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Green finance cooperation as a means of facilitating the development of partnership between Belarus and China

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Subject. Partnership between the Republic of Belarus and China has been developing very quickly lately. At the end of the 20th century, the world recognised the need for a transition to a new resource-saving economic model – the so-called green economy, which combines overall wellbeing, including employment, and reduced pressure on the environment. This was brought about by grave environmental problems resulting from the human economic activities and the understanding that intensive use of natural resources will in the long term lead to their exhaustion. Even if new deposits are found, their development will require a lot of time and financial resources. Studying the best practices of the developed countries and emerging economies in the area of green finance is of utmost importance for the further development of the partnership between Belarus and China. The focus of our study was the effect of green finance on China-Belarus relationships.

The purpose of our study was to determine the development prospects of the China-Belarus partnership based on cooperation in the area of green finance.

Methodology. In our study, we used general scientific methods, including analysis, generalisation, and comparison.

Conclusions. The article presents a review of the history of the partnership between China and Belarus. A review of green finance in the Republic of Belarus demonstrated that it is still at the initial development stage. It also demonstrated that at the moment the green economy of the Republic of Belarus needs green investment from China. A review of green finance in China demonstrated its effective development, especially in the area of green energy. Based on the analysis, we determined the development prospects of China-Belarus partnerships based on green finance cooperation.

Keywords: Republic of Belarus, green finance, China.

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Introduction

Partnership between the Republic of Belarus and China started in January 1992. The two countries have been collaborating for 29 years. The most dynamic cooperation is observed in the sphere of economy. Both countries are eager to develop their economies and actively use mutual trade and economic cooperation to do so. China is one of the most important foreign economic partners of Belarus in Asia. Located in the very

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centre of Europe, Belarus is attractive to China mainly due to its geographic location, which allows for effective international transportation. Besides the economic partnership, the countries also run construction programmes and projects aimed at improving the railway system in Belarus. The partnership between Belarus and China also involves organising public cultural events, producing printed matter and souvenirs, and developing programmes for the exchange of experience. The implementation of joint environmental programmes can strengthen the friendship and partnership between the two countries.

The ideas of green growth and sustainable development are now becoming a global ideology for the transformation of national economies. Green finance benefits the environment, which is important as it is. However, it also increases the amount of investment in green industries, creates jobs, and enhances the growth potential of the global economy. This issue is becoming more important and more urgent every year. In this regard, the Republic of Belarus and China are no exceptions. They are interested in all the benefits of green finance for the sustainable development of their partnership.

However, the problem of green finance for the sustainable development of China-Belarus partnerships has not been thoroughly studied yet. There are only studies concerning each country separately. Thus, L. Filippova (Filippova, 2021) focused on role of green finance in the sustainable development of the Republic of Belarus. A. Shushkevich (Shushkevich, 2022) provided a detailed study of green finance. However, the author used a case study of only one country, the Republic of Belarus. S. P. Savinsky (Savinsky, 2019) focused on the idea of green loans in China and determined its main problems. G. Gavrilko and G. Shuai (Gavrilko & Shuai, 2019) conducted a detailed study of green finance in China.

The purpose of our study was to determine the development prospects of China-Belarus partnerships based on green finance cooperation.

In order to achieve this purpose, the following objectives were set:

– to analyse the history of development of partnership between China and Belarus;

– to study green finance in the Republic of Belarus;

- to study green finance in China;

– to determine the development prospects of the China-Belarus partnership based on green finance cooperation.

Our study was based on the following hypothesis: green finance cooperation will enhance partnership between China and Belarus.

Research methods

The analysis of the history of cooperation between China and Belarus was focused on the time period starting with the introduction of the idea of green finance in both countries. The main sources of information were scientific articles, laws and regulations, and green finance programmes in China and Belarus.

The analysis is mainly based on a review of publications by Russian, Belarusian, and Chinese scholars. Each article allowed us to determine the specific features of green finance and its prospects. We also performed a comparative analysis in order to determine in which country the development of green finance is more effective.

Results

The history of various interactions between the Republic of Belarus and China extends over many years. After the collapse of the Soviet Union, Belarus was transformed from a soviet republic into an independent state - the Republic of Belarus. In 1992, Belarus established diplomatic relations with China. The diplomatic mission of China was opened in Minsk the same year, and the diplomatic mission of Belarus was opened in Beijing in 1993. According to N. Verenko, "the Republic of Belarus is committed to the sustainable development goals and the principles of green economy, which ensures environmental sustainability and economic growth" (Verenko & Kamenkov, 2018). The country is eager to continue the introduction of financial tools supporting the green economy and facilitating a

more effective combination of public and private green finance.

At the level of interstate relations, the Republic of Belarus and China established a tradition of regular meetings between heads of states. A. I. Loiko points out "the importance of the visits by Alexander Lukashenko to China in January 1995, April 1997, April 2001, December 2005, August 2008, October 2010, July 2013, September 2015, and September 2016" (Loiko, 2021).

An important milestone for the establishment and development of partnership between the Republic of Belarus and China was a visit by the President of China Xi Jinping to Belarus in May 2015. As a result of the visit, the two heads of state signed a China-Belarus treaty on friendly cooperation and issued a joint statement on further developing and deepening the countries' comprehensive strategic partnership.

A. A. Novskaya and A. A. Nechai pointed out that "among the major breakthroughs in the history of China-Belarus relations were the implementation of the Silk Road Economic Belt concept, the construction of the Great Stone industrial park, and the opening of the Geely automobile production plant" (Novskaya & Nechai, 2021).

The Great Stone industrial park is an important element of logistics of the new Silk Road. Its construction began in 2015. It is located close to an international airport, railways, and the Berlin-Moscow motorway. The idea behind the Great Stone industrial park was to build a modern eco-city with all the necessary production, administrative, and social infrastructure.

An important aspect of the strengthening of political and strategic partnership is making the Republic of Belarus a major regional member of the "One Belt, One Road" project – a continental bridge between Europe and Asia (Lusgina, 2021). In May 2017, president Lukashenko participated in the first "One Belt, One Road" international forum held in Beijing. In April 2019, he visited China to participate in the Second Belt and Road Forum for International Cooperation.

Figure 1 presents the dynamics of trade and economic cooperation between China and Belarus.

Figure 1 demonstrates that the total foreign trade turnover as of the end of 2021 was 5,850 million USD, which is significantly more than during or before the pandemic. This is a positive trend which indicates the restoration of economic relations between the Republic of Belarus and China.

In 2021, Belarus exported goods and services to China for a total of 1,314 million USD. It is also more than in 2020 (1,197 million USD). The dynamics are quite positive, with exports increasing even during the pandemic. The majority of goods exported by Belarus to China are potassium fertilisers, frozen beef, timber, offal, condensed and dried milk and cream, woodwork, sodium and sulphate cellulose, whey, sugar, rapeseed oil, and integrated circuits.



Fig. 1. Dynamics of trade and economic cooperation between China and Belarus in 2017–2021, USD m.

In 2021, Belarus imported goods and services from China for the total of 4,536 million USD. In 2020, the import decreased due to the restrictions imposed because of the coronavirus infection.

The two countries are also actively collaborating in the area of security, military, and militarytechnical partnership. In 2017–2019, delegations from both countries exchanged experience in the area of combating transnational crime, law enforcement, public security. They also participated in special training programmes. In the military area, regular visits and joint military exercises are organised. Belarusian and Chinese military officers complete training at Chinese and Belarusian military academies respectively.

The investment sector is also a dynamic area for strengthening the economic partnership between Belarus and China. Every country wants to attract foreign investment in order to facilitate its own economic growth. D. V. Mukha pointed out that "in 2020, due to the COVID-19 pandemic, a large number of investment projects were cancelled or stopped for objective reasons, which significantly reduced the attractiveness of Chinese capital for the Republic of Belarus" (Mukha, 2022) (Fig. 2).

Figure 1 demonstrates that by the end of 2021, the total amount of Chinese investment in Belarus was 101.7 million USD, which is much less as compared to 2019 (339.9 million USD).

The amount of investment by the Republic of Belarus in China also started to decrease in 2019 and fell to 1 million USD by the end of 2021.

An important element of the development of partnership between Belarus and China is the introduction of green finance, which has become quite popular recently. The term "green finance" is defined differently by international organisations and different countries. L. S. Khudyakova pointed out that "a broad definition provided by the G20 Report reads as follows: green finance can be understood as financing of investments that provide environmental benefits in the broader context of environmentally sustainable development" (Khudyakova, 2017). These environmental benefits include reductions in air, water, and land pollution, reductions in greenhouse gas emissions, improved energy efficiency while utilising existing natural resources, as well as mitigation of and adaptation to climate change and their co-benefits.

According to Z. Zhao "green investment is a bridge enabling sustainable transition to a digital economy. An increase in green investment can enhance the potential of green industries and environmentally friendly technologies and create new jobs" (Zhao, 2022).

The main financial instruments in green finance used globally are bonds and loans (Fig. 3). A specific feature of green finance is

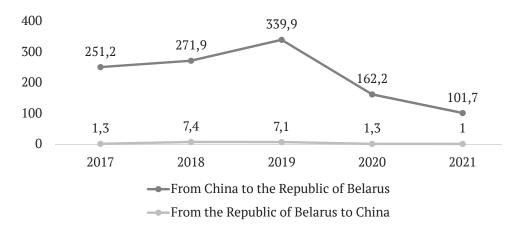


Fig. 2. Investment dynamics in the Republic of Belarus and China in 2017–2020, USD m.

that all attracted funds are used to implement environmentally oriented projects.

According to the G20 Report, green bonds are used to finance projects complying with green standards (for example, energy conservation, energy efficiency, and renewable energy projects). L. Filippova mentions that "according to the definition given by the International Finance Corporation, a green bond is a bond that meets the following criteria (Filippova, 2021):

attracted funds are used to finance green projects;

investments are assessed regarding their compliance with environmental principles;

 the funds attracted by the issuer are used as reserve funds only;

 information regarding the use of the funds is transparent and is published annually".

Green loans are the most important financial instruments in green finance. Bank loans contribute the most to green investment, including low-carbon projects. Bank loans constitute about two thirds of the total amount of debt and a half of the total amount of loans.

While traditionally green finance used to be promoted mainly by Western European countries and the USA (especially during the presidency of Obama), in recent years, the idea has been actively supported by emerging economies, especially China.

In September 2015, Central Committee of the Chinese Communist Party published the Integrated Reform Plan for Promoting Ecological Progress, which presented the idea of a green financial system for the first time. The development of green finance in China is believed to include three stages (Fig. 4).

The Chinese green financial system employs the following financial instruments: green loans, green bonds, green equity indexes, and their co-products. China supports the transition to a green economy by establishing green development funds, promoting green insurance, and introducing corresponding incentives.

China is eager to optimise the structure of green loans by means of various norms and regulations. Loans granted for environmental facilities and services constitute about 77 %, while loans granted for energy efficiency projects, development of new sources of energy and electric cars, as well as development of new strategic industries constitute about 23 % of the total amount of green loans in the country.

A recognised leader in the area of green finance in China is the Industrial and Commercial Bank of China, which pioneered the area of green loans in the country. In 2007, it supervised the development of the country's policy in the banking sector, developed environmental standards, and participated in the introduction of the "environmental veto" system, which prohibits financing of projects that can have a negative impact on the environment.

G. N. Gavrilko and G. Shuai pointed out that "green finance promoted by China within the framework of the "One Belt, One Road" project aims to facilitate the economic growth of the country as well as to solve global environmental problems and develop rules and guidelines for

Green bonds	Attracted funds or an equivalent sum of money are used to finance or refinance green projects only
Green loans	Only for financing or refinancing of green projects

Fig. 3. Green finance instruments

Early stage (2007–2010)	Development of the policv in the area of green finance, loans, insurance, and bonds
Integration stage (2011–2014)	Development of regulations on green loans and accounting. In 2014, the People's Bank of China and the UN Environment Programme created a working group focused on green finance and developed 14 recommendations on the creation of the green financial system in China
Implementation stage (2015 up to the present)	Development of the Guide on Green Finance published in September 2015, development of the inner market of green bonds and new green financial products, establishment of the Committee on Green Finance, and development of green finance standards and monitoring instruments

Fig. 4. Stages of development of green finance in China (Slavinsky, 2019)

the international order and the international system" (Gavrilko & Shuai, 2019). Development of green finance within the framework of the "One Belt, One Road" project is an important indicator of a new type of international relations, which involves mutually beneficial collaboration and recognition of mutual interests according to the current situation and aiming at the global wellbeing.

The green financial market of Belarus is still in its infancy and currently only has a few components. Nevertheless, steps are made by the government and the business community in this direction. Thus, one of the key sections of the National Programme for Social and Economic Development of the Republic of Belarus for 2016–2020 was the implementation of green projects in the following areas: transportation, agriculture, the reduction of harmful emissions into the atmosphere, the recycling of waste, the introduction of green labelling and ecological certificates, studying the possibility of the introduction of green bonds, the establishment of a green investment bank, etc. According to A. Lusgina, "the National Programme for Social and Economic Development of the Republic of Belarus for 2016-2020 suggests that fiscal tools should be elaborated to facilitate the growth of the green economy" (Lusgina, 2021).

Of great importance for the development of the green finance market in Belarus is a programme launched by OAO *Development Bank*. The programme aims to finance environmental projects by small and medium businesses and entrepreneurs by providing them with concessional loans with the rate of interest being 50 % of the refinancing rate plus 3 % added by partner banks. At the level of international cooperation regarding green finance, Belarus developed a programme for financing sustainable energy, which is implemented by Belarusian banks with the support from the European Bank for Reconstruction and Development.

Until recently, loans by international financial institutes, including the European Bank for Reconstruction and Development, the International Bank for Reconstruction and Development, and the European Investment Bank, constituted the greatest part of extrabudgetary funds for social and environmental projects. A. Shushkevich pointed out that "the total amount of investment into the economy of Belarus in 2019 exceeded 1 billion euros" (Shushkevich, 2022). The main investment areas include forestry, education, healthcare, housing construction, roads construction, and energy efficiency. However, due to political reasons, these institutes have ceased their financing of new projects in the Republic of Belarus. Current green financing in Belarus does not fully meet the existing demand.

Considering the limited state resources and the need to refinance foreign credits, it is necessary to replace tied credits with untied loans and direct investments. This is where China can become a strategic partner and a portfolio investor. However, despite the pilot projects on the privatization of several enterprises in 2017, the Republic of Belarus has practically no tools for attracting direct investments from China.

Trust between Belarusian and Chinese financial institutes is mainly based on the good payment discipline of Belarusian debtors. This has enabled Chinese banks and companies to collaborate with Belarusian banks and companies directly, without the state acting as the debtor and the sponsor. Cooperation in the area of green loans and investments will result in better cooperation between business communities in Belarus and China and will boost the development of the partnership between the two countries.

The Republic of Belarus has already taken steps to enter the Chinese stock market, which will help to obtain more green financing. For the first time Belarus was rated AA+ by a Chinese rating agency, China Chengxin International Credit Purchasing (Chen & Low, 2021; Huang & Lei, 2021). E. G. Zaitseva believes that "the Republic of Belarus can improve its position in the rating, if the economic growth is greater than expected, corporate governance system is improved, and the government's debt portfolio is diversified" (Zaitseva, 2019).

On 17 January 2019, the Republic of Belarus became the 70th member of the Asian Infrastructure Investment Bank. This provides new opportunities for green financing of infrastructure projects within the framework of the "One Belt, One Road" project (modernisation of transport corridors, energy sector, urban infrastructure, etc.).

At the beginning of 2021, Belarus created an institutional basis for its own organic market. Dramatic changes were introduced to the state policy regarding waste disposal and processing. The government also compiled a list of disposable and non-recyclable packaging materials that should be forbidden in the country. At the end of 2021, the government adopted a Plan for the Creation of Green Economy for 2021–2025. S. G. Golubev et al. state that "both China and Belarus pay particular attention to the development of low-carbon energy and the role of renewable energy sources in green development and reduction of the carbon footprint. Belarus also focuses on a reduction in the use of coal in the national energy system" (Golubev et al., 2022a).

According to the World Bank, the Republic of Belarus is one of the countries that can compete for Chinese investors. However, the amount of investment and the development of financial partnership between the two countries depends on the measures the Republic of Belarus takes to improve its investment environment, increase the efficiency of management responsible for investment decisions, as well as the efficiency of businesses, development of the financial market, public procurement procedures and interbank lending. At the moment, an important task is to attract a larger amount of green investment from China in order to develop the priority (strategic) areas of economy of the Republic of Belarus.

Yu. A. Zelenkov names three factors affecting the efficiency of green financing. Firstly, there is a discrepancy between the national development policy and the fact that foreign residents are attempting to enter the investment market, which has resulted in a series of administrative measures. Secondly, there are no unified criteria for credit ratings. Finally, a quantitative evaluation of the results leads to greater corruption and, when dealing with large sums of money, even neutralises the strictness of Chinese laws (Zelenkov, 2019).

Belarus can use the Chinese experience in attracting private investors, including by means of public-private partnerships. According to S. Golubev et al. "mutual academic contacts between Belarus and China can help to classify green projects taking into account national development priorities, to develop standards for the assessment of environmental risks of investment projects and environmental audit of green finance instruments, as well as to determine effective measures of the state support of green finance and other internationally recognised measures" (Golubev et al., 2022b). The support of green finance methods according to accepted standards can be of great value.

The development of a circular economy, construction of smart and energy efficient cities, conservation of biodiversity and landscapes, promotion of eco-tourism, education and staff training in this field can be priority vectors of partnership between Belarus and China in the area of green growth. It is vital that China and Belarus are ready for an open international partnership in the area of climate change and low-carbon economy.

Discussion

Our review of the literature helped us to determine that the problem of partnership between China and the Republic of Belarus in the area of green finance has not been thoroughly studied yet. All studies focus on either one of the two countries. We would like to point out an article by E. Zaitseva focusing on investment partnership between China and Belarus (Zaitseva, 2019). The author detailed the issue of investment partnership between the two countries, which makes it possible to determine the prospects of China-Belarus relationships in the area of green finance. In our study, we also focused on the history of relations between China and Belarus. In this regard, we should point out articles by A. I. Loiko, A. A. Novskaya and A. A. Nechay (Loiko, 2021; Novskaya & Nechay, 2021). Both scholars provided detailed descriptions of each stage of relationship between China and Belarus. In this article, however, we do not dwell on this issue, because it was not the main focus of our study. Of great assistance, when studying the theory of the question, were the available statistics. It allowed us to determine that the partnership between China and Belarus is developing very dynamically. L. S. Khudyakova (Khudyakova, 2017) focused on the specific features of green finance. The study provides definitions of the term and describes the main financial instruments used in green finance. S. P. Savinsky, N. G. Gavrilko, G. Shuai (Savinsky, 2019; Gavrilko & Shuai, 2019) studied the development of green finance in China. The strong side of their article is that it lists the main stages of development of green finance in China. L. Filippova and A. Shushkevich (Filippova, 2021; Shushkevich, 2022) focused on the specifics of development of green finance in the Republic of Belarus. As a result of our study, we came to a conclusion that the problem of partnership between China and the Republic of Belarus in the area of green finance has not been thoroughly studied yet. Green policy is a clear message for the market. It raises the rating of companies with high ESG indexes and reduces the cost of capital. A comparative analysis of various ESG investment indices emphasises the influence of the green policy. A study by Zhang et al. demonstrates how green policy can attract investments to the green sector based on ESG investing, which is a key to sustainable development (Zhang et al., 2021). C. X. Chen et al. demonstrated that the state control over businesses transformed from direct control to a combination of direct and indirect control. The authors believe that such control should be exercised by the public as well as by stakeholders (C. X. Chen et al., 2021). The government should employ command and control measures to change the regulations concerning the environment and provide market stimuli for green investment in order to control the environment. It is necessary to raise awareness of the need to monitor the environmental indices of companies polluting the environment. The article provides a structured analysis of the studied problem. First, we focused on the history of partnership between China and Belarus and

analysed its dynamics. As a result, we determined that the partnership between China and Belarus is effective and beneficial. The article then moves on to the prospects of the China-Belarus partnership in the area of green finance and focuses on theoretical issues. The article provides the definition of green finance and describes the main financial instruments used in green finance. It also details the specifics of the development of green finance both in China and the Republic of Belarus. This allowed us to determine the prospects for further development of Chinese-Belarusian collaboration in the area of green finance, which was not discussed in other studies.

Conclusions

Social and environmental issues are becoming more important for the modern economic system. Decisions made in the area of economic policy should be based on sustainable development goals. Financial systems play an important role in this process, their main function being the redistribution of resources. Banks and other financial institutes have great potential for investments in environmental and social projects. Since green finance is a relatively new area for banks and financial companies, financial bodies and international financial institutes and organisations are still working on the development of common rules, standards, and recommendations in this area. At the international level, green financing involves financing of a limited number of environmentally oriented projects, including renewable energy sources, waste management, water supply, sanitation, and environmentally friendly means of transport. Best international practice requires the use of specific financial instruments, including green bonds and green loans, for the implementation of green projects.

Despite its short history, the partnership between Belarus and China has reached a new level of strategic cooperation in politics, economy, culture, and education. Trade, economic, investment, scientific, and technical partnership between Belarus and China is developing very dynamically. Both countries maintain an active political dialogue. Both China and Belarus are interested in joint implementation of the Silk Road Economic Belt project. At the same time, China is actively developing its cooperation with CIS countries and specifically with Belarus, investing in its projects and entering its market.

Not only has China made green finance a part of its national strategy and developed its own regulations, it also used its position as the chairman of G20 in 2016 to create a working group on green finance. While introducing large-scale ecological changes at its own institutions, China is also doing its best to involve its partners in the process. Chinese green finance within the framework of the "One Belt, One Road" project aims to promote economic growth in each country, as well as to solve global environmental problems and develop rules and regulations for the international order and the international system. The development of green finance within the framework of the "One Belt, One Road" project is important because it represents a new type of international relations, which involves mutually beneficial collaboration and recognition of mutual interests according to the current situation and aiming at the global wellbeing.

The green finance market of Belarus is still in its infancy. We should note that Belarusian banks, together with international financial organisations, play an important role in the implementation of environmental projects in the Republic of Belarus. Green finance in Belarus provides funding for projects in such areas as renewable energy sources, waste disposal, and environmentally friendly organic products and packaging, as well as electric cars. At the moment, there is not a wide range of green products available from Belarusian banks. Most financial organisations are cautious about the introduction of environmentally oriented products. At the moment, the amount of green financing in Belarus does not fully meet the existing demand. The main areas of state green investment are energy efficiency and energy conservation, sustainable forestry, green transport, and the corresponding infrastructure.

Recommendations presented in this article can help to mobilise a sufficient amount of national and international green finance and create an area of financial services required for the investment in low-carbon technologies, energy efficiency, and renewable sources

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of energy. Cooperation in the area of green loans and investments will result in better cooperation between business communities in Belarus and China and will boost the development of the partnership between the two countries.

Conflict of Interest

The authors declare the absence of obvious and potential conflicts of interest related to the publication of this article.

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Содействие общему развитию китайско-белорусских отношений посредством «зеленого» финансового сотрудничества

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Предмет. В последние годы сотрудничество между Республикой Беларусь и Китаем развивается быстрыми темпами. В конце XX в. международное сообщество признало необходимость перехода к новой ресурсосберегающей экономической модели – так называемой «зеленой экономике», которая сочетала бы в себе общественное благосостояние, включая занятость, и снижение воздействия на окружающую среду. Толчком к этому послужили серьезные экологические проблемы, вызванные экономической деятельностью человека, и осознание того, что интенсивное использование природных ресурсов в долгосрочной перспективе приведет к их истощению. Кроме того, даже если новые месторождения будут обнаружены, их разработка потребует много времени и затрат. Изучение передового опыта, накопленного различными развитыми и развивающимися странами в области становления «зеленого» финансирования, особенно важно для дальнейшего развития китайско-белорусских отношений. Предметом исследования является влияние «зеленого» финансового сотрудничества на китайско-белорусские отношения.

Цель исследования – выявление перспектив развития китайско-белорусских отношений посредством «зеленого» финансового сотрудничества.

Методология. Исследование построено на применении общенаучных методов, таких как анализ, обобщение и сравнение.

Выводы. В статье представлен обзор исторического развития китайско-белорусских отношений. Оценка «зеленого» финансирования в Республике Беларусь позволила сделать вывод, что оно находится на начальном этапе развития. Также в ходе исследования стало понятно, что «зеленая» экономика Республики Беларусь в настоящее время заинтересована в «зеленых» инвестициях Китая. Оценка «зеленого» финансирования в Китае позволила сделать вывод о его эффективном развитии, особенно в области «зеленой» энергетики. На основании проведенного исследования представлены перспективы дальнейшего развития китайско-белорусских отношений посредством «зеленого» финансового сотрудничества.

Ключевые слова: Республика Беларусь, «зеленое» финансирование, Китай.

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Конфликт интересов

Авторы декларируют отсутствие явных и потенциальных конфликтов интересов, связанных с публикацией настоящей статьи.

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