switchasia

Funded by
the European Union

SYLPROJECT
Sustainable Yak Leather

Capacity building to the Mongolian vegetable tanned yak cluster on bio-leather and bio-leather products

Guide on Mongolian and International Green Financing Opportunities and Initiatives

Disclaimer

Publicity Disclaimer

This publication was produced with the financial support of the European Union. Its contents are the sole responsibility of the SYL consortium and do not necessarily reflect the views of the European Union.

Table of Contents

Abbreviations

ADB	Asian Development Bank
AE	Accredited Entity
BAU	Business-As-Usual
CAGR	Compound annual growth rate
CBA	Cost-Benefit Analysis
CO2	Carbon dioxide
DBM	Development Bank of Mongolia
EBRD	European Bank for Reconstruction and Development
EC	European Commission
EE	Energy Efficiency
EIA	Environmental Impact Assessment
EIB	European Investment Bank
ESG	Environment-Social-Governance
ESMS	Environmental and Social Management Systems
EU	European Union
FSC	Financial Stability Council
GCF	Green Climate Fund
GEF	Green Environment Facility
GEFF	Green Economy Funding Facility
GGGI	Global Green Growth Institute
GHG	Green House Gas
GrDP	Green Development Plan
IFC	International Finance Corporation
JICA	Japan International Cooperation Agency
MECC	Ministry of Environment and Climate Change
MET	Ministry of Environment and Tourism
MGFC	Mongolian Green Finance Corporation
MN	Mongolia
MonSEFF	Mongolian Sustainable Energy Financing Facility
MSFA	Mongolian Sustainable Finance Association
NAMA	Nationally Appropriate Mitigation Actions
NBFIs	Non-bank financial institutions
NDC	National Determined Contribution
NGDF	National Green Development Fund
NGO	Non-governmental Organisation
NSFR	National Sustainable Finance Roadmap
PPP	Public-Private Partnership
RE	Renewable Energy
RES	Renewable Energy Sources
ROI	Return on Investment

SDG	Sustainable Development Goals
SDV 2030	Sustainable Development Vision 2030
SME	Small and Medium Enterprises
UNDP	United Nations Development Programme
UNEP	United Nations Environmental Programme
UNFCCC	United Nations Framework Convention on Climate Change
VSD	variable-speed drive
WB	World Bank

List of figures

List of tables

Abstract

This guide serves as an overview of Mongolia's green finance programmes and available opportunities – both on local and international level – able to facilitate the nation's sustainable transformation. The added value of green finance instruments (e.g., grants, concessional loans, green bonds) that are used to address sustainability challenges, resource efficiency, and to promote climate resilience, is being highlighted. Special attention is given in enabling Mongolian industries – such as textiles, leather, agriculture and renewable energy – to embrace circular economy principles and adopt circularity practices into their operations. Mongolia's key policies are reviewed and linked to the efforts of international institutions supporting their implementation through funding. Policymakers, financial institutions, SMEs, and foreign funding organisations are among the many stakeholders for whom this guide seeks to give useful perceptions by addressing obstacles to green finance access, proposing strategic solutions (tactics supplemented by specific actions), and presenting successful implementations from various funders in different fields, though all linked to Mongolia's transition towards sustainability. Through promoting communication and cooperation, this guide aims to enable Mongolia's stakeholders to advance its green development objectives and increase the pace of the nation's transition to a resource-efficient, and low-carbon future.

Chapter 1. Introduction

Sustainable development is at the core of most countries' strategic reform plans. In the case of Mongolia, the country's sustainability transition efforts are intertwined with green financing, a necessary, yet essential, tool for tackling the country's environmental challenges, derived from the country's dependence on industries like mining, agriculture, and manufacturing. Mongolia aspires to make an impactful transition towards environmentally friendly and sustainable business practices, in order to compete global economies which are already taking solid and decisive steps towards low-carbon growth and resource-efficient practices.

The term "Green Financing" can be defined as the funding for projects and activities on environmental protection, sustainable development, and climate resilience (adaptation & mitigation), which includes a toolkit of funding mechanisms such as concessional loans, grants, bonds, and technical assistance that support sustainability related projects (e.g., renewable energy sources (RES), waste management, energy efficiency, sustainable agriculture). Mongolia's sustainable development depends on efficient and effective utilisation of the green finance toolkit[1] (Fig.1). Given that the provision of the necessary funding for environmentally beneficial projects will support upgrades in the infrastructure, will promote RES projects, and will enable SMEs – particularly in the energy, agriculture, and manufacturing sectors – to adopt energy and resource efficient practices – hence cultivating an environmentally friendly business context –, it can be strongly argued that Green Financing holds a significant role in promoting Mongolia's efforts towards sustainability transition.

[1] https://www.unescap.org/sites/default/d8files/event-documents/SDG%20Taxonomy_MSFA.pdf

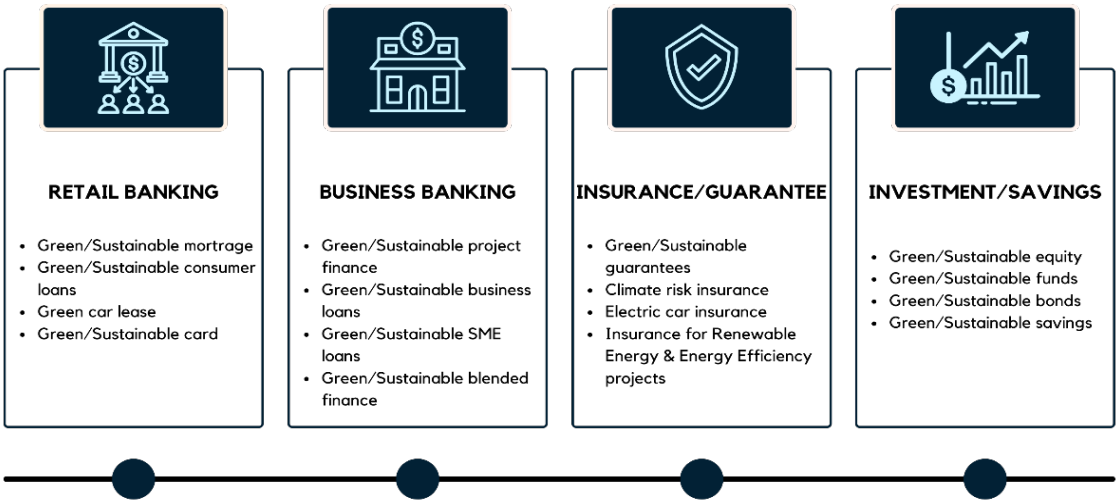


Figure 1: Sustainable finance toolkit

As stated in the Mongolian Sustainable Finance Principles[2], green finance is defined as "*facilitating and financing projects involving renewable or clean energy, resource efficiency, clean production, reduced emissions, improved waste management, and other activities that contribute to green economic growth and development*."[3]

The Mongolian Sustainable Finance Principles[4][5]:

Principle 1. *Protect the natural environment*

Principle 2. *Protect people and communities*

Principle 3. *Protect cultural heritage*

Principle 4. *Promote "green economy" growth*

[2] Mongolian Sustainable Finance 8 Principles Guideline

[3] National Sustainable Finance Roadmap of Mongolia: Unlocking Mongolia's Potential to Become a Sustainable Finance Knowledge Centre in the Region

[4] National Sustainable Finance Roadmap of Mongolia: Unlocking Mongolia's Potential to Become a Sustainable Finance Knowledge Centre in the Region

[5] Бидний тухай | Монголын Тогтвортой Санхүүжилтийн Холбоо

Principle 5. *Promote financial inclusion*

Principle 6. *Promote ethical finance and corporate governance*

Principle 7. *Promote transparency and accountability*

Principle 8. *Practice what we preach*

1.1 Scope of the Guide

The "*Guide on Mongolian and International Green Financing Opportunities and Initiatives*" has been developed with a certain dogma at its core; to enable Mongolian SMEs in accessing green financing tools to support their transition towards sustainability. It serves as a practical resource offering valuable insights to Mongolian stakeholders – ranging from SMEs, policy makers, and financial institutions, to international partners – into the green financing opportunities landscape in Mongolia. It addresses the pressuring need of Mongolian SMEs in finding allies for implementing their transition towards sustainability, hence supporting the country's aspirations for a low-carbon, resource-efficient, and circular economy, through provision of insights, opportunities in specific sectors, application key tips, and study cases as examples for better understanding on impactful green investments.

1.2 Context for Sustainable & Green Financing in Mongolia

Sustainable finance refers to investments that have a significant contribution to climate action (e.g., substantial energy savings, enhancement and/or restoration of biodiversity, adoption of circular economy business models), and includes environmental, social and governance considerations in investment decisions[6][7]. Sustainable finance is a critical tool for an SME willing to come onboard in the country's journey towards sustainability via energy efficiency and renewable energy sources, circular economy, and enhanced environmental practices, as it connects

[6] European Investment Bank

[7] European Investment Bank – Sustainable finance

businesses to investors and provide access to green financial products. It leads, in the long-term, to more investments in sustainable projects and activities. It plays a key role in delivering on the objectives of the European Green Deal[8], which aims to boost the green transition. This means moving towards a green economy through sustainable technology, industry and transport.

The objective of green and sustainable finance is to redirect financial flows towards projects that contribute towards fulfilling the SDGs and the Paris Agreement[9]. Green financing is imperative for Mongolia's efforts to make its sustainability transition, especially in the field of supporting circular economy business models for the country's intensive resource consumption industries of manufacturing, energy, and agriculture[10]. Targeted investments will enable Mongolia to align with internationally accredited sustainability standards, thus fostering long-term competitiveness. To that end, the development of green finance markets and financial products in Mongolia must be observed through a holistic and system-level approach.

[8] The European Green Deal - European Commission

[9] Green Capital Market Incentives KZ MNG.pdf

[10] What Are The Biggest Industries In Mongolia? - WorldAtlas

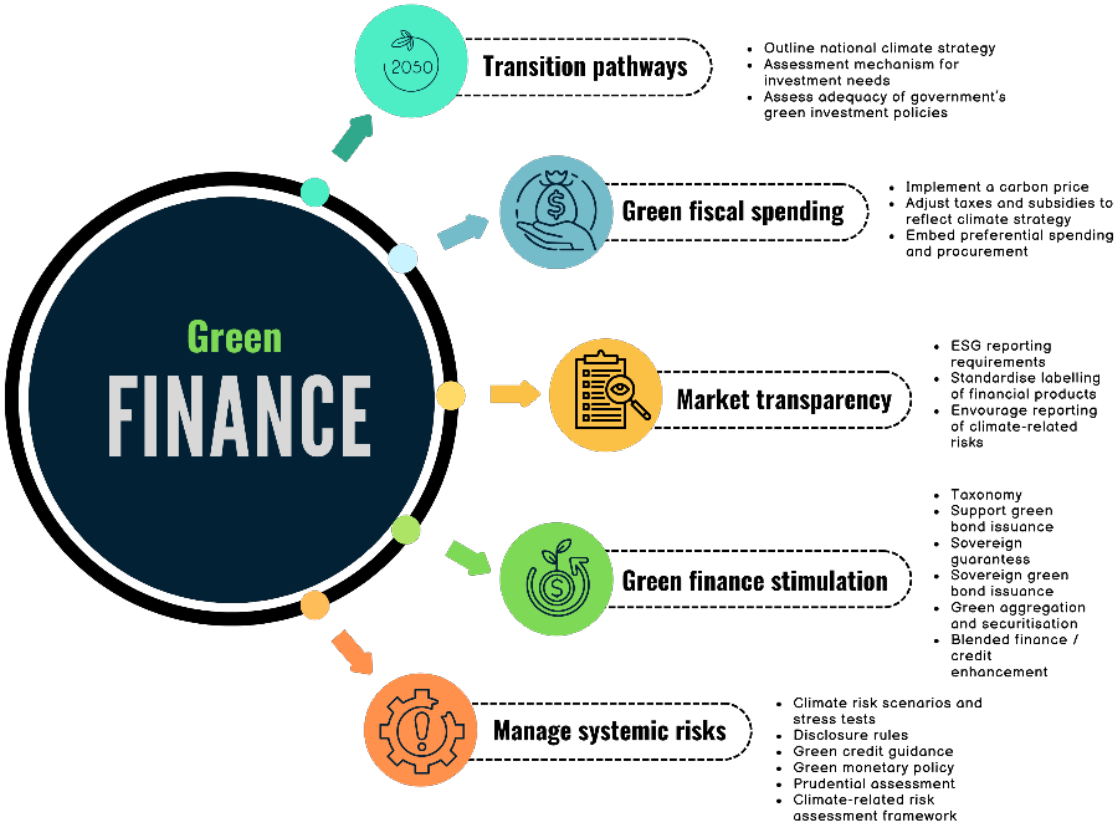


Figure 2: The 5 pillars for green finance[11]

1.2.1 Role of Green Financing in Key Sectors

In Mongolia, most MSMEs operate in the trade (51%) and services sectors (32%), followed by manufacturing (19%) and agriculture (6%)[12]. For the Mongolian manufacturing sector – being the national economy's cornerstone – to embrace sustainability via adopting circular economy principles and practices, including energy efficiency measures and technologies, the green financing toolkit ought to address the challenges lying within the sector, particularly for the leather, textiles, and food production SMEs. These challenges range from outdated technology to inadequate

[11] Green Capital Market Incentives KZ MNG.pdf

[12] Report-Financing-Local-Green-Enterprises-22-Sept-2022.pdf

environmental standards and safeguards, while being dependent on resource-intensive processes and fossil fuels supplement to severe environmental degradation.

As an example, in the context of the Sustainable Development Yak Leather project funded by the SWITCH-Asia programme, green financing can transform the leather industry by enabling leather manufacturing SMEs in Mongolia to reduce the waste produced and complying with the international environmental standards, hence empowering them to enter international and EU markets in specific.

Given the broader objectives of the Mongolian Green Finance Corporation (MGFC) and other Mongolian and international initiatives on green finance to support projects that foster environmental sustainability, relevant projects similar to the SYL project can absorb capital of green financing.

On the other hand, given the high potential for RES development in Mongolia, green financing is critical for scaling up relevant investments in clean energy, especially in solar and wind energy infrastructure. For the shift of Mongolia towards sustainable energy infrastructure, the Green Climate Fund (GCF) along with other international financing institutions, hold a major role in supporting the country's respective efforts to decrease reliance on fossil fuels in their power mix.

Summing up, Mongolia's pursuit of sustainable growth model is intertwined with green financing, as the effective and efficient mobilisation of the Green Finance toolkit across sectors is essential for the country to ensure that the set green development goals and the enhanced competitiveness of its products are achieved.

1.2.2 Leveraging Green Financing for Circular Economy Practices

The Circular Economy Framework

Steering towards a circular economy model, in which economic growth is decoupled from virgin resource use to a system where the value of materials is retained for as long as possible, if not forever, is a major turn point for Mongolia.

Under the concept of circular economy, green financing is essential for enabling the Mongolian SMEs to adopt practices which focus on waste minimization, resource efficiency maximization, and promotion for reuse and recycling of materials, i.e., circular economy practices. This approach is in alignment with the GrDP, SDV 2030, and Vision 2050 sustainable development goals for Mongolia, though it comes in contrast to the business-as-usual linear economy model, in which resources are extracted, used, and then discarded as waste. As priorly said, Mongolia aims to address the country's environmental challenges, derived from the country's dependence on industries like mining, agriculture, and manufacturing. Hence, for the country to achieve this target, transitioning to circular economy business models is imperative, particularly in the leather, textiles and manufacturing sectors, where resource inefficiency and waste generation are concerns of major importance and impact. By incorporating green finance into these sectors, businesses can leverage cutting-edge technologies that decrease the consumption of resources, optimise the management of waste, and allow for materials recycling, reuse and repurpose.

Role of Green Financing in Promoting Circular Practices

In order for Mongolian SMEs to modernise their production processes, via upgrading their technological infrastructure, and thus support the uptake of a circular economy business model, green financing can provide the necessary capital for relevant investments. As mentioned, the Green Finance toolkit includes green bonds, loans, and grants that fund sustainability related projects promoting the development of sustainable products through resource efficiency and reduction of waste.

As an example, in the context of the Sustainable Development Yak Leather project, green financing support circular economy principles within a specific industry (yak leather manufacturing), driving sustainable economic growth and environmental benefits (waste reduction, resource efficiency, reduced pollution).

Green finance assists manufacturers in lowering emissions, recycling by-products, and upgrading energy-efficient systems. Through the use of traceability and process

control systems financed by global green finance programs, Mongolian companies are able to minimise waste and maximise resource utilisation.

Circular economy potential in key sectors of the Mongolian industry

The key sectors with significant potential for circular economy practices in Mongolia are: i) leather and textile industries, ii) agriculture, iii) energy production.

The **leather and textile industries** in Mongolia have long depended on intensive production processes and treatment methods in terms of resources consumption. By embracing the circular economy's principles – such as recycling waste, repurposing by-products, and using sustainable materials – these industries may drastically lessen their environmental impact. Green finance allows SMEs in these industries to form sustainable supply chains, consume less energy, and employ cleaner production methods.

Additionally, adopting circular processes has a considerable potential in the **agriculture** industry, especially in yak raising. Green finance can be used from SMEs willing to adopt resource-efficient agricultural products processing and sustainable farming practices, utterly leading to lower emissions from livestock raising, and enhanced soil health.

Last but not least, as **renewable energy** is an integral part of circular economy, green financing can be utilised for the development of solar and wind energy projects, hence lowering the country's reliance on fossil fuels via the promotion or RES allowing Mongolia to establish an efficient and effective system for sustainable energy.

1.3 Policy & Regulatory Framework Overview

The sustainable development roadmap of Mongolia takes into account the country's geophysical and economic environments and their respective unique characteristics. The former is characterised by a wealth of natural resources, in which the latter introduces significant environmental challenges due to its need for growth via linear business models ("Business-As-Usual" / "BAU"). Mongolia's approach to green financing is formed by the several strategic policies and frameworks that have been adopted to support the country's sustainable development, serving as the foundations for both national and international stakeholders towards Mongolia's sustainability goals. These policies and frameworks also specify the regulatory and financial environment for green investments in the country.

The commitment of Mongolian government to integrate sustainable development principles into its economic and environmental policies, was initiated by the Green Development Policy (GrDP) – adopted in 2014 and supplemented by the respective National Action plan for its implementation (adopted in 2016) –, and the Sustainable Development Vision 2030 (SDV 2030 adopted in 2016), both aiming to decrease the country's environmental impact, while cultivating sustainable business models to drive economic growth.

Mongolia's ambitious Green Development Policy, and commitment to the Sustainable Development Vision 2030, followed by "Mongolia's Long Term Development Policy Vision 2050" (Vision 2050) introduced in 2020 as a response to post-pandemic, translates green financing not only as a need, but also as a crucial element for minimising environmental degradation, enhancing resource efficiency, and encouraging economic growth in the country.

Green financing initiatives are offered by both national and international stakeholders whose impact in the green financing offerings is significant. However, high business regulatory costs and difficulties in accessing affordable credit are hindering business expansion. Local institutions, such as the *Mongolian Green Finance Corporation*

(MGFC) and the *National Green Development Fund* (NGDF) provide financial support for domestic projects supporting the achievement of the sustainability goals set by the Mongolian government. In addition, international donors (funding organisations), such as the *Green Climate Fund* (GCF), the *Global Environment Facility* (GEF), and the *European Bank for Reconstruction and Development* (EBRD), provide funding and technical assistance, in order to ensure that the industrial and agricultural sectors in Mongolia have access to best practices and technologies for achieving the aspired sustainable transition.

Mongolia's regulatory framework for green investments addresses both national environmental priorities and international sustainability standards. This framework is designed to promote transparency, accountability, and effectiveness in financing projects that contribute to the nation's green development goals. It sets the foundation for mobilising public and private capital towards projects that reduce environmental impacts, improve resource efficiency, and promote climate resilience. Mongolia's key green development and climate change related policies, strategies, programmes, environmental standards, and mechanisms are key elements of the regulatory framework that facilitate the integration of sustainable practices into the national financial system[13][14]. Namely[15],

- National Roadmap for Sustainable Financing[16], 2022
- National Program on Air and Environmental Pollution Reduction[17], 2017

[13] Library | Sustainable Banking And Finance Network

[14] Green Capital Market Incentives

[15] Mongolia – Country Progress Report, 2022, Sustainable Banking and Finance Network, International Finance Corporation – World Bank Group

[16] Mongolian Sustainable Finance Roadmap

[17] Air-Pollution-in-Mongolia.pdf

- Mongolian Sustainable Development Vision (2016–30)[18][19][20], 2016
- State Policy on Forestry (2016–30)[21], 2015
- Law on Renewable Energy[22], 2015
- Law on Energy Conservation[23], 2015
- Intended Nationally Determined Contributions (2030)[24][25], 2015
- State Policy on Energy (2015–30)[26], 2015
- National Green Development Policy (2014–30)[27], 2014
- Mongolian Sustainable Finance Principles – Manufacturing Sector Guideline[28], 2014
- Mongolian Sustainable Finance Principles – Mining Sector Guideline[29], 2014
- Mongolian Sustainable Finance Principles – Agriculture Sector Guideline[30], 2014

[18] Mongolia Sustainable Development Vision 2030. | UNEP Law and Environment Assistance Platform

[19] Mapping the SDGs against Mongolia's National Development Plans and Policies | United Nations Development Programme

[20] Sustainable Development Goals | United Nations in Mongolia

[21] State Policy on Forestry (2016-2030). | UNEP Law and Environment Assistance Platform

[22] Law package for energy

[23] Law package for energy

[24] Mongolia submitted increased national climate pledge under Paris Agreement - the updated pledge has the potential to significantly limit climate change impacts- | United Nations Development Programme

[25] First Submission of Mongolia's NDC.pdf

[26] Mongolia State Policy on Energy 2015-2030 – Policies - IEA

[27] Mapping of the Sustainable Development Vision 2030 of Mongolia and the Green Development Policy/ Action Plan against the Global SDG targets

[28] Manufacturing Sector Guideline

[29] Mining Sector Guideline

[30] Agriculture Sector Guideline

- Mongolian Sustainable Finance Principles – Construction and Infrastructure Sector Guideline[31], 2014
- Mongolian Sustainable Finance Principles – Textile Sector Guideline[32], 2014
- National Action Program on Climate Change (2011–21)[33], 2011
- National Livestock Program[34], 2010
- Agricultural Policy of Mongolia (2010–21)[35], 2010
- National Renewable Energy Program (2005–20), 2005
- National REDD+ Readiness Roadmap[36], 2015
- National Sustainable Finance Roadmap of Mongolia[37], 2018
- Green Bond Issuance and Registration Regulation[38], 2021
- Mongolia SDG Finance Taxonomy[39], 2023
- Mongolia Green Taxonomy[40], 2019
- Green Loan Statistics online database[41], 2021

For the maximisation of the previously mentioned key policies, strategies, programmes, environmental standards, and mechanisms, it is essential to better understand the broader context for sustainable development guidelines in Mongolia. More concretely, in 2018, the Mongolian Sustainable Finance Association (MSFA), in partnership with United Nations Environmental Programme (UNEP) Inquiry and

[31] Construction and Infrastructure Sector Guideline

[32] Textile Sector-Specific Green Loan Criteria Guide

[33] National Action Programme on Climate Change (NAPCC) - Climate Change Laws of the World

[34] Nationally Appropriate Mitigation Actions for Grassland and Livestock Management in Mongolia | Asian Development Bank

[35] FAO Country Profiles: Mongolia | Food and Agriculture Organization of the United Nations

[36] Readiness Roadmap – REDD+ Mongolia National Programme

[37] National Sustainable Finance Roadmap of Mongolia

[38] Green Bond Guideline

[39] SDG Finance Taxonomy

[40] Mongolian Green Taxonomy

[41] greenloan2021Q2e.pdf

International Finance Corporation (IFC), launched a National Sustainable Finance Roadmap[42][43] (NFSR), with the objective "*to agree on an integrated, multi-stakeholder, strategic approach towards accelerating the development of a sustainable financial system in the country by 2030 in alignment with the country's sustainable development and climate targets*"[44]. The NSFR is based on 6 pillars supplemented by strategic actions under each pillar to facilitate Mongolia's financial system transition towards sustainability[45].

- Pillar 1: Develop core building blocks to unlock sustainable finance
- Pillar 2: Promote green fiscal spending
- Pillar 3: Stimulate green/SDG/climate finance flows
- Pillar 4: Develop green banks and financial institutions
- Pillar 5: Improve ESG/climate risk management framework
- Pillar 6: Promote disclosure and accountability

The NSFR encourages the adoption of ESG standards, serving as a major tool in fostering an inclusive, transparent, resilient, accountable and green financial system in Mongolia, hence attracting international investors interested in sustainability-focused opportunities.

Summarising, the NSFR promotes green investments as priorities for banks and financial institutions, and encourage them to support climate-resilient projects, while also to develop innovative financial products, such as green loans and green bonds, to fund sustainable development[46].

---

[42] Mongolian Sustainable Finance Roadmap

[43] National Sustainable Finance Roadmap of Mongolia

[44] Mongolian Sustainable Finance Roadmap

[45] Mongolian Sustainable Finance Roadmap

[46] National Sustainable Finance Roadmap of Mongolia: Unlocking Mongolia's Potential to Become a Sustainable Finance Knowledge Centre in the Region

In 2016, the Sustainable Development Vision 2030 was adopted with the purpose to shape a sustainable and inclusive economy through ambitious economic, social, and environmental development targets. The SDV 2030 included specific sustainability objectives on GHG emissions reduction, enhanced energy efficiency, and improved access to clean water and sanitation[47]:

Subsequently, in 2020, the Mongolian government adopted the Vision 2050[48], a long-term policy document replacing the Sustainable Development Vision 2030. Vision 2050[49] outlines nine fundamental goals to which circular models can contribute, such as protecting and reclaiming the environment and ecosystems, increasing productivity through resource-efficient and low-waste advanced technologies and innovative products and services, and encouraging eco-friendly lifestyles[50]. Sub-development goals further include preventing water resource scarcity and contributing to international climate change mitigation efforts.

The goals outlined in the Vision 2050[51] – to be carried out over 3 phases: 2020-2030, 2030-2040, 2040-2050 – form the basis of the Government Action Plan 2020-2025 in relation to social development, including improved quality of life, living environment, and education focused on national identity, organised and prioritised under nine pillars for long-term sustainable development[52]:

1. National Shared Values
2. Human Development
3. Quality of Life and the Middle-Class,
4. Economy

[48] Vision 2050

[49] Vision 2050

[50] МОНГОЛ УЛСЫГ 2021-2025 ОНД ХӨГЖҮҮЛЭХ ТАВАН ЖИЛИЙН ҮНДСЭН ЧИГЛЭЛ

[51] Vision 2050- Green Development

[52] Vision 2050

5. Governance
6. Green Development
7. Peaceful and Secure Society
8. Regional and Local Development
9. Ulaanbaatar and satellite cities

The following activities within Vision 2050 specifically focus on sustainable finance[53]:

- Develop a public-private partnership mechanism to promote green finance
- Introduce ESG responsible operating standards into the financial and other key business sectors
- Promote the development of innovative green finance instruments such as green bonds, green insurance green banks, green stock exchange
- Access affordable, green funding from GCF and other international climate funds and investors

1.4 Mongolia Taxonomy

In 2019, the Financial Stability Council (FSC) approved the "Green Taxonomy" starting from 2020, statistics on green loans in the banking sector have been released and reported to the public. In 2023, the FSC approved a more expanded version of the "Sustainable Development Goal Financing Taxonomy" while the Bank of Mongolia approved the bank's environment, social and governance (ESG) and climate risk assessment and management methods, respectively. Hence, it becomes possible for the Bank of Mongolia to determine what constitutes green business and activities[54].

Mongolia became the second country in the world to approve its National Green Taxonomy in 2019[55]. The Mongolia Green Taxonomy, developed by the Mongolian

[53] Vision-2050 Long-term Development Policy of Mongolia

[54] Lkhagvasuren.B: The Bank of Mongolia is leading the way in establishing a sustainable financial system

[55] Mongolian Green Taxonomy

Sustainable Finance Association, provided a framework of activities for resource conservation and pollution prevention, integrating circular practices such as energy efficiency and waste recycling[56]. It has been substituted by the SDG Taxonomy, a classification system of 142 Sustainable Development Goals (SDG)-aligned economic activities, 15 main sectors and 53 sub-sectors[5758].

The specific objectives of the SDG Taxonomy are to[59606162]:

- Provide financial institutions, businesses, policy makers, and other market players with a common understanding and approach to identify SDG investment opportunity areas
- Support investors' confidence to finance SDG projects and mitigate the risk of "green/social washing", and prevent the misuse of SDG labelling
- Level the playing field in the financial sector through a homogenous assessment of SDG projects and clients
- Increase business opportunities and boost SDG finance flows from various sources including the private sector, international financial institutions, and foreign investors
- Enable the monitoring and reporting of SDG financing flows and the respective impacts, boost the quality of sustainability data, and estimate the contribution of the private sector to Mongolia's sustainable development related policies and targets

---

56 1270_Mongolia_Green_Taxonomy_2019_MSFA.pdf

57 Mongolia SDG Finance Taxonomy

58 SDG Finance Taxonomy

59 SDG Finance Taxonomy

60 Mongolia SDG Finance Taxonomy

61 1270_Mongolia_Green_Taxonomy_2019_MSFA.pdf

62 Lkhagvasuren.B: The Bank of Mongolia is leading the way in establishing a sustainable financial system

- Identify areas of underinvestment and inform and shape national policies and regulations on SDG finance
- Foster coherence and alignment with national and international standards

1.5 Green Development Policy (GrDP) of Mongolia - Synopsis

The GrDP put in first place the Mongolia's national objectives on improved resource efficiency, reduced environmental degradation, and green growth promotion. The GrDP acted as the all-encompassing policy that mainstreams the Nationally Determined Contribution (NDC)[63][64] and Sustainable Development Goals (SDGs) into its national policy. In more detail, the development of a low-carbon economy was prioritised, with targets for greenhouse gas emissions (GHG) reduction, increased energy usage from RES, and improved management systems for water and waste. The SDV 2030 and the Vision 2050 serve as complementary policies to these efforts via establishing strategic long-term goals for poverty reduction, social equity, and environmental sustainability, aligned to global commitments under the Paris Agreement in 2015 and the United Nations Sustainable Development Goals.

Mongolia's GHG mitigation policy is primarily directed towards focusing on the efficient use of the electricity and heat produced from coal burning by energy efficient appliances and equipment and reducing heat losses in buildings. In addition, the use

[63] National Sustainable Finance Roadmap of Mongolia: Unlocking Mongolia's Potential to Become a Sustainable Finance Knowledge Centre in the Region, 1.4 "Key Sustainability Policies and Frameworks", page 13, "Mongolia's Nationally Determined Contribution (NDC) has its conceptual roots in the Green Development Policy of Mongolia and outlines a series of policies and measures that the country commits to implement up to 2030, in the energy, industry, agriculture, and waste sectors. The expected mitigation impact of these policies and measures will be a 14% reduction in total national GHG emissions, excluding land use, land use change, and forestry (LULUCF), by 2030, compared to the projected emissions under a business-as-usual scenario", 2018

[64] NDC promise GHG reductions of 22.7% of 16.89 million tons of CO2 by 2030., 2019 GoM Resolution no.407 on "Approving goals"

of renewable energy sources for electricity and for heat supply is also a relevant GHG reduction strategy for the country.

Chapter 2. Green Financing Initiatives in Mongolia

The Mongolian Green Finance environment has been shaped by domestic financial initiatives – supported by international organisations and funds – dedicated to directing and mobilising funding into projects that promote sustainability, e.g., projects on energy efficiency, climate resilience (climate mitigation and climate adaptation), and environmental sustainability, showcasing that green finance is a key component of Mongolia's sustainable growth plan.

2.1 Mongolian Green Finance Corporation (MGFC)

MGFC[65] is a national financing vehicle formed in 2018 with the mission to promote green, clean, resource-efficient and socially inclusive projects, specifically designed to serve as a tool to address the challenges and constraints of climate change mitigation efforts. The MGFC initiative, planned to commence full operations in 2024 – upon successful approval of the 50 million USD funding from the GCF, the Mongolian government and the private sector –, is a collaboration among the Mongolian banking sector, the Mongolian government (represented by the Ministry of Finance and the Ministry of Environment and Climate Change (MECC)[66]), and international partners including the Green Climate Fund (GCF) and the Global Green Growth Institute (GGGI)[67].

Designed to support the low carbon economy transition of Mongolia, the MGFC's mandate is:

- To finance projects that reduce environmental impact, improve energy efficiency, and support RES deployment

[65] Mongolia Green Finance Corporation

[66] Former Ministry of Environment and Tourism (MET)

[67] Төслүүд | Монголын Тогтвортой Санхүүжилтийн Холбоо

- To facilitate investment from the private sector through minimising the risk of environmentally beneficial projects by concessional loans and relevant financing products
- To enable Mongolia financial institutions access to global funds dedicated to sustainable development by fostering partnerships with international financial institutions and donors (e.g., GCF[68], GEF[69])

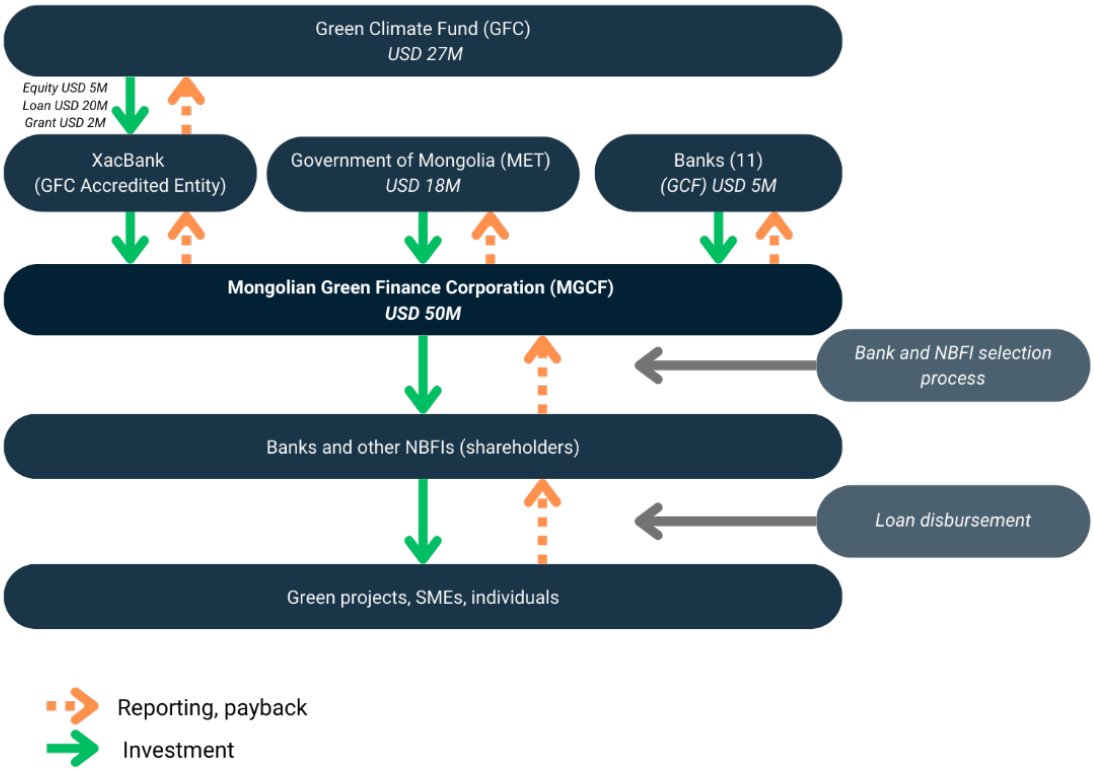


Figure 3: MGFC funding line to green projects, SMEs, individuals[70]

The MGFC targets the mainstreaming of green, affordable and gender-inclusive financing for households and businesses to shift towards low-carbon technologies, and to create an enhanced policy environment and build the capacity and awareness

[68] https://www.greenclimate.fund/

[69] Home | GEF

[70] Bold Magvan, MGFC - Mongolia Green Finance Corporation | PPT

of stakeholders in support of this mission[71][72]. The MGFC financial tools include green loan funds with wholesale and concessional terms to qualified domestic financial institutions. In the context of the previously mentioned green funds, banks and financial institutions, as well as finance energy-efficient technology, the MGFC key areas of focus are:

- Renewable energy (mainly solar and wind energy projects)
- Energy efficiency (e.g., upgrading industrial machinery, improved insulation in buildings, energy saving technologies in manufacturing infrastructure)
- Circular economy (e.g., recycling of industrial waste, waste-to-energy projects, initiatives for reducing environmental impact from manufacturing processes)
- Water management (e.g., improved water use efficiency in water intensive manufacturing processes, reduce water waste, wastewater recycling).

[71] Bold Magvan, MGFC - Mongolia Green Finance Corporation | PPT

[72] Mongolia Green Finance Corporation

2.2 Mongolian Sustainable Finance Association (MSFA)

The Mongolian Sustainable Finance Association (MSFA, a.k.a ToC Association) was formed with the vision of becoming a sustainable finance knowledge and leadership centre in the region as a member-serving NGO. The MSFA closely collaborates with various stakeholders to create cross-sector linkages and cohesive action to promote the role of finance in sustainability, climate change resilience and ecological preservation. As presented in the MSFA strategy[73] (Fig.4), the MSFA works closely with its members and partners to design integrated and transformative policies, business approaches, and multi-sector initiatives that create positive change in line with the Sustainable Development Goals (SDGs), the Paris Agreement, as well as Mongolia's SDV 2030, Nationally Determined Contributions (NDC)[74], and GrDP. The MSFA provides guidance on integrating environmental, social, and governance (ESG) considerations into financial decision-making. The association's primary function is to advocate for the adoption of

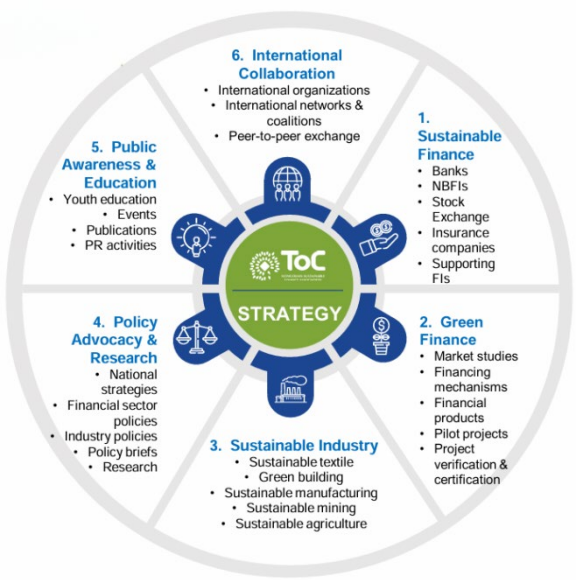


Figure 4: MSFA Strategy elements, Source: Mongolia's Sustainable Finance Journey & SDG Taxonomy

[73] Mongolia's Sustainable Finance Journey & SDG Taxonomy

[74] National Sustainable Finance Roadmap of Mongolia: Unlocking Mongolia's Potential to Become a Sustainable Finance Knowledge Centre in the Region, 1.4 "Key Sustainability Policies and Frameworks", page 13, "Mongolia's Nationally Determined Contribution (NDC) has its conceptual roots in the Green Development Policy of Mongolia and outlines a series of policies and measures that the country commits to implement up to 2030, in the energy, industry, agriculture, and waste sectors. The expected mitigation impact of these policies and measures will be a 14% reduction in total national GHG emissions, excluding land use, land use change, and forestry (LULUCF), by 2030, compared to the projected emissions under a business-as-usual scenario", 2018

sustainable finance practices across Mongolian financial institutions, ensuring that banks and other lenders incorporate sustainability criteria into their lending portfolios.

The MSFA provides guidance on integrating ESG considerations into financial decision-making. The association's primary function is to advocate for the adoption of sustainable finance practices across Mongolian financial institutions, ensuring that banks and other lenders incorporate sustainability criteria into their lending portfolios.

The efforts of the MSFA are focused on the “greening” of the financing system through the promotion of sustainability and green growth to its member financial institutions and businesses.

MSFA consists of commercial banks, mortgage corporations, non-bank financial institutions (NBFIs), asset management companies, insurance companies, research and training institutions, while its main activities include:

- Sustainable Finance: Aiming to improve member organisations’ ESG implementation, climate financing, reporting and disclosures, initiate and implement projects, trains, meetings and events.
- Sustainable Business: Aiming to strengthen cooperation and common reporting methods for measuring business activities and impacts consistent with sustainable development.
- Policy support & Research: Aiming to introduce sustainable finance standards, guidelines and policies, support its implementation.
- Public awareness & Education: Aiming to increase public awareness and understanding on sustainable finance and green business.

The MSFA role in advancing the principles outlined in the NSFR has been critical, working closely with local banks to ensure they have the capacity and knowledge to assess the environmental risks of projects and finance green initiatives. By facilitating workshops, training programs, and policy discussions, the MSFA helps the Mongolian financial institutions to build the expertise needed for effective green finance implementation. In addition, the MSFA has a catalytic role in developing Mongolia’s

Sustainable Finance Principles[75] (Fig.5), which provide a framework for local banks to adhere to, when financing projects with environmental and social impacts. These principles guide financial institutions on how to manage ESG risks, develop green financial products, and increase transparency in financial disclosures related to sustainability.

Non-banking financial sector related initiatives from MSFA

For Mongolia to achieve its ambition of becoming a regional sustainable finance champion, a large financial sector reform needs to take place beyond banks to include non-bank financial institutions, such as insurance companies and other institutional investors.

Alongside the development of sustainable finance, key stakeholders involved in the financial system have acknowledged the importance of creating a level playing field and of coordinating individual sector policies in a more integrated and strategic way. To address this need, one of the priorities of MSFA is to design a sustainable finance framework for non-bank financial institutions (NBFIs) building on the MSF Principles for banks. Several NBFIs, insurance companies, and asset management companies have already joined MSFA and are currently working on the development of sustainable finance frameworks and tools tailored to the operations and needs of these sub-sectors.

[75] See "Sustainable Development and Green Financing in Mongolia" section of "Guide on Mongolian and International Green Financing Opportunities and Initiatives"

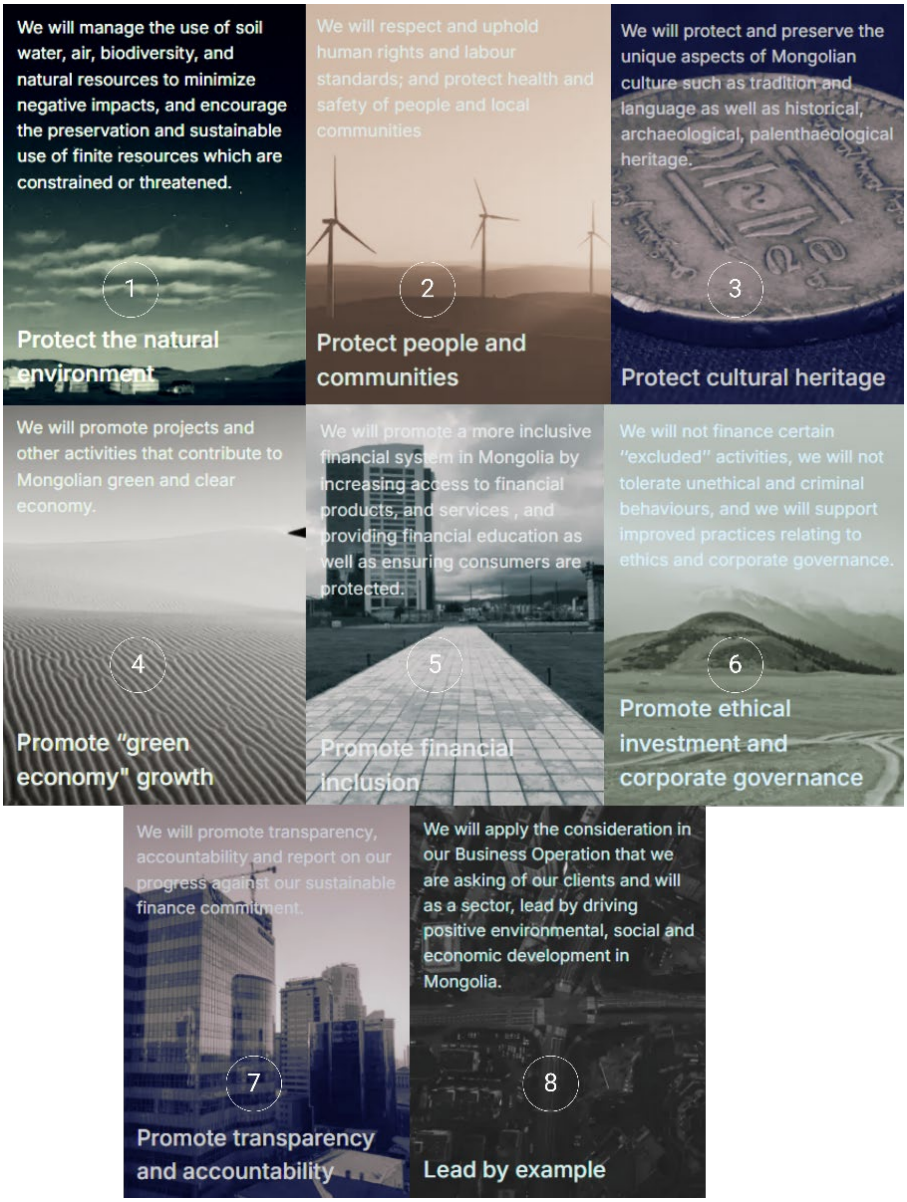


Figure 5: Mongolia Sustainable Finance principles[76]

A number of reports and guidelines serving as an insightful toolkit for sustainable financing have been developed by the Mongolian Sustainable Finance Association.

- Green Finance Mapping Report for Mongolia, 2022

[76] Бидний тухай | Монголын Тогтвортой Санхүүжилтийн Холбоо

- Integration of Gender Responsible Financing Practices in the Mongolian Financial Sector, 2022
- ESG Disclosure & Sustainability Reporting Guidance, 2022
- Mongolian Sustainable Finance Roadmap, 2022
- Mongolian Sustainable Finance 8 Principles Guideline (Mongolian Bankers Association, MBA), 2014
- Mongolian Green Taxonomy, 2019
- Mongolian Sustainable Finance Principles - Manufacturing Sector Guideline, 2022
- Gender mainstreaming in the Mongolian financial sector and guidelines for developing feminized financial products, 2022
- Mongolia Green Bond Guidelines, 2021
- Green Capital Market Incentives, 2022
- SDG Finance Taxonomy, 2023
- Building energy efficiency rating criteria, training concept for banking sector, 2020
- Sustainable Finance Book (in Mongolian), 2019
- Mongolia's National REDD+ Readiness Roadmap, 2014

2.3 Mongolian Sustainable Energy Financing Facility (MonSEFF) – Green Economy Funding Facility (GEFF)

The Mongolian Sustainable Energy Financing Facility[77], a specialised financing programme for green development in Mongolia, was a credit line developed by the EBRD, operating from 2014-2019, to enable the Partner Banks in Mongolia to finance businesses in the industrial and commercial sectors of Mongolia seeking to promote

[77] Mongolian Sustainable Energy Facility

energy efficiency and RES projects[78][79]. The MonSEFF provided long-term loans and technical assistance for energy consumption reduction and carbon emission reduction[80]. It operated in partnership with Mongolian banks (e.g., XacBank and Khan Bank) as intermediaries for funding companies to upgrade their equipment with energy-efficient technologies and installations for renewable energy[81][82]. Hence, besides contributing to the national climate goals, the companies lower their operational costs. The technical support offered by MonSEFF included feasibility studies, energy assessment, and advisory services on energy efficiency. MonSEFF had a total budget of USD 25 million and helped almost 40 Mongolian businesses to reduce their energy consumption through targeted investments in new equipment and energy efficiency measures. Combined, the projects generated 255,047 MWh in annual energy savings and reduced carbon emissions by 94,044 ton eq. CO_2/y[83].

Building upon the successes of the MonSEFF, Mongolia Green Economy Funding Facility[84] (GEFF), supported by the Green Climate Fund (GCF) and the Japan-EBRD Cooperation Fund, offers finance and technical advice for households and private sector businesses to improve their competitiveness, through high performance technologies and best practices[85]. The GEFF goes one step further and supports Mongolia's green economy transition with 137 million US$ of financing for energy efficiency and small-scale RES investments.

Through GEFF, the national financial institutions have access to EBRD's credit line to finance green investments, complemented by technical support addressed to the

[78] EBRD's Sustainable Energy Initiative: Sustainable Energy Financing Facilities (SEFFs)

[79] Commercial – GEFF

[80] Mongolia goes circular the stepping stones

[81] RSF – Khan Bank Full Recourse Line

[82] MonSEFF:Khan Bank Sustainable Energy Loan

[83] The Facility – GEFF Mongolia

[84] Mongolia – GEFF

[85] EBRD and GCF support green lending in Mongolia - XacBank

institutions themselves and to their clients for enhancing their market practices[86]. This helps the GEFF in Mongolia to demonstrate the benefits of the green economy investments and their transformation into sound investments. Households and SMEs can request from the banks participating in the facility:

- Technical support to develop of a green investment project
- Finance (loans or leases) to implement it

Technical support is provided by a local GEFF team (EBRD bankers and technical programme managers) for the different stages of a project (i.e., origination, investment evaluation, implementation), a method ensuring that the most suitable solutions are identified, and quality green economy projects are funded[87]. Another important aspect of the GEFF is that partnering with donors is central to promoting the green economy in Mongolia, since they provide critical support to climate change mitigation and adaptation projects, as well as to projects addressing other environmental threats[88].

MonSEFF was supported by a technical cooperation programme for business and product development, as well as supported the origination and assessment of eligible investments. This included support to develop a project pipeline, product guidelines and also supported the PFI's associated marketing campaign(s) and staff training module(s)[89].

MonSEFF generated transition impact by demonstrating the benefits of energy conservation and promoting the early adoption of sustainable energy financing. MonSEFF demonstrated the effects of rational energy utilisation for improving industrial competitiveness as energy costs rise in Mongolia. It introduced a new energy efficiency financing product to the market to support investment in the

[86] GEFF, Khan Bank and suppliers of green technologies ally for a more sustainable Mongolia – GEFF Mongolia

[87] EBRD's Sustainable Energy Initiative: Sustainable Energy Financing Facilities (SEFFs)

[88] The Facility – GEFF Mongolia

[89] Mongolian Sustainable Energy Facility

industrial and commercial sectors. Moreover, it transferred and built expertise related to sustainable energy investments among financial institutions and sub-borrowers. The PFIs built expertise in assessing the risk of energy efficiency investments and enhanced their capability in identifying clients and projects with energy savings potential. Sub-borrowers were able to recognise the technical and financial benefits of Sustainable Energy Investments to improve their operations. MonSEFF was available to Participating Financial Institutions ("PFIs") in Mongolia, the first of which was an existing client of the EBRD, XacBank[90].

EBRD financed this initiative with a USD 25 million credit line, to be used for on-lending to private sector companies and SMEs for sustainable energy investments, such as stand-alone small scale renewable energy projects, industrial renewable energy, commercial energy efficiency investments and building sector energy efficiency. Overall, the facility's investments in projects have contributed to saving more than 255,000 MWh of energy and more than 94,000 tons of CO2 emissions per year. In total US$21 million worth of loans were provided by 2 partner financial institutions: XacBank and Khan bank[91].

Advisory services from experts were made available to borrowers and partner financial institutions and included energy assessments, training and marketing support. The advisory services, funded by the Shareholder Special Fund, aimed to support borrowers in selecting the best solutions and implementing their projects[92] .

[90] Mongolian Sustainable Energy Facility

[91] Commercial – GEFF

[92] Commercial – GEFF

The portfolio of green loans under GEFF Mongolia issued to sub-borrowers through the project's partner financial institutions, Khan Bank and XacBank, reached USD 23.2 million by the end of 2023. Cumulative energy to be saved annually from investment in GEFF-funded green technologies reached almost 300 thousand GJ annually which corresponds to almost 26 thousand tons of avoided emissions of greenhouse gases per year.

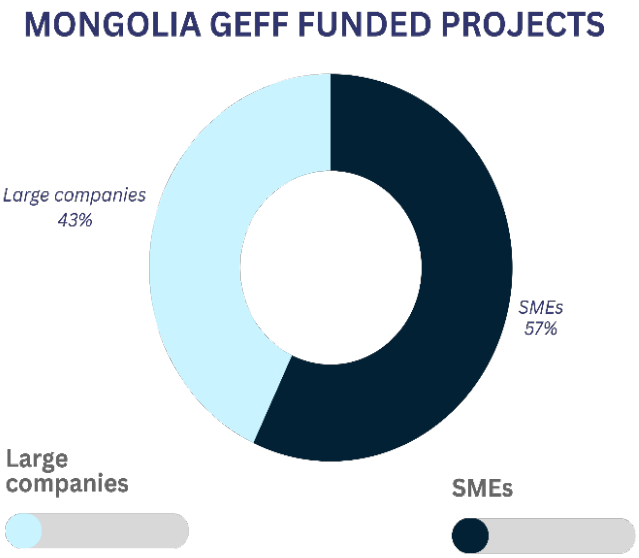


Figure 6: GEFF funded projects in Mongolia, Source: GEFF Mongolia green loans portfolio reached USD 23 million in 2023 – GEFF Mongolia

Green loans under GEFF Mongolia are available to both companies and individuals, to help them in acquiring green technologies.

The financed projects are spread between various sectors – from the construction of green residential and commercial buildings to manufacturing, including the replacement of outdated production equipment with new energy efficient technologies and agriculture.

GEFF Mongolia also provides loans to producers and vendors of green technologies: construction materials, LED lighting, white appliances, electric vehicles, and many more.

The mix of the projects in the portfolio is well-balanced: 57% of projects belong to SMEs vs large companies (Fig.6) and 40% of projects belong to women-led businesses as of the end of 2023[93] (Fig.7).

[93] GEFF Mongolia green loans portfolio reached USD 23 million in 2023 – GEFF Mongolia

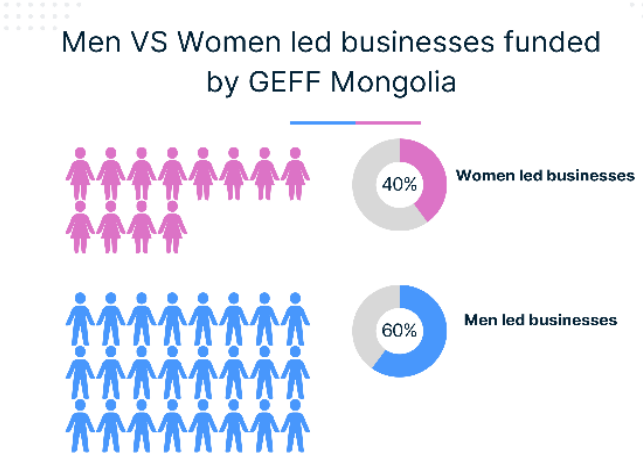


Figure 7: Share of Men and Women led businesses received GEFF funding in Mongolia, 2023, GEFF Mongolia green loans portfolio reached USD 23 million in 2023 – GEFF Mongolia

GEFF Mongolia actively uses EBRD's *Green Technology Selector*[94] (GTS) to streamline the financing of standard investment projects. Green Technology Selector is a web-based online list of pre-approved technologies that can be financed by partner banks without further

By the end of 2023, a total of 755 pre-approved green technologies from 132 local vendors were available on the GTS for Mongolia. To ensure gender parity and inclusion, in 2023 GEFF Mongolia developed and delivered Mongolia-specific gender materials and trainings for its partner banks. A set of recommendations from GEFF Mongolia is meant to aid financial institutions in enabling equal access for men and women to finance investments in green technologies[95]. Overall, USD 137 million of EBRD funding is available to the current and potential partner financial institutions under GEFF Mongolia for on-lending Mongolian businesses and individuals willing to invest in green technologies[96].

2.4 Financial Regulatory Commission

The Financial Regulatory Commission (FRC) supports the advancement of the sustainability agenda in micro finance and capital markets, pushing forward the

[94] Green Technology Selector – SME Green Value Chain

[95] GEFF, Khan Bank and suppliers of green technologies ally for a more sustainable Mongolia – GEFF Mongolia

[96] GEFF, Khan Bank and suppliers of green technologies ally for a more sustainable Mongolia – GEFF Mongolia

activities identified in the National Sustainable Finance Roadmap and Financial Market Development Programme 2025[97]. FRC plays an active role in the Alliance for Financial Inclusion[98] (AFI) and is also supporting the development of a green bond market in Mongolia ("*Green Finance and Bond Market Development Project*") in alignment with ICMA's Green Bond Principles[99][100], and the design and implementation of the Mongolia Sustainable Stock Exchange Initiative. This includes the development of ESG listing rules, reporting guidelines and templates, as well as capacity development activities for the stock exchange, relevant financial regulators, listed companies, and other key stakeholders[101] (*"Introduction of ESG listing rules and reporting guidelines for the Mongolian Stock Exchange"*).

[97] Mongolia launches guidelines on corporate sustainability reporting | Green Finance Platform

[98] Homepage - Alliance for Financial Inclusion

[99] Green Bond Principles » ICMA

[100] Green-Project-Mapping-June-2021-100621.pdf

[101] ESG reporting ENG.pdf

Chapter 3. Green Banking Initiatives in Mongolia

3.1 Banking sector initiatives

With the support of IFC and FMO, MSFI introduced the Mongolian Sustainable Finance Principles and Sector Guidelines[102], a set of industry-wide, voluntary principles that guide investment in the banking sector. All Mongolian banks started implementing Environmental and Social Management Systems (ESMS) starting from 2015. The ESMS required E&S due diligence on business loans above the threshold of USD25,000, with additional industry specific E&S requirements for mining, agriculture, construction, manufacturing, and textile sector projects. Banks report to MSFA on their implementation of ESMS biannually, and as of 2018, 47 loan proposals were rejected specifically due to E&S risks. Following the approval of the Green Taxonomy, the BoM has started collecting green loan statistics from banks.

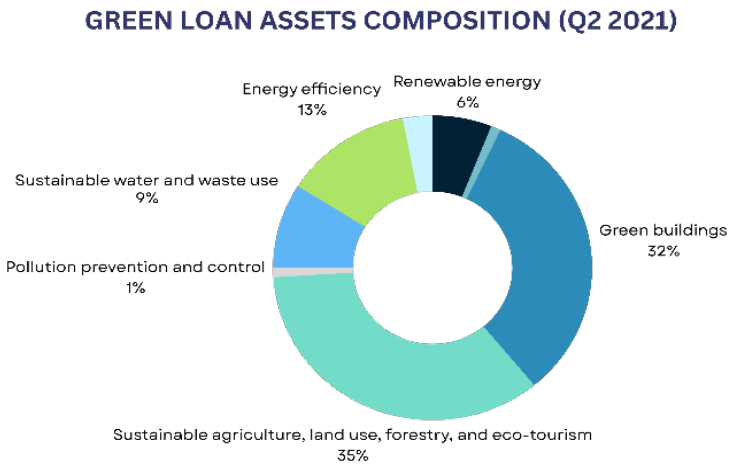


Figure 8: Green loan distribution in Mongolia (Q2 2021), Green Capital Market Incentives KZ MNG.pdf

To summarise the green loan status of the Mongolian banking sector in Q2 2021[103][104] (Fig. 8), according to the Central Bank of Mongolia's statistics using the Green Taxonomy, the green loan balance is estimated to be around USD 140.3m, with 967 green loans issued in the eight categories

[102] 1330_Mongolia_Sustainable_Finance_Principle_Guidelines_2014_MBA.pdf

[103] Green Capital Market Incentives KZ MNG.pdf

[104] greenloan2021Q2e.pdf

of the Taxonomy, representing 2.27% of the total loan portfolio of the sector. The highest number of green loans are issued for the sustainable agriculture, land use, forestry and eco-tourism (35%) category, followed by the green building category (32%).

According to green loan status of the Mongolian banking sector in Q2 2022[105], based on the Bank of Mongolia's statistics using the Green Taxonomy, the highest number of green loans are issued for the sustainable agriculture, land use, forestry and eco-tourism category, followed by the green building category.

In addition to ESMS, banks are encouraged to catalyse business opportunities, and some have developed business strategies that are consistent with the Mongolian Government's sustainable development and green economy targets. In this regard, many new green and low-carbon project financing has been undertaken with the support of MDBs such as EBRD, ADB, and IFC.

Development Bank of Mongolia (DBM)

Operating since 2011, the Development Bank of Mongolia (DBM) is a key financial institution, established to promote long-term economic development in Mongolia. It focuses on financing large scale projects and programmes of Mongolia's strategic economic sectors, including projects on sustainable energy infrastructure, water resource management, and waste management, hence ensuring sustainable development in the national level[106]. The DBM also provides funding for the development of industrial projects dedicated to import substitution and export promotion[107]. It is worth mentioning that as a state-owned legal entity, the DBM

[105] LOAN PORTFOLIO HELD BY BANKS 2022Q2

[106] Development Bank of Mongolia | Development Bank of Mongolia

[107] Development Bank of Mongolia | Development Bank of Mongolia

mandate is to facilitate the national environmental sustainability policy goals through financing relevant projects[108].

The DBM's main role is to finance projects and programs of strategically important sectors that ensure national sustainable economic growth, and to raise financings required for the development of import substituting and export promoting industrial projects. The Bank follows below principles of good corporate governance in its activities[109]:

- ✓ profitability
- ✓ sustainability of operations
- ✓ independence and transparency
- ✓ responsibility and collective management
- ✓ independent and external supervision

As a state-owned policy bank, the Development Bank of Mongolia is committed to managing and mitigating environmental and social risks. By focusing on sustainable finance initiatives, the bank aims to create positive outcomes and contribute to the implementation of a comprehensive approach to sustainable financing.

This aligns with the following national commitments to sustainable development in Mongolia and the responsibilities of development finance institutions:

- *Vision 2050*: Mongolia's long-term development policy approved by the Parliament in its 52nd resolution in 2020
- *New Recovery Policy (NRP)*: A medium-term targeted program to be implemented over the next ten years aimed at improving economic growth, infrastructure, and government efficiency
- *Nationally Determined Contribution*: Approved by the government in its 407th resolution in 2019 for implementing the Paris Agreement

[108] Development Bank of Mongolia | Development Bank of Mongolia

[109] Development Bank of Mongolia | Development Bank of Mongolia

- *National Roadmap for Sustainable Finance*: A program developed by the Financial Stability Council in 2022 for the development of the financial sector until 2030
- *8 Principles of Sustainable Finance*: Defined by the Mongolian Sustainable Finance Association

Furthermore, in accordance with the Law on the Development Bank of Mongolia and its lending policy, the bank prioritizes financing projects and programs that align with Mongolia's Sustainable Development Vision and medium-term development strategies. The bank also maintains a strong commitment to funding those projects that have undergone comprehensive environmental and social impact assessments[110].

As part of its sustainable development strategy, the bank is committed to[111]:

- Increasing its green loan portfolio
- Attracting greater levels of foreign sustainable and green investment funding
- Strengthening the knowledge and awareness of sustainable finance among employees and clients

The DBM developed a Sustainability Financing Framework in which the criteria and selection processes for green and social projects and programmes are being evaluated for funding[112] (Fig.9).

[110] Development Bank of Mongolia | Development Bank of Mongolia

[111] Development Bank of Mongolia | Development Bank of Mongolia

[112] Development Bank of Mongolia | Development Bank of Mongolia

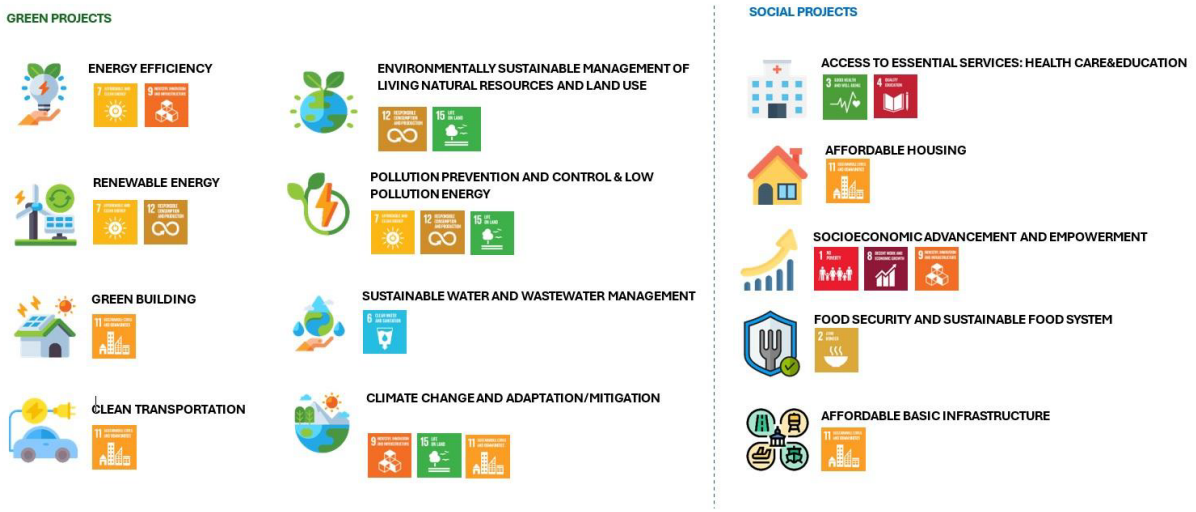


Figure 9: Categories of projects and programmes eligible for financing under the DBM sustainable financing framework.[113]

Golomt Bank

On September 22, 2019, Golomt Bank became one of the Founding Signatories of the Principles for Responsible Banking, committing to align strategically its business with the Sustainable Development Goals and the Paris Agreement on Climate Change[114]. Golomt Bank, by signing the Principles for Responsible Banking, joined a coalition of 130 banks worldwide, representing over USD 47 trillion in assets, in committing to taking on a crucial role in helping to achieve a sustainable future. Golomt Bank is committed to advancing global and national sustainable development goals through responsible business practices. The bank provides financing for environmentally and socially sustainable initiatives, actively supporting its clients and the broader community via its 101 branches[115] in their transition to more sustainable practices. The bank's Sustainable Development Committee was established in 2022, with its responsibilities including oversight and management of the Bank's sustainable financing and development strategy implementation. Golomt Bank, in 2015,

[113] Development Bank of Mongolia | Development Bank of Mongolia

[114] Sustainable Finance

[115] Banking sector Review, 2021, MBA

introduced Sustainable Financing Policy and environmental and social risk assessment procedures into its lending activities and in 2019 the principles were revised regarding environmental and social risk management and mitigation of environmental and social impacts in its "Credit Policy". As a result, business loans that meet the following minimum features are required to have environmental and social (E&S) risk assessment. These include[116]:

- All loan applications included in the "Caution list" in the Sustainable Finance Principles of Mongolia
- Business loan applications of high-risk sectors of E&S as outlined in the Mongolian Sustainable Finance Principles (*mining, energy, construction, agriculture, manufacturing /heavy manufacturing/, and chemicals and explosives /for use, sale and processing/ and fuel /storage, trade, production and transportation*)
- Other business loan requests more than MNT 100 million or equivalent

Golomt Bank has developed a document-based assessment methodology in its updated E&S Risk Assessment, reflecting the International Finance Corporation (IFC) E&S risk management standard and Mongolian legislations and norms concerning the customer's economic sector. The Assessment is carried out in 3 stages: initial, general and detailed. In doing so, the bank is well-placed to manage the E&S risk for both the Bank and the customer by dividing the risk into five categories, ranging from low risk to high risk, depending on how the customer's activities impact the environment and society. From September 2018 to June 2019, Golomt Bank successfully implemented a green finance capacity building program in cooperation with IFC. Under this program, Golomt Bank's employees received training on green business opportunities identification, green project technical assessment and risk analysis, and energy efficiency calculations to increase their knowledge of green finance. In addition, Golomt Bank highlights the sectors in high demand for green

[116] Sustainable Finance

finance as reflected in Mongolia's “Nationally Determined Contribution” and aims to support customers in the energy saving, green building, and sustainable cashmere textile sectors[117]. Golomt Bank extended Environmental Protection Loans to its clients among commercial banks implementing Phase 2 of TSL Project Loan Programme supported by the Japanese International Cooperation Agency (JICA) in cooperation with the Ministry of Finance[118]. Through its two phases and revolving fund operation between 2006 – 2024, the TSL Project financed a thousand sub-loan projects that resulted in advancement of several sectors, creation of job opportunities as well as import substitution and export promotion[119][120].

The green financial products offered by Golomt bank are:

- Green consumer loan[121] (for customers going to buy green products, e.g., electronics, furniture, bicycles, electric scooters, etc)
- Sustainable and green business loan[122] (enabling borrowers to use the proceeds to exclusively fund projects that make a substantial contribution to an environmental objective)
- Interest Split Sustainable & Green Business Loan[123] (enabling borrowers to use the proceeds to exclusively fund projects that make a substantial contribution to an environmental objective)
- Green house loan[124] (loan service specifically for green building)

[117] Sustainable Finance

[118] 2014-mongolia-green-economy-eg-full-nov16-web.pdf

[119] Environmental Financing in Mongolia | PPT

[120] TSLReport_english_3.pdf

[121] Green consumer loan

[122] Sustainable & Green business loans

[123] Interest Split Sustainable & Green Business Loan

[124] Green house loan

- Eco car loan[125] (loan product for customers going to buy a car for personal use)

XacBank

Since its founding in 2001, XacBank has created sustainable growth in the banking and financial sector of Mongolia, continuously expanding operations, and has become one of the largest systemic banks[126]. XacBank's vision is to become a preferred bank for a wide range of customers in the financial market providing financial solutions in the most convenient way being dedicated to its values of People, Planet and Prosperity and continuing to set high standards in corporate governance and social responsibility.

"XacBank recognizes the crucial role it has in slowing climate change, an epidemic that is already having effects on Mongolia in terms of more extreme weather conditions, desertification, and the most polluted capital city in the world: Ulaanbaatar. XacBank has the power to contribute to the fight against climate change by crowding capital into the sustainable energy market."[127]

The bank offers a dual-sided support for the sustainable energy market:

DEMAND

Encourage the consumption of products that reduce GHG emissions, save energy, or utilize renewable energy solutions through accessible financing.

SUPPLY

Support the companies producing, selling or adopting solutions that reduce GHG emissions, save energy, or utilize renewable energy solutions by providing concessional loans.

XacBank offers the financial product "*SME Business Loan for GHG Emission Reduction*" [128]to businesses that produces, trades, or installs products reducing GHG

[125] Eco car loan

[126] Banking sector Review, 2021, MBA

[127] Eco Banking - XacBank

[128] SME Business Loan for GHG Emission Reduction - XacBank

emissions by at least 20% and to end users of products that reduce GHG emissions by at least 15%.

Promoting women entrepreneurship, XacBank offers to women-led MSMEs (micro, small and medium size enterprises) lower interest rate if they meet one of the following conditions:

- At least 40% of the total employees are women
- At least 51% of company owned by women
- At least 30% of senior managers are women

The XacBank works with international financing organisations, such as the Green Climate Fund (GCF), through which it has accessed funding to support green energy projects across Mongolia.

The following graph presents the project types eligible to be granted a loan by XacBank follows[129] (Fig.10):

[129] SME Business Loan for GHG Emission Reduction - XacBank

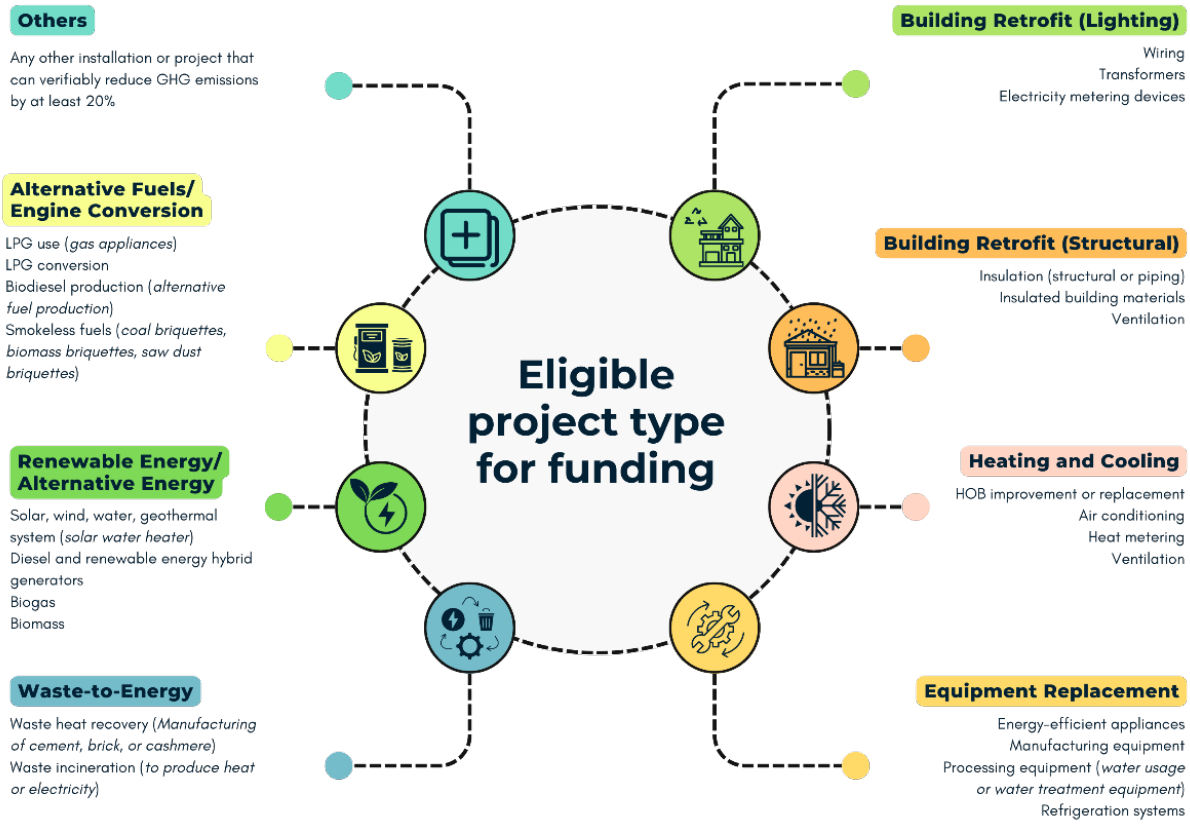


Figure 10: Eligible project types for being granted a loan by XacBank[130]

Khan bank

Khan Bank offers green products to SMEs and individuals to support renewable energy (e.g., funds green projects through business loans, empower women entrepreneurship through specialised loans, and also provides loan products to support the green economy[131]). Green bonds have been raised by Khan Bank aiming to finance renewable energy projects in various sectors, including manufacturing, such as solar installations in SMEs seeking to adopt green energy technologies, hence improving their energy efficiency and reducing their carbon footprint. Khan Bank is one of the leading banks and a major provider of financial services, both retail and SME business lending, in urban and rural areas of Mongolia. With its 500+

[130] SME Business Loan for GHG Emission Reduction - XacBank

[131] Green project business loan

branches, 88% of which are in rural areas, Khan Bank offers deposit and loan products to a large share of Mongolian households[132]. The bank finances corporate, small and medium businesses, mortgages, consumers and individuals.

Khan Bank has also partnered with the Mongolian Sustainable Energy Financing Facility (MonSEFF) to offer tailored financial products that help businesses reduce their energy consumption. The bank's involvement in MonSEFF, which is backed by international institutions such as the EBRD, allows it to offer favourable loan terms to companies looking to adopt energy-efficient technologies. EBRD provided financing lines so that Khan Bank can finance local private companies. Loans can be used for working capital financing as well as for investment projects and export and pre-export financing of industrial enterprises manufacturing.

Transcapital

TransCapital is one of the largest NBFI established in 2001 in Mongolia, focused on providing financial services to individuals and MSEs through its 11 branches. An EBRD loan of USD 2 million equivalent is the second loan provided by EBRD to TransCapital which is provided in the local currency, Mongolian tugrug, and will support micro and small businesses in Mongolia[133].

3.2 Categories of Green Financing

3.2.1 Grants

Project proposals that are likely to achieve significant positive social and environmental effects, though not immediate financial gains, are offered funding in the form of grants by international organisations and development agencies. Grants are non-repayable funding, usually offered to high-impact initiatives that aspire to

[132] Banking sector Review, 2021, MBA

[133] EBRD, - "Loan financing for Micro, Small and Medium-sized Enterprises"

substantially contribute to Mongolia's sustainability transition and its climate resilience objectives.

Main providers

- Green Climate Fund
- Global Environment Facility
- SWITCH-Asia Programme (EU)

Application

- RE installations
- Climate resilience
- Sustainable production and consumption
- Pollution reduction (e.g., sustainable waste management, sustainable water treatment)

3.2.2 Concessional loans

A concessional loan (or “soft loan”) serves as a tool of concessional finance, which comes with no or low (below-market rate) interest[134], as well as lenient terms in comparison with traditional loans (e.g., longer payback durations). This type of loan is often offered with strings attached from the lender, such as for the borrower to use certain products or companies for the funded project. Concessional finance targets high-impact projects responding to globally significant development challenges that otherwise would not proceed without financial support[135] with specialised terms, usually in fields like sustainable infrastructure, energy efficiency, and renewable energy, where immediate gains are not the case. By lowering financial obstacles, concessional loans enable SMEs and bigger companies to embark on green

[134] Soft Loan: Meaning, Overview, Pros and Cons

[135] Climate Explainer: Concessional Finance

initiatives, promoting the broad adoption of sustainable practices across Mongolia's economy.

Main providers

- ADB
- EBRD
- JICA

Application

- Energy efficiency (technological upgrades)
- RE facilities
- Sustainable urban infrastructure (e.g., eco-housing, green public transport)

3.2.3 Equity investments

Equity investments are capital funding in exchange for ownership stakes. These are usually found in start-ups and high potential SMEs which are focused on clean energy, sustainable agriculture, or circular economy innovations. Simply put, equity investors purchase shares of a company with the expectation that they'll rise in value in the form of capital gains, and/or generate capital dividends. If an equity investment rises in value, the investor would receive the monetary difference if they sold their shares, or if the company's assets are liquidated and all its obligations are met[136].

Main providers

- IFC[137]
- Green venture capitals
- Green investment firms

[136] What are equity investments? | BlackRock

[137] "IFC requires a commitment from its clients to not originate and finance any new coal projects.", IFC's Green Equity Approach – 2023 Update

Application

- Start-ups (clean energy production, energy storage, RES)
- Sustainable agriculture
- Circular economy projects

3.2.4 Technical assistance

Technical assistance is a key instrument for improving policies and project design, enhancing skills, and strengthening implementation capacity, and for institutional development in general[138]. Technical assistance programmes help stakeholders to successfully implement green projects by offering non-financial support, i.e., training, project design, feasibility studies, and capacity-building activities, while it is often combined with other financing tools to ensure project feasibility and alignment with sustainability standards.

Main providers

- UNDP
- GGGI
- MSFA
- EU/EC[139]

Application

- Feasibility studies (e.g., for RE and EE)
- Training on ESG integration & sustainable business practices
- Capacity building workshops for SMEs on green finance
- Capacity building workshops for SMEs on environmental risk management

[138] Technical assistance

[139] Global Europe: Neighbourhood, Development and International Cooperation Instrument - European Commission

Chapter 4. International Green Financing Instruments

Mongolia's transition to circular economy business models is supported by a number of international institutions offering green financing for sustainability-oriented projects. Several international programmes, finance institutions, and funds provide the necessary resources to Mongolia to achieve its sustainable development targets.

The full list of the ODA (Official Development Assistance)-eligible organisations, including multilateral agencies, international non-governmental organisations (INGOs), networks, and public-private partnerships (PPPs) can be accessed through the OECD official page (*Annex 2 and Single Table for 2023 flows.xlsx*)[140].

Additional international funding organisations can be found in the Annex of the "*Green Finance Mapping Report for Mongolia, September 2022*" published in the MSFA website[141].

Furthermore, the UN has issued a guidance document on reporting contributions to trust funds managed by multilateral institutions and can be accessed through the OECD official page[142] (*Reporting contributions to trust funds managed by multilateral institutions*).

According to the International Finance Corporation, the required investment needed to satisfy the set environmental targets of Mongolia is shown in the table below[143].

[140] ODA recipients: countries, territories, and international organisations | OECD

[141] Green Finance Mapping Report for Mongolia

[142] ODA recipients: countries, territories, and international organisations | OECD

[143] Green Capital Market Incentives

Table 1:Investment needs for Mongolian environmental targets, Source: Green Capital Market Incentives

Target	Period of implementation	Total investment required (USD bn)	Total investment required, average per year (USD bn/ year)
Vision 2050	2020-2050	N/A	N/A
NDCs	2020-2030	11.7	1.3
Of this, adaptation:		*6.4*	
Of this, mitigation:		*5.3*	
NGDP	2016-2030	6.96	0.5
NPRAEP	2017-2025	3.8	0.4

As it can be noticed, a total of USD 22.46 bn (USD 2.2 bn per year) in investments are needed so that Mongolia makes its transition towards sustainability. Some examples of green loan programmes in Mongolia are shown below[144].

Table 2: Green loan programmes in Mongolia by international sponsors, Source; Green Capital Market Incentives

Sponsor	Project/ Programme	Partner Financial Institutions (PFI)	Objective	Project financing	Interest rate/ subsidy
`					
EBRD	MonSEFF/ MonGEFF	Khan bank XacBank, Transcapital NBFI VisionFundMongolia	Business loans for retrofitting of existing plant, equipment, production processes or EE of the building itself,	USD 80m	i/r defined by PFI (%)

[144] Green Capital Market Incentives

		Xac Leasing	or modification or expansion of production capacity. Consumer loans for purchasing EE household appliance, cars etc.		
JICA	JICA Two Step SME Loan	Xac bank Khan bank Golomt bank State bank TDBM Capitron bank	SME loans for environmental protection projects with a focus on air pollution reduction		7%
ADB	AHURP	*(to be confirmed)*	New EE, affordable houses in specific ger area locations.	USD 570m	
GIZ	EE housing mortgage pilot project	Xac bank Golomt bank State bank TDBM Capitron bank Trans bank Arig bank	Consumer loan for new EE houses *(11 EE housing designs and construction companies are selected by GIZ)*.	60 houses	8-12% (30% down payment subsidy provided by GIZ)
Green Climate Fund	Green SME loan	Xac bank	Business loans for: Building retrofit, heating and cooling, equipment replacement, RE technologies, alternative fuels/engine conversion.	USD 60m	14.4-15% (lower rate for women SMEs)

	Green consumption loan	Xac bank	Consumer loans for: New EE houses Insulation Electrical heaters.	USD 20m	12%

4.1 United Nations Development Programme (UNDP)

UNDP's support focuses on the development of a range of strategies that enhance the country's ability to conserve and protect its environment for resource efficient development, and to empower local communities and enhance institutional capacity for sustained environmental management, and climate change adaptation and mitigation[145]. Within the current Country Programme 2023-2027, UNDP in Mongolia is focusing on:

- *Strengthening mechanisms and capacities for risk-informed climate adaptation*

UNDP will continue to promote nature-based adaptation solutions and support the government with digital technology and equipment to develop longer term climate change models and more accurate early warning systems[146]. At the same time, it will prioritize investment in the river basin management and livestock husbandry sectors to develop water and land use plans for better risk-informed decision-making at the national level and in selected provinces[147]. UNDP helps to expand the knowledge and skills of women and men in herder groups and cooperatives to improve livestock management, build resilience to climate risk and supply sustainably sourced livestock

[145] Climate Change | United Nations Development Programme

[146] Advancing health and environmental sustainability through action on pollution | United Nations Development Programme

[147] Deepening efforts to accelerate NDC implementation in Mongolia | United Nations Development Programme

products[148][149]. A traceability system for such products (cashmere, meat, dairy, leather) will be improved, including by adding incentives to engage herder producers throughout programme implementation. This helps to improve climate mitigation actions in the agriculture and livestock sectors as pledged under Mongolia's nationally determined contributions to cut emissions[150].

- *Strengthening mechanisms for sustainable and inclusive management of natural ecosystems*

UNDP will help to advance ecosystems and biodiversity contributing to Vision 2050's green development priorities, through

(a) integrated land use planning, to ensure that use of land and natural resources is oriented to optimize production without harming ecosystem services or degrading biodiversity[151][152][153]

(b) making production practices more environmentally appropriate in the animal husbandry, arable farming and infrastructure development sectors[154]

---

148 Improving Adaptive Capacity and Risk Management of Rural Communities in Mongolia | United Nations Development Programme

149 SDG-Aligned Budgeting to Transform Employment In Mongolia | United Nations Development Programme

150 Mongolia - Climate Change - Strengthening mechanisms and capacities for risk-informed climate adaptation

151 Environmental Governance for Sustainable Natural Resource Management (SEPA EGP) | United Nations Development Programme

152 Global Biodiversity Framework-Early Action Support project | United Nations Development Programme

153 Biodiversity Finance Initiative (BIOFIN) Phase II - Mongolia | United Nations Development Programme

154 Mongolia | BIOFIN

(c) offering technical support to line ministries and subnational governments to enhance regulatory and legislative frameworks on access to benefit-sharing of genetic resources

(d) developing innovative financing solutions (such as debt-for-nature swaps, biodiversity funds) and other area-based conservation measures.

To contribute to an inclusive and green COVID-19 recovery, UNDP will invest in systemic changes and dialogues among diverse stakeholders. It will also put nature at the heart of development to accelerate climate action and achieve progress towards the SDGs and the Post-2020 Global Biodiversity Framework targets. UNDP's collaboration with ministries and specialized government agencies, FAO and other stakeholders will contribute to achieving national priorities on sustainable forest management and ecosystem restoration. Interventions will address diversification of livelihood options for communities and herders to improve production practices[155][156].

More information on projects funded by the UN programmes and international sponsors can be found via an interactive map[157] developed by the UN aligned by Sustainable Development Goals[158].

4.2 Green Climate Fund (GCF)

As the world's largest climate fund, the Green Climate Fund[159] accelerates transformative climate action in developing countries through a country-owned partnership approach and use of flexible financing solutions and climate investment

[155] Mongolian Sustainable Cashmere Platform | United Nations Development Programme

[156] Mongolia - Climate Change - Strengthening mechanisms for sustainable and inclusive management of natural ecosystems

[157] United Nations in Mongolia

[158] The United Nations in Mongolia | United Nations in Mongolia

[159] Homepage | Green Climate Fund

expertise. In 2020, the Green Climate Fund approved a new US$23.1million grant to UNDP supported project aimed at strengthening climate resilience in Mongolia[160].

Through this grant approximately 26,000 households (130,000 people) living across four of the country's most remote and vulnerable Western and Eastern provinces are set to benefit, with a further 160,000 households (800,000 people) to benefit indirectly – which is about one quarter of Mongolia's entire population. The project's design links closely with Mongolia's National Action Program on Climate Change[161], Vision 2050, and policies related to the livestock sector, as well as its Nationally Determined Contributions[162] under the global Paris Agreement. Implementation of the project activities initiated in mid-2021.

UNDP is working with the Government of Mongolia on a range of climate change-related initiatives, including accelerating efforts to implement its Nationally Determined Contribution (NDC) under the global Paris Agreement[163], and, under the NDC Support Programme and 'Climate Promise', supporting Mongolia to develop an NDC implementation strategy and set up a south-south cooperation on NDCs with other Central Asian countries.

A noteworthy project funded by the GCF is a business loan programme for GHG emission reductions (FP028[164]) has been designed with one of Mongolia's commercial banks, XacBank, as local GCF accredited entity[165]. GCF has provided US$20 million to aid Mongolian enterprises in their efforts to invest in energy efficiency

[160] Mongolia receives new $23.1 million GCF grant to strengthen climate resilience | United Nations Development Programme

[161] National Action Programme on Climate Change (NAPCC) (MN).pdf

[162] 150924_INDCs of Mongolia.pdf

[163] Deepening efforts to accelerate NDC implementation in Mongolia | United Nations Development Programme

[164] FP028: MSME Business Loan Program for GHG Emission Reduction | Green Climate Fund

[165] GCF (2017). XacBank first Mongolian bank to finance renewable energy.

and renewable energy projects, and another US$8.7 million to build Mongolia's second large-scale solar plant with a capacity of 10 MW[166].

In total, the GCF has provided funding for 13 projects in Mongolia worth of USD 484.3m[167]. Namely, projects funded by the GCF include:

- FP253 – Greening Financial Systems: Delivering Climate Finance for All[168]
- FP223 – Project GAIA ("GAIA")[169]
- FP204 – Sustainable Renewables Risk Mitigation Initiative (SRMI) Facility (Phase 2 Resilience focus) [SRMI-Resilience][170]
- FP154 – Mongolia: Aimags and Soums Green Regional Development Investment Program (ASDIP)[171]
- FP153 – Mongolia Green Finance Corporation[172]
- FP141 – Improving Adaptive Capacity and Risk Management of Rural communities in Mongolia[173]
- SAP004 – Energy Efficient Consumption Loan Programme[174]
- FP099 – Climate Investor One[175]

166 National Sustainable Finance Roadmap of Mongolia: Unlocking Mongolia's Potential to Become a Sustainable Finance Knowledge Centre in the Region

167 Mongolia | Green Climate Fund

168 FP253: Greening Financial Systems: Delivering Climate Finance for All | Green Climate Fund

169 FP223: Project GAIA ("GAIA") | Green Climate Fund

170 FP204: Sustainable Renewables Risk Mitigation Initiative (SRMI) Facility (Phase 2 Resilience focus) [SRMI-Resilience] | Green Climate Fund

171 FP154: Mongolia: Aimags and Soums Green Regional Development Investment Program (ASDIP) | Green Climate Fund

172 https://www.greenclimate.fund/project/fp153

173 FP141: Improving Adaptive Capacity and Risk Management of Rural communities in Mongolia | Green Climate Fund

174 SAP004: Energy Efficient Consumption Loan Programme | Green Climate Fund

175 FP099: Climate Investor One | Green Climate Fund

- FP086 – Green Cities Facility[176]
- FP077 – Ulaanbaatar Green Affordable Housing and Resilient Urban Renewal Project (AHURP)[177]
- FP046 – Renewable Energy Program #1 - Solar[178]
- FP028 – MSME Business Loan Program for GHG Emission Reduction[179]
- FP025 – GCF-EBRD SEFF Co-financing Programme[180]

4.3 Global Environment Facility (GEF)

The Global Environment Facility (GEF)[181] is a multilateral family of funds dedicated to confronting biodiversity loss, climate change, and pollution, and supporting land and ocean health. Its financing enables developing countries to address complex challenges and work towards international environmental goals[182][183]. The partnership includes 186 member governments as well as civil society, Indigenous Peoples, women, and youth, with a focus on integration and inclusivity. Over the past three decades, the GEF has provided more than $25 billion in financing and mobilized $145 billion for country-driven priority projects. The family of funds includes the Global Environment Facility Trust Fund, Global Biodiversity Framework Fund (GBFF)[184],

176 FP086: Green Cities Facility | Green Climate Fund

177 FP077: Ulaanbaatar Green Affordable Housing and Resilient Urban Renewal Project (AHURP) | Green Climate Fund

178 FP046: Renewable Energy Program #1 - Solar | Green Climate Fund

179 FP028: MSME Business Loan Program for GHG Emission Reduction | Green Climate Fund

180 FP025: GCF-EBRD SEFF Co-financing Programme | Green Climate Fund

181 Who We Are | GEF

182 Home | GEF

183 National Sustainable Finance Roadmap of Mongolia: Unlocking Mongolia's Potential to Become a Sustainable Finance Knowledge Centre in the Region

184 Global Biodiversity Framework Fund | GEF

Least Developed Countries Fund (LDCF)[185], Special Climate Change Fund (SCCF)[186], Nagoya Protocol Implementation Fund (NPIF)[187], and Capacity-building Initiative for Transparency Trust Fund (CBIT)[188].

[185] Least Developed Countries Fund - LDCF | GEF

[186] Special Climate Change Fund - SCCF | GEF

[187] Access and Benefit-sharing | GEF

[188] Transparency | GEF

Trust Fund	Project Type	Number of Projects	Total Financing	Total Co-Financing Ratio
GET	National	8	$20,887,322	5.63
GET	Regional/Global	22	$335,415,467	0.76
LDCF	National/Regional		$0	0.00
SCCF	National/Regional		$0	0.00

Figure 11: GEF active projects in Mongolia (Financing for national and regional projects is inclusive of financing covering all participating countries.)[189]

[189] Projects | GEF

Title	ID	Countries	Focal Areas	Type	Agencies	GEF Grant	Cofinancing	Status
Enhancing climate change transparency in Mongolia	11377	Mongolia	Climate Change	Medium-size Project	Food and Agriculture Organization	1,776,484	1,408,000	Project Approved
Green and Inclusive Cities in Mongolia	11297	Mongolia	Biodiversity, Climate Change, Land Degradation	Full-size Project	United Nations Development Programme	7,261,694	70,000,000	Concept Approved
Eliminating hazardous chemicals from supply chains in Mongolia	11171	Mongolia	International Waters, Chemicals and Waste	Full-size Project	United Nations Development Programme	3,272,018	40,070,000	Concept Approved
Rehabilitating and conserving the mountain landscapes in Khangai region of Mongolia for improved ecosystem services and community livelihoods	11114	Mongolia	Biodiversity, Climate Change, Land Degradation	Full-size Project	Food and Agriculture Organization	2,639,726	22,500,000	Concept Approved
Promoting cleantech innovation and entrepreneurship for green jobs in Mongolia	10889	Mongolia	Climate Change	Medium-size Project	United Nations Industrial Development Organization	1,776,484	8,360,000	Project Approved
Promoting Dryland Sustainable Landscapes and Biodiversity Conservation in the Eastern Steppe of Mongolia	10249	Mongolia	Biodiversity, Land Degradation	Full-size Project	Food and Agriculture Organization, World Wildlife Fund - US Chapter	5,354,586	50,945,000	Project Approved

Figure 12: Approved GEF funded projects in Mongolia (2024)[190]

[190] Projects | GEF

4.4 European Bank for Reconstruction and Development (EBRD)

The EBRD and the European Union (EU) are working together to create a better business environment and a stronger SME sector in Mongolia. Through Green Economy Financing Facility (GEFF), EBRD supports businesses and homeowners wishing to invest in green technologies[191]. Specifically, the EBRD helps small to medium-sized businesses (SMEs) in Mongolia by working to improve the business environment in which they operate and by strengthening key organisations and institutions that affect the private sector[192]. Since the SME sector is one of the most important for the Mongolian economy, accounting for 50% of employment, EBDR is also making a strong contribution to alleviating poverty. The support programme of EBRD ("*Mongolia Country Strategy 2022-2027*"[193]) to Mongolia integrates various types of the EBRD's activities in support of private sector SME development, offering four related instruments of[194]:

- **Instrument 1:** Indirect financing to SMEs via credit lines to partner financial institutions for on-lending to mostly micro and small companies
- **Instrument 2[195]:** Risk sharing/co-financing with partner financial institutions on their loans to mostly small and medium-sized companies
- **Instrument 3[196]:** Business advice to SMEs

191 About GEFF – GEFF

192 Support to SME Development in Mongolia: Overview

193 Mongolia Country Strategy 2022-2027, EBRD, 2022

194 Support to SME Development in Mongolia: Overview

195 Instrument 2

196 Instrument 3

- **Instrument 4**[197]**:** Policy dialogue to develop new financial products and strengthen business associations

The following graph includes the projects funded by EBRD in Mongolia over the last two years (2023-2024)[198] (Fig.13).

The EBRD provides tailored solutions to client and project needs and to the specific situation of the country, region and sector. It assigns a dedicated team of specialists with expertise in project finance, the region and sector, law and environment.

- The EBRD funds up to 35% of the total project cost for a greenfield project or 35% of the long-term capitalisation of an established company
- Additional funding by sponsors and other co-financiers is required. The EBRD may identify additional resources through its syndications programme
- Typical private sector projects are based on at least one-third equity investment
- Significant equity contributions are required from the sponsors. Sponsors should have a majority shareholding or adequate operational control. In-kind equity contributions are accepted

197 Instrument 4

198 EBRD Project Summary Documents

Date (DD.MM.YYYY)	Project ID	Location	Project Title	Sector	Public/Private	Status
17.10.2024	55780	Mongolia	OT Liquidity	Natural Resources	Private	Passed Final Review, Pending Approval
15.10.2024	54857	Mongolia	Khan Bank green bond	Financial Institutions	Private	Signed
02.08.2024	55168	Mongolia	DFF - Shunkhlai Plaza Regeneration	Property and tourism	Private	Signed
12.06.2024	55290	Mongolia	APU Dairy	Agribusiness	Private	Approved
08.05.2024	55099	Mongolia	MCSCC Sustainability-Linked Loan	Agribusiness	Private	Disbursing
02.05.2024	55423	Mongolia	FIF - CA WiB Programme - Khan Bank III	Financial Institutions	Private	Disbursing
02.05.2024	55422	Mongolia	GCF GEFF Regional - Mongolia - Khan Bank II	Financial Institutions	Private	Disbursing
23.04.2024	55110	Mongolia	Tavan Bogd	Manufacturing and Services	Private	Disbursing
01.03.2024	54920	Mongolia	DFF - Ulaanbaatar Flour	Agribusiness	Private	Disbursing
19.10.2023	54633	Mongolia	DFF-Khanburgedei 4	Manufacturing and Services	Private	Repaying
18.10.2023	54025	Mongolia	DFF-Tavan Bogd International 2	Manufacturing and Services	Private	Repaying
14.08.2023	54313	Mongolia	FIF - CA YiB - Transcapital Youth in Business loan I	Financial Institutions	Private	Disbursing
31.05.2023	54081	Mongolia	DFF - Khan Altai	Natural Resources	Private	Disbursing
26.04.2023	54207	Mongolia	RSF - Khan Bank - Uurteel II	Manufacturing and Services	Private	Repaying
11.04.2023	54475	Mongolia	FIF - CA WiB Programme - Khan Bank II	Financial Institutions	Private	Repaying
06.03.2023	54284	Mongolia	GCF GEFF Regional - Mongolia - XacBank II	Financial Institutions	Private	Disbursing

Figure 13: EBRD funded projects in Mongolia (2023-2024), Source EBRD Project Summary Documents

4.5 Asian Development Bank

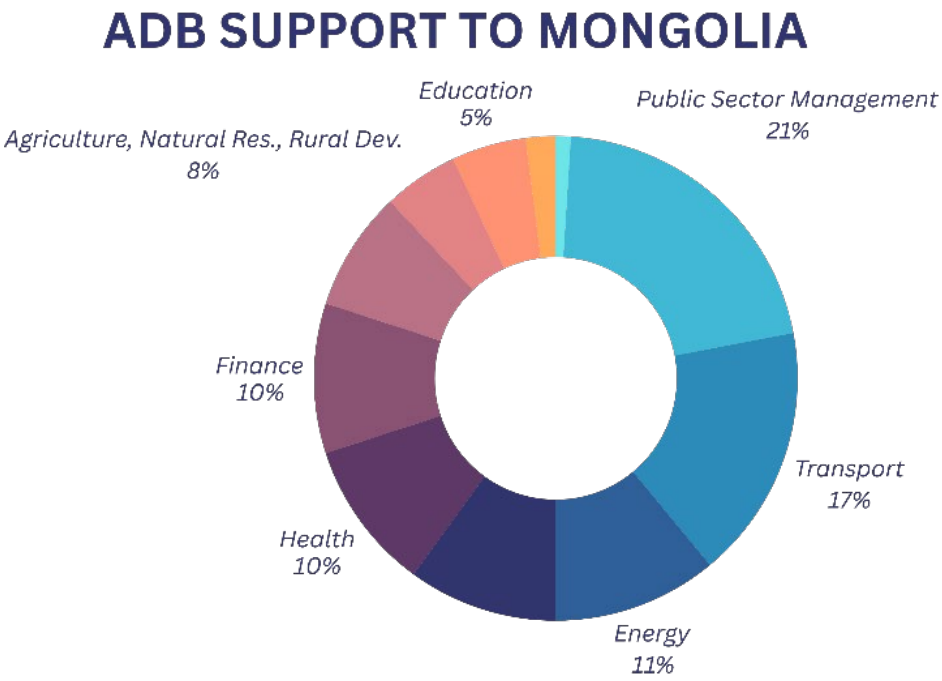
In 2021, ADB launched its new country partnership strategy for Mongolia, 2021–2024[199][200] The strategy outlines ADB's priorities and support for Mongolia on three strategic priorities: (i) fostering of inclusive social development and economic opportunity; (ii) climate-resilient infrastructure to drive competitiveness and diversification; and (iii) resilience for sustainable, green, and climate-conscious development. Mongolia has worked with ADB and other development partners to implement reforms in every sector of the economy and upgrading basic infrastructure. ADB has implemented several renewable energy projects and programmes, including technical assistance, providing financing and technical support for renewable energy production, storage and distribution, across multiple sectors in Mongolia[201], including agriculture, education, energy, finance, health, transport, and urban development.

As of April 2023, ADB had provided $4.14 billion for sovereign and non-sovereign assistance, financing 477 loan, grant, and technical assistance projects (Figure 1). As of 31 December 2023, ADB has committed 371 public sector loans, grants, and technical assistance totalling $4.1 billion to Mongolia.

[199] Mongolia: Country Partnership Strategy (2021–2024) | Asian Development Bank

[200] ADB. 2021. Country Partnership Strategy: Mongolia, 2021–2024—Laying Resilient Foundations for Inclusive and Sustainable Growth

[201] Projects | Asian Development Bank



The bank's current sovereign portfolio in the country includes 41 loans and 1 grant worth $1.55 billion[202].

Figure 14: ADB's assistance to Mongolia by sector, as of April 2023[203]

ADB is the largest multilateral development partner for Mongolia, and its contributions to the country's development, as well as its collaboration with the government and other stakeholders, are highly valued by the government and people. Projects are meticulously designed to serve Mongolia's development priorities and have helped to improve people's lives significantly by creating substantial social and economic

[202] Asian Development Bank and Mongolia: Fact Sheet | Asian Development Bank

[203] Learning Through Partnership - Insights from the 30th Anniversary of ADB's Partnership with Mongolia

benefits in sectors including health, education, transport, water, and urban services[204].

As an example, the Government of Mongolia requested ADB to support the installation of a battery energy storage system (BESS) in the country. The country's first utility-scale advanced BESS with a capacity of 125 MW/160 MWh is being financed by an ADB loan of $100 million and grant of $3 million from the High-Level Technology Fund approved in April 2020[205].

ADB also approved a Small Expenditure Financing Facility for $20 million that can be used for advance project actions such as the establishment of project implementation units, and preparation of detailed engineering design and

Accelerating Battery Energy Storage System Development in the Asia and Pacific Region 58382-001; Regional, Mongolia, Viet Nam; Energy	Status: Proposed	Approval Year: 2024
Supporting Renewable Energy Development 52240-001; Mongolia; Energy	Status: Proposed	Approval Year: 2024
Accelerating Clean Energy Transition in Asia and the Pacific 57302-001; Regional, Armenia, Bangladesh, Cambodia, India, Mongolia, Turkmenistan; Energy	Status: Active	Approval Date: 09 Jul 2024
Advance Sustainable Clean Energy Network for Development 58010-001; Regional, Indonesia, Mongolia, Uzbekistan, Viet Nam; Energy	Status: Active	Approval Date: 28 Jun 2024
Enabling the Development of Inclusive, Resilient, Diverse, and Responsible Critical Minerals and Clean Energy Technology Manufacturing Supply Chains 58185-001; Regional, Indonesia, Mongolia, Uzbekistan, Viet Nam; Energy	Status: Active	Approval Date: 31 May 2024
Sermsang Khushig Khundii Solar Project 52127-001; Mongolia; Energy	Status: Active	Approval Date: 28 Jan 2019
Supporting Energy-Saving Regulation and Energy Efficiency Investments in Mongolia 57008-001; Mongolia; Energy	Status: Active	Approval Date: 29 Aug 2023
Maximizing Poverty Alleviation and Gender Co-benefits through Innovative Clean Energy Solutions in Asia and the Pacific 56028-001; Regional, Mongolia; Energy	Status: Active	Approval Date: 24 Nov 2022
Renewable Heating Demonstration in Remote Areas 54360-001; Mongolia; Energy	Status: Active	Approval Date: 17 Oct 2022

Figure 15: Asian Development Bank - Energy projects in Mongolia, Source: Projects | Asian Development Bank

[204] Learning Through Partnership - Insights from the 30th Anniversary of ADB's Partnership with Mongolia

[205] Unlocking Mongolia's Rich Renewable Energy Potential | Asian Development Bank

bidding documents for large infrastructure projects[206].

Fig.15 includes an indicative list of energy projects in Mongolia funded by ADB[207].

ADB is implementing a US$540 million project with the support of GCF to improve the climate resilience of Ulaanbaatar and reduce GHG emissions and air pollution by creating eco-districts[208][209].

As of October 2024, ADB has invested USD 12.5 million in a green bond issued by Khan Bank JSC under the first green thematic bond program on the Mongolian Stock Exchange[210].

4.6 SWITCH-Asia Programme

The European Union supports Mongolia's transition to a green and circular economy through initiatives on energy efficiency, waste management, and the circular economy. The EU SWITCH-Asia Programme[211] provides technical and policy support on circular economy topics related to sustainable consumption and production (SCP) covering themes such as green products, plastics, recycling and waste as well as construction[212].

By supporting the sharing of knowledge and developing local capacity for responsible business practices, SWITCH-Asia is a means for local companies to more easily access the supply chains of multinational companies which seek to establish green

---

206 Learning Through Partnership - Insights from the 30th Anniversary of ADB's Partnership with Mongolia

207 Projects | Asian Development Bank

208 Natonal Sustainable Finance Roadmap of Mongolia: Unlocking Mongolia's Potential to Become a Sustainable Finance Knowledge Centre in the Region

209 GCF (n.d.) Ulaanbaatar Green Affordable Housing and Resilient Urban Renewal Project (AHURP)

210 ADB Invests $12.5 Million in Khan Bank's Milestone Green Bonds, a First in Mongolia | Asian Development Bank

211 Home | SWITCH-Asia

212 Mongolia goes circular the stepping stones

and fair conducts within their value-chains. The replication and scaling-up effect of project results together with access to finance and public-private investments for green products, services and technologies will be key elements within the programme in the next years in order to have a greater impact in the region. The evidence provided by projects is meant to feed into policy and regulatory discussions with national governments in their transition towards a low-carbon and resource-efficient economy through the improvement of national strategies and action plans with regard to sustainable production and consumption practices[213].

SWITCH-Asia has been a catalyst for Mongolia's New Regulation on Construction and Demolition Waste (CDW) Management, paving the way for the use of secondary materials in the buildings and construction sector[214]. The SWITCH-Asia SCP Facility has undertaken multi-stakeholder consultations and provided training on Sustainable/Green Public Procurement. Recently, the SWITCH-Asia SCP Facility developed an SCP Baseline Study to map relevant policies and stakeholders and identify practices to support increased awareness on SCP.

With the Economic Governance for Equitable Growth (EG4EG), the EU funded a project aiming to strengthen the economic governance of revenues from Mongolia's mineral wealth towards sustainable development. The EU co-funded Partnership for Action on the Green Economy (PAGE) also supports the country's transition, with macro-economic planning and monitoring, mapping of the national policies on the green economy to SDGs, policy development, and training and capacity building.

Mongolia National Context for SCP and Connection to the Global Agenda[215]

Mongolia is set to present its first Voluntary National Review (VNR) on the Sustainable Development Goals (SDGs) at the 2019 High-level Political Forum (HLPF) as part of

[213] About Grants › GRANTS PROGRAMME | SWITCH-Asia

[214] Mongolia goes circular the stepping stones

[215] Mongolia › Asia | SWITCH-Asia

its commitment to Agenda 2030. Mongolia has also participated in the UN Partnership for Action on Green Economy (UN-PAGE) since 2013. This eventually resulted in the Action Plan for implementation of the National Green Development Policy (NGDP) in 2016 and the adoption of the Sustainable Development Vision (SDV) 2030.

- Priorities
    - Mongolia's efficient use and sustainable management of natural resources has been recognized as a priority, especially as it relates to scarce resources such as water, which also faces pollution threats from intensive industrialization and mining.
    - Renewable energy and energy efficiency, particularly through the adoption of new technology, are important as industry expands and energy use increases, which will also have an effect on emissions.
    - Waste management improvements and waste reduction are both the objectives of Mongolia's National Development Policy based on the Sustainable Development Goals.
    - Sustainable and intensification agriculture practices are a national priority as modern, efficient food and agricultural systems can substantially increase production and competitiveness, resulting in improved rural livelihoods and long-term sustainability.
    - Sustainable tourism has become increasingly important as Mongolia's tourism industry develops and has become clear that products and services that meet higher environmental standards improve its capacity to welcome tourists.
    - In addition to other benefits, the NGDP determined Sustainable Public Procurement (SPP) to be an effective economic instrument to achieve green development along with other instruments such as tax and incentives.
    - Other priorities include Green urban building, manufacturing and eco-labelling

- Challenges
  - Lack of continued mainstreaming in other development policies has hindered effective implementation of SCP-related policies.
  - Mongolia's wealth in minerals and metal ores has resulted in the growth of its national economy being linked to the unsustainable extractive sector, putting pressure on the country to find more sustainable industries.
  - Resource efficiency is among the region's lowest with 17 kilograms per USD versus a regional average of 3 kilograms per USD.
  - Public awareness of both environmental and financial advantages of resource and energy efficient improvements remains low while household access to finance also makes adoption of new technology difficult.
- Opportunities
  - SWITCH-Asia SCP Facility can support and strengthen the Millennium Development Goals-based Comprehensive National Development Strategy of Mongolia (2007-2021 NDS) and the National Green Development Policy (NGDP).
  - SWITCH-Asia SCP Facility can also facilitate policy dialogues within and between the Mongolian Government SCP-related bodies as well as organisations from civil society, academia and the private sector.
  - Providing technical assistance to Mongolia on SCP policy development and concentrating on key priorities such as sustainable housing, low carbon and less resource intensive production systems, alternative energy and heat supply, which will benefit from support in awareness raising, eco-innovation, sustainable public procurement and eco-labelling.
  - Seeking innovative finance models to support adoption of energy efficient technologies among households and industry will help move Mongolia away from unsustainable energy sources.

Table 3: SWITCH-Asia Activities in Mongolia (per year till 2021), Source: Mongolia › Asia | SWITCH-Asia

Year	Activity
2018[216]	SCP Facility • Preliminary assessment of SCP related policies, activities, needs/gaps, and opportunities
2019[217]	SCP Facility • A concept note with specific actions and timeline was prepared • Capacity building for decision and policymakers in developing policy frameworks for SCP • Support the uptake of eco-innovation programmes and SCP incentives schemes targeting MSMEs Regional Policy Advocacy Component (RPAC) • Participation to regional and sub-regional events

[216] Mongolia › Asia | SWITCH-Asia

[217] Mongolia › Asia | SWITCH-Asia

2020- 2021[218]	SCP Facility • Collaboration with the National Focal Point and the Ministry of Environment and Climate Change[219] Mongolia to implement the following activities: • SCP Baseline Study: Sustainable Consumption and Production (SCP) in Mongolia Enhancing Knowledge and Awareness Raising on Policies, Instruments and Practices (2020) developed • Preparation of a Guideline for the National SCP Roadmap • Training Workshops on SCP and SPP • Sustainable Public Procurement (SPP) Action Plan developed • Conducted capacity building workshops on the assessment and SCP knowledge management plan, and Sustainable Public Procurement (SPP) Action Plan. • First set of SPP criteria for three selected product groups prepared in close cooperation with concerned government agencies and stakeholders • On greening supply chains, provide advisory services and trainings for the selected three SMEs/MSMEs to incorporate sustainability into operations and processes and prepare case study report and policy briefs • Provided advisory services and trainings for the selected three SMEs/MSMEs to incorporate sustainability into operations and processes and prepare case study report and policy brief

[218] Mongolia › Asia | SWITCH-Asia

[219] Former Ministry of Environment and Tourism (MET)

2020[220]	Regional Policy Advocacy Component (RPAC) • Facilitated the participation of Mongolian key-stakeholders in the following regional activities: • SWITCH2Green Meeting - RPAC initiated the discussion and shared the first report in 2020. (April 2020) • MOVING THE NEEDLE ON CLIMATE CHANGE – The event was co-organised by the UNESCAP as a part of the 2020 Virtual United Nations Responsible Business and Human Right Forum (RBHRF) (10 Jun 2020), regional level • WORLD ENVIRONMENT DAY 2020 – A media kit was provided to call for action to promote SCP as a part of the 2020 World Environment Day (WED) celebration (5-7 Jun 2020), regional level • Intervention in regional forum: Webinar on Sustainable Lifestyles for Plastics & Packaging Waste Management During a Pandemic COVID-19 (6 Aug 2020), regional level • SCP in Tourism: Opportunities and Challenges with COVID-19 (8 Oct 2020), regional level • Innovation and Connectivity through Farm to Fork (13 Nov 2020), regional level • Sustainable Lifestyles for SCP (19 Nov 2020), regional level • Support to Steering Committee of SWITCH-Asia – Provide support for the annual Steering Committee Meeting to review each country proposed 2021 workplan (3 Dec 2020), regional level • Regional Policy Dialogue on Circular Cities (4 Dec 2020), regional level • Regional Dialogue Driving Mechanisms for Eco-Design in Asia (9 Dec 2020), regional level • Leadership Academy on Circular Economy 2020 (14-18 Dec 2020), regional level

[220] Mongolia › Asia | SWITCH-Asia

	• Webinar: Innovations & Startups (16 Dec 2020), regional level
2021[221]	Facilitated the participation of Mongolian key-stakeholders in the following regional activities: • Contextualising the Circular Economy for Action (4 Feb 2021), regional level • Technology for Circular Economy: A Prologue to the 2021 SWITCH-Asia Leadership Academy (25 March 2021), regional level • Circular Economy and Sustainable Lifestyles Course (18 May 2021), regional level

[221] Mongolia › Asia | SWITCH-Asia

As for the projects funded by grants from SWITCH-Asia in Mongolia, these are presented in the following figure (Fig. 16).[222]

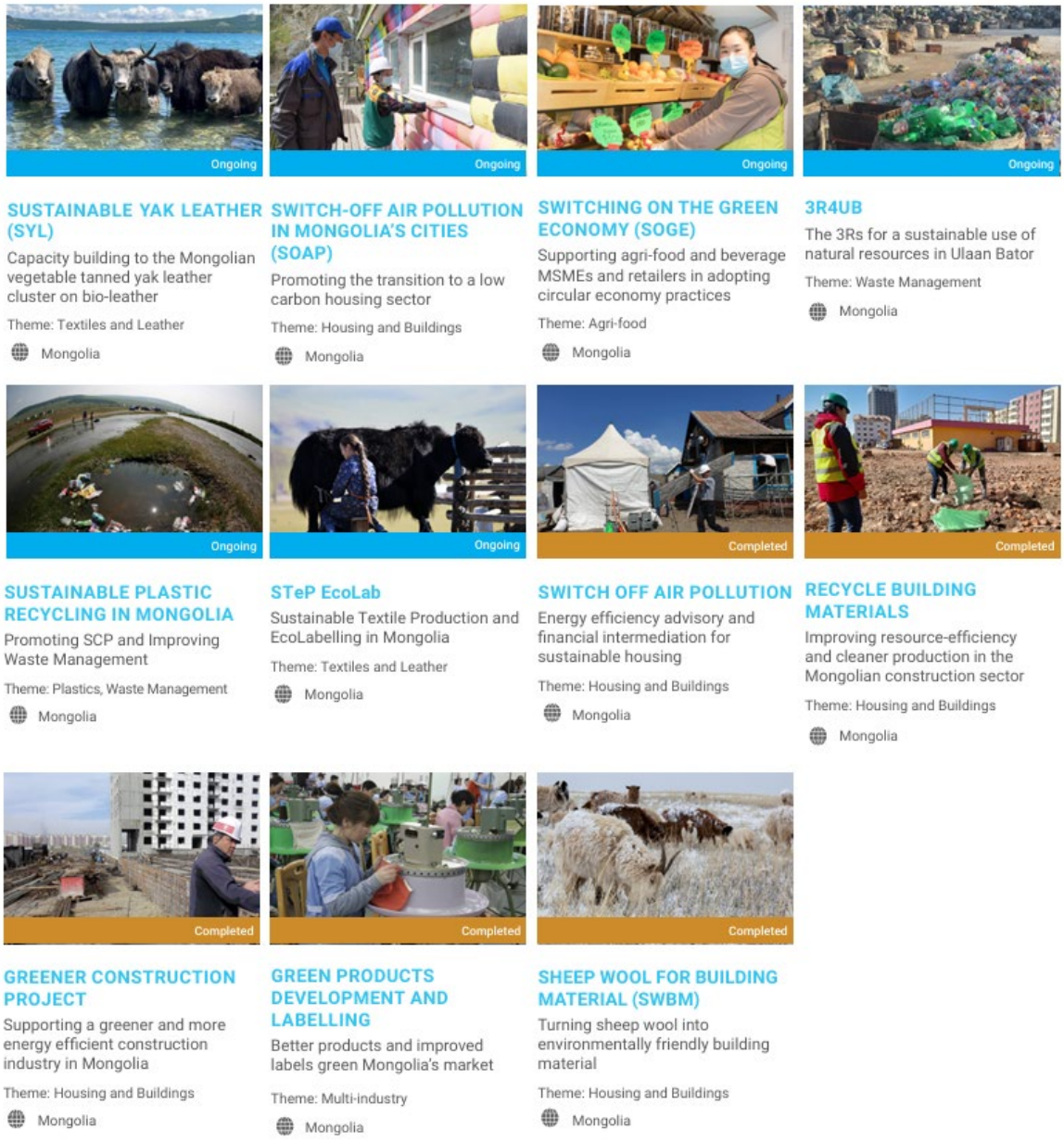


Figure 16: SWITCH-Asia projects in Mongolia, Source: GRANTS PROGRAMME | SWITCH-Asia

[222] SWITCH-Asia, SCP Facility, COUNTRY PROFILE MONGOLIA mongolia_2022.pdf

4.7 Adaptation Fund

The Adaptation Fund is financed largely by government and private donors (Germany, Sweden, Italy, Spain, Belgium, Norway, Switzerland, France, and the United Kingdom), and also from a two percent share of proceeds of Certified Emission Reductions (CERs) issued under the Protocol's Clean Development Mechanism projects. The Adaptation Fund's climate objective is "adaptation to the climate change" and its core sectors and focus areas include[223]:

- Agriculture
- Coastal Zone management
- Disaster risk reduction
- Disaster risk reduction and Early warning systems
- Ecosystem-based adaptation
- Food security
- Forests
- Multisector projects
- Rural development
- Urban development
- Water management

The Adaptation Fund through the "Adaptation Fund Climate Innovation Accelerator" (AFCIA) provides small grants to developing countries to support innovation for effective, long-term adaptation to climate change[224].

Figure 17: Adaptation Fund project in Mongolia - Statistics and Results, Source: https://www.adaptation-

[223] Green Finance Mapping Report for Mongolia

[224] Green Finance Mapping Report for Mongolia

Mongolian farmers and pastoralists find themselves struggling to adapt to a drier climate, and the majority of Mongolia's 40% rural herding population finds themselves at increasing risk. In 2012, this project funded by the Adaptation Fund and implemented by the UNDP began to deliver sustainable ecosystem-based approaches linking herders' survival with environmental health.

The Adaptation Fund finances concrete climate adaptation and resilience projects in developing countries. Since 2010, The Fund has committed $338.5 million to support 61 countries, including 22 Least Developed Countries and 13 Small Island Developing States. As an example — climate adaptation in Mongolia[225].

In 2015, the Adaptation Fund has allocated a grant of USD 5.5 million for a project that supported the establishment of the Uvs Lake/Tes River Basin Administration to develop and implement an integrated water management plan, combining ecosystem-based adaptation techniques with both simple and high impact technologies such as advanced irrigation systems (Fig.17). It was focused on maintaining critical ecosystems and natural water-provisioning catchments with capacity building activities designed to improve livelihoods of small-scale rural farmers and pastoralists through climate-smart use of land and water resources[226].

4.8 Global Green Growth Institute

The Global Green Growth Institute (GGGI) was founded as a treaty-based international, inter-governmental organization in 2012 at the United Nations Conference on Sustainable Development. GGGI's vision is a low-carbon resilient world of strong, inclusive, and sustainable growth. GGGI supports its Member States in transitioning their economies towards green growth model that simultaneously achieve poverty reduction, social inclusion, environmental sustainability, and economic growth. GGGI's work contributes to its members' efforts to deliver on the

[225] Adaptation Fund in Mongolia - Adaptation Fund

[226] AdaptationStory-Mongolia-Nov2015-Final.pdf

Sustainable Development Goals and the Nationally Determined Contributions to the Paris Agreement[227]. GGGI partners with stakeholders to develop innovative green growth solutions, project financing and investments, and share knowledge and lessons learnt. Mongolia is a member state of the GGGI and GGGI's program in Mongolia directly supports the Government's National Green Development Policy, NDC and Long-term policy "Vision 2050"[228]. Based on GGGI's Strategy 2030 and Roadmap 2021-2025, GGGI Mongolia will contribute to[229]:

Figure 18: GGGI Mongolia's strategic outcome targets, Source: Mongolia — Countries — Global Green Growth Institute

On the 16th of October 2024, the Ministry of Environment and Climate Change (MECC)[230] of Mongolia and the Global Green Growth Institute (GGGI) signed a

[227] GGGI at a Glance 2024 (final) Web (1)

[228] Mongolia — Countries — Global Green Growth Institute

[229] Mongolia — Countries — Global Green Growth Institute

[230] Former Ministry of Environment and Tourism (MET)

Memorandum of Understanding (MoU) on Green Growth Cooperation. In the context of the MoU, GGGI and MECC will cooperate in the following areas[231]:

Figure 19: Core areas of GGGI and MECC MoU signed in 2024, Source: MEC & GGGI MoU

The beneficial relationship between the GGGI and the Mongolian Government over the past 10 years has resulted in the mobilisation of over USD 100 million of investments to support the country's commitments on climate[232]. A total of 13 projects[233] have received funding from the GGGI all aiming to support Mongolia's sustainable transition.

---

231 GGGI and Ministry of Environment and Climate Change of Mongolia sign MOU for Green Growth Cooperation — Global Green Growth Institute

232 GGGI and Ministry of Environment and Climate Change of Mongolia sign MOU for Green Growth Cooperation — Global Green Growth Institute

233 Projects — Global Green Growth Institute

Table 4: GGGI funded projects in Mongolia, Source: Mongolia — Countries — Global Green Growth Institute

#	Project Title
1	MN22 Strengthening Institutional and Technical Capacity to Support NDC Implementation and Mainstreaming Climate Change into Subnational Development Planning in Mongolia
2	MN27 Support implementation phase I for Energy Performance Contracting for Residential Retrofitting in Ulaanbaatar City — Global Green Growth Institute
3	MN26 Scaling-up clean Heating Investments to Facilitate energy Transformation (SHIFT) — Global Green Growth Institute
4	MN19 Building capacity of Mongolian government for NDC implementation — Global Green Growth Institute
5	MN17 Energy Performance Contracting for Residential Retrofitting in Ulaanbaatar City — Global Green Growth Institute
6	MN15 TTR Phase II-Development of Guideline for Standard Offer Program — Global Green Growth Institute
7	MN13 Mongolia Green Finance Corporation — Global Green Growth Institute
8	MN08 Sectoral Analysis for NDC Update 2020 – Agriculture and IPPU — Global Green Growth Institute

9	MN06 Low Carbon Heat only boilers in Public Buildings in Mongolia — Global Green Growth Institute
10	MN05 Mongolia Renewable Energy Absorption Project — Global Green Growth Institute
11	MN04 Promoting Energy Efficiency and ESCO development in Mongolia — Global Green Growth Institute
12	Mongolian Green Credit Fund (MGCF) — Global Green Growth Institute
13	Mongolia Transition to Green Development – Phase 2 — Global Green Growth Institute

4.9 World Bank Group

With 189 member countries[234], staff from more than 170 countries, and offices in over 130 locations, the World Bank Group is a unique global partnership: five institutions (IBRD[235], IDA[236], IFC[237], MIGA[238], and ICSID[239]) (Fig.20) working for sustainable solutions that reduce poverty and build shared prosperity in developing countries[240].

Together, IBRD and IDA form the World Bank, which provides financing, policy advice, and technical assistance to governments of developing countries.

IDA focuses on the world's poorest countries, while IBRD assists middle-income and creditworthy poorer countries.

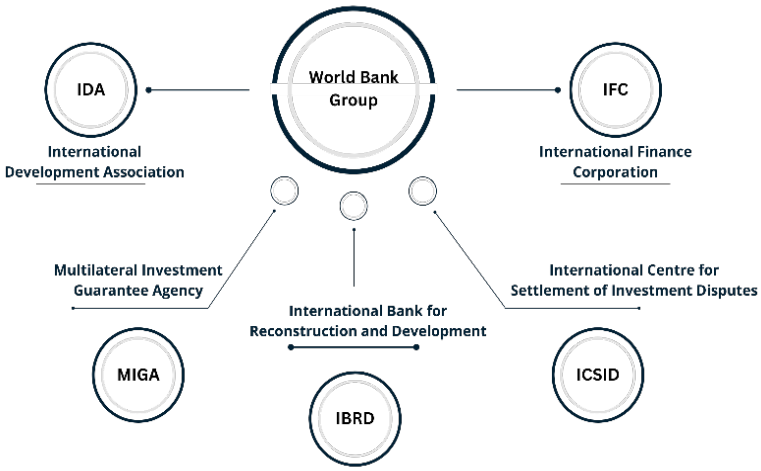


Figure 20: World Bank Group entities, Source World Bank Units

IFC, MIGA, and ICSID focus on strengthening the private sector in developing countries.

---

234 Member Countries - IBRD

235 Member Countries - IBRD

236 Member Countries - IDA

237 Member Countries - IFC

238 Member Countries - MIGA

239 International Centre for Settlement of Investment Disputes

240 World Bank Units

Through these institutions, the World Bank Group provides financing, technical assistance, political risk insurance, and settlement of disputes to private enterprises, including financial institutions.

Mongolia became a member of the World Bank in February 1991, and IDA has supported Mongolia in a range of areas, including transport, rural development, education, health, Ulaanbaatar's development, sound management of the mining sector, environmental protection, and policy development over the last three decades, the World Bank has provided over US$1.4 billion in development financing to the country[241]. Fig. 21 presents the active projects of the WBG in Mongolia[242][243][244][245][246][247][248][249]

[241] Mongolia Overview: Development news, research, data | World Bank

[242] Mongolia Overview: Development news, research, data | World Bank

[243] Projects

[244] Mongolia Transport Connectivity and Logistics Improvement Project

[245] Ulaanbaatar Sustainable Urban Transport Project

[246] Smart Government II Project

[247] Ulaanbaatar Heating Sector Improvement Project

[248] Livestock Commercialization Project

[249] Mongolia Emergency Relief and Employment Support Project

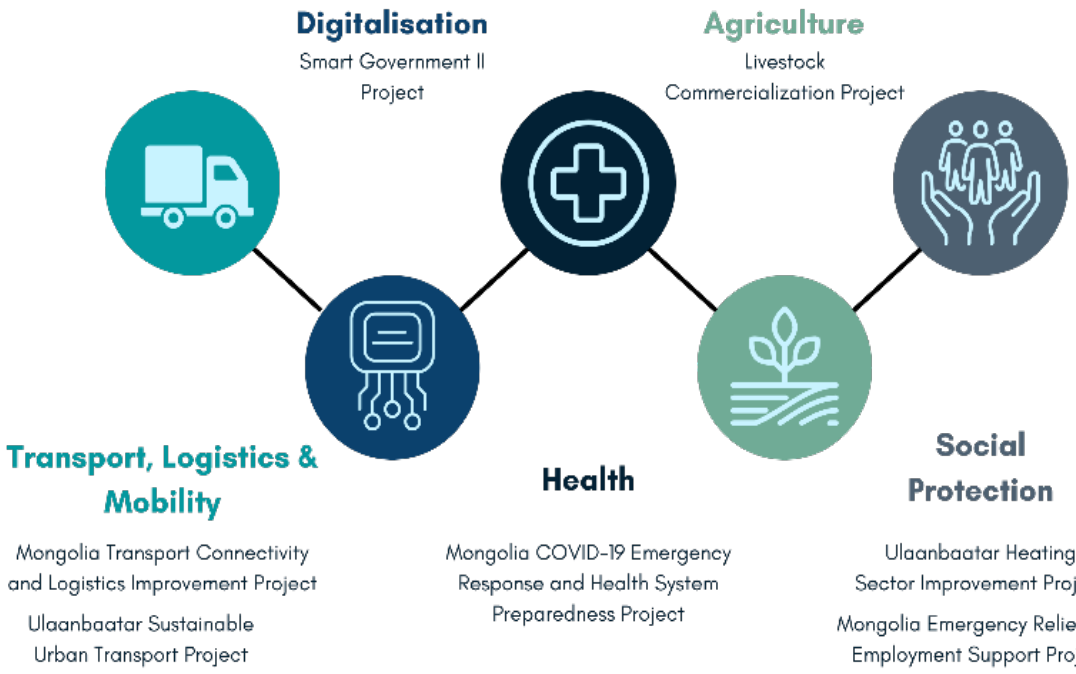


Figure 21: World Bank Group active projects in Mongolia, Source: World Bank group Projects

In 2021, the World Bank Group finalised its new Country Partnership Framework (CPF) for Mongolia. The strategy, which covers the period of FY2021-2025, aimed to support Mongolia in overcoming the COVID-19 crisis in the short term, while working toward a more sustainable, inclusive, and resilient recovery into the future, with a strong focus on job creation and climate resilience.

In addition to lending operations and grants, the Bank also provides advisory services to Mongolia to support its medium and long-term development objectives and to build the capacity for formulating and implementing strategic reforms[250].

Under the overall objective of promoting resilient recovery and inclusive and sustainable growth, the Country Partnership Framework has three key focus areas[251]:

[250] Mongolia Overview: Development news, research, data | World Bank

[251] Mongolia Overview: Development news, research, data | World Bank

- Strengthening economic governance
- Boosting competitiveness
- Improving quality of life

The strategy is anchored in Mongolia's national development strategy — Vision 2050 — as well as the government's program and the World Bank Group's twin goals of eradicating poverty and boosting shared prosperity on a liveable planet. This is Mongolia's first CPF as an International Development Association (IDA) graduate, with the country having become an International Bank for Reconstruction and Development (IBRD)-only client on July 1, 2020.

Regarding green financing, the World Bank has launched a series of Country Climate and Development Reports (CCDR), examining climate change and development considerations through data and research to held countries find ways to reduced GHG emissions and boost adaptation and resilience[252].

The CCDRs are initiated as part of the World Bank Group's Climate Change Action Plan for 2021-2025, which sets goals for the institution both in terms of financing, by dedicating 35% of World Bank Group financing to climate over the next five years, and country programming, by helping countries fully integrate their climate and development goals.

The World Bank Group provides innovative solutions for financing, enabling and delivering sustainable infrastructure[253]. The WBG's experts, financial instruments, funding partnerships, tools and analysis facilitate sustainable and resilient investment environments, more bankable projects and enhanced opportunities for private sector participation in infrastructure and other sectors[254]. Through its Public-Private

[252] Home - World Bank Group releases first Country Climate Development Report (CCDR), 16th June 2022

[253] Sustainable Infrastructure Finance

[254] Sustainable Infrastructure Finance Overview

Partnership (PPP) toolkits (Annex), the WBG supports and guides stakeholders to evaluate and create PPPs.

Chapter 5. Green Financing Opportunities in the Manufacturing Sector

The manufacturing market encompasses a wide range of physical goods. This includes the creation of finished products from raw materials or semi-finished goods, as well as the assembly, installation, and repair of industrial machinery and equipment. A diverse range of industries is covered such as food and beverage production, textiles, chemical manufacturing, metalworking, and electronics manufacturing[255]. The activities involved in manufacturing are crucial to the economy and have a significant impact on employment, technological innovation, and international trade[256].

Green financing mechanisms are critical for enabling manufacturers to invest in sustainable technologies and practices. By leveraging the proper financial resources, Mongolia's manufacturing sector can reduce its energy consumption, lower its operational costs, and contribute to the country's broader goals of sustainability and climate resilience. To gain these benefits, continued efforts are needed to raise awareness, build capacity, and ensure that green financing is accessible to all sectors of the manufacturing industry. Some highlights for the manufacturing sector in Mongolia include[257]:

- ✓ *Value added in the Manufacturing market is projected to amount to USD 1,125.0m in 2024. A compound annual growth rate of 3.14% is expected (CAGR 2024–2029)*
- ✓ *The value added per capita in the Manufacturing market is projected to amount to USD 322.1 in 2024*

[255] What Are The Biggest Industries In Mongolia? - WorldAtlas

[256] Manufacturing - Mongolia | Statista Market Forecast

[257] Manufacturing - Mongolia | Statista Market Forecast

- ✓ *The value-added margin in the Manufacturing market is projected to amount to 23% in 2024*
- ✓ *Output in the Manufacturing market is projected to amount to USD 4.9bn in 2024. A compound annual growth rate of 2.73% is expected (CAGR 2024–2029)*
- ✓ *The output per enterprise in the Manufacturing market is projected to amount to USD 1.2m in 2024*
- ✓ *The manufacturing intensity in the Manufacturing market is projected to amount to 32.4% in 2024*
- ✓ *The number of enterprises in the Manufacturing market is projected to amount to 4,213.00 in 2024. A compound annual growth rate of 4.35% is expected (CAGR 2024–2029)*
- ✓ *The enterprise density in the Manufacturing market is projected to amount to 1,206 in 2024*
- ✓ *The number of employees in the Manufacturing market is projected to amount to 18.05k in 2024. A compound annual growth rate of 3.14% is expected (CAGR 2024–2029)*
- ✓ *The employment rate in the Manufacturing market is projected to amount to 0.52% in 2024*
- ✓ *The labour efficiency in the Manufacturing market is projected to amount to USD 272.5k in 2024*
- ✓ *The labour productivity in the Manufacturing market is projected to amount to USD 62.3k in 2024*

In the context of this study, regarding the “Leather & Related Products” market, this encompasses businesses engaged in the production of leather, as well as the manufacturing of a wide range of leather products such as footwear, handbags, belts, wallets, and other accessories. The leather production process involves the treatment and processing of animal hides to produce high-quality leather materials. This includes tanning, dyeing, and finishing. The market is an important sector of the global

economy, providing both functional and fashionable products that are in high demand across the world[258].

- ✓ *The value-added in the Leather & Related Products market is projected to amount to US$13.4m in 2024. A compound annual growth rate of 3.15% is expected (CAGR 2024–2029)*
- ✓ *The value added per capita in the Leather & Related Products market is projected to amount to US$3.8 in 2024*
- ✓ *The value-added margin in the Leather & Related Products market is projected to amount to 36% in 2024*
- ✓ *Output in the Leather & Related Products market is projected to amount to US$37.8m in 2024. A compound annual growth rate of 2.74% is expected (CAGR 2024–2029)*
- ✓ *The output per enterprise in the Leather & Related Products market is projected to amount to US$0.5m in 2024*
- ✓ *The manufacturing intensity in the Leather & Related Products market is projected to amount to 0.2% in 2024*
- ✓ *The number of enterprises in the Leather & Related Products market is projected to amount to 84.00 in 2024. A compound annual growth rate of 4.36% is expected (CAGR 2024–2029)*
- ✓ *The enterprise density in the Leather & Related Products market is projected to amount to 24 in 2024*

[258] Leather & Related Products - Mongolia | Market Forecast

5.1 Energy Efficiency

The manufacturing sector in Mongolia is the engine for growth in Mongolia, though it is highly dependent on fossil fuels, and specifically coal. This results in high operating costs and high GHG emissions. Considering that energy efficiency is a fundamental element of both sustainable development and green manufacturing, enabling SMEs to access funds to invest in their transition to energy-efficient technology and processes, the derived environmental impact of the sector will be reduced, while at the same time their competitiveness will be enhanced, thus safeguarding sustainability in the long-term.

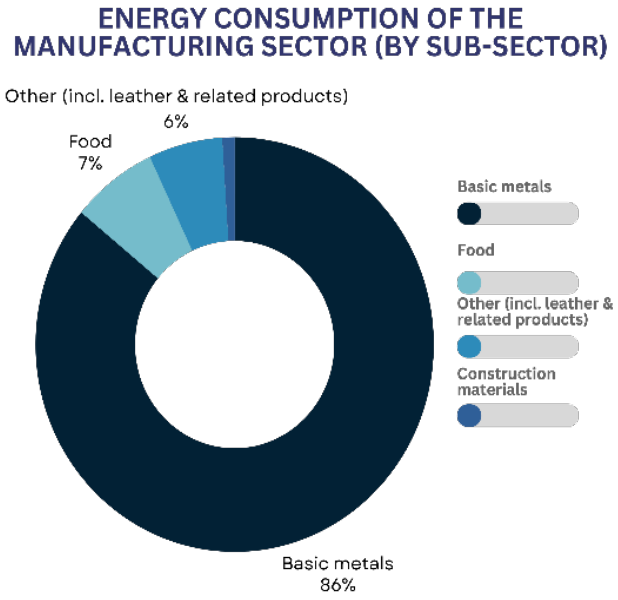


Figure 22: Energy consumption by sub-sector, Source: Mongolia's Energy Efficiency Indicators 2019

Therefore, green financing is an essential tool for Mongolia to facilitate the shift towards energy efficiency.

When it comes to energy efficiency in the manufacturing sector, this includes the optimisation of energy consumption by assessing the energy performance of processes, machinery and infrastructure aiming to reduce energy waste.

A starting point would be to upgrade outdated equipment, streamline the production processes, and incorporate technologies and systems that are energy efficient. Given that in Mongolia the manufacturing sector – especially the textile, leather processing,

agriculture, and metal production – includes energy-intensive processes and equipment, this results in high operating costs and increased environmental degradation[259].

The key areas where energy efficiency initiatives in the Mongolian manufacturing sector can be funded are presented in the following table.

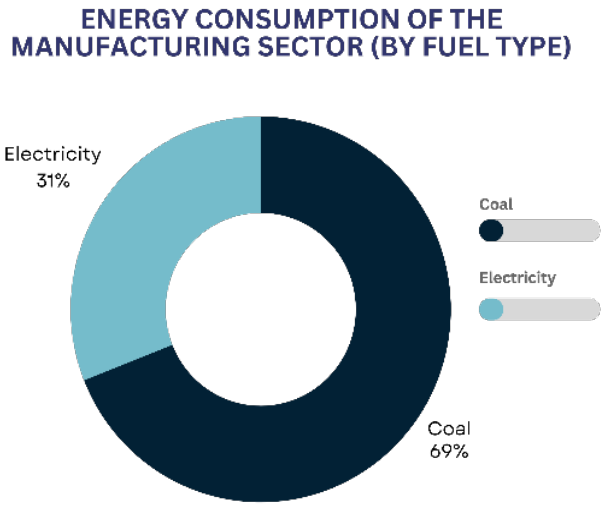


Figure 23: Energy consumption by fuel type, Source: Mongolia's Energy Efficiency Indicators 2019

Table 5: Leverage points for energy efficiency financing in the Mongolian manufacturing sector.

Leverage points for energy efficiency in the Mongolian manufacturing sector	
Technological upgrades	• Replacement of outdated, energy-intensive, and inefficient equipment with upgraded machinery • Introduction of energy efficient technologies (e.g., variable-speed drives (VSDs)
Systems for recovering heat waste	• Introduction of heat waste recovery systems (capture and reuse heat energy)
Insulation and energy efficient building design	• Improve insulation • Install energy efficient lighting • Optimise heating and cooling systems

[259] Mongolia's Energy Efficiency Indicators 2019

Integration of RES	• Incorporate small-scale RES (solar, wind, biomass boilers) to power parts of manufacturing operations

Shifting to energy efficient processes, equipment and infrastructure, bares significant benefits for the manufacturing sector in Mongolia, such as:

- Economic: Less energy translates into reduced operating costs, leading to increased competitiveness in both domestic and international markets. In addition, energy efficient equipment comes with increased lifespan and decreased maintenance cost, thus reduced operational costs leading to increased profitability.
- Environmental: Less energy also translates to reduced air pollution, contributing to enhanced public health and improved environmental performance (reduced carbon footprint), which aligns with the country's sustainability commitments.

Funding, grants, and technical assistance for projects aiming on promoting energy efficiency are offered to Mongolian SMEs by several international financial institutions, development banks, as well as by local banks. The following table includes an indicative list of those organisations.

Table 6: Indicative list of international and national organisations, financial institutions, and banks offering financing for green projects in Mongolia.

Organisation/Financial institution/Bank	Type of assistance *(indicative)*	Topic *(indicative)*
Asian Development Bank (ADB)	Financing Technical assistance Grants	Energy efficiency RES development Sustainable urban development
European Bank for Reconstruction and Development (EBRD)	Financing (Green loans through GEFF) Advisory services Technical assistance	Energy efficiency Green economy development
European Investment Bank (EIB)	Financing (loans, equity, guarantees) Advisory services	Innovation, digital and human capital Sustainable energy and natural resources Sustainable cities
Green Climate Fund (GCF)	Concessional financing Grants Technical assistance	Energy efficiency Climate resilience Low-emission infrastructure
International Finance Corporation (IFC)	Financing (equity investments, loans) Advisory services	Energy efficiency Renewable energy Sustainable business practices
World Bank (WB)	Funding Technical assistance	Energy efficiency

	Advisory services	Sustainable urban development Green infrastructure
Global Green Growth Institute (GGGI)	Technical assistance Policy development support Capacity building	Energy efficiency Sustainable growth Green policy development
United Nations Development Programme (UNDP)	Grants Technical assistance Capacity building programs	Energy efficiency Renewable energy
Japan International Cooperation Agency (JICA)	Concessional loans Technical assistance Capacity building	Energy efficiency Technology transfer Green infrastructure development
Green Economy Financing Facility	Loans Technical expertise	Energy efficient technologies Energy audits Feasibility studies
Khan Bank	Green loans Financial products for energy efficiency	Energy efficient housing Solar energy installations Green technology
XacBank	Green loans Financial products for energy efficiency	Energy efficient housing Solar energy installations Green technology

In addition, energy efficiency in Mongolia is supported, either via financing or technical support, by several European and international funding programmes targeting diverse areas such as urban infrastructure, energy efficiency for industries, and renewable energy integration, focusing on sustainable development and emission reductions through energy efficiency. The following list includes funding programmes and funded projects.

European Union (EU) – SWITCH-Asia

An EU initiative promoting sustainable consumption and production in Asia, through funding projects for energy efficiency integration (low carbon and resource efficient technologies) in various sectors, including manufacturing.

European Bank for Reconstruction and Development (EBRD) – Green Cities

In collaboration with Mongolian municipalities, particularly Ulaanbaatar, it provides funding through loans, grants, and advisory services, for energy efficient infrastructure (e.g., district heating, building retrofit, public lighting). In addition, EBRD through the Green Economy Financing Facility (GEFF) supports Mongolian SMEs via loans for energy efficient technologies and technical expertise (energy audits, feasibility studies).

European Investment Bank – Climate Action and Environmental Sustainability funding[260]

EIB is currently operating in over 150 countries and has a mandate to operate in any developing country. Climate action is one of the top policy priorities for EIB, which integrates climate considerations across all its activities, in addition to financing climate mitigation and adaptation projects, thereby contributing to low-carbon and

[260] Climate and environmental sustainability

climate-resilient growth around the world and supporting the transition to a sustainable low-carbon future[261].

Global Environment Facility (GEF)

The GEF[262] financing of energy efficiency projects has produced valuable, even critical, results for developing countries and transition countries. The GEF support has promoted energy efficiency by helping to remove barriers to implementation and dissemination of energy-efficient technologies and practices, and by supporting market transformation for energy-efficient appliances and the widespread adoption of energy-efficient technologies and sustainable financial mechanisms in the industry and building sectors. Specifically, the GEF's support has been praised for its combination of investment funding with technical assistance and for its development and introduction of new financial mechanisms and pilot projects, which often have overcome high transaction costs and initial risks

Green Climate Fund (GCF)

GCF employs part of its funds to help mobilise financial flows from the private sector to compelling and profitable climate-smart investment opportunities. It operates through a network of over 200 Accredited Entities[263] and delivery partners who work directly with developing countries for project design and implementation. GCF's partners include international and national commercial banks, multilateral, regional and national development finance institutions, equity funds institutions, United Nations agencies, and civil society organisations. GCF can structure its financial support through a flexible combination of grant, concessional debt, guarantees or equity instruments to leverage blended finance and crowd-in private investment for

[261] European Investment Bank (EIB) | Green Climate Fund

[262] GEF_EnergyEff-Oct17-2013_0.pdf

[263] Accredited Entities are organisations established in Mongolia authorised by international funding bodies (e.g., the Green Climate Fund, the Adaptation Fund, the Global Environment Facility)

climate action in developing countries[264]. A project funded by GCF is on improving the climate resilience of the Mongolian capital Ulaanbaatar and reducing greenhouse gas emissions and air pollution by creating eco-districts (low carbon, climate resilient, and affordable zones through low-cost urban infrastructure, public facilities, and social housing units) (Ulaanbaatar Green Affordable Housing and Resilient Urban Renewal Project (AHURP)[265]). The Accredited Entities in Mongolia with direct access to the GCF credit line are the Trade and Development Bank and the XacBank.

United Nations Development Programme

UNDP's support focuses on the development of a range of strategies that enhance the country's ability to conserve and protect its environment for resource efficient development, and to empower local communities and enhance institutional capacity for sustained environmental management, and climate change adaptation and mitigation[266]. The "Nationally Appropriate Mitigation Actions (NAMA) project in the construction sector in Mongolia"[267], aimed to remove the barriers for increased adoption of energy efficiency technology in construction sector through three components; i) establishment of baseline energy consumption and GHG emission in the construction sector ii) development and implementation of NAMA in the construction sector iii) measuring, reporting and verification (MRV) system for NAMA.

However, scaling energy efficiency in the Mongolian manufacturing sector includes certain challenges, despite the availability of green financing, such as: i) high upfront costs, ii) gaps in awareness and capacity (e.g., on the financial benefits of energy

264 About GCF | Green Climate Fund

265 FP077: Ulaanbaatar Green Affordable Housing and Resilient Urban Renewal Project (AHURP) | Green Climate Fund

266 Climate Change | United Nations Development Programme

267 Nationally Appropriate Mitigation Actions (NAMA) in the Construction Sector in Mongolia | United Nations Development Programme

efficiency, or technical skills on advanced technologies), iii) regulatory barriers (e.g., absence of mandatory standards for energy efficiency)

5.2 Renewable Energy

Mongolia's nationally determined contribution3 estimated that the country's GHG emissions under a business-as-usual scenario would grow to 51.5 million metric tons of carbon dioxide ($MTCO_2$) by 2030, of which the energy sector's share would be 81.5%.4 The Mongolian government has set a GHG emissions reduction target of 7.3 million $MTCO_2$ by 2030, of which 4.9 million MTCO2 would come from reduced power generation[268].

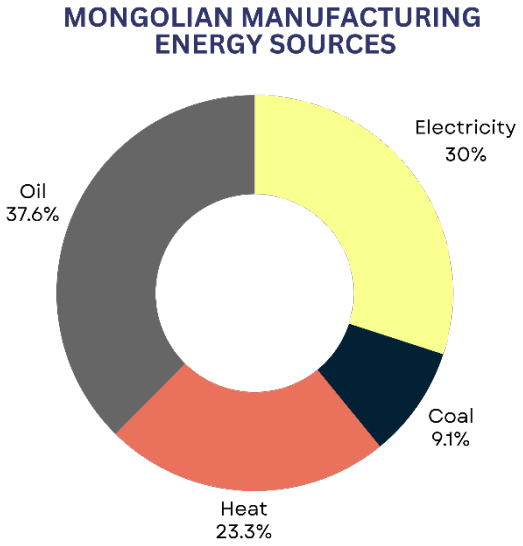


Figure 24: Energy sources used by the Mongolian manufacturing sector, Source: Mongolia - Countries & Regions - IEA

In order to achieve its GHG emissions reduction target, the government aims to increase the share of renewable energy's total installed capacity to 30% by 2030, in line with "Vision 2050"[269]. Mongolia presents a vast capacity of renewable energy potential, especially wind and solar, which is equivalent to 2,600 gigawatts[270]. The country's renewable energy capacity must reach 540 MW by 2030 to achieve the target specified in Vision 2050.

---

[268] Designing a Grid-Connected Battery Energy Storage System: Case Study of Mongolia (EAWP No. 62)

[269] https://www.cabinet.gov.mn/wp-content/uploads/2050_VISION_LONG-TERM-DEVELOPMENT-POLICY.pdf

[270] Designing a Grid-Connected Battery Energy Storage System: Case Study of Mongolia (EAWP No. 62)

According to the International Energy Agency (IEA) data, Mongolia's largest source of energy for 2022 was coal, amounting to 67.9% of the total energy supply, while in terms of domestic energy production this percentage raises up to 97.8%, generating 85.8% of the total electricity produced in the country[271]. For Mongolia to foster sustainable manufacturing practices, and to align with the established national development goals and its international commitments related to climate, transitioning to renewable energy sources, such as solar, wind, biomass, is imperative. The Mongolian manufacturing sector's sources of energy (2022) is segmented as shown in Fig.24 [272].

The share of RES in Mongolia's energy mix in 2022 amounted to 0.3% (wind, solar, etc)[273]. The Mongolian manufacturing sector will benefit from the incorporation of renewable energy's higher percentage in the country's energy mix, through reduced GHG emissions, stabilised energy costs, and energy security due to volatility of fossil fuel prices, hence minimising the long-term financial risks. According to the International Renewable Energy Agency (IRENA) Mongolia's energy profile[274], the renewable energy capacity in Mongolia (2023) was 34% solar, 56% wind, and 10% hydro/marine (Fig. 25). To this end, the Mongolian manufacturing sector can exploit the country's high RE potential for its powering needs via green financing.

[271] Mongolia - Countries & Regions - IEA

[272] Mongolia - Countries & Regions - IEA

[273] Mongolia - Countries & Regions - IEA

[274] Mongolia_Asia_RE_SP.pdf

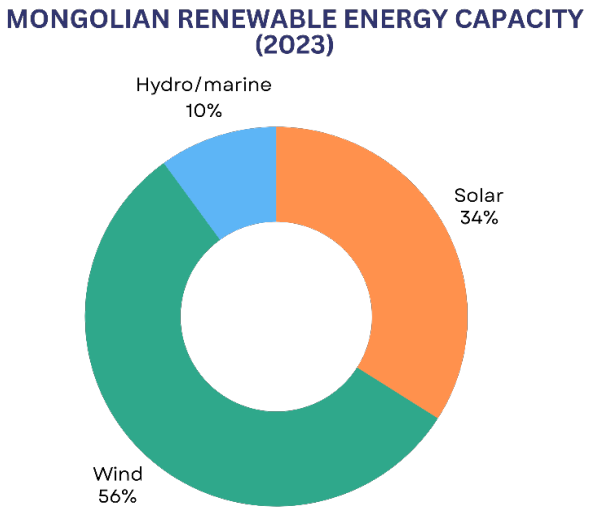


Figure 25: Renewable energy capacity in Mongolia (2023), Source: Mongolia - Countries & Regions - IEA

According to IRENA, the solar potential in Mongolia reaches about 1.6-1.8 MWh/kWp in nearly 60% of its land area, and the respective wind potential amounts to 260-420 W/m^2 (wind power density at 100m) in 40% of the country's land area[275].

Based on these findings, the huge potential for RES installation is evident, and the Mongolian manufacturing sector can exploit sustainable energy to meet its energy demands. In one hand, solar panels, photovoltaic and power heating systems will be an effective and efficient solution to be examined for local installations (e.g., rooftop solar panels), while small-scale wind turbines can supplement the sector's energy needs, resulting in a hybrid RES system.

On the other hand, industrial-scale wind turbines and solar farms can be installed in rural or semi-rural areas feeding the local system where grid reliability is an issue.

Regarding energy from biomass, this can be harvested from organic materials (e.g., agricultural waste, animal by-products) and it presents another sustainable energy alternative that can feed – partially – the Mongolian sector's energy demands. The examination of an industrial symbiosis model can be of essence among supplementing SMEs in proximity – based on a circularity roadmap – (e.g., food processing SMEs, leather manufacturers, local farms and agricultural SMEs with livestock) where organic waste is in high quantities and the "zero waste" principle can triumph. For example, biomass boilers or biogas systems can transform an SME's

[275] Mongolia_Asia_RE_SP.pdf

waste into energy either for itself or for its neighbour, hence providing a double-fold solution for reducing waste and reducing energy costs. According to IRENA Mongolia's energy profiling, the country's potential on biomass Net Primary Production (NPP[276]) accounts to 0.5tC/ha/yr NPP, when the global average amounts to 3-4 tC/ha/yr.

Regarding investments from the private sector on renewable energy projects, it should be noted that the Mongolian government has implemented targeted energy sector reforms to attract private sector investment in renewable energy. Since Mongolia's energy sector reform in 2001, the central energy system has been unbundled into generation, transmission, and distribution subsectors; and the government has introduced a single-buyer model for market-oriented sector operations. The Law on Investment was amended in 2015 to support private sector investment in energy infrastructure, while the Law on Renewable Energy (2007) aimed to increase the use of renewable energy in Mongolia and to regulate its generation and supply; has enabled sizable private sector investments in renewable energy.

For the promotion of competitive procurement of renewable energy, following an expansion of renewable energy facilities funded by the private sector and a reduction in renewable energy prices, the Law on Renewable Energy was amended in 2019, aiming to reduce the upper limits of solar and wind energy tariffs and removed the lower limits. The government introduced Vision 2050 to encourage collaborations among the different sectors.

Based on the above data and information, it is evident that the manufacturing sector in Mongolia is highly dependent on fossil fuels, and specifically on coal. Despite high operating costs, this also results in high GHG emissions. Since the Mongolian

276 Net primary production (NPP) is the amount of carbon fixed by plants and accumulated as biomass each year. It is a basic measure of biomass productivity.

manufacturing sector constitutes the 21% of the Mongolian SMEs[277], integrating renewable energy systems in the country's manufacturing sector highly depends on access to green financing which is designed to support holistically this transition either by reducing the needed upfront capital and/or by providing support in the form of technical assistance ensuring proper installation and operation.

National and international financial mechanisms for renewable energy technologies follow below.

Green Climate Fund (GCF)

The Green Climate Fund (GCF) – a critical element of the historic Paris Agreement - is the world's largest climate fund, mandated to support developing countries raise and realize their Nationally Determined Contributions (NDC) ambitions towards low-emissions, climate-resilient pathways[278].

GCF's investments are anchored in its core principle of country ownership and are aligned with existing national planning processes (e.g. Nationally Determined Contributions (NDCs), Technology Need Assessments (TNAs) and National Adaptation Plans (NAPs). GCF supports countries through its Readiness programme by providing grants to help countries develop bankable investment plans based upon their NDCs.

GCF leverages its range of financing instruments (grants, concessional loans, guarantee funds, equity investment) to meet country-specific needs and reduce risks for investors. By doing so, GCF mobilises capital at scale for investments where risk may otherwise be considered too high. This accelerates the transition to renewable

277 Doojav, Gan-Ochir & Luvsannyam, Davaajargal & Sukhbaatar, Bilguun & Sodnomdarjaa, Bilguunzul & Otgonbat, Tsolmon & Batmunkh, Khuslen & Gantumur, Munkhbayar & Enkh-Amgalan, Elbegjargal. (2020). Development and Access to Finance of Small and Medium-Sized Enterprises in Mongolia. 10.4018/978-1-7998-1566-2.ch014.

278 About GCF | Green Climate Fund

energy, as well as providing energy access and affordability for millions of people, including marginalised groups[279]. According to GCF, the Mongolian financial institutions XacBank and Trade and Development Bank of Mongolia (TDB Mongolia) are the listed accredited entities[280] with direct access to GCF funds, while the national designated authority is the Ministry of Environment and Climate Change)[281]. The GCF has allocated 484.3m USD to Mongolia under 13 projects[282].

5.2.2 European Bank for Reconstruction and Development (EBRD)

Mongolia became an EBRD country of operations in 2006. The EBRD supports Mongolia in its transition to a full market economy and is currently the largest foreign investor in the country. All projects that we have supported have been in the private sector and almost all of these involve local entrepreneurs or banks. One of the priorities for the EBRD in Mongolia is to support infrastructure projects with private sector participation, including public-private partnerships (PPPs). The main priorities of the EBRD's work in Mongolia are[283]:

- *Diversification*: The EBRD will aim to expand its engagement with the non-extractive private sector.
- *Sustainable growth*: We support the financial sector through small and medium-sized enterprise (SME)-debt programmes, equity and technical assistance.
- *Responsible mining and institutions*: The EBRD continues to offer debt and equity finance to reputable mining companies which meet its high standards

279 gcf-thematic-brief-renewable-energy.pdf

280 Accredited Entities are organisations established in Mongolia authorised by international funding bodies (e.g., the Green Climate Fund, the Adaptation Fund, the Global Environment Facility)

281 Former Ministry of Environment and Tourism (MET)

282 Mongolia | Green Climate Fund

283 The EBRD in Mongolia: overview

and will support institutional building. All of our support in the mining sector has thus far been directed to local enterprises.

- *Infrastructure and private sector development*: The EBRD supports Mongolia's infrastructure-building "including through the development of renewable energy" and promotes private sector involvement where possible.

The projects funded by EBRD in Mongolia are[284]:

Table 7: EBRD funded projects in Mongolia for renewable energy, Source: EBRD Project Summary Documents

Date	Project ID	Project Title	Sector	Public/ Private	Status
23 Apr 2024	55110	Tavan Bogd	Manufacturing and Services	Private	Disbursing
19 Oct 2023	54633	DFF-Khanburgedei 4	Manufacturing and Services	Private	Repaying
18 Oct 2023	54025	DFF-Tavan Bogd International 2	Manufacturing and Services	Private	Repaying
26 Apr 2023	54207	RSF- Khan Bank - Uurteel II	Manufacturing and Services	Private	Repaying
18 May 2022	51505	Choir-Sainshand transmission line	Energy	State	Disbursing
25 Jan 2022	53139	DFF- Sain International	Manufacturing and Services	Private	Repaying
12 Jul 2021	52728	DFF-Tavan Bogd 2	Manufacturing and Services	Private	Complete

[284] EBRD Project Summary Documents

12 Jul 2021	52729	DFF-Tavan Bogd International	Manufacturing and Services	Private	Repaying
17 Nov 2020	52279	DFF - Mekhlopat	Manufacturing and Services	Private	Complete
27 Mar 2017	47397	Sainshand Wind	Energy	Private	Repaying
19 Aug 2016	47949	Tsetsii Windfarm	Energy	Private	Repaying
13 Oct 2014	45872	DLF-Tavan Bogd	Manufacturing and Services	Private	Complete

The EBRD may fund projects in Mongolia that fulfil the following criteria:

- have good prospects of being profitable
- have significant equity contributions in cash or in kind from the project sponsor
- would benefit the local economy
- satisfy the EBRD's environmental standards as well as those of the host country

The EBRD provides tailored solutions to client and project needs and to the specific situation of the country, region and sector. It assigns a dedicated team of specialists with expertise in project finance, the region and sector, law and environment.

- ✓ The EBRD funds up to 35% of the total project cost for a greenfield project or 35% of the long-term capitalisation of an established company.
- ✓ Additional funding from sponsors and other co-financiers is required. The EBRD may identify additional resources through its syndications programme.
- ✓ Typical private sector projects are based on at least one-third equity investment.

- ✓ Significant equity contributions are required from the sponsors. Sponsors should have a majority shareholding or adequate operational control. In-kind equity contributions are accepted.

EBRD through the Green Economy Financing Facility (GEFF) supports Mongolian SMEs via loans for renewable energy technologies and technical expertise (energy audits, feasibility studies).

Asian Development Bank (ADB)

Mongolia has worked with ADB and other development partners to implement reforms in every sector of the economy and upgrading basic infrastructure. ADB has implemented several renewable energy projects and programmes, including technical assistance, providing financing and technical support for renewable energy production, storage and distribution, across multiple sectors in Mongolia[285], including agriculture, education, energy, finance, health, transport, and urban development. As of April 2023, ADB had provided $4.14 billion for sovereign and non-sovereign assistance, financing 477 loan, grant, and technical assistance projects (Figure 26). As of 31 December 2023, ADB has committed 371 public sector loans, grants, and technical assistance totalling $4.1 billion to Mongolia. The bank's current sovereign portfolio in the country includes 41 loans and 1 grant worth $1.55 billion[286].

[285] Projects | Asian Development Bank

[286] Asian Development Bank and Mongolia: Fact Sheet | Asian Development Bank

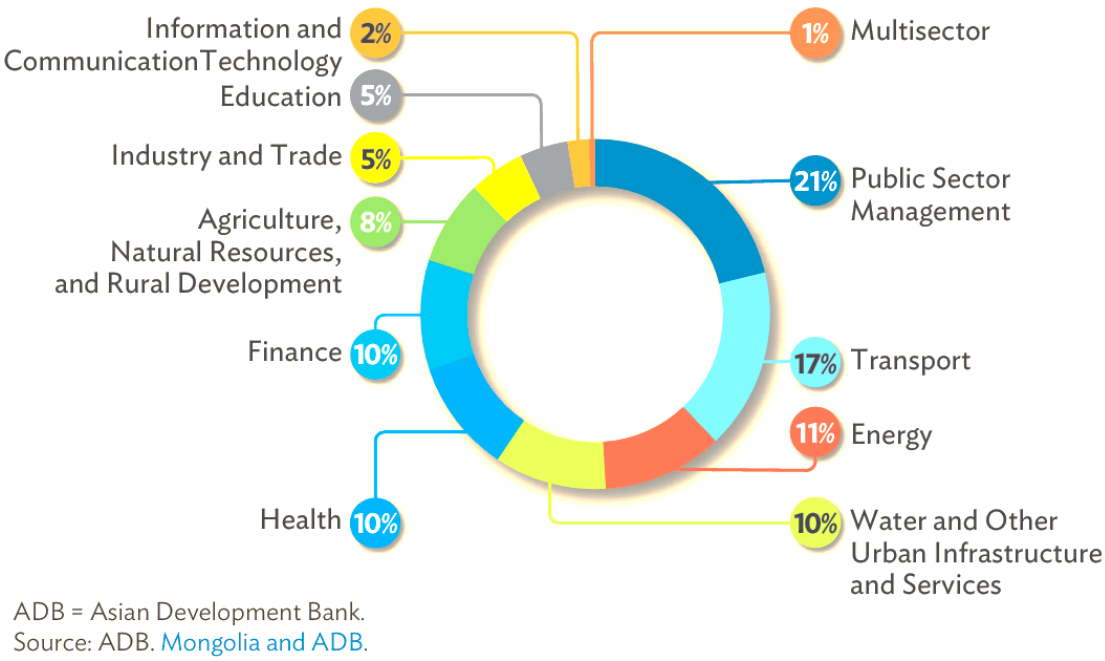


Figure 26: ADB's assistance to Mongolia by sector, as of April 2023, Source: ADB Annual Report 2023: Operational Data | ADB Data Library | Asian Development Bank

XacBank

Xacbank is a strong supporter of sustainable development in Mongolia. It offers green business loans to SMEs, especially in the manufacturing sector, for their GHG emission reduction via renewable energy. The eligible SMEs are any business that produces, trades, or installs products reducing GHG emissions by at least 20%. The XacBank also promotes women empowerment in the Mongolian business environment through reduced interest rate for women-led MSMEs (micro-small-medium size enterprises) that fulfil the following criteria[287]:

- At least 40% of the total employees are women
- At least 51% of company owned by women
- At least 30% of senior managers are women

[287] SME Business Loan for GHG Emission Reduction - XacBank

XacBank is not only funding initiatives around energy efficient buildings based on GCF and GEF funds but also in cooperation with ADB and UNDP[288].

Khan Bank

Khan Bank offers green products to SMEs and individuals to support renewable energy (e.g., funds green projects through business loans, empower women entrepreneurship through specialised loans, and also provides loan products to support the green economy[289]). Green bonds have been raised by Khan Bank aiming to finance renewable energy projects in various sectors, including manufacturing, such as solar installations in SMEs seeking to adopt green energy technologies, hence improving their energy efficiency and reducing their carbon footprint.

Summing up, considering that energy efficiency is a fundamental element of both sustainable development and green manufacturing, enabling SMEs to access funds to invest in their transition to renewable energy technology, the derived environmental impact of the sector will be reduced, while at the same time their competitiveness will be enhanced through low-cost and environmentally friendly energy, thus safeguarding their sustainability in the long-term. Therefore, green financing is an essential tool for Mongolia to facilitate the shift towards renewable energy.

[288] synergies-climate-finance.pdf

[289] Green project business loan

5.3 Waste Management and Circular Manufacturing: Textile and Leather

Sustainable growth includes the adoption of circular economy principles and practices, which focus on retaining value across the value chain. Regarding resource intensive industries in Mongolia, e.g., leather and textiles manufacturers, circular economy practices, including proper waste management, are essential elements towards sustainable operations. Specifically, for Mongolia's textile and leather sectors - which contribute significantly to both economic production[290] and environmental degradation - to increase resource efficiency, thus minimise waste, through circular economy principles and practices adoption, green finance mechanisms are of essence for these businesses to make their transition towards sustainability and enhance their competitiveness.

Role of Circular Manufacturing in Textile and Leather Industries

The adoption of circular economy practices in manufacturing is based on “closed-loop” business models (or “closed-loop systems”) in which materials are recycled, parts are reused, waste is reduced, and resources are fully utilised. Regarding the leather and textile industries in Mongolia, circular manufacturing concerns the production of long-lasting products that are designed to be both recyclable and reusable. As a result of this, the need for virgin materials is minimised, as well as waste is reduced and environmental degradation – due to the “business as usual” production processes – is minimised.

The main challenges of the Mongolian leather and textile manufacturing industries derive from the current manufacturing processes which produce large quantities of waste – including chemical waste from tanning process that affect the water beds – and rely on excessive consumption of natural resources. Specifically, tanning

[290] Manufacturing, value added (% of GDP) - Mongolia | Data

generates large amounts of hazardous waste, like effluents that are chromium-laden, and their treatment and proper disposal are challenging.

Therefore, by financing the adoption of green (e.g., purchase of energy efficient equipment) and circular (e.g., generate value from discarded materials, like leather cut-offs, textile scraps, substitute tanning process' materials) practices in these industries, their environmental impact will be reduced, their competitiveness in the global market will be enhanced, and the Mongolian's respective manufacturing sector will be a model-concept for replication in the region.

Summing up, green finance assists manufacturers in lowering emissions, recycling byproducts, and upgrading energy-efficient systems. Through the use of traceability and process control systems financed by global green finance programs, Mongolian companies are able to minimise waste and maximise resource utilisation.

The following list includes national and international financial mechanisms providing support for waste management and circular manufacturing projects:

European Union (EU) – SWITCH-Asia

An EU initiative promoting sustainable consumption and production in Asia, through funding projects for energy efficiency integration (low carbon and resource efficient technologies) in various sectors, including leather and textile manufacturing.

European Bank for Reconstruction (EBRD

EBRD through the Green Economy Financing Facility (GEFF) supports Mongolian SMEs via providing funding to increase their energy efficiency and enhance their resource utilisation, by assisting manufacturers in adopting circular economy practices and proper waste treatment systems.

Green Climate Fund (GCF)

GCF employs part of its funds to help mobilise financial flows from the private sector to compelling and profitable climate-smart investment opportunities. It operates

through a network of over 200 Accredited Entities and delivery partners who work directly with developing countries for project design and implementation. GCF's partners include international and national commercial banks, multilateral, regional and national development finance institutions, equity funds institutions, United Nations agencies, and civil society organisations. GCF can structure its financial support through a flexible combination of grant, concessional debt, guarantees or equity instruments to leverage blended finance and crowd-in private investment for climate action in developing countries[291].

Asian Development Bank (ADB)

Enhancing solid waste management, lowering industrial pollution, and encouraging circular economy principles are the main objectives of ADB's financial support. ADB funds projects and initiatives in Mongolia to build capacity in Mongolian SMEs on waste management, especially by implementing material recycling and adopting waste-to-energy technologies.

Mongolia Green Finance Corporation (MGFC)[292]

In 2016, organizations such as the MBA, MSFA, XacBank, Ministry of Finance, MET, GCF, and GGGI jointly initiated the project to establish a "Green Loan Fund" in Mongolia and founded the Mongolia Green Finance Corporation in 2018 with the special purpose of improving the policy environment to support green finance in Mongolia[293]. It is planned to commence full operations in 2024, with a total budget of 50 million USD funding from the GCF, government and the private sector, an amount that is important for the intensification of green finance in Mongolia[294]. With the establishment of the MGFC, Mongolia will have a financing system capable of

[291] About GCF | Green Climate Fund

[292] Mongolia Green Finance Corporation

[293] Mongolia Green Finance Corporation

[294] Mongolia Green Finance Corporation

reducing greenhouse gas emissions, adapting to climate change, and leading to sustainable development.

The Mongolian Green Finance Corporation is designed to unlock its renewable energy potential and support Mongolia's low carbon transition by scaling up and accelerating investment into green energy and energy efficiency projects, tackling the dual challenges of climate change and air pollution[295]. As part of this work, the MGFC will also work with the Mongolian financial services sector to build domestic capability in green finance[296]. Moreover, it intends to support the transition of enterprises and entrepreneurs to advanced technologies with low greenhouse gas emissions in a gender-sensitive, environmentally friendly and affordable manner.

MGFC will work towards meeting the financing needs of the domestic market by providing wholesale loans aimed at increasing green facilities and energy efficiency, reaching areas in need of green investment. With these green funds, banks and financial institutions will first finance energy-efficient technology, residential housing and insulation loans. Therefore, it is expected that MGFC will play an important role in achieving Vision 2050 and Mongolia's policies adopted in the field of combating climate change, as well as national contribution goals. Mongolia's international obligations can be directly or indirectly fulfilled to a certain extent by the projects implemented by the MGFC. As a green wholesale financing organization jointly established by the government, the private sector, and international organizations, MGFC is the first unique model in the region. It will play an important role in creating a favourable policy environment for the implementation of low greenhouse gas emission and energy efficient solutions, attracting green and gender-sensitive financing, and efficiently and inclusively distributing it to the domestic market.

Total within the project 3.7 million tons of greenhouse gases will be reduced, 87,000 or so people will benefit, 20,000 or more ger district houses will be insulated, 1,500

[295] Developing Mongolia's Green Finance Corporation

[296] Developing Mongolia's Green Finance Corporation

more new green jobs will be created, 130 enterprises' energy efficiency will be increased[297].

[297] Mongolia Green Finance Corporation

Chapter 6. Eligibility criteria and Guidelines on Application

6.1 Introduction

As part of its commitments under the Paris Agreement and the National Green Development Policy (2014), the country strives to achieve a 22.7% reduction in total national greenhouse gas (GHG) emissions compared to the projected emissions under a business-as-usual scenario. In addition to climate change, pollution is one of Mongolia's most critical environmental concerns. The National Program on Reduction of Air and Environmental Pollution (2017) aims to decrease air pollutants by 80%, prohibit the use of unprocessed coal anywhere except for thermal power plants in Ulaanbaatar, and reduce air and environmental pollution by at least 50% by 2025[298]. Furthermore, Mongolia has set ambitious targets in areas such as climate adaptation, water efficiency, waste management, job creation, income equality, and the development of a stable, professional governance system[299].

The total investment required to finance the Mongolian National Green Development Policy, alone, is estimated at USD 6.96 billion. Taking into consideration, the Nationally Determined Contribution (NDC) and other government targets, the annual green investment needs of Mongolia range from USD 690 million to USD 1.03 billion according to studies conducted by the UN Environment[300]. The revised NDC currently under submission to the UNFCCC is estimated to require USD 11.7 billion. These estimates make it clear that public funds will be insufficient, and capital from the private sector and international investors will need to be leveraged.

298 http://www.wpro.who.int/mongolia/publications/20180228_policy_brief_on_air_pollution.pdf

299 Mongolian Green Taxonomy

300 National Sustainable Finance Roadmap of Mongolia. UN Environment, IFC, MSFA. 2018

Mongolia introduced its National Sustainable Finance Roadmap up to 2030, which marks a vast reform agenda in the financial system to embed sustainable finance beyond banking, in insurance, capital markets and institutional investors. Of course, this came with some certain challenges[301] (Fig. 27). For Mongolia to create an operational sustainable financial system and help re-orient capital to sectors and projects that substantially contribute to environmental sustainability and emission reduction, a green taxonomy framework was developed that provides a list of economic activities eligible for green investment.

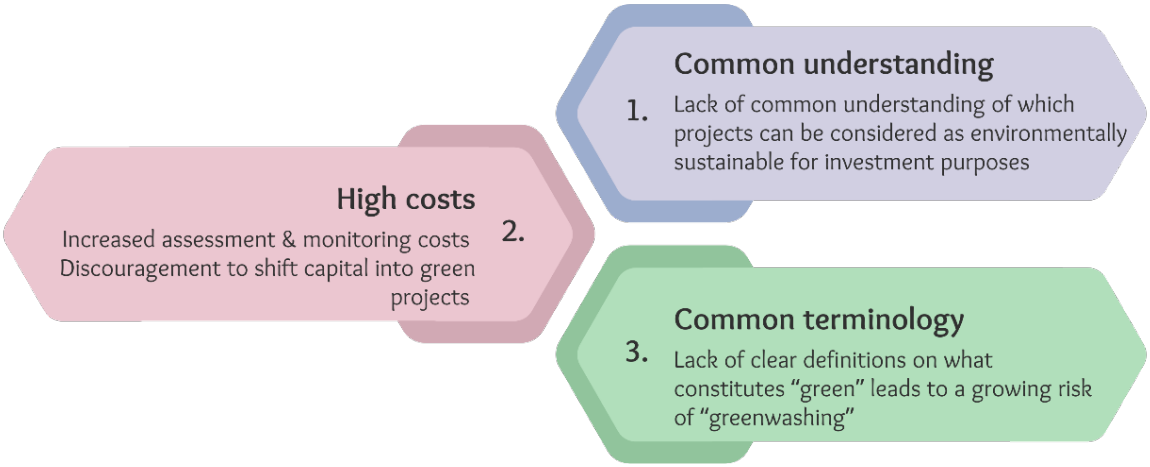


Figure 27: Major challenges for Sustainable Finance in Mongolia, Source: [mongolia-green-taxanomy-eng-pdf-for-publishing.pdf]

Accessing international green financing requires for partnerships to be formed with Accredited Entities (AE)[302], which are responsible for overseeing and managing project proposals, the disbursement of the funds, and the project implementation. Since acquiring an international funding may prove more complex than it seems as there are stringent standards to adhere to, partnering with an AE ensures that project

[301] "Green Taxonomy Working Group Report". Green Finance Leadership Program. 2019

[302] Accredited Entities are organisations established in Mongolia authorised by international funding bodies (e.g., the Green Climate Fund, the Adaptation Fund, the Global Environment Facility)

developers – including government agencies –, NGOs, and actors from the private sector to access and manage the necessary funding effectively and efficiently.

The AEs act as "a liaison" between local project implementers and international funding bodies, overseeing the application, execution, and reporting needs of projects that receive financing (Fig. 28).

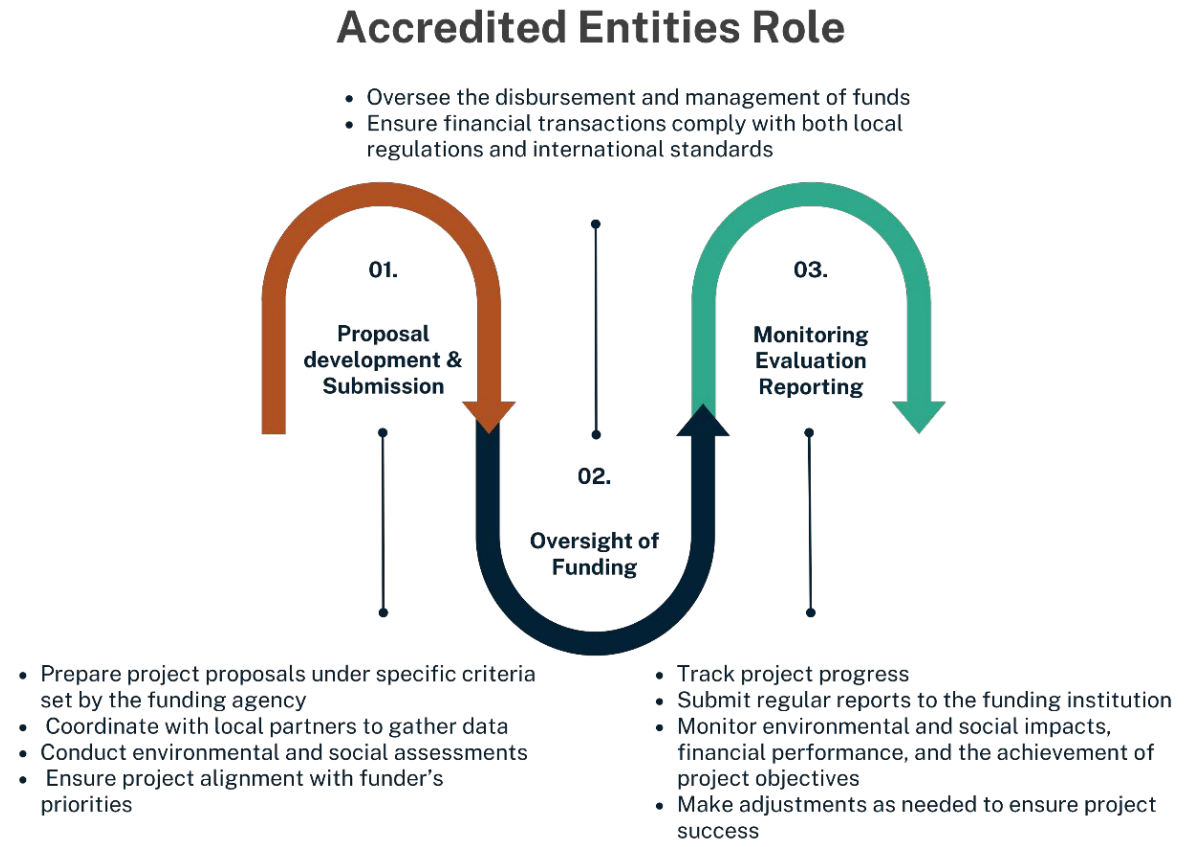


Figure 28: Accredited Entity for accessing international funding, Source: [Entity accreditation | Green Climate Fund]

6.2 Criteria for Green Funding Access

A Green Taxonomy Committee was established in February 2019 to provide clarity on which activities could be considered eligible for green investment. The Mongolia

Sustainable Finance Association (MSFA) chaired the committee, partnering with the Central Bank of Mongolia and the Ministry of Environment and Climate Change. The committee established six technical working groups bringing together representatives from policy making and standard setting government organizations, financial institutions, businesses and project developers, international organizations, industry experts, and civil society institutions to discuss and advise on specific sectors: energy; green building; environmental pollution; water and waste, and sustainable agriculture. Taxonomy's target users (Fig.29) include primarily banks, but also capital market participants.

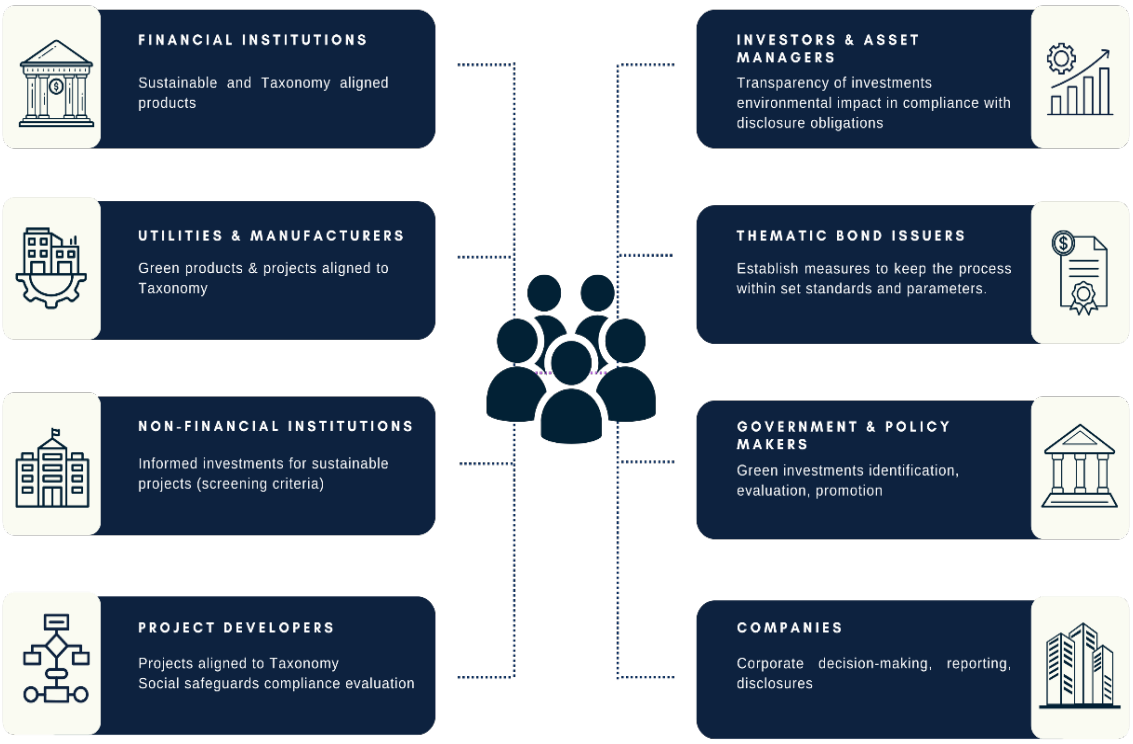


Figure 29: Mongolia's Green Taxonomy users, Source: 1270_Mongolia_Green_Taxonomy_2019_MSFA.pdf

The Taxonomy focuses on four environmental objectives (Fig.30):

- climate change mitigation and adaptation
- pollution prevention
- resource conservation
- livelihood improvement

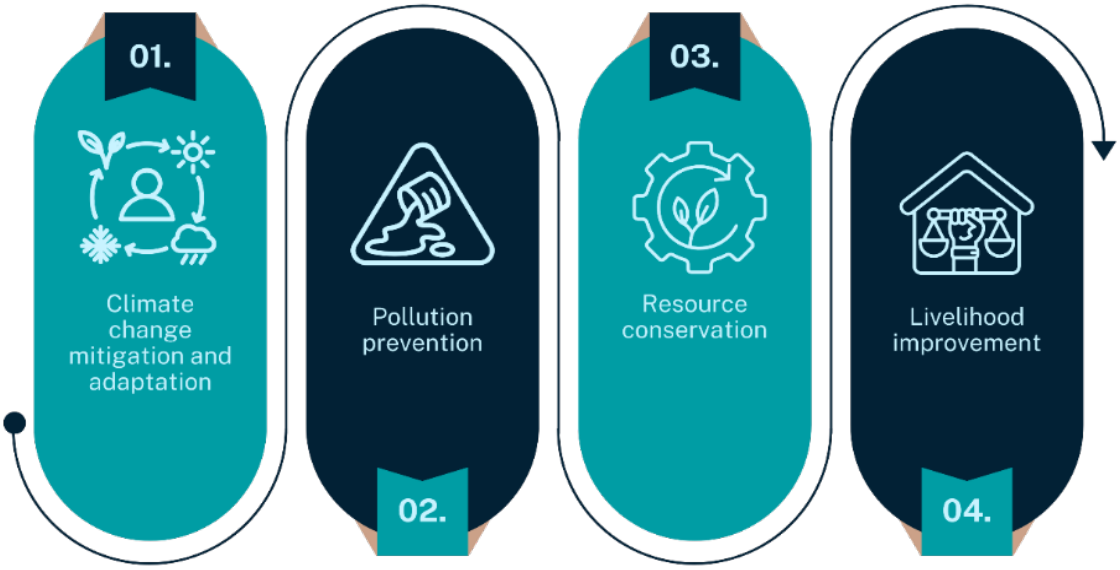


Figure 30: The four environmental objectives of the Green Taxonomy in Mongolia, Source: 1270_Mongolia_Green_Taxonomy_2019_MSFA.pdf

The Taxonomy is based on 6 principles (Fig. 31) [303][304]:

- Contribute to national policies and targets
- Address environmental challenges
- Cover high-emitting, key economic sectors
- Align with international standards and good practices

[303] 1270_Mongolia_Green_Taxonomy_2019_MSFA.pdf

[304] Mongolia Green Taxonomy | Green Finance Platform

- Comply with ESG standards
- Continues review and development

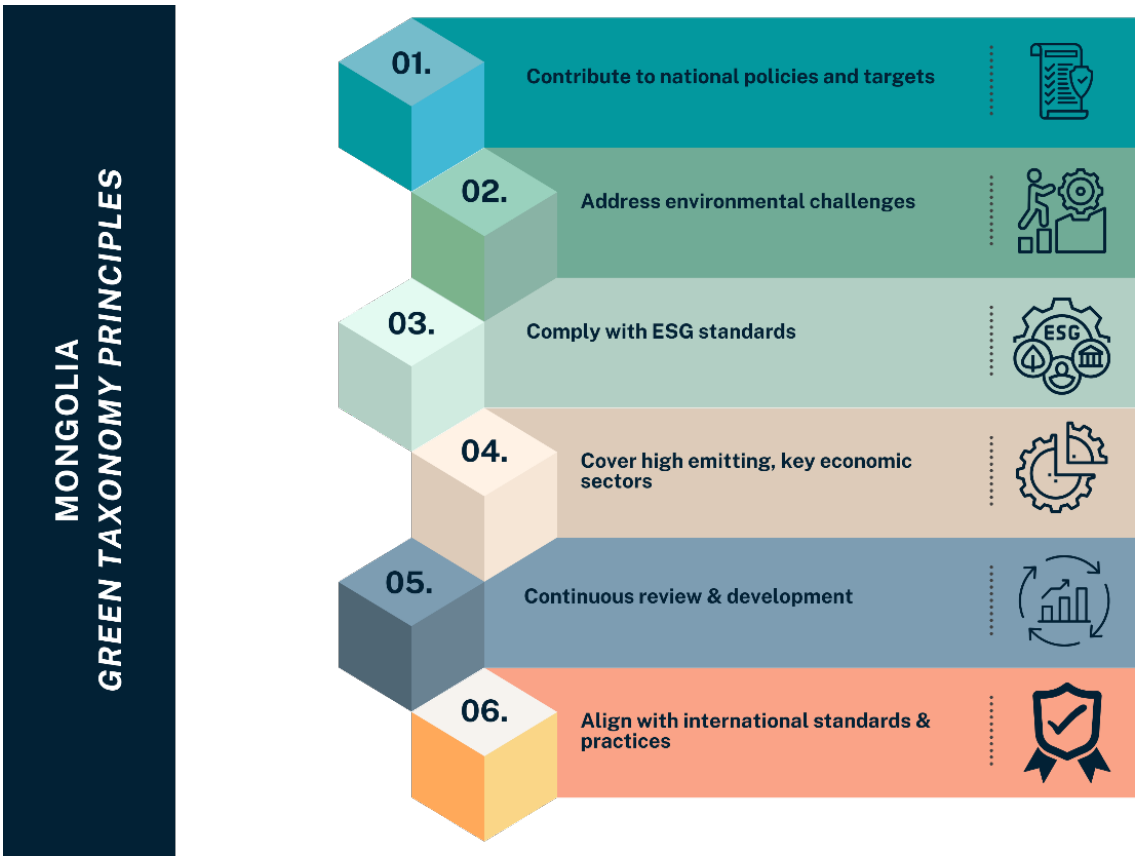


Figure 31: The 6 Principles of Green Taxonomy in Mongolia, Source: Mongolia Green Taxonomy | Green Finance Platform

For the Mongolian manufacturing sector to access the toolkit of Green Finance, a number of criteria has been established[305], as described in the "*Manufacturing Sector Guideline*" developed by the MSFA (ToC). It should be taken into consideration that when requesting for funding for a green project, all banks involved in financing manufacturing sector clients, projects or transactions are ought to apply the Mongolian Sustainable Finance Principles and the Manufacturing Sector Guideline.

[305] Manufacturing Sector Guideline

The main focus of the document is on ESG risk management; however, banks also consider opportunities for ESG performance improvement beyond risk management[306].

The initial screening to evaluate ESG requirements for funding disbursement, indicatively include[307]:

- Documents and approvals for manufacturing activities (this extends to contractors if appropriate)
- ESG risk assessment
- Requirements of applicable international and national ESG laws and standards
- Ability to manage and mitigate ESG risks

Upon the funding approval, continuous monitoring on the project's implementation should be expected on the agreed ESG action plans, ESG risk management plans, or other requirements, included in the signed agreement.

A project requiring funding should be within the scope of the SDG Finance Taxonomy's core sectors[308] (Fig. 32).

306 Manufacturing Sector Guideline

307 ESG Requirements for Manufacturing Sector Transactions in Mongolia

308 Mongolia SDG Finance Taxonomy

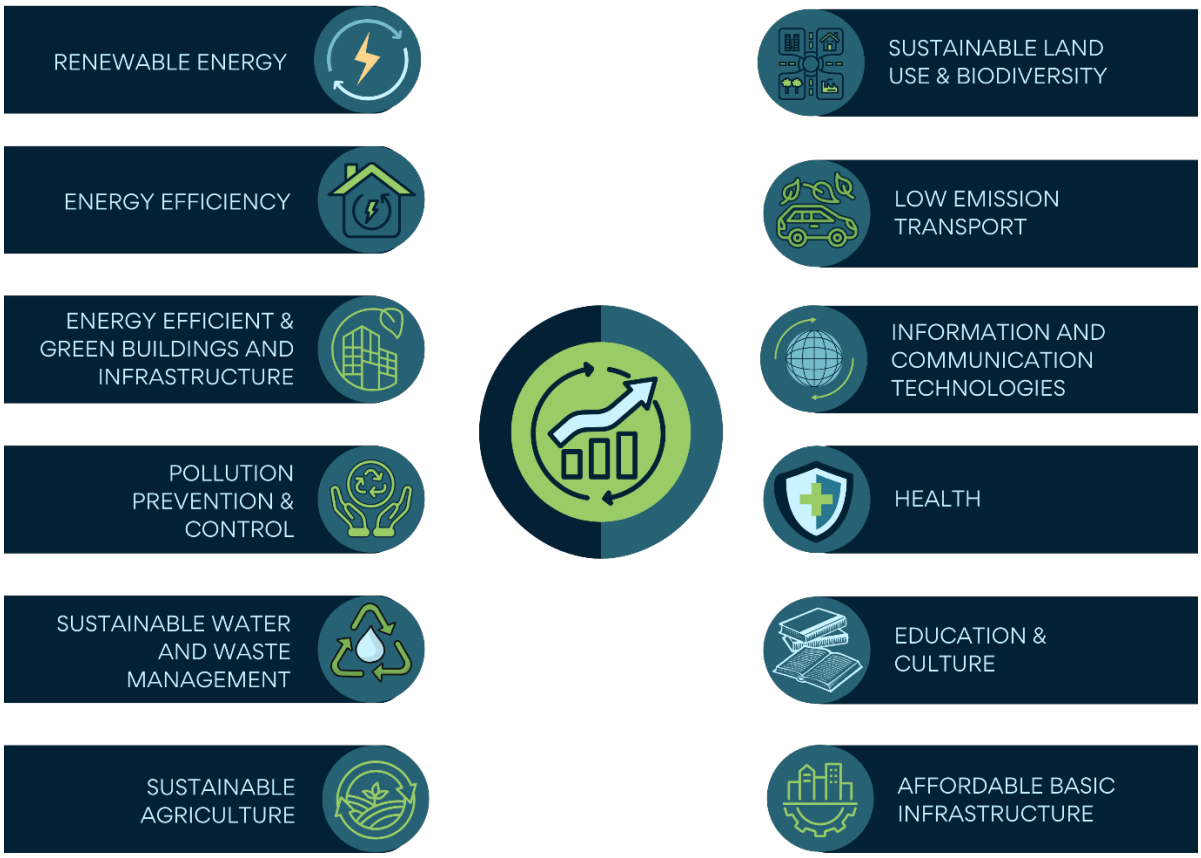


Figure 32: SDG Finance Taxonomy Core Sectors, Source: [Mongolia SDG Finance Taxonomy]

Based on all the above, a summary of the primary eligibility criteria under which a project should demonstrate clearly defined benefits and measurable outcomes, typically considered both by international and national financial institutions for green financing follows.

1. Alignment of the project with environmental goals
    a. Climate change mitigation
    b. Climate change adaptation
    c. Conservation of biodiversity and natural resources
2. Financial and technical viability
    a. Feasibility of the project and cost effectiveness
    b. Technical capacity and expertise

   c. Risk management and mitigation strategies
3. Social and environmental safeguards
   a. Minimised environmental harm
   b. Community engagement and inclusivity
   c. Health and safety standards
4. Impact measurement and reporting
   a. Clearly defined and measurable targets
   b. Monitoring and evaluation system
   c. Transparency in reporting
5. National and international standards
   a. Compliance to Mongolian environmental regulations
   b. Alignment with international protocols on the environment
   c. Sustainable Development Goals commitment

6.3 Development of successful proposals

A successful proposal consists of the following elements:

- Strategic planning
- Comprehensive research
- Compelling presentation of the project's potential

To better understand what a proposal should include and how it should be written, one should first understand the target group – to whom this proposal is addressed to. Funders (either that being an international or national funding organisation) need to see clear, coherent and evidence-based proposals, as each proposal must:

- meet their established funding criteria
- demonstrate feasible and impactful solutions
- include well-defined metrics for success

Regarding green funding, a proposal for green funding includes the following elements:

- project summary
- clear objectives
- implementation strategy
- metrics on the impact
- financial planning
- environmental standards
- social standards

In more detail,

- Project summary
  - Brief overview
    - Key points (goals, objectives, scope, relevance to the funding organisation objectives)
  - Justification
    - The need for this project (what is the problem, how the data and research show its importance)
  - Expected outcomes
    - Expected environmental and social benefits, potential sustainable impact
- SMART objectives & goals (Specific, Measurable, Relevant, Time-bound)
  - Detailed goals
    - Direct alignment with the funding organisation's environmental and social priorities (e.g., energy efficiency project → target % for energy reduction in a specified time frame)
  - Alignment to funding organisation's mission
    - Each funding organisation has its own goals to achieve through provision of funding to projects. The proposal should specify its contribution to these goals.

- Expected impact metrics
  - The proposal should be based on quantifiable metrics (e.g., CO2 emissions reduction, number of people benefiting from the project)

- Project implementation strategy
  - Analytical methodology
    - Clear, step-by-step, and detailed timeline of the activities at each stage of the project
  - Technical considerations
    - Technologies, practices, methodologies to be used
  - Roles & responsibilities
    - Each team member's or partner organisations'- in the case of a consortium - should have well-defined responsibilities and contribution to the project
  - Contingency planning
    - How potential risks – regulatory, environmental or technical challenges - are addressed, risk mitigation strategy
- Impact measurement and evaluation plan
  - Indicators & metrics
    - Benchmarking & quantifiable indicators for monitoring progress
  - Baseline data & targets
  - Frequency of monitoring and evaluation
    - Timeline of data collection project points
    - Timeline of project evaluation points
    - Timeline of interim reporting
  - Independent evaluation
    - Third-party evaluation for results verification
- Budget & financial planning

- Budget breakdown
  - Detailed budget (listing of each expense category) – it should be realistic, and cost-effective
- Justification
  - Each expense should be accompanied by a clear justification in terms of environmental benefits and cost effectiveness
- Funding allocation timeline
  - Clear timeline on how funding will be allocated over the project's duration
- Co-financing & additional resources (if applicable and eligible)
  - Sources and agreements on co-financing should be included in the proposal (co-financing reduces the risk for the main funding organisation)

- Environmental and social standards compliance
  - Environmental and social impact assessment
    - Include or make reference to impact assessments that could solidify your proposal goals
  - Community engagement and inclusivity
    - Ensure that local communities are involved in and benefitted from the project (planning stage & implementation phase)
  - Health and safety standards
    - compliance with international and local standards add credibility and integrity to the proposal

Summing up, a successful proposal should be determined by thorough and well-structured i) project planning, ii) financial accountability, iii) impact measurement.

6.4 Impact Assessment – Environmental & Financial

The impact assessment is a process that identifies and address the challenges of a project's development. Regarding green financing, the key impacts of a project are: i) environmental, ii) financial, and iii) social. This guide focuses on the environmental and financial impacts of a project.

The Environmental Impact Assessment (EIA) process aims to identify and address the potential environmental effects of a project, ensuring that a project will be implemented with a minimised harm to the environment. It consists of the following elements[309][310][311]:

- Screening
  - Determining whether a project requires for an EIA to be conducted
  - Local or national environmental authorities define on the need for an EIA based on the project's potential impacts (see Criteria for Green Funding Access relevant topic on impacts of the project in the proposal stage)
- Scoping
  - Defining the scope of the EIA and identifying the important environmental issues to be addressed
  - Consultation from experts, stakeholders, and public is critical to identify the key environmental concerns
- Impact assessment
  - Assessing the potential effects of the project on the environment (both positive and negative)

309 Fundamentals of Project Sustainability | PMI

310 World Bank Document - Environmental and social impact assessments, 2018

311 Environmental Impact Assessment (EIA): Meaning, Process, and Case Studies -

  - Data gathering & use of specialised tools (e.g., air – water quality models) to determine importance of potential effects in the long-term and short-term
- Mitigation measures
  - Strategies & actions to reduce -or manage- negative environmental impact
  - Include advanced technologies to minimise the impact of the project during implementation
  - Restore or create new habitats in the affected areas to offset environmental losses
- Public participation
  - Engaging local communities and stakeholders to gather feedback on the project's impact
  - Organisation of meetings and hearings with local communities and stakeholders for their feedback
  - Refinement of the project to address the local communities' and stakeholders' concerns
- Reporting
  - All findings are compiled within an "Environmental Impact Statement" (EIS)
  - The EIS is reviewed by the responsible authority
- Decision making
  - The responsible authority takes decision on approval or rejection of the EIA based on the EIS -modification to address concerns might be an option too-
- Monitoring and compliance
  - Ensuring that the project follows the approved EIA plan, mitigation measures and the environmental standards
  - Regular inspections and monitoring progress on the actual compared to the foreseen impacts

For a project seeking green funds to be implemented, each financial or non-financial organisation willing to provide the necessary funding will conduct, or ask from the team drafted the project proposal, a list with detailed information and data for the proposed green initiative. This list is typically consisting of the following steps[312]:

- Clear statement of the reason for funding
- Data information on all relevant costs and potential revenues
- Factors that could influence the project's finances
- Expected income compared to estimated expenses

To conduct a Financial Impact Assessment three key elements[313] are to be considered: i) cost benefit analysis, ii) return on investment, and iii) long-term financial planning[314]. In more detail,

- Cost-Benefit Analysis (CBA)
    - Comparison of the expected costs to the expected financial and non-financial benefits (e.g., energy savings, economic gains from preserving biodiversity in the project's affected area)
      Note: projects with high benefit to cost ratio are more favourable for green financing
- Return on Investment (ROI)[315][316]
    - A core financial performance measure used to evaluate efficiency of a project and to compare its efficiency to other projects
    - In a given project's context, ROI compares the gains or losses to its initial cost

[312] Crafting Financial Impact Analysis (FIA) for Better Decision-Making, Blue Sky Business Consulting, Shawn Richards, 2024

[313] Financial Impact Assessment: How to Estimate and Communicate the Effects of Your Financial Decisions - FasterCapital

[314] Fundamentals of Project Sustainability | PMI

[315] Wall Street Prep Return on Investment (ROI) | Formula + Calculator

[316] Corporate Finance Institute, ROI Formula (Return on Investment)

Note: for more accurate results the time value of money should be factored

- ROI is usually presented as a percentage and can be calculated using a specific formula[317]

$$ROI = \frac{Net\ Return\ on\ investent}{Initial\ cost\ of\ the\ investment} \times 100\%$$

- Long-term financial planning
  - Financial planning involves the strategic management of financial resources to achieve specific financial goals (including saving, investing, budgeting, and risk management)
  - It is based on the following steps:
    - Assessment of the current financial situation
    - Identification of the financial goals
    - Development & implementation of the financial plan
    - Monitoring and adjusting the financial plan

[317] ROI: Return on Investment Meaning and Calculation Formulas

Chapter 7. Challenges and Barriers

7.1 SMEs

Based on the findings of the European Bank for Reconstruction and Development (EBRD), the SMEs sector in Mongolia requires targeted financial products and better understanding of what constitutes “green financing” to be able to adopt and implement sustainable practices in an efficient and effective manner[318].

The International Finance Corporation (IFC) recognises that despite the fact that there are concessional loans and grants in place, SMEs require further support to access them, due to high interest rates and collateral requirements, hence limiting their access to green financing products[319].

According to a Bank of Mongolia survey on the SMEs’ Development and Financing, the SMEs found the loan terms – including the fees, collateral requirements, guarantees, loan amounts and interest rates – problematic. The greatest difficulties had to do with high interest rates (43%), short loan terms (20%), and unrealistic collateral values (20%)[320].

Increased awareness on green loan products offered in Mongolia for energy efficiency and renewable energy installations (e.g., by XacBank and Khan Bank – supported by the Green Climate Fund (GCF)) as well as understanding the benefits of green

[318] Mongolia Country Strategy 2022-2027, EBRD, 2022

[319] 202206-emerging-market-green-bonds-report-2021-vf-2.pdf

[320] BTI 2024

technologies, will address the low uptake from the Mongolian SMEs[321][322][323][324][325][326][327].

The Mongolian SMEs lack of technical capacity in skills or resources, elements that are crucial for effective implementation of green projects. Identification and applying for green financing products or integrating sustainable practices in their operations, presents as a major challenge for SMEs in Mongolia[328][329][330][331][332][333][334].

Gender based gap in accessing green financing is also evident in Mongolian SMEs. According to State Registration Authority, as of 2020 68% of SMEs which are owned by women. By sector, 34% operate in the wholesale industry, 22% in the service industry, 19% in the retail industry, and the remaining in other industries[335]. Still, their businesses are underserved or not served at all, representing 25% of the total credit gap in Mongolia. Lending is limited for smaller businesses, as bank requirements are

---

321 Green Bond Framework, Khan Bank, 2023

322 fp028-annual-performance-report-cy2023-disclosable-sections.pdf

323 Financial and Operational result - XacBank, Annual Report 2022

324 Mongolia: Green Finance Policy Framework, ADB, 2019

325 unsdcf_2023-2027_english_version.pdf

326 Mongolia's green initiatives offer "solid incentive" for environmentally friendly economic activity - Alliance for Financial Inclusion

327 Report-Financing-Local-Green-Enterprises-22-Sept-2022.pdf

328 mongolia-tdbm.pdf

329 Mongolia: Green Finance Policy Framework, ADB, 2019

330 National Sustainable Finance Roadmap of Mongolia

331 EEP in Mongolia Capacity Building & Finance - energypedia

332 Report-Financing-Local-Green-Enterprises-22-Sept-2022.pdf

333 Energy Efficiency Criteria & Banking sector training,2020

334 Transformation Atlas 2024

335 Gender mainstreaming in the Mongolian financial sector and guidelines for developing feminized financial products, 2022

challenging to meet and there are few alternatives[336]. As women in Mongolia own 2/3 of SMEs operating in the country, are still facing funding challenges.

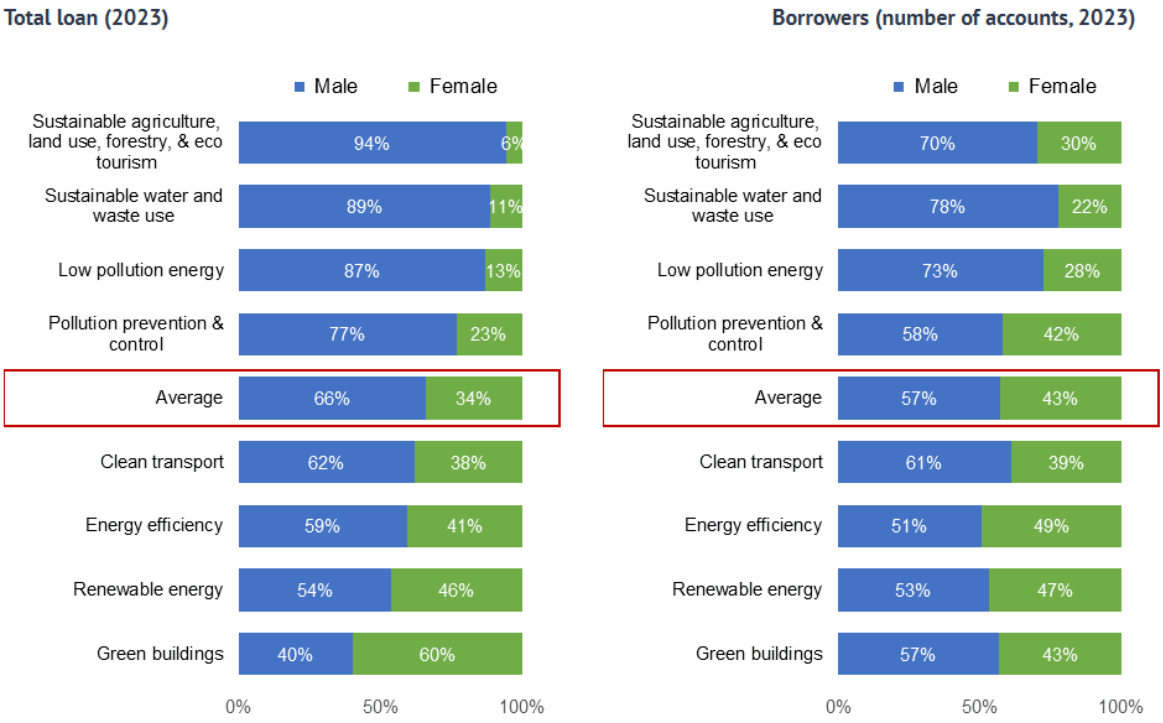


Figure 33: Banking sector indicators by gender-Green loan[337]

Foreign and domestic enterprises face long bureaucratic processes when registering with the State Registration Office (ranging from weeks or even months for the process to complete), while SMEs and newly established businesses face significant financial and administrative barriers[338]. This adds to the domestic banks' high annual interest rates – a hindering element for business growth -, given that the domestic banking sector has 90% of the private sector's loan portfolio. The greatest difficulties that

[336] Integration of Gender Responsive Financing practices in the Mongolia's Financial Sector, 2021

[337] Statistics on sex-disaggregated green loans granted to entities* and citizens in 2022 and 2023

[338] Transformation Atlas 2024

SMEs face in Mongolia are: i) high interest rates, ii) short loan terms, iii) collateral values[339].

7.2 Regulatory and Institutional Challenges

The regulatory organisations and financial institutions in Mongolia are called to face a range of challenges when it comes to their ability to provide green financing products. Some of these obstacles are considered to be the insufficient infrastructure for green investments, the limitations in terms of market maturity, as well as the insufficient regulatory frameworks. The responsible financial institutions lack the capacity to evaluate green products, mainly due to poorly defined regulations for green financing at national level.

Additionally, the lack of analytics resources and the necessary data for the determination of the effects of the investments on the environment, make it even more difficult for the responsible financial institutions to incorporate environmental risks assessment into their portfolios.

The existing gap in awareness among investors and the Mongolian people about green financing opportunities, impedes demand and obstructs further market growth.

The high initial capital expenses needed for the transition towards sustainability, green technologies and practices, all add up to the challenges for financial institutions in Mongolia, particularly due to their limited financial resources and Mongolia's economic size.

Mongolia needs to diversify its economy, shifting from being dependent on extractive processes – which cause severe effects on the environment, affecting biodiversity and

339 Transformation Atlas 2024

local communities – to more sustainable industrial sectors[340][341][342]. However, this entails significant policy support and investments in sustainable business models and practices. In 2024, Mongolia is classified as an "upper-middle income"[343][344][345], a status indicating that among the major challenges could be curbing corruption[346][347][348] and governance improvement[349][350].

Regarding green financing, although Mongolia has incorporated climate change as a factor in policies development across the country's ministries and agencies, a specific green investment plan is absent. Mongolia's efforts to achieve net-zero carbon emissions in 2050, are not being followed neither by policy recommendations, nor specific regulatory or legal measures for carbon reduction, resulting in discouragement of the private sector to uptake measures towards zero-emission practices. Last, but not least, while the "*Law of Procurement*" in Mongolia refers to green procurement has yet to be implemented, as stated by business and environmental communities and associations[351].

Summing up, willing businesses in Mongolia to access green financing face substantial and unpredictable regulatory burdens at every level (e.g., foreign businesses report that they cannot submit documents digitally and must submit paper

---

340 Mongolia (MNG) Exports, Imports, and Trade Partners | The Observatory of Economic Complexity

341 Mongolia (MNG) Exports, Imports, and Trade Partners | The Observatory of Economic Complexity

342 Mongolia Overview: Development news, research, data | World Bank

343 Data for Lower middle income, Upper middle income | Data

344 World Bank country classifications by income level for 2024-2025

345 Upper-middle income (for FY24): between $4,466 and $13,845

346 National Anti-Corruption Program

347 Mongolia – United States Department of State, "Corruption"

348 Mongolia - Transparency.org

349 World Bank Group Engagement in Upper-Middle-Income Countries: Evidence from IEG Evaluations | Independent Evaluation Group

350 Middle-Income Countries (MICs): Characteristics and Significance

351 Mongolia – United States Department of State, "Climate Issues"

documents[352], contradictory or not implemented legislation[353][354]), asserting that officials across ministries and agencies, ignoring the actual statutes and regulations, routinely make decisions disregarding existing legislation.[355]

[352] Mongolia - United States Department of State, "Business Facilitation", 2024

[353] Mongolia - United States Department of State, "Industrial Policies – investment Incentives"

[354] Mongolia - United States Department of State, "Financial Sector – Capital Markets and Portfolio Investment"

[355] Mongolia - United States Department of State, "Transparency of the Regulatory System", 2024

Chapter 8. Strategies for Improved Access to Green Funding

The financial challenges in green financing that will support the Mongolia's transition towards sustainability ought to be addressed via a systemic approach[356]. For example, enabling the transition towards a green economy requires for small, and medium-sized enterprises, renewable energy projects, and local adaptation initiatives, to have improved access to funding[357]. The tactics within this holistic approach also include the development of inclusive financing mechanisms[358], strengthened institutional capacity, facilitating public-private partnerships, and enhanced transparency in the Mongolian green financing system[359][360]. The targeted audience include:(i) policymakers, (ii) financial institutions, (iii) SMEs, and (iv) international partners and donors.

- **Tactic 1. Diversification**

  Increasing the available capital for green projects in Mongolia is critical. Hence, access to a wider range of funding sources is imperative, as project developers will be able to get funding from sources that are a better fit for their needs, objectives, and capacity[361].

  - Action 1: Partnerships (iv)

[356] National Sustainable Finance Roadmap of Mongolia

[357] Green Finance Mechanisms in Developing Countries: Emerging Practice

[358] Gender mainstreaming in the mongolian financial sector and guidelines for developing feminized financial products

[359] МОНГОЛ УЛСЫГ 2021-2025 ОНД ХӨГЖҮҮЛЭХ ТАВАН ЖИЛИЙН ҮНДСЭН ЧИГЛЭЛ

[360] New opportunities for Mongolia to strengthen private sector productivity, diversify economy – World Bank report

[361] A New Regulation on 'Green Bond' Was Approved to Boost Green Finance in Mongolia

Formation of strategic partnerships with international funds and their Accredited Entities to enhance access, improve quality of proposals, and comply with funding requirements.

- Action 2. Green Bonds[362][363] (ii)

  Investments on a fixed-income product linked to environmental projects are attractive to foreign and domestic investors. Thus, issuing green bonds can leverage on available green capital worldwide. To ensure transparency and alignment with the international standards, and most importantly avoid any risks of greenwashing, experienced financial institutions should be approached for issuance of green bonds (e.g., ADB, EBRD)

- Action 3. Public-private partnerships (PPPs) (iii)

  Mongolia's need for large-scale green projects can be funded via PPPs in which the risks and resources are shared between the public and the private sector.

- **Tactic 2. Institutional capacity**

  The effective design, implementation, monitoring, and compliance of green projects with international standards requires for strong institutional capacity in Mongolian financial institutions[364], as well as in SMEs.

  - Action 1. Training (ii) (iii)

    Targeted training in proposal development, monitoring, and reporting in accordance with international standards, will provide expertise in proper management of green funds in all levels[365]

[362] Green Bond Guideline

[363] 202408-mongolia-s-financial-landscape-and-climate-actions.pdf

[364] Building energy efficiency rating criteria, training concept for banking sector

[365] Learning Through Partnership - Insights from the 30th Anniversary of ADB's Partnership with Mongolia

- Action 2. Support (ii)

  Green financing units dedicated to providing guidance, technical assistance, and explore the available resources for green project development, will streamline the application process, and facilitate the allocation of green funds[366]

- Action 3. Data (ii)

  Credibility of impact assessments from green projects and reports derive from the collection of accurate on environmental metrics, emissions, and energy use. This results to improved project evaluation, transparency, and utterly trustworthy outcomes, hence enabling more funding for sustainable development projects

- **Tactic 3. Simplification**

  Saving time and resources for navigating through perplexed regulations, through simplified processes that reduce delays and improve efficiency, can substantially improve access to green funding[367].

  - Action 1. Streamlining (i) (ii)

    Simplification and digitalisation of processes for green projects (e.g., e-platforms for application, intergovernmental database of SMEs eligibility for green funding) enhance transparency and eliminates complicated processes[368]

  - Action 2. Standardisation (i)

    Clear and uniform environmental standards across national and local levels, enable SMEs that lack specialised knowledge on regulations to

366 Learning Through Partnership - Insights from the 30th Anniversary of ADB's Partnership with Mongolia

367 Report-Financing-Local-Green-Enterprises-22-Sept-2022.pdf

368 New opportunities for Mongolia to strengthen private sector productivity, diversify economy – World Bank report

develop quality proposals for green funding with well-established impacts

- Action 3. Coordination (i)

  Enhanced coordination among ministries and agencies streamlines the regulatory environment and organised green policies enforcement is ensured (e.g., reduction of regulatory processes, identification and elimination of conflicts among standards)[369]

- **Tactic 4. Incentives**

  Green projects are accompanied with various risks and high costs. Introduction of financial incentives encourage investments from domestic and international investors.

  - Action 1. Tax (i)

    Tax incentives for investments in clean energy, energy efficiency, green technologies, circular economy practices result in attracting investments for sustainability related projects

  - Action 2. Subsidies (i)

    SMEs and local industries in Mongolia can be encouraged to invest in the country's efforts towards sustainable development through subsidies that offset the required high initial costs

  - Action 3. Carbon pricing (i)

    Establishment of a transparent and credible carbon trading system, supplemented by a tax on carbon emissions, serve as financial incentives for SMEs and industries to shift on green technologies and sustainable practices. Though this is only functional when the gained revenue is re-invested into green projects, thus establishing an "industrial symbiosis" like model in the Mongolian green financing system.

[369] Green development policy of Mongolia and its implementation, T. Bulgan, 2015, ppt

- **Tactic 5. Knowledge**

  Information on green funding opportunities, best practices for designing green projects, and compliance guidelines with international standards, are essential elements for cooperation between public sector and private sector organisations. The development of a respective knowledge-sharing platform can serve this purpose.

  - Action 1. Green Hub (i) (ii)

    A green finance hub offering knowledge on green financing opportunities along with the relevant information (e.g., available funding sources, updates on regulations, green project implementation best practices, etc.) can fill the gap between green funding offering and demand

  - Action 2. Raising awareness (i) (iii)

    Campaigns for raising awareness on green financing opportunities aiming to educate the Mongolian SMEs and industries about i) accessing green funding, ii) implementing green projects, and iii) benefitting from green investments, encourage wide participation towards the country's sustainable development targets

  - Action 3. Networking (i) (ii) (iii) (iv)

    Peer learning networks offer to project developers, funding institutions, policy makers and regulators to exchange knowledge, experiences, and solutions regarding green financing, hence building capacity on national level and cultivating a "common effort" attitude among stakeholders

- **Tactic 6. SMEs & Green funding**

  SMEs hold a major role in Mongolia's economy, thus their financial barriers on accessing green finance products are imperative to be removed

  - Action 1. "Green lines" (i) (ii)

    Mongolian SMEs have unique needs, and these can be addressed through innovative green financing schemes like micro-grants or low-

interest loans with limited collaterals, hence facilitating access to green capital for sustainable projects

- Action 2. Simplicity[370][371] (i) (ii)

  Given the complexity of criteria to access green capital, the funding application process for green projects in SMEs should be simplified and streamlined (e.g., reducing documentation via intergovernmental database, flexible lending criteria)

- Action 3. Financial literacy (iii) (iv)

  The green financing landscape's terminology can be complicated and frustrating for an SME[372]. Targeted training programmes on financial literacy will enable SMEs to understand requirements and develop skills to apply with quality projects for green funding. International donors' Accredited Entities and local bank branches can establish such programmes that will utterly increase their own portfolio of green projects

8[370] SDG Finance Taxonomy

9[371] Mongolia SDG Finance Taxonomy

10[372] Mongolia: Systematic Country Diagnostic, World Bank, 2015

Chapter 9. Inspiration – Funded projects in Mongolia

	Project Name	Thematic	Link
1	Strengthening Fiscal, Financial, and Economic Resilience Subprogram 1	Finance/ Finance sector development Public sector management/ Public expenditure and fiscal management	55209-003: Strengthening Fiscal, Financial, and Economic Resilience Subprogram 1 | Asian Development Bank
2	Managing Solid Waste in Secondary Cities	Water and other urban infrastructure and services/ Urban solid waste management	52303-001: Managing Solid Waste in Secondary Cities | Asian Development Bank
3	Khan Bank Green Bond Investment Project	Finance/ Finance sector development	57215-001: Khan Bank Green Bond Investment Project | Asian Development Bank
4	Agriculture and Rural Development Project Phase 2	Agriculture, natural resources and rural development/ Agricultural production - Agro-industry, marketing, and trade - Land-based natural resources management	55218-001: Agriculture and Rural Development Project Phase 2 | Asian Development Bank
5	Strengthening Soum Centre Infrastructure and Green Development	Water and other urban infrastructure and services/ Urban policy, institutional and capacity development	56212-001: Strengthening Soum Centre Infrastructure and Green Development | Asian Development Bank
6	Dzud Disaster Response	Agriculture, natural resources and rural development/ Agricultural production	58121-001: Dzud Disaster Response | Asian Development Bank

7	Bogd Bank Financing Micro, Small and Medium-Sized Enterprises and Promoting Green Lending Activities Project	Finance/ Small and medium enterprise finance and leasing	57132-001: Bogd Bank Financing Micro, Small and Medium-Sized Enterprises and Promoting Green Lending Activities Project | Asian Development Bank
11	Climate-Smart Mining for a New Climate Economy	Energy/ Energy sector development and institutional reform Finance/ Trade finance Industry and trade/ Industry and trade sector development	57273-001: Climate-Smart Mining for a New Climate Economy | Asian Development Bank
12	Capacity Building for Agriculture Value Chain Financing	Agriculture, natural resources and rural development/ Agricultural production - Agro-industry, marketing, and trade Land-based natural resources management	55218-003: Capacity Building for Agriculture Value Chain Financing | Asian Development Bank
13	Enhancing Gender Equality for Rural Women and Girls through Climate-Resilient and Gender-Responsive Policies	Public sector management/ Law and judiciary	57135-001: Enhancing Gender Equality for Rural Women and Girls through Climate-Resilient and Gender-Responsive Policies | Asian Development Bank
14	Strengthening Public Administration, Digitalization and Decentralization of Public Services for Property Rights and Legal Entities Registration in Soums	Information and communication technology/ ICT strategy and policy, and capacity development Public sector management/ Public administration	56359-001: Strengthening Public Administration, Digitalization and Decentralization of Public Services for Property Rights and Legal Entities Registration in Soums

				Asian Development Bank
15	Gobi Climate-Resilient Cashmere Value Chain Project	Agriculture, natural resources and rural development / Livestock	57156-001: Gobi Climate-Resilient Cashmere Value Chain Project | Asian Development Bank
16	Promoting Innovative and Sustainable Financing	Finance/ Finance sector development	57115-001: Promoting Innovative and Sustainable Financing | Asian Development Bank
17	Supporting Renewable Energy Development	Energy/ Electricity transmission and distribution - large hydropower generation Renewable energy generation - geothermal	52240-001: Supporting Renewable Energy Development | Asian Development Bank
18	Smart Energy System for Mongolia	Energy/ Electricity transmission and distribution - Energy sector development and institutional reform - Renewable energy generation - solar - Renewable energy generation - wind	53054-001: Smart Energy System for Mongolia | Asian Development Bank
19	Infrastructure Development for Green and Resilient New Satellite City in the Khushig Valley Area	Information and communication technology/ ICT infrastructure Transport/ Urban roads and traffic management Water and other urban infrastructure and services/ Other urban services - Urban flood protection - Urban housing - Urban policy, institutional and capacity development - Urban sewerage - Urban solid waste management - Urban water supply	56298-001: Infrastructure Development for Green and Resilient New Satellite City in the Khushig Valley Area | Asian Development Bank
20	Nationally Appropriate Mitigation Actions	Energy efficiency	Nationally Appropriate Mitigation Actions

	(NAMA) in the Construction Sector		(NAMA) in the Construction Sector in Mongolia | United Nations Development Programme
21	Ulaanbaatar Green Affordable Housing and Resilient Urban Renewal Project	Green, low carbon, climate-resilient housing	Mongolia | ADB and the GCF
22	Sustainable tourism in Mongolia	Energy efficiency	Sustainable tourism in Mongolia – GEFF
23	Installation of new efficient district heating system in Mongolia	Sustainable infrastructure	Installation of new efficient district heating system in Mongolia – GEFF
24	Energy Efficient Warehousing Complex	Energy efficiency	Energy Efficient Warehousing Complex – GEFF
25	Energy Efficient University Building	Energy efficiency	Energy Efficient University Building – GEFF
26	Ulaanbaatar Sustainable Urban Transport Project Additional Financing	Environment and Natural Resource Management Finance Private Sector Development Urban and Rural Development	Projects/179043
27	Second Energy Sector Project	Environment and Natural Resource Management	Projects/152343
28	Ulaanbaatar Clean Air Project	Environment and Natural Resource Management Finance Urban and Rural Development	Projects/122320
29	Renewable Energy for Rural Access Project (REAP)	Environment and Natural Resource Management Private Sector Development	Projects/099321

		Urban and Rural Development	
30	Greening Financial Systems: Delivering Climate Finance for All	Buildings, cities, industries, and appliances Ecosystems and ecosystem services Energy generation and access Health, food, and water security Transport	FP253: Greening Financial Systems: Delivering Climate Finance for All | Green Climate Fund
31	Project GAIA ("GAIA")	Ecosystems and ecosystem services Energy generation and access Health, food, and water security Infrastructure and built environment Transport	FP223: Project GAIA ("GAIA") | Green Climate Fund
32	Sustainable Renewables Risk Mitigation Initiative (SRMI) Facility (Phase 2 Resilience focus) [SRMI-Resilience]	Energy generation and access Infrastructure and built environment Livelihoods of people and communities	FP204: Sustainable Renewables Risk Mitigation Initiative (SRMI) Facility (Phase 2 Resilience focus) [SRMI-Resilience] | Green Climate Fund
33	Mongolia: Aimags and Soums Green Regional Development Investment Program (ASDIP)	Buildings, cities, industries, and appliances Ecosystems and ecosystem services Forest and land use Health, food, and water security Livelihoods of people and communities	FP154: Mongolia: Aimags and Soums Green Regional Development Investment Program (ASDIP) | Green Climate Fund
34	Mongolia Green Finance Corporation	Buildings, cities, industries, and appliances	FP153: Mongolia Green Finance Corporation | Green Climate Fund
35	Improving Adaptive Capacity and Risk Management of Rural communities in Mongolia	Ecosystems and ecosystem services Health, food, and water security	FP141: Improving Adaptive Capacity and Risk Management of Rural communities in

			Mongolia | Green Climate Fund
36	Energy Efficient Consumption Loan Programme	Buildings, cities, industries, and appliances Energy generation and access	SAP004: Energy Efficient Consumption Loan Programme | Green Climate Fund
37	Climate Investor One	Energy generation and access	FP099: Climate Investor One | Green Climate Fund
38	Green Cities Facility	Buildings, cities, industries, and appliances Infrastructure and built environment Livelihoods of people and communities Transport	FP086: Green Cities Facility | Green Climate Fund
39	Ulaanbaatar Green Affordable Housing and Resilient Urban Renewal Project (AHURP)	Buildings, cities, industries, and appliances Infrastructure and built environment Livelihoods of people and communities Transport	FP077: Ulaanbaatar Green Affordable Housing and Resilient Urban Renewal Project (AHURP) | Green Climate Fund
40	Renewable Energy Program #1 - Solar	Energy generation and access	FP046: Renewable Energy Program #1 - Solar | Green Climate Fund
41	MSME Business Loan Program for GHG Emission Reduction	Buildings, cities, industries, and appliances Energy generation and access	FP028: MSME Business Loan Program for GHG Emission Reduction | Green Climate Fund
42	GCF-EBRD SEFF Co-financing Programme	Buildings, cities, industries, and appliances Energy generation and access Infrastructure and built environment	FP025: GCF-EBRD SEFF Co-financing Programme | Green Climate Fund

Annexes

I. Glossary

Term	Description
Green Finance	
Circular Economy	An economic model focused on resource efficiency, waste reduction, and recycling, where materials are used continuously through reuse, recycling, and repurposing rather than following a traditional linear model of production, use, and disposal.
Concessional Loan	A loan provided at lenient terms than market rates, often with lower interest rates, extended repayment periods, and sometimes partial debt forgiveness, to support projects with high social or environmental value.
Environmental, Social, and Governance (ESG)	A framework for evaluating a project's or company's impact on the environment, social factors, and governance practices, commonly used to assess sustainability and ethical impact.
Green Bond	A bond issued specifically to finance projects that have positive environmental or climate benefits, such as renewable energy, energy efficiency, or waste management.
Green Economy	An economy that aims to reduce environmental risks and ecological scarcities, promoting sustainable development without degrading the environment, often through the adoption of green technologies and renewable resources.
Green Financing	Funding for projects and activities that contribute to environmental protection, sustainable development, and climate resilience
Impact Assessment	The evaluation of the potential effects of a project, including environmental, social, and financial impacts
Renewable Energy Sources (RES)	Energy generated from natural processes that are continuously replenished, such as solar and wind energy.
Policy and Regulatory Frameworks	
Mongolia Green Taxonomy	A classification system defining activities eligible for green financing, emphasizing sustainability and resource conservation

National Sustainable Finance Roadmap (NSFR)	A strategic framework for aligning Mongolia's financial sector with sustainable development goals.
Sustainable Development Vision 2030 (SDV 2030)	Mongolia's framework for achieving a sustainable economy through environmental and social development goals.
Vision 2050	Mongolia's long-term policy for sustainable development, focusing on resource efficiency and climate resilience.
Financial Terms	
Carbon pricing	A financial mechanism to charge for carbon emissions, creating incentives for reducing environmental impacts
Equity Investment	Capital funding in exchange for ownership stakes, often used to support startups and SMEs in green sectors
Grants	Non-repayable funds for projects with significant environmental or social impact.
Impact Assessment	Evaluation of financial and environmental outcomes of green projects
Public-Private Partnerships (PPPs)	Collaborations between public and private sectors to finance large-scale green projects
Return on Investment (ROI)	A measure of profitability for sustainable investments
Sustainable Finance	Broader investment initiatives incorporating Environmental, Social, and Governance (ESG) criteria
Technical Assistance	Non-financial support such as training, feasibility studies, and capacity building for implementing green projects
Circular Economy	
Waste minimisation	Reducing waste generation in production processes
Resource Efficiency	Maximizing the use of resources in manufacturing

Recycling and Reuse	Retaining material value through recycling and repurposing
Circular Leather and Textiles	Use of sustainable materials and recycling by-products
Circular agriculture	Circular practices in livestock management and sustainable farming
"Circular" energy	Integration of renewable energy sources into the economy / processes of a business fostering energy autonomy
Sustainability	
Environmental, Social, and Governance (ESG)	Criteria used to evaluate sustainable investments
Sustainable Development Goals (SDGs)	Global objectives, including climate action and resource efficiency, guiding national policies
Energy Efficiency (EE)	Technologies and practices reducing energy consumption
Climate Resilience	Enhancing capacity to adapt to climate change impacts
Sustainable Finance	
Mongolian Sustainable Finance Principles	Guidelines for integrating sustainability into financial decision-making across various sectors (e.g., mining, textiles, agriculture)
Green Loan Statistics	Metrics on green loans in Mongolia, highlighting key sectors (e.g., sustainable agriculture and eco-tourism)
Gender-Responsive Financing	Financial products targeting gender inclusivity in sustainable investments

II. Mongolian and International E&S Standards[373]

Mongolian Standards[374] (Mandatory)	
MNS Standards related to Air quality	MNS Standards related to Soil quality
MNS Standards related to Chemical technology	MNS Standards related to Rubber and plastic plant
MNS Standards related to Environmental protection	MNS Standards related to Textile and tannery technology
MNS Standards related to Garment industry	MNS Standards related to Water quality and safety
MNS Standards related to Glass and ceramic production	MNS Standards related to Wood technology
MNS Standards related to Paper production	Inspection checklist for Manufacturing Sector's activity[375]
MNS Standards related to Occupational Health and Safety	
International Standards (Voluntary)	
ISO 14001: Standard specifies the requirements for an E&S management system[376]	OHS18001: Occupational Health and Safety[377]
ISO 9000: Quality management[378]	
Industry's Leading E&S Standards and Best Practices	
IFC Performance Standards[379] (recommended)	IFC/WB Environmental, Health and Safety Guidelines[380] (recommended)

[373] Appendix 3: Relevant Mongolian and International E&S Standards, principles and other References for the Manufacturing Sector, 1300_Mongolia_Sustainable_Finance_Principles_Manufacturing_Sector_Guideline_2014.pdf

[374] http://estandard.mn/

[375] http://inspection.gov.mn/index.php?option=com_content&view=article&id=56&Itemid=25

[376] www.iso.org

[377] http://www.ohsas-18001-occupational-health-and-safety.com/

[378] http://www.iso.org/iso/home/standards/management-standards/iso_9000.htm

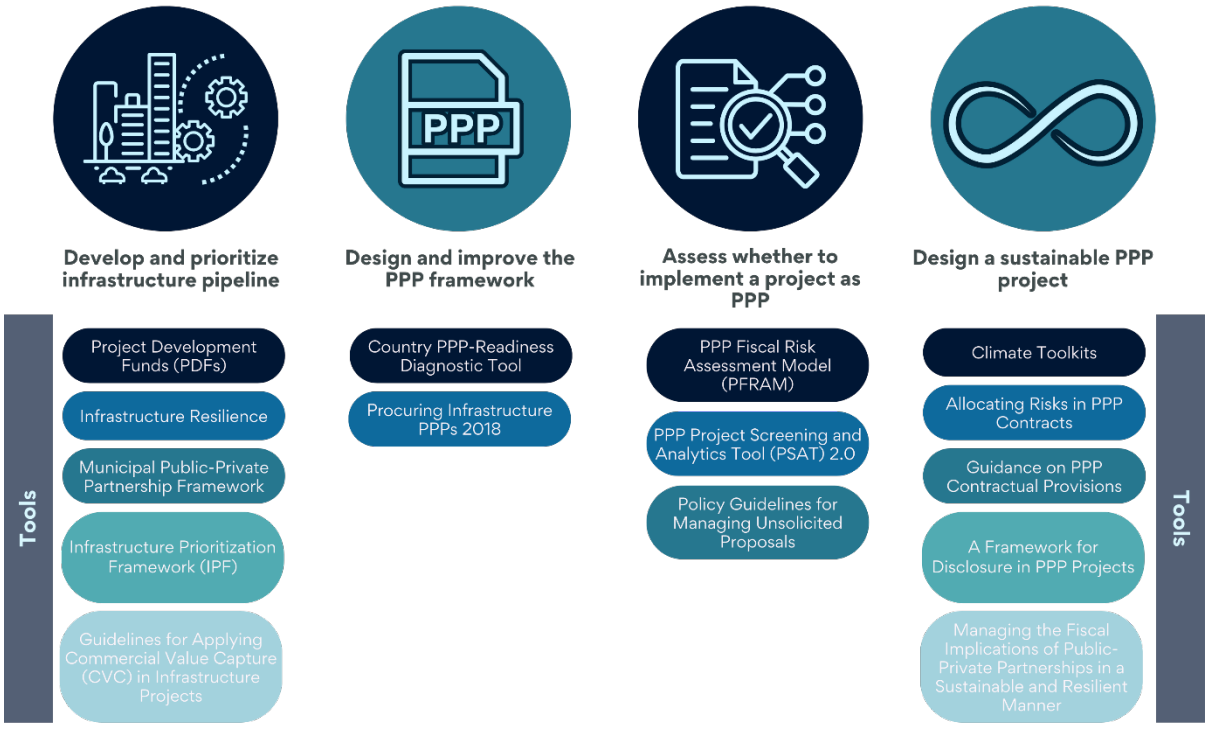
[379] www.ifc.org/performancestandards

[380] www.ifc.org/ehsguidelines

PS 1: Assessment and management of E&S and social risks and impacts	General EHS Guidelines *(The General EHS Guidelines contain information on cross-cutting environmental, health, and safety issues potentially applicable to all industry sectors. It should be used together with the relevant industry sector guideline(s)*
PS 2: Labour and Working Conditions	EBRD Performance Requirements[381] (voluntary) *Required where EBRD is an investor (similar to IFC standards)*
PS 3: Resource efficiency and Pollution Prevention	PS 5: Land acquisition and involuntary resettlement
PS 8: Cultural Heritage	PS 6: Biodiversity Conservation and Sustainable management of living natural resources
PS 4: Community Health, Safety, and Security	PS 7: Indigenous Peoples

[381] http://www.ebrd.com/environment/e-manual/e31ebrd-performance-requirements.html

III. WBG Toolkits



Tools to develop and prioritize infrastructure pipeline [382]

- Infrastructure Prioritization Framework (IPF)
- Infrastructure Resilience.
- Guidelines for Applying Commercial Value Capture (CVC) in Infrastructure Projects
- Municipal Public-Private Partnership Framework
- Project Development Funds (PDFs)

[382] Select WBG PPP Toolkits | Public Private Partnership

Tools to design and improve the PPP framework

- Country PPP-Readiness Diagnostic Tool
- Procuring Infrastructure PPPs 2018.

Tools to assess whether to implement a project as PPP

- PPP Fiscal Risk Assessment Model (PFRAM)
- PPP Project Screening and Analytics Tool (PSAT) 2.0
- Policy Guidelines for Managing Unsolicited Proposals

Tools to design a sustainable PPP project

- Managing the Fiscal Implications of Public-Private Partnerships in a Sustainable and Resilient Manner-
- Climate Toolkits
- Guidance on PPP Contractual Provisions-
- Allocating Risks in PPP Contracts
- A Framework for Disclosure in PPP Projects
- Using PPP to Deliver Asset Recycling
- The World Bank Group's climate and disaster risk screening tools
- Resilience Rating System: A Methodology for Building and Tracking Resilience to Climate Change