

APPLICATION OF GREEN FINANCING INSTRUMENTS (USING THE EXAMPLE OF THE INDUSTRIAL BANK OF CHINA)

Guo Jinhan¹⁾, E. K. Volkova²⁾

¹⁾ PhD student, Belarusian State University, Minsk, Republic of Belarus,
e-mail: xiaohanjieje@gmail.com

²⁾ PhD in economics, Belarusian State University, faculty of economics, Minsk, Republic of Belarus,
e-mail: gfu.vek@yandex.ru

Along with rapid economic development, China is accelerating the development of green finance and increasing the scale of industries such as energy conservation, environmental protection and green manufacturing. Commercial banks play an important role in promoting the sustainable development of society. The article reveals the directions of green financing on the example of the Industrial Bank of China. The forecast of further development of this direction of economic activity is presented.

Keywords: green finance; sustainable development; Industrial Bank of China; economic transformation; commercial bank.

ПРИМЕНЕНИЕ ИНСТРУМЕНТОВ ЗЕЛЕНОГО ФИНАНСИРОВАНИЯ (НА ПРИМЕРЕ ПРОМЫШЛЕННОГО БАНКА КИТАЯ)

Го Цзиньхань¹⁾, Е. К. Волкова²⁾

¹⁾ аспирант, Белорусский государственный университет, г. Минск, Республика Беларусь,
e-mail: xiaohanjieje@gmail.com

²⁾ кандидат экономических наук, Белорусский государственный университет,
экономический факультет, г. Минск, Республика Беларусь, e-mail: gfu.vek@yandex.ru

Наряду с быстрым экономическим развитием Китай ускоряет развитие зеленых финансов и увеличивает масштабы таких отраслей, как энергосбережение, охрана окружающей среды и зеленое производство. Коммерческие банки играют важную роль в содействии устойчивому развитию общества. В статье раскрыты направления зеленого финансирования на примере Индустриального банка Китая. Представлен прогноз дальнейшего развития данного направления экономической деятельности.

Ключевые слова: зеленые финансы; устойчивое развитие; Промышленный банк Китая; экономическая трансформация; коммерческий банк.

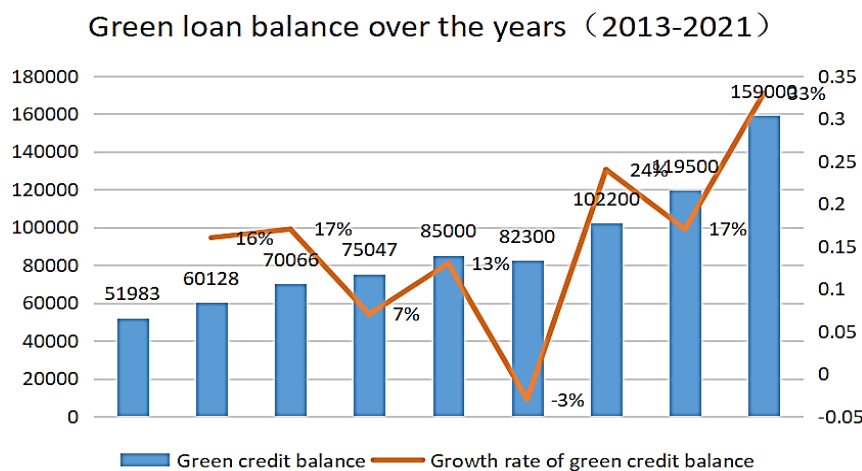
Introduction. The development of green finance is an important part of practicing the construction of ecological civilization. Green finance aims to mobilize and encourage more social capital to invest in green industries, accelerate the cultivation of new economic growth points, enhance economic growth potential, and at the same time more effectively curb polluting investment to support the green transformation of the economy [1].

There are significant problems with the state of the environment in China associated with intensive industrial development in recent years (the annual GDP growth rate in the period 2000–2020 was in the range of 6–15 % per year). At present, China has established a multi-level green financial system, covering products such as green

credit, green bonds, green stocks, green funds, green insurance, and carbon emission trading markets. With the promotion of the "double carbon" goal and the development of the green financial market, various green financial assets have begun to take shape; as the ESG investment concept is becoming more and more popular, many institutions also have the need to allocate green financial assets [2].

The practice of green financing in commercial banks. The scale of green loans continues to expand and their uses tend to be more extensive. By the end of 2021, the stock of green loans in China will reach RMB 15.9 trillion, ranking first in the world (figure). Since 2013, the green credit balance of domestic banks has grown steadily, with a compound annual growth rate of 15 %, reaching a record high in 2021, with a year-on-year increase of 33 % [3].

As of the end of June 2022, the balance of green loans was RMB 19.55 trillion, and the growth rate hit a record high, with a year-on-year increase of 40.4 % (figure).



Green loan balance in China, 2013–2021

Source: [7].

Experience in the development of green finance in the Industrial Bank of China. Industrial Bank is a pioneer in green finance in China, with continuous business innovation and the launch of the country first green financial product. Table 1 provides information on the use of green financing instruments in this bank since 2006 (table 1).

Table 1

Green Finance Development Process of Industrial Bank of China, 2006–2021

Year	Events
2006	Industrial Bank launched the first green credit product in China
2010	The first to launch the first low-carbon credit card
2014	Issued the first green credit ABS in China
2016	The first company to launch green mortgage loan and consumer loan products, and issued RMB 50 billion green financial bonds in the domestic market
2017	Change the Environmental Finance Department into the Green Finance Department and set up 6 major teams to concentrate professional efforts to expand the green financial comprehensive service system
2018	Ganmen New District Sub-branch is listed as the first batch of green sub-branches in the country, and its green credit balance or customer ratio exceeds 60%

Year	Events
2020	Underwrote the first "green epidemic prevention bond" in the market, and independently underwrote the first blue bond in China
2021	The lead underwriter of the first "carbon neutral" themed bond in the Guangdong-Hong Kong-Macao Greater Bay Area and Fujian Province, the first carbon credit loan with forward carbon sink products as the subject matter and the first forestry bill pledge loan in the country

Source: compiled by the author according to [6].

Green financing development at Industrial Bank branch in Shenzhen. Under the guidance and support of governments at all levels in Shenzhen, regulatory authorities, and the head office, Industrial Bank Shenzhen Branch has continuously raised the height of its green finance strategy, taking multiple measures to explore and promote the development of green finance. Since 2021, it has successively provided the first carbon emission reduction loan in Shenzhen, underwrote several carbon neutral bonds, and supported the first carbon quota auction in Shenzhen throughout the process, and will continue to promote carbon emission reduction loans, green bond bidding, and bill discounting for green customers, carbon finance and other innovative services, injecting industrial momentum into economic green development [4].

By the end of 2021, the Shenzhen Branch has achieved a balance of 10.897 billion yuan of green loans regulated by the People's Bank of China. Projects supported by green loans can save 19,088.62 tons of standard coal, reduce 41,005.59 tons of carbon dioxide emissions, 303.06 tons of sulfur dioxide emissions, and 162.98 tons of nitrogen oxide emissions tons, and the annual emission reduction of particulate matter is 213.80 tons [5]. The indicators of environmental benefits of projects supported by green loans in 2021 will be significantly improved compared with the previous year. Table 2 shows the environmental benefits of projects supporting green loans of Industrial Bank branch in Shenzhen for the period 2017–2021.

In addition, Shenzhen Branch actively participates in the construction of the green bond market. Through in-depth development of green bond underwriting and investment, it introduces financial water into clean energy such as photovoltaic power generation, rail transit, green buildings, energy conservation and environmental protection and other industries. As of the end of 2021, Shenzhen Branch has invested 14 green bonds with a total amount of 3.107 billion yuan (table 2).

Table 2

Benefits of Industrial Bank Shenzhen Branch Green Loan Support Projects, 2017–2021

Environmental Benefit Index	Unit	2017	2018	2019	2020	2021
CO2 reduction	Ton	120.6	98.29	115.22	14094	41005.59
Sulfur dioxide emission reduction	Ton	3686	16.66	27142	156.03	303.06
Reduction of nitrogen oxides	Ton	9386	3.12	37175	25.23	162.98

Source: compiled by the author according to [6].

Conclusion. In our opinion, despite the crisis phenomena in the world at the present time and the preservation of the essential role of traditional energy sources, a reasonable increase in the importance of green financing will gradually restore the destroyed ecological balance in the country. In recent years, the development of China's green financial market has made great progress, but there is still a long way to go to

promote the realization of the «double carbon» goal. On the one hand, the green financial policy system will be further improved, and there is room for improvement in the establishment of standard systems, statistical accounting, regulatory information, and preferential policies for various green financial products. On the other hand, the scale of the green finance market will continue to expand, and the balance of green credit and green bonds will continue to increase; the carbon emissions trading market will continue to promote the expansion of the national market, but the process may be relatively slow; the scale of green insurance business will also continue to grow with the development of the green industry.

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