, states need to cooperate using all possible tools and platforms, and Kazakhstan, which is one of the key players in the framework of China’s Belt and Road Initiative, needs to use all available means in the international arena in order to build its positive image through active involvement in foreign policy and foreign economic activities and with full compliance with the norms and standards of carbon neutrality and green economy in the framework of SDG 7.

CONCLUSIONS

The structure of international relations in the 21st century is developing in such a way that only joint efforts of states and common activities in various spheres and directions are able to eliminate the existing threats and challenges of the third millennium, which have become a real problem for national security, as well as for social development and state-political transformation. The international instruments that have a global impact and bring tangible changes in the life of the overwhelming majority of the world’s population include China’s Belt and Road Initiative and the SDGs developed by the United Nations. The Republic of Kazakhstan, which is one of many countries participating in the Belt and Road Initiative, is actively involved in many transport, financial, construction and other projects within the framework of the initiative, and has long ago prioritized this type of cooperation in the international arena. As a member country of the United Nations, the Republic of Kazakhstan fully supports the programmes of the United Nations, in particular, the Sustainable Development Goals, namely, Goal 7 on clean and affordable energy. As Kazakhstan is a country that is rich in water, geothermal and wind energy sources, compliance with the principles of Goal 7 is not an impossible task for Astana.

Having launched reforms for the “green” transition and a gradual shift away from non-renewable energy sources at the beginning of the XXI century, Kazakhstan purposefully started transformational processes within the framework of this goal. The geographical proximity of China was an additional condition in favour of the fact that participation in Beijing’s “Belt and Road” initiative became inevitable for the Republic. Thanks to transport and logistics projects, a large-scale network of railway and air hubs was created in Kazakhstan, which further strengthened foreign policy ties with the European Union, as well as with the United States of America, Canada, and Australia. However, a certain preponderance of Chinese investments in large-scale projects with a high level of carbon pollution forced Astana to reconsider the geography of its partners and slightly adjust the vectors of its foreign policy cooperation. And, thus, minimizing the country’s involvement in programmes that carry a high risk of pollution and preferring to engage in safer initiatives has significantly accelerated the country’s progress towards carbon neutrality and the achievement of all the principles of SDG 7, which, in turn, has only strengthened Kazakhstan’s international image. However, there is still much that Astana needs to reform for this

purpose.

The limitations of this study were the lack of information on international humanitarian projects under the auspices of the UN in particularly remote regions and countries of the world; some confusion due to the duplication of a number of functions and activities within the framework of the Belt and Road Initiative and the SDGs. In order to obtain additional information on the peculiarities and specifics of cooperation between the states within the framework of the Belt and Road Initiative, it would be advisable to study the practice and results of the implementation of joint international projects in this area within the framework of cooperation between the countries of Central Asia. It is essential for the Republic of Kazakhstan to continue to develop a multi-vector foreign policy, focusing on the EU countries as well as the USA, India, and Japan. Through continuous dialogue, exchange of experience and skills, the implementation of large-scale international projects will become much freer in terms of compliance with SDG 7 through the use of many different mechanisms and instruments of energy control.

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