

- 108 ветроэнергетических установок мощностью 122 МВт;
- 31 биогазовый комплекс общей мощностью 40,2 МВт;
- 11 мини-ТЭЦ на древесном топливе электрической мощностью около 100,5 МВт [3].

За последние два десятилетия в Беларуси наблюдается положительная динамика использования ВИЭ. За более чем двадцать лет использование возобновляемых источников энергии в республике выросло почти в два с половиной раза: с 3,3% в 2000 г. до 7,6% в 2023 г. [3].

Несмотря на это, доля ВИЭ в генерации электроэнергии в Беларуси составляет около 7,6%, что значительно ниже, чем в малых странах ЕС (Латвия – более 40%, Словения – около 30%, Эстония и Словакия – более 20%). Это свидетельствует о необходимости внедрения инновационных подходов в этой области по примеру других стран с целью повышения доли ВИЭ в энергобалансе страны.

### **Литература**

1. European Environment Agency. – URL: <https://www.eea.europa.eu/en/analysis/indicators/share-of-energy-consumption-from> (дата доступа: 08.04.2025).
2. European Commission Horizon Magazine. – URL: <https://projects-research-and-innovation.ec.europa.eu/en/horizon-magazine/clean-energy-solutions-offer-new-spark-europes-small-island-nations> (дата доступа: 08.02.2025).
3. Департамент по энергоэффективности. – URL: [https://energoeffect.gov.by/news/news-2024/20240129\\_news3](https://energoeffect.gov.by/news/news-2024/20240129_news3). (дата доступа: 19.09.2024).

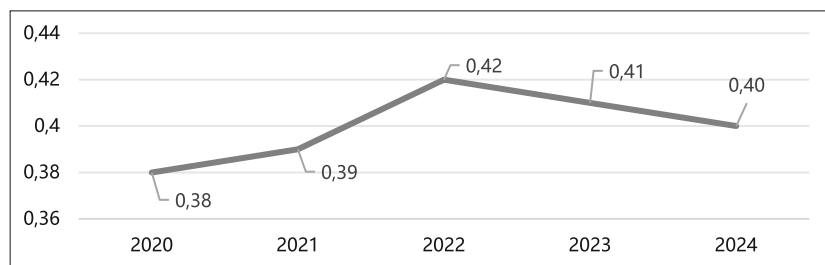
## **Belarus-China Relations in the Context of Global Value Chains: The Impact of Exchange Rate Dynamics (2020–2024)**

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Belarus-China cooperation has steadily evolved into a critical component of global economic integration, particularly under the Belt and Road Initiative (BRI). Over the past five years, this partnership has strengthened across industrial production, agricultural modernization, and digital infrastructure development, fostering interconnected value chains. However, the stability of these value chains has been significantly influenced by fluctuations in the exchange rate between the Chinese yuan (CNY) and the Belarusian ruble (BYN). From 2020 to 2024, the CNY/BYN exchange rate exhibited notable volatility, reflecting broader macroeconomic challenges and bilateral trade dynamics.

In 2020, the average exchange rate stood at 1 CNY = 0.38 BYN, aligning with stable trade flows and predictable bilateral agreements. During this period, Belarusian imports of Chinese machinery and electronics surged by 18%, driven by investments in industrial automation and renewable energy projects. However, the global economic landscape shifted dramatically in 2022 due to the prolonged effects of the COVID-19 pandemic and geopolitical tensions, leading to a sharp appreciation of the yuan to 1 CNY = 0.42 BYN. This shift imposed considerable financial strain on Belarusian enterprises reliant on Chinese imports. For instance, manufacturers in Belarus's automotive sector, which sources 40% of its components from China, faced a 12% increase in production costs. Supply chain delays further compounded these challenges, reducing competitiveness in regional markets such as the Eurasian Economic Union. Conversely, Chinese investors in Belarusian industrial parks encountered reduced profit margins due to unfavorable currency conversion rates. Joint ventures in agritech, such as the Minsk-based Sino-Belarusian Agricultural Innovation Center, reported a 7% decline in returns, prompting delays in technology transfer and scaling of precision farming initiatives.

By 2024, concerted efforts by Belarus to stabilize its economy – through fiscal reforms, export diversification, and enhanced BRI trade mechanisms – moderated the exchange rate to 1 CNY = 0.40 BYN [1]. This stabilization alleviated pressures on cross-border transactions, enabling smoother coordination in value chain activities. The Great Stone Industrial Park, a flagship BRI project near Minsk, exemplifies this recovery. In 2023, the park reported a 15% increase in operational efficiency as currency risks diminished, attracting 12 new high-tech firms specializing in AI and green manufacturing [2]. Both nations also leveraged bilateral currency swap agreements, totaling \$500 million since 2021, and prioritized local currency settlement frameworks in BRI projects. These measures reduced dependency on the U.S. dollar, cutting transaction costs by 8% for Belarusian exporters of dairy and timber products to China.



**Figure 1.** – Annual Average CNY/BYN Exchange Rates, 2020–2024 [3]

The volatility of the CNY/BYN exchange rate (2020–2024) highlights critical challenges for Belarus-China value chain integration. To mitigate currency risks, enhancing financial cooperation – through SME-tailored hedging tools, bilateral currency swaps, and shared forecasting platforms – is essential. Prioritizing high-tech collaborations (e.g., semiconductor production, AI logistics) and expanding blockchain-based payment systems, as demonstrated by the Belarusbank-ICBC pilot, can streamline transactions and strengthen resilience. These measures, aligned with BRI objectives, foster sustainable economic ties and reduce dependency on volatile external currencies, ensuring robust value chain efficiency amid global uncertainties [4].

### **Literature**

1. Ministry of Economy of Belarus (2022, August 30). Alesya Abramenko: Trade between Belarus and China grows at a record pace. – URL: <https://economy.gov.by/en/news-en/view/alesya-abramenko-trade-between-belarus-and-china-grows-at-a-record-pace-46760-2022>.
2. Belt and Road Initiative Portal (2023). China-Belarus Industrial Park Project. – URL: <https://eng.yidaiyilu.gov.cn/sjgjt.htm>.
3. National Bank of the Republic of Belarus (2025). Official Average Exchange Rate of the Belarusian Ruble Against Foreign Currencies for 2025. – URL: <https://www.nbrb.by/engl/statistics/rates/avgrate>.
4. International Monetary Fund (2024, October 22). Global financial stability report: Navigating financial markets in an uncertain world. – URL: <https://www.imf.org/zh/Publications/GFSR/Issues/2024/10/22/global-financial-stability-report-october-2024>.

## **Does Economic Empowerment Equal Gender Equality? Rethinking Microfinance**

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*Introduction.* Microfinance has become a cornerstone of development policy, with women comprising 80% of clients globally [1]. While promoted as a tool for both poverty reduction and gender equality, feminist scholars question whether financial inclusion alone can address structural inequalities [2]. This study investigates the complex relationship between economic empowerment and substantive gender justice.

*Key Findings.* The convergent parallel mixed-methods approach combines: