

CURRENT STATE OF THE GREEN FINANCE FOR THE CONSTRUCTION SECTOR OF MONGOLIA

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ABSTRACT: In order to meet the United Nations' Sustainable Development Goals 2030 and reduce greenhouse gas emissions, it is necessary for every country and industry to take decisive measures. The construction industry is one of the leading sectors in terms of greenhouse gas emissions, and therefore, reducing greenhouse gas emissions in this sector is of great importance. Financial support is critical to reducing greenhouse gas emissions in the construction industry, and this article attempts to identify the current issues with green loans for the construction sector and suggest solutions.

KEYWORDS: green taxonomy, green finance, green loan

1. INTRODUCTION

In Mongolia's "nationally determined contribution target for the implementation of the Paris Agreement", the six leading economic sectors that emit the most greenhouse gases at the national level (energy production and supply sector, agriculture sector, industry sector, road transport sector, construction sector and waste sector) based on the measures included in the development policy and program until 2030, greenhouse gas emissions in 2010 were 25.8 million tons of CO₂-eq. will be 74.2 million tons of CO₂-eq in 2030. It is expected to increase by 2.76 times, and by 2030, the national greenhouse gas emission reduction target has been determined at the level of each sector, and the overall amount is 22.7% or 16.89 million tons of CO₂-eq by 2030. can be reduced. Out of this, in the construction industry has set a target to reduce total amount of 830,000 tons of CO₂-eq. There is a need for green financing of 7 billion US dollars to fulfill these goals and the need for green financing is expected to increase year by year.

A joint study by the Mongolian Banks' Association and the Green Economy Partnership determined that there is a greater need for green loans, especially for construction and manufacturing industry projects.

The purpose of this paper is to investigate the current situation of green financing in the construction industry and identify the problems facing.

2. CURRENT STATE OF GREEN FINANCE FOR THE CONSTRUCTION SECTOR

In 2020, the Green Finance Corporation of Mongolia was established as a result of the step-by-step implementation of green financing initiatives in Mongolia since 2013.

2.1 Green taxonomy of Mongolia

Within the framework of the goal of developing a green economy in Mongolia, the Financial Stability Council approved the "Green Taxonomy", which is a classification and indicator of environmentally

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friendly activities to reduce greenhouse gas and air pollution.

banks and non-banking financial institutions as the main criteria for identifying green loan and green investment projects and programs.



Figure 1. Green taxonomy of Mongolia

The Green Taxonomy covers the following 8 groups, 28 sub-groups and 58 related technological activities.

Table 1. Green taxonomy of Mongolia

No	Group	Sub group	No. of technologies
1	Renewable Energy	6	10
2	Low Pollution Energy	4	6
3	Energy Efficiency	3	9
4	Green Buildings	3	4
5	Pollution Prevention & Control	2	5
6	Sustainable Water and Waste Use	3	7
7	Sustainable Agriculture, Land use, Forestry & Eco tourism	3	10
8	Clean Transport	4	7

This "Green Taxonomy" is now used by commercial

2.2 Current state of green finance

Based on the report issued by the Bank of Mongolia, the amount of new green loans issued by commercial banks in 2020-2023 is shown in Figure 2.

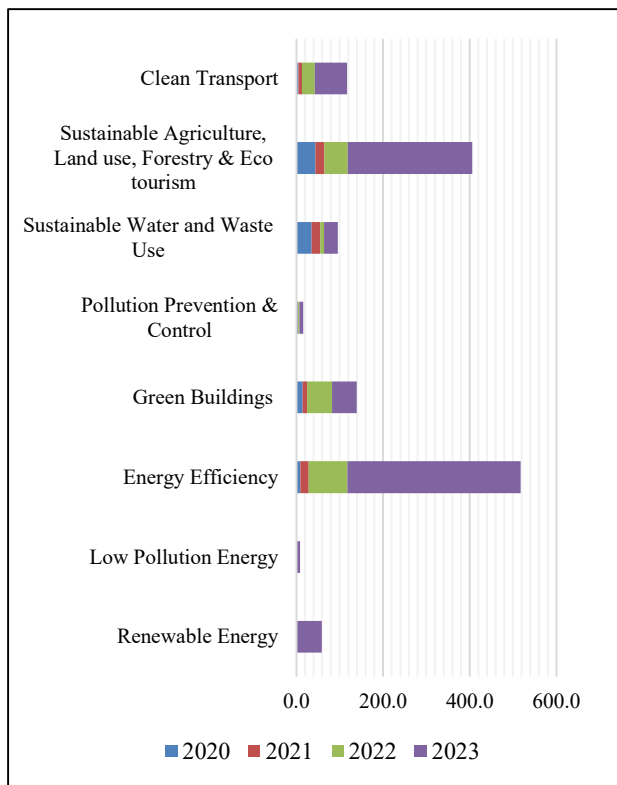


Figure 2. Amount of green loans issued by commercial banks, 2020-2023

By analyzing the amount of green loans issued by commercial banks in detail, as of the 4th quarter of 2023, there is a total of 202,960.0 million MNT loans issued under the energy-efficient building category, and 21,091.0 million MNT loans issued under the green building category. Table 2 shows the amount of new loans granted by banks to green buildings in 2020-2023.

Table 2. Loan amount for energy efficient buildings and green buildings

No.	Activities	Loan amount, in millions of MNT			
		2020	2021	2022	2023
3.3	Energy Efficient Buildings	831.6	4,235.1	8,134.3	212,048.7
3.3.1	Construction of new energy-efficient buildings	460.1	2,241.7	1,046.9	200,240.5
3.3.2	Improve the energy efficiency of existing buildings	371.5	1,993.4	7,087.5	11,808.3
4	Green buildings	14,453.7	10,128.0	58,028.2	56,502.8
4.1	Green buildings	13,118.7	5,979.9	56,278.5	42,739.6
4.1.1	Construction of green buildings	13,118.7	5,979.9	56,278.5	42,739.6
4.2	Green building materials and products	1,335.0	1,300.0	1,377.5	12,953.2
4.2.1	Green building materials and product manufacturing	1,335.0	1,300.0	1,377.5	12,953.2
4.3	Green infrastructure	0.0	2,848.0	372.2	810.0
4.3.1	Green infrastructure	0.0	0.0	0.0	0.0
4.3.2	Improvement of the ger district	0.0	2,848.0	372.2	810.0
Total		15,285.3	14,363.0	66,162.6	268,551.5

According to statistics, the amount of loans granted for the construction of new energy-efficient buildings increases year by year, reaching 200,240.5 million MNT by 2023, while the amount of loans granted for the construction of green buildings is unstable and is 5 times smaller, or 42,739.5 million MNT (Figure 3).

This shows that on the one hand, citizens and enterprises have a weak understanding of green building, and on the other hand, there is no green building standard in Mongolia, it is expensive to obtain in international green building certification, and there is a weak understanding of how apply for it.

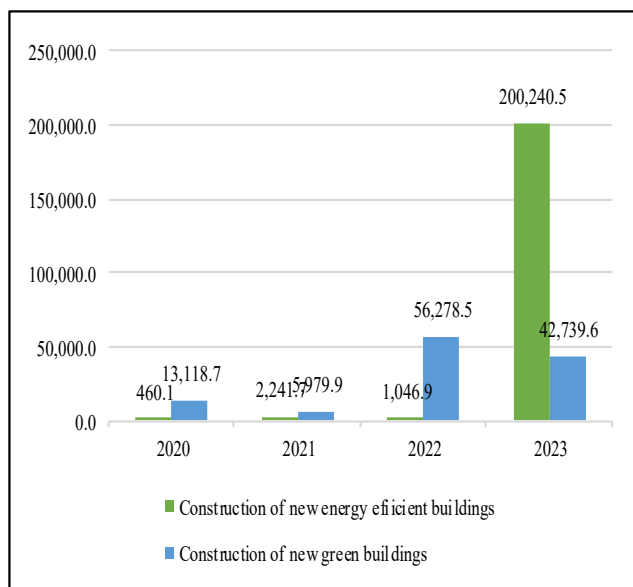


Figure 3. Amount of green loans issued by banks for construction of new energy efficient buildings and green buildings, 2020-2023

In order to be eligible for the above energy-efficient building and green building loans, certain energy-efficient or green building criteria must be met and certified.

The main indicator of an energy-efficient building is the building energy certificate issued by the building's energy auditor (Figure 4). According to this certificate, the building classified as energy efficiency category above B is considered to be energy efficient and banks allow to issue the loan.

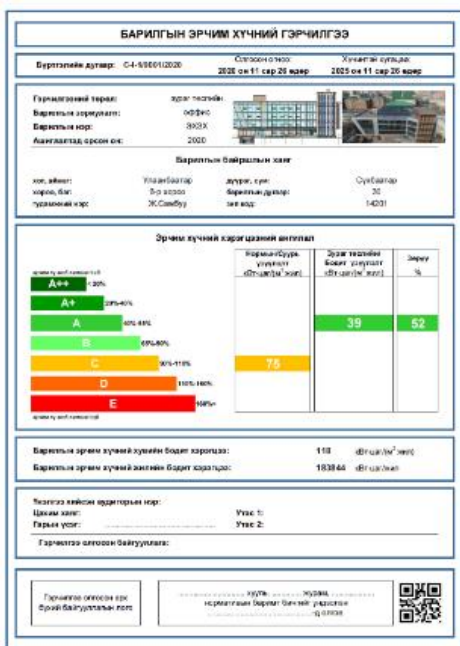


Figure 4. Building energy certificate (example)

But for green buildings, there is a requirement to be certified by an international green building certificate.

Table 3. International Green Building Rating Systems

Evaluation criteria	International Green Building Rating Systems			
	EDGE	LEED	BREAM	DGNB
Energy Efficiency	✓	✓	✓	✓
Water saving	✓	✓	✓	✓
Energy embodied in building materials	✓	✓	✓	✓
Indoor air quality		✓	✓	✓
Construction waste		✓	✓	✓
Infrastructure		✓	✓	✓
Location		✓	✓	✓
Telecommunication		✓	✓	✓
Innovation		✓	✓	
Management		✓	✓	

In order to achieve the goal of sustainable development in the long term, it is important to pay attention not only to the energy efficiency of new buildings, but also to pay attention to green buildings that meet other requirements (Table 3).

3. CHALLENGES FACING TO GREEN FINANCE FOR THE CONSTRUCTION SECTOR, RECOMMENDATIONS

Green financing for the construction industry faces the following challenges. It includes:

1. There are no green building standards, norms and rules in Mongolia. There is no national green building rating system.
2. There is a lack of support for the government's policy on green building.
3. There is a lack of understanding of green building by construction industry enterprises and citizens.
4. Development of green financing environment is weak.

Therefore, it is necessary to implement the following measures step by step to intensify green building and its financing (Table 4).

Table 4. Plan for further action

No.	Action to be taken
1	Based on international best practices, create a National Green Building Rating System
2	To create green building standards and provide policy support by creating a legal framework for their implementation
3	To train and prepare national green building experts and auditors to implement the National Green Building Rating System
4	To conduct training in the field of

increasing the awareness of green building among construction industry enterprises and citizens

URL: <https://www.xacbank.mn/product/1142>(last date accessed: 3 May 2024).

- 5 Develop a web-based system to increase the usage of the National Green Building Rating System
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Paris Agreement Nationally Determined Contribution Targets, 2019

URL:
<https://unfccc.int/sites/default/files/NDC/2022-06/First%20Submission%20of%20Mongolia%27s%20NDC.pdf> (last date accessed: 3 May 2024).

4. CONCLUSIONS

In order to further increase the amount of green financing in the construction sector, the following measures are required. It includes:

1. Create a new National Green Building Rating System in Mongolia and provide policy support
2. Increase the understanding of energy-efficient buildings and green buildings among construction industry enterprises and citizens
3. Publicize measures by commercial banks on green financing for the construction industry.

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