MONGOLIAN TEXTILE SECTOR-SPECIFIC GREEN LOAN CRITERIA GUIDE

2021

TABLE OF CONTENTS

LIST OF FIGURES

ABBREVIATIONS

AVSF	Agronomes et Veterinaires Sans Frontieres
EE	Energy efficiency
E&S	Environment and social
ESG	Environment, social, and governance
FIs	Financial institutions
IFC	International Finance Corporation
MOFALI	Ministry of Food, Agriculture and Light Industry
MWCA	Mongolian Wool and Cashmere Association
MSFA	Mongolian Sustainable Finance Association
NFPUG	Mongolian National Federation of Pasture User Groups
RE	Renewable energy
SME	Small and medium-sized entreprises
SF	Sustainable finance
STeP EcoLab	Sustainable Textile Production and Ecolabelling in Mongolia
VCP	Voluntary Code of Practice

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About the Project

The Sustainable Textile Production and Ecolabelling in Mongolia (STeP EcoLab) Project is being implemented by Agronomes et Vétérinaires Sans Frontières (AVSF Mongolia) in partnership with the Collaborating Centre for Sustainable Consumption and Production (CSCP, Germany), Mongolian Wool and Cashmere Association (MWCA), Environment and Security Center of Mongolia (ESCM, Mongolia), National Federation of Pasture Users Group (NFPUG), Mongolian Sustainable Finance Association (MSFA) and the Mongolian Bankers Association (MBA). Within four years, STeP EcoLab, funded by the European Union under SWITCH-Asia II Programme, aims to support the Mongolian wool and cashmere industries to implement sustainable practices in their production lines.

The project aims to support the supply chain and the textile industry in adopting more sustainable sourcing and production practices, and simultaneously improve the branding for sustainable products, optimise cost-saving measures, reach out to climate and green finance, and diversify the portfolio of customers. STeP EcoLab will strive to leverage key drivers of sustainable consumption and production in Mongolia by consolidating sustainable and certified raw material sourcing options meeting market expectations; developing a conducive environment for textile processing SMEs to switch to sustainable production practices; and raising customer and consumer awareness of Mongolian sustainable textile-related initiatives.

Objective of the criteria document

The green loan criteria document defines the basic criteria, verification methods and categories that financial institutions (FIs) are recommended to apply to issue green loans and evaluate green projects in the Mongolian textile sector.

Defining the criteria for green loan issuance helps not only FIs but also project developers and producers, as it provides a common understanding for green projects in the textile sector, enabling green project identification, development, and financing, as well as its monitoring, verification, and reporting. Notably, the green loan criteria are specifically tailored to the textile sector in Mongolia. We also believe the criteria will prompt FIs to increase their green loan portfolios and mitigate sectoral environmental, social, and governance (ESG) risks, ultimately contributing to the sustainable and green development of Mongolia.

Following the trends and changes of sustainable finance, technology development, and the policy environment, this textile sector-specific green loan criteria will be reviewed and updated **once every two years** by the Technical Committee, to be composed of sectoral experts and professionals chaired by the MSFA.

Structure of the document

The criteria document consists of four chapters and an appendix. The first chapter provides an overview of the Mongolian textile sector and green market demand. The second chapter describes the globally recognized Green Loan Principles (GLP), which we used in alignment with the Mongolian Green Taxonomy. In the third chapter, the textile sector-specific green loan criteria are presented for green investment loans and green working capital loans, followed by the group of eligible technologies, technical criteria, and sample verification methods. Last but not least, chapter four explains guidelines for monitoring and reporting following the disbursement of funds. In the appendix, we summarized textile sustainability standards, and included a list of textile machinery, equipment, and manufacturers, as well as key sustainable finance documents.

Chapter 1. Introduction

The devastating effects of climate change are reaching all regions around the globe, evident in increased heat, drought, wildfires, water scarcity, and reduced agriculture yields (IPCC, 2019). Meanwhile, economic, social, and industrial growth over the last century have also been causing environmental degradation that is harming the systems on which our future progress and survival rely on.

Before these issues can escalate, huge investments are needed for climate change adaptation and mitigation activities. Under the Paris Agreement and the United Nations Sustainable Development Goals 2030, countries have defined their goals for climate adaptation and mitigation, and sustainable development, as well as to their contributions to the financing of these activities, known as "climate finance" and "sustainable finance" (UNFCCC, 2015; United Nations 2015). As a result of global negotiation, mobilizing finance from developed countries to developing countries through multilateral and bilateral mechanisms is considered a key solution. For instance, the Green Climate Fund[1] is the largest dedicated fund supporting countries in reducing greenhouse gas emissions and adaptin to climate change.

Countries are also promoting their domestic economies by raising private finance through financial instruments and supporting sustainable businesses and manufacturers. In this regard, globally, **green loans and bonds** are increasingly utilized for sustainable investments, and they specifically **aim to facilitate and support environmentally sustainable economic activities**.

Box 1.
Green loans are loan instruments made available exclusively to finance or refinance new or existing green projects (Loan Market Association/ICMA, 2018).

A project is considered green[2] if it has climate and environmental benefits, examples include renewable energy, energy efficiency, sustainable waste management, sustainable land use, biodiversity, clean transport, and clean water (UNDP, 2016).

In Mongolia, commercial banks play a major role in the business and financial sectors, accounting for more than 90 percent of Mongolia's financial market. In terms of sustainable finance development, Mongolian commercial banks joined forces to launch the "Mongolia Sustainable Finance Initiative" since 2013. This initiative resulted in significantly positive progress, as shown in the assessment conducted by IFC's Sustainable Banking Network. Out of 38 developing countries, Mongolia has reached an "advanced" 0-stage of sustainable finance implementation (IFC, 2019). The assessment evaluates the country's sustainable finance development in three areas: 1) bank's environmental, social and governance (ESG) assessment, 2) strategic coherence, 3) climate and green finance.

1 Green Climate Fund (GCF) https://www.greenclimate.fund/about
[2] UNDP Green Bonds: Green Projects http://www.undp.org/content/dam/sdfinance/doc/green-bonds

Overview of the Mongolian textile sector and green finance market

A majority of Mongolia's textile industry is wool and cashmere processing. Currently, there are a total 300 large, medium, and smaller-scale textile companies operating in wool and cashmere processing and production in Mongolia.[3] Of these companies, 15 are fully integrated manufacturers, 23 are primary processors, 59 are spinning and knitting SMEs, and over 150 are family-scale micro-enterprises (MWCA, 2020).

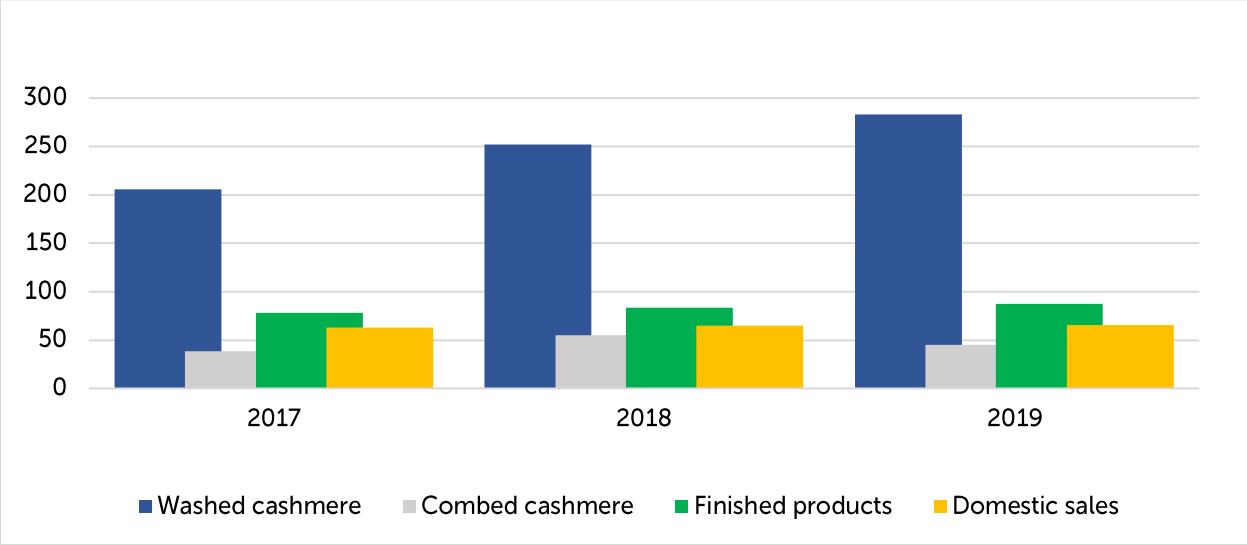
Globally, Mongolia is the second largest raw cashmere supplier after China. The Government of Mongolia has been paying attention to the development of the cashmere industry since 2000, considering that it has a significant impact as an economically valuable commodity after copper and gold. In 2018, the **National Cashmere Program** was renewed to increase the level of cashmere processing to 60 percent, increase environmentally friendly production and exports, and create sustainable development in the sector.[4] Key sector policies related to textile sector development, sustainable development, and climate change action include:

- Nationally Determined Contribution (NDC) under the Paris Agreement (NDC) (2016-2030), 2016
- Vision 2050/Mongolia's sustainable development vision (SDV), Action Plan (2016-2030), 2016
- UN Sustainable Development Goals (SDGs)
- Mongolian Green Development Policy (MGDP) (2014-2030), 2014
- National Livestock Program: Phase II (2016-2021), 2016
- Cashmere Program (2018-2021), 2018
- State Policy on Energy (2015-2030), 2015
- National Energy Efficiency Action Programme (2018-2022), 2017
- National Sustainable Finance Roadmap of Mongolia, 2018
- National Program on Reduction of Air and Environmental Pollution, 2017
- National Water Programme (2010-2015, 2016-2021)
- National Security Concept of Mongolia, 2010

[3] http://www.mongoltextile.mn/web/nav/79

[4] Cashmere Program (2018-2021). https://mofa.gov.mn/exp/ckfinder/userfiles/files/tosol27.pdf

Figure 1. Mongolian cashmere sales revenue (million USD)



Mongolian cashmere revenue has been increasing year by year, however exports of finished products and domestic sales have not grown significantly in the last three years (see Figure 1) (MOFALI, 2019).

The main challenges for SMEs in the cashmere and wool sector are the **lack of technical and economic capacity** of companies, lack of national standards for sustainability, lack of certification, and a weak legal framework to support sustainable producers. Furthermore, **high consumption of disposable plastic packaging, a lack of quality control infrastructure to determine chemical residues in final products, outdated methods of industrial wastewater treatment and sludge removal, and a lack of advanced water and energy efficient technologies** have led to **unsustainable production in the textile industry**. Thus, the need for green loans and green financing is essential for the introduction of sustainable production in the textile sector.

To determine green finance market demand and investment capacity, a study of green finance market demand for textile SMEs in Mongolia was conducted under the STeP EcoLab project.[5] As of 2019, actual green finance demand in the sector was estimated between at 250 billion MNT (Figure 2).[6] However, in terms of the supply side, the **total potential financing** of green loans for textile processing producers **was MNT 75 billion**. In order to balance supply and demand, it is necessary to increase green finance resources in the textile sector.

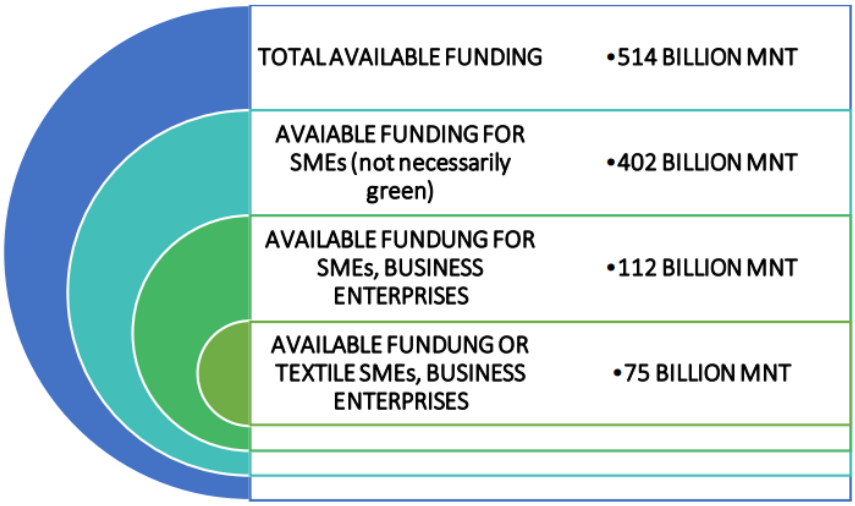
More specifically, the green finance needs of 17 of the companies that participated in the study can be classified as follows:

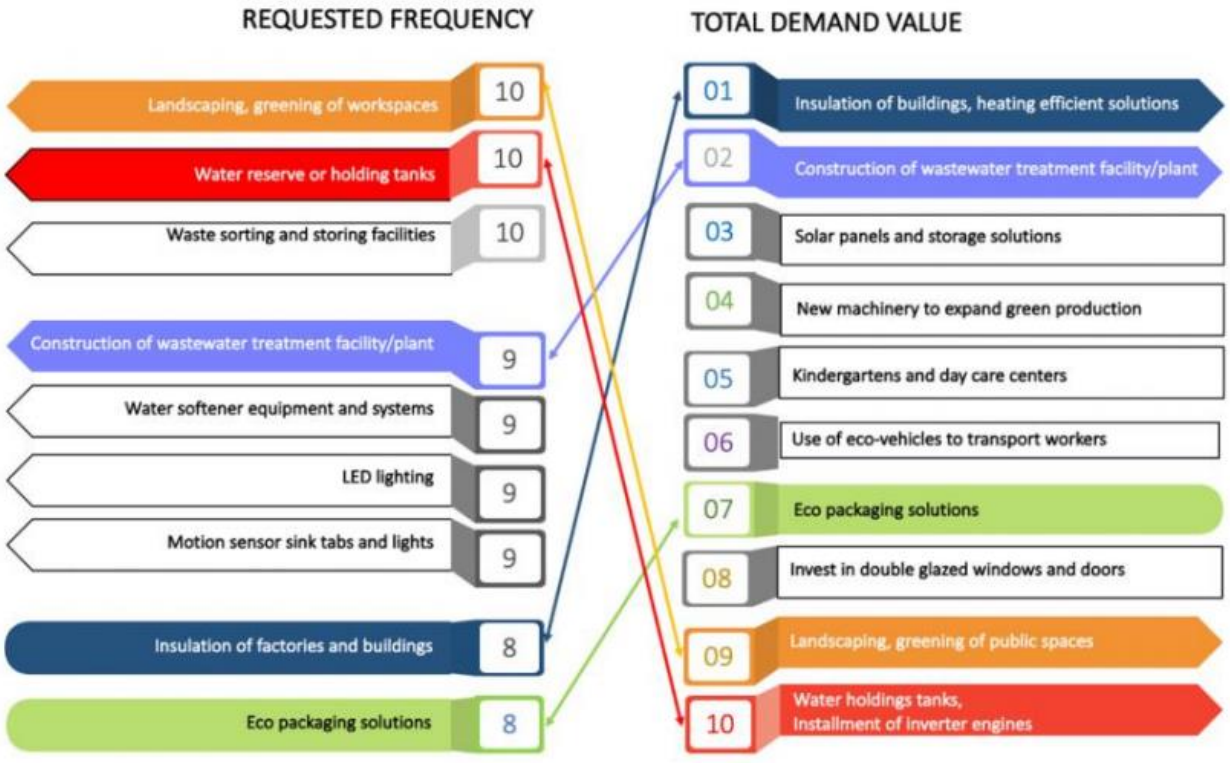
- 44% for solutions **to reducing heat loss** in industrial buildings and factories

[5] MSFA & Gerege Partners (2019). Green market demand of small and medium textile enterprises in Mongolia.
[6] Including Cashmere program targets, the projected green finance demand of the textile sector would be 576 billion MNT.

- 18% for **electricity efficient solutions**
- 17% for the construction of **wastewater treatment facilities**
- 21% for other needs required to implement sustainable, green production and service practices

Figure 2. Green finance market of the Mongolian textile sector





Source 1. Green Finance Market Demand of Textile SMEs in Mongolia, MSFA & Gerege Partners (2019).

Green finance is often considered a major economic incentive for producers to move to sustainable production by offering concessional and long-term financing. As a result, factories will have a positive impact on the environment and society, as well as more efficient and cost-effective production.

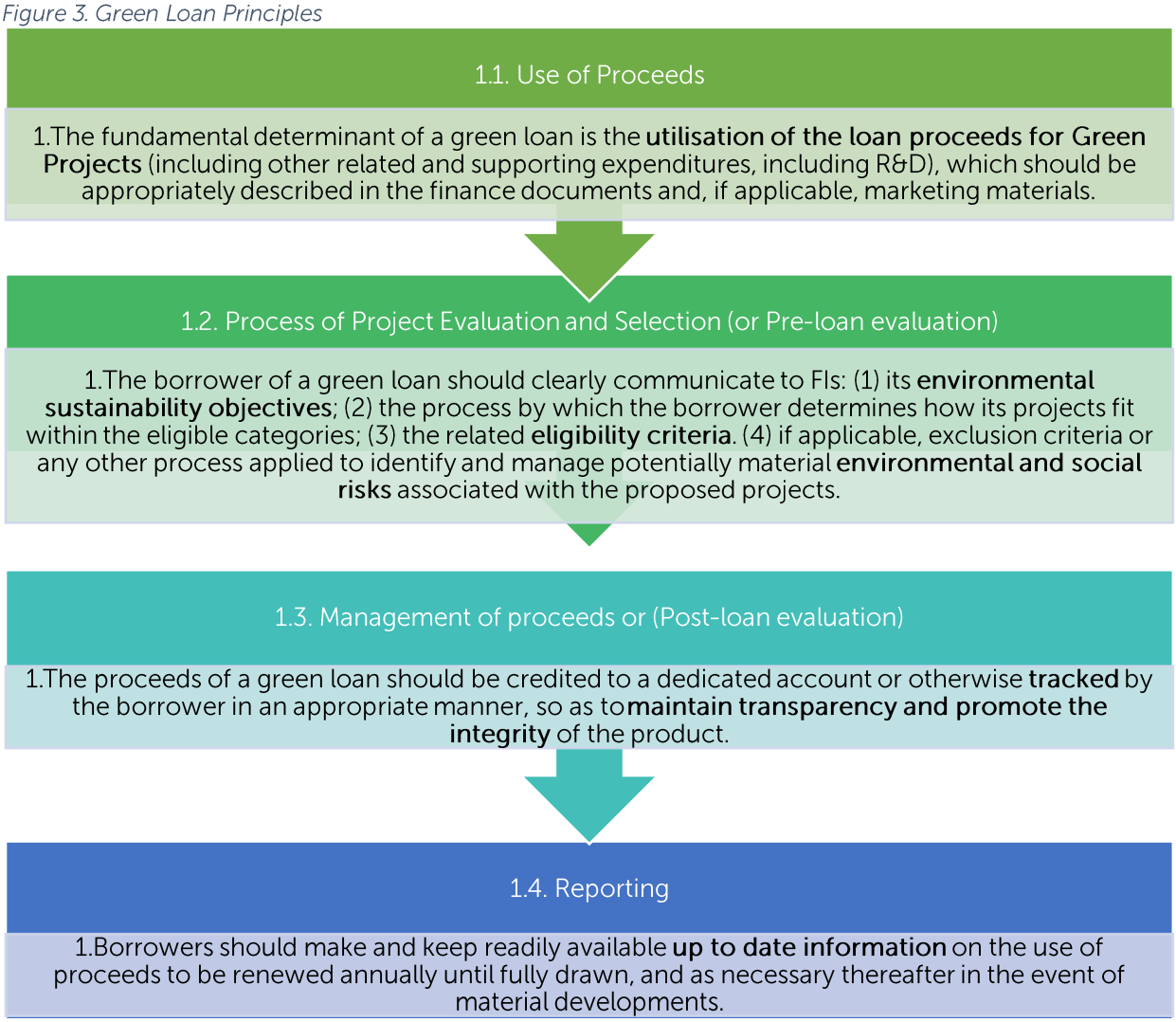
Rationale

Banks and FIs around the world are introducing various financial instruments to finance green – environmentally and socially friendly– projects in order to adapt green finance to market demand. **However, there is a lack of green loan criteria applicable to the Mongolian textile** sector. Therefore, under the STeP EcoLab project, MSFA has developed a sector-specific green loan criteria guide for Mongolian textiles, incorporating input from key stakeholder groups, including industry experts, engineers, ministries, relevant agencies, associations, and FIs, as well as international stakeholders.

Chapter 2. International requirements for Green Loan Principles

In principle, green loans are meant to provide financing within the framework of transparency and the avoidance of greenwashing.[7] The framework for green loans, or Green Loan Principles, provide a clear and transparent set of principles that enable investments in green projects that facilitate and support environmentally sustainable activities. The Green Loan Principles were developed by the Loan Market Association to define the following four principles (Figure 3)[8].

Figure 3. Green Loan Principles



Source 2. Loan Market Association (2019)

[7] Greenwashing is marketing that portrays an organization's products, activities, or policies as producing positive environmental outcomes when this is not the case. (UK's Financial Conduct Authority)
[8] Jointly developed by the The Loan Market Association (LMA), Asia Pacific Loan Market Association (APLMA), and the Loan Syndications and Trading Association (LSTA) with the support of the International Capital Market Association (ICMA). 2018.

Globally, countries have been developing green loan and green bond criteria following an umbrella classification system known as **green taxonomy**. For instance, the EU Taxonomy is a well-known taxonomy that defines and lists the criteria for environmentally sustainable economic activities.[9] Similarly, the Mongolian Green Taxonomy approved by the Financial Stability Council of Mongolia classifies 58 activities in eight sectors as green economic activities (see Appendix 5).

Chapter 3. Textile sector-specific green loan criteria and verification

The criteria document was developed in line with international and national sustainable finance principles, as well as key documents such as the National Sustainable Finance Roadmap and Mongolian Green Taxonomy.

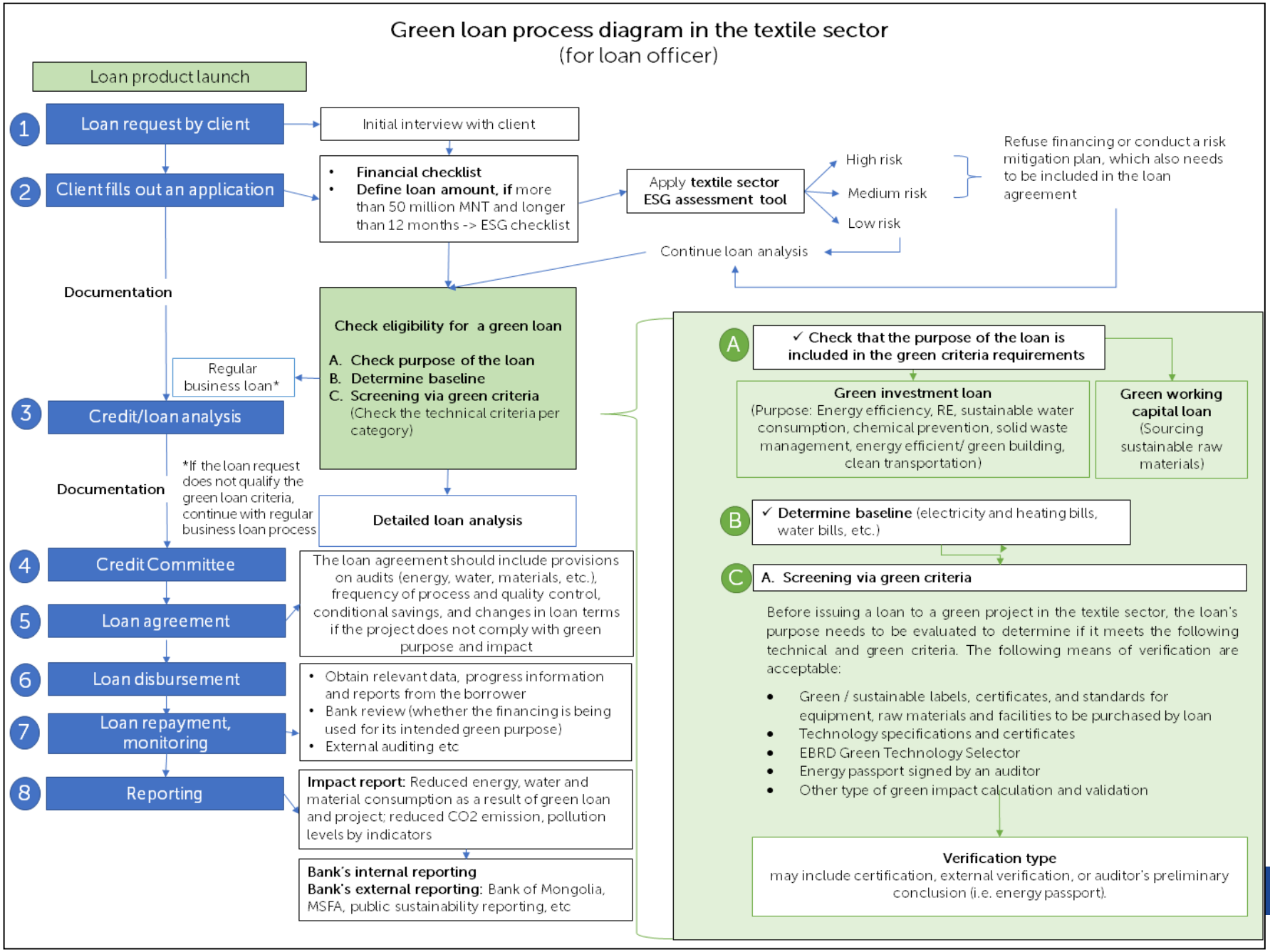
This document shall be used during an FI's initial loan screening and detailed loan analysis, as illustrated in Figure 4. It should be noted that **loans exceeding 50 million MNT and 12 months** must be assessed using the Textile Sector ESG Risk Assessment Tool.

Regarding the green loan product, amount, and term, they will be determined in accordance with the FI's internal loan policies and procedures, and relevant laws (Civil Code, Banking Law, and the Law on Deposits, Settlements and Banking Transactions, etc). It is recommended that FIs set the loan term and amount after taking into consideration the prospects and green finance demand of a textile company. For example, according to the results of the green finance market demand survey, wool and cashmere factories have the following expectations from green loans:

- Loan interest rate of no more than 8%
- Loan term of 5 years or more
- A seasonal loan repayment schedule

[9] https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities_en

Figure 4. Textile sector Green loan process diagram



Steps to determine eligibility for green loans

A. Check whether the loan purpose is green

The textile sector green loans within this criteria framework are aimed at reducing greenhouse gas emissions, saving energy and water consumption, creating material efficiency, and supporting environmentally friendly and sustainable solutions. We explore two potential types of textile sector green loans: (i) green investment loans and (ii) green working capital loans.

Green investment loans are intended to finance textile producers who are planning to promote sustainable production by investing in resource-efficient technologies, textile machinery and equipment, or materials produced with low energy and water consumption (see Table 1).

Table 1. Textile sector green investment loan by general category and purpose

General category	Example green loan purpose
Energy efficiency (EE) 	• Purchase of energy efficient equipment • Insulation of existing/old factory building
Renewable energy (RE) 	• Installation of small-scale RE solutions • Installation or construction of large RE technologies
Sustainable water consumption 	• Purchase and installation of water efficient machines and equpment • Purchase of wastewater treatment facilities and equipment
Chemical prevention 	• Purchase of chemicals that meet green requirements • Construction of a chemical warehouse, laboratories and stations
Solid waste management 	• Purchase of smart waste bins, collection, and recyclable packaging (3Rs – reduce, reuse, recycle, circular economy etc)
Energy efficient, green buildings 	• Construction of an energy efficient factory building • Construction of a green building
Clean transport 	• Replace traditional petroleum fuel vehicles with electric or hybrid vehicles

The green working capital loan is intended to finance the procurement of sustainable raw cashmere by textile processing companies. For example:

Table 2. Textile sector green working capital loan by purpose

General category	Example green loan purpose
Sourcing sustainable raw materials/cashmere 	• Purchase of raw cashmere with sustainable certification where pasture management and animal welfare requirements are addressed • Development of a raw material and product traceability system

B. Determine the baseline

According to the Green Loan Principles, measuring baseline data through quantitative and qualitative indicators builds conditions to measure, verify, and report the green impact of a loan. Generally, the baseline is determined based on product measurement and assessment provided by state authorities, as well as national and international standards. In the absence of baseline data, a review of the client's performance indicators for the past 1-3 years (energy consumption, water consumption, industrial wastewater amount and toxicity, etc.), external assessment, and audit results is also recommended.

C. Screen and verify whether green criteria are met

Before issuing a loan for a green textile sector project, the loan purpose needs to be evaluated and verified to determine if it meets the relevant technical and green criteria.

The following resources and documents may be used for verification:

- Green / sustainable labels, certificates, and standards for equipment, raw materials and facilities to be purchased with loan financing
- Technology specifications and certificates
- European Bank for Reconstruction and Development (EBRD) Green Technology Selector
- Energy passport and report from a verified auditor
- Other type of green impact calculation and validation method

The relevant criteria for each category of green loan are explained in detail below.

CRITERIA: ENERGY EFFICIENCY

Scope: Improving energy efficiency (EE), reducing heat loss of buildings and facilities

Energy saving technologies	Examples of subclasses and technologies	Technical criteria
Energy efficient technology solutions for all stages of textile processing production	• Improving energy use and efficiency of **electric motors** • Improving energy use and efficiency of **compressed air system** • Improving energy use and efficiency of **water pump** • Improving energy use and efficiency of **fan system** • Improving energy use and efficiency of **lighting system** • Improving energy use and efficiency of **steam system** (Steam boiler and pipeline insulation) • Installing a **control panel**	• **The total energy efficiency of the project must be 20% or more.** • Machinery and equipment used in the process must be manufactured and meet industry standards to calculate its energy efficiency, and to determine if it is environmentally friendly and has a low environmental impact. • Energy savings and efficiency calculations Equipment must hold an energy label of B or higher (B, A, A +, A ++)
Energy saving technologies related to the washing production process	• Energy-efficient technologies for the **preparation of the washing process** • Energy efficient **Drying technologies** • Energy efficient **capillary sorting (final process) technologies** • General energy efficient technologies for the **washing process**	
Energy saving technology solutions for weaving and knitting	• Energy efficiency improvement of **compressed air system** • Energy efficient solutions for **knitting and weaving machines and equipment**	
Energy saving spinning technology solutions	• Energy efficient equipment for **dyeing, mixing and combing** • Improving the energy efficiency of **carding and hoop spinning machines** • Technologies to increase the energy saving efficiency of **wrapping and overlapping weavings** • Installation of **air ventilation and humidification systems** • Other energy efficient solutions for **spinning machines (portable cleaner energy saving, machine capacity improvement, etc.)**	

Purchase of other energy efficient textile machinery and equipment	• **Equipment with a green label** identified by British, German and Italian textile machinery manufacturer associations, such as VDMA and BTM ACIMIT (Annex 4)	• **The total energy savings of the project must be 20% or more.** • Energy auditor's conclusion will apply in the absence of any manufacturer-certified energy savings calculation, technical documentation, or green certificate/label. • Old equipment must be disposed of in accordance with standard guidelines, in a manner that is not harmful to the environment or human health.

Ac According to the ERC program's energy policy, **a designated consumer** must have an energy efficiency manager and an energy efficiency plan.[10]

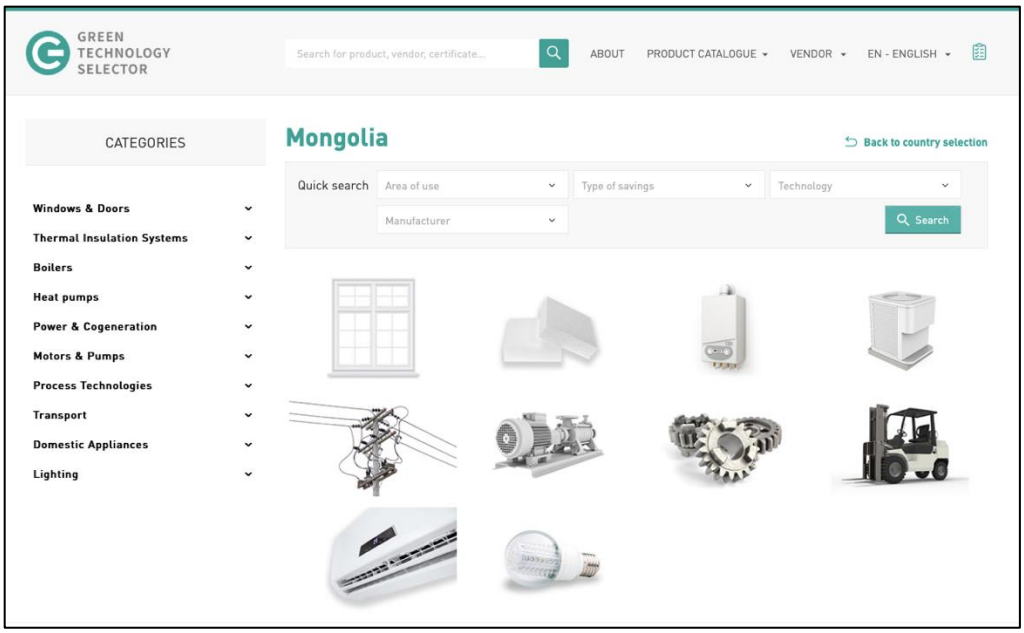
Sample verification

Depending on the scope of the loan and the project, appropriate verification methods will need to be implemented. The following verification methods can be applied.

- Equipment certificate (invoice) with HS or product classification code, or energy saving calculations, a technical certificate, green certificate, and label certified by the manufacturer[11]
- Certified equipment included in the EBRD Green Technology Selector

[10] As of 2020, Gobi JSC and Khanbogd Cashmere LLC are considered designated consumers. A full list of designated consumers can be found here: http://ecc.erc.gov.mn/mn/m/uureg-huleesen-hereglegchid

[11] The Harmonized Commodity Identification and Coding System is a list of foreign trade classifications, including consumer and advanced technical and technological commodity classification codes, used to accurately identify and declare goods, prevent classification violations, and save time on customs clearance. It is internationally known as the HS code.



- "Green"[11] or"Blue competence" label and certificate of sustainable technology issued by VDMA Textile Machinery Association [9], British Textile Machinery Association (BTMA)[10] and ACHIMIT (see Annex 4)
- Energy auditor's report or conclusions

If the company with adheres to the following standards and cooperates with the Energy Service Company (ESCO), it can be an advantage in loan analysis and the decision-making process.

- Certificate of MNS ISO 50001:2019 Energy Management System Standard
- Certificate of MNS:2021[12] Standard for Sustainable Textile Production

[12] As the standard is still under review, an MNS standard code has not yet been assigned.

CRITERA: INSULATION OF EXISTING BUILDINGS

Scope: Insulation and renovation of old and existing factory buildings

№	Building insulation technologies	Technical criteria	Verification
General criteria: Total energy savings for building insulation should be 20% or more			
1	Insulating **outer walls**	• Wall thermal performance has to meet the requirements set forth in CNR 23-02-09: Building thermal performance norms • Insulation material has to meet the following standards and technical requirements: MNS EN 13162, MNS EN 13163, MNS EN 13164, and MNS EN 13165 • Construction blueprint available	• Construction design inspection document (Construction Development Center) • Construction Energy Certificate (Energy Auditor) • Structural strength assessment of the building (State Specialized Inspection Agency) • Door and window energy certificate (Manufacturer Coalition NCA) • An RE solution in construction design and a design feasibility study (performed by the design company and NREC)
2	Improving thermal coating of **floor and foundation slabs**	• Floor thermal performance must meet the requirements set forth in CNR 23-02-09: Building thermal performance norms • Construction blueprint (a study drawing) available	
3	**Roofing and replacement**	• Roof thermal performance must meet the requirements set forth in CNR 23-02-09: Building thermal performance norms • Roof material must meet the technical requirements in MNS 6303 • Construction blueprint available	
4	**Replacement and insulation of doors and windows**	• Door and window thermal performance must meet the requirements set forth in CNR 23-02-09: Building thermal performance norms • MNS 5874:2008: Polyvinyl chloride (PVC) profiles for windows and doors, Technical requirements • MNS 5830:2007: Plastic PVC windows and doors for buildings, Technical requirements • MNS 6266:2011: Erection to joints of window assemblies adjoined to wall openings, General specifications	

Note: Prior to renovating the building, by implementing the renovation measures to determine the condition of the building and energy consumption, the conclusion of the construction energy audit on what results will be achieved will be prepared.. Source 3. (MSFA & GIZ, 2020)

The appendix provides includes a diagram of the building insulation and new construction loan process (see Appendix 7). For more instructions, please refer to the "Building energy Energy efficient Efficiency rating Rating criteriaCriteria" (MSFA & GIZ, 2020)

CRITERIA: RENEWABLE ENERGY

Renewable energy (RE) equipment included in the RE category of the Mongolian Green Taxonomy, and in Annex 2 of Government Resolution No. 468 of 2019, List of environmentally friendly machinery and equipment for efficient use of natural resources, reduction of environmental pollution and waste", can be financed by green loans.

See sample technologies in Appendix 2.

RE technologies	Example subclass, technology	Technical criteria
RE generator	Installation or construction of generators with renewable natural resources, such as solar, wind, hydropower, geothermal, and biomass • Wind turbines • Solar panels • Biogas station • Geothermal power plants • Hydroelectric power plants • Battery storage	• Obtain a license to build an energy facility specified in Article 20 of the Energy Law (ERA, province and capital city regulatory councils) • Meet relevant standards, rules, and regulations • A feasibility study should be developed, including identification of reduced CO2, traditional fuel replaced, and electricity produced •
Small-scale solar and wind-powered solutions	Solar and wind-powered **small vehicles, equipment, and electrical appliances** (solar panels, electric motors, generators, lighting, batteries, household appliances, inverters, etc.)	• Must be included in the RE technology category • Equipment and process equipment should be manufactured and tested to standards that take into account their respective energy efficiency, or are environmentally friendly and low impact.
Small **biomass-charged solutions**	Biofuel-powered machinery and equipment (**stoves, steam turbines, generators,** etc.)	
Small solutions that can be **powered by geothermal energy**	All types of equipment (**water, heating, floor insulation**, etc.) charged with combined (solar) and single ground energy	

CRITERIA: SUSTAINABLE WATER CONSUMPTION

Scope: Clean water and wastewater treatment

Methods and technologies related to water management	Subcategories and technologies	Technical criteria
Machinery, equipment and parts to **save water** in textile industry processing	• Machinery and equipment for washing, dyeing, weaving and knitting raw materials • Hot water boiler • A device for steam heating of cold water for wool and cashmere washing and dyeing • Centrifuge/spinner after washing and dyeing wool and cashmere • Water softening machine equipment	• Total water savings of 20% or more • Calculations on water saving potential must be conducted • Appoint or cooperate with the local water use manager and conduct internal monitoring • Greywater reuse technology and equipment
Wastewater treatment plant, equipment and parts	• Wastewater treatment plant (anaerobic and biological waste treatment plant) • Small-scale treatment plant (for wool and cashmere washing) • Air blower for wastewater treatment equipment • Reactors and pumps (sewage pump, sludge pump, crusher pump, vacuum pump, etc.) • Other sewage and sludge filtration filters, grilles, and press equipment (microbubble device, filter press, vacuum filter crusher) • Flotation machine and micro electrolysis process	• Appoint or cooperate with the local water use manager and conduct internal monitoring • Have a pre-treatment facility • Handling of wastewater, from technological needs to the main line, must meet Mongolian standards for environmental safety and water quality. Only the accepted volume of wastewater can be sent to the sewage network. (General requirements MNS 6561:2015) • In accordance with MNS 5667-10:2001, standards for wastewater sampling, a state environmental inspector or local environmental department water specialist shall determine a wastewater sampling point and conduct sampling and analysis at least twice a quarter. • Install a sewage meter at the wastewater outlet

Sample verification

- Any water saving calculations, technical documentation, green certificate, or label certified by the manufacturer
- General requirements MNS 6561:2015 standard: Environment, water quality, wastewater to be sent to the sewage network
- Certificate of MNS:2021 Standard for Sustainable Textile Production

- Equipment certificate for equipment with relevant HS or product classification code
- "Green" or "Blue Competence" label and certificate issued by VDMA Textile Machinery Association, British Textile Machinery Association (BTMA), or ACHIMIT Textile Machine Manufacturers Association (see Appendix 4)

CRITERIA: CHEMICAL PREVENTION

Scope: Proper use of chemicals, machinery, and equipment to reduce the use of chemicals and emission of toxic substances into the air

№	Sustainable solutions for chemical management	Green purpose & green impact	Technical criteria
1	Support import and export, sale and purchase of eco-friendly chemicals	Minimize the harmful effects of chemicals on humans and nature, and support industry initiatives to implement and adhere to a stricter and more responsible chemical management system	The chemicals should have an international green certificate of chemicals such as REACH, ZDHC, MRSL, RSL, Bluesign, GOTS, GreenScreen Certified, and OEKO-TEX.
2	Financing the building of a standardized warehouse for toxic and hazardous chemicals	Establish the rational use of chemicals; minimize the adverse effects of chemicals on the health and safety of the workforce	Must provide a project plan that meets the general requirements of the MNS 6458:2014 standard on warehouses for toxic and hazardous chemicals
3	Purchase of modern laboratory equipment and inventory that meet the requirements of sustainable chemical management	Enable building an improved, more controlled supply chain management by using a well-equipped laboratory system while providing high quality chemical processing	The laboratory equipment and accessories should be new, not secondhand. Purchaser should provide quality certifications from the suppliers with technical information. Equipment bearing an international certification mark is preferred.
4	Purchase and installation of biological safety cabinets (BSCs), isolators, and local exhaust ventilators	These devices protect the operator, the laboratory environment, and/or the work materials from exposure to infectious aerosols and splashes that may be generated when manipulating materials containing harmful biological agents	The BSCs and related devices should be new, not secondhand. Purchaser should provide quality certifications from the suppliers with technical information. Equipment bearing an international certification mark is preferred.
5	Purchase and installation of a well-designed/improved ventilation system in the laboratory or production plant	Enable controlling emissions of hazardous chemicals in the laboratory or production plant; reducing the harmful effects of dyes and chemicals on human health and the environment	The ventilation system and related devices should be new, not secondhand. Purchaser should provide quality certifications from the suppliers with technical information. Equipment bearing an international certification mark is preferred.
6	Purchase and installation of green and innovative textile dyeing and finishing	Establish rational use of chemicals; minimize adverse effects of	Purchaser should provide quality certifications from the suppliers with technical information.

	machinery, and related inventory and spare parts	chemicals on the safety of the workforce and the environment	Machinery bearing an international green certification mark is preferred.
7	Purchase and installation of innovative and automatic dosing and preparation systems for dyes and chemicals (including processes for mixing, storage, dosing, dilution, and distribution for dyes and chemicals)	Enable environmentally friendly, safe, and highly efficient preparation and dosing of dry or liquid chemicals; reduce the harmful effects of dyes and chemicals on human health and the environment	Purchaser should provide quality certifications from the suppliers with technical information. Equipment bearing an international green certification mark is preferred.
8	Water quality testing and monitoring instruments for pure and industrial stock (turbidity meters, water level meters, hardness test kits, and multi-parameter water quality testing, etc.) and required reagents for water analysis	Enable control and reduce the concentration of dyes and chemicals in stock water to achieve sustainable water consumption criteria; enable the manufacturer to reuse technological water on the quality analysis	The instruments and reagents for water analysis should be new, not secondhand. Purchaser should provide quality certifications from the suppliers with technical information
9	Purchase and installation of water softening and cleaning equipment, spare parts, and reagents	Water softeners have a range of benefits, including reducing maintenance and extending the life of your existing equipment, eliminating scale formation, and reducing energy consumption. Enable manufacturers to achieve sustainable water consumption criteria. Softening water improves the quality of the chemical process and reduces the presence of chemicals in the finished product. This process will alleviate the wastewater treatment load at the central treatment plant of the capital city	Purchaser should provide quality certifications from the suppliers with technical information. A green certification mark will is preferred.

Sample verification

- Equipment certificate for equipment with relevant BTCS or product classification code;
- "Green label" or "Blue Competence" label and certificate issued by VDMA Textile Machinery Association, British Textile Machinery Association (BTMA) and ACHIMIT Textile Machine Manufacturers Association (Appendix 4. Textile equipment manufacturers)
- Other type of calculations and technical documentation certified by the manufacturer

CRITERIA: SOLID WASTE MANAGEMENT

Scope: Technological solutions for reducing industrial waste and recycling secondary raw materials

№	Sample solid waste reduction, sorting and recycling technologies	Green impact	Technical criteria
1	Introduce innovative solutions such as sorting and recycling wool and cashmere secondary by-products from each stage of the plant (hair, blemishes, mold residue, by-products from the spinning process, wire waste, high-strength yarn, embroidery waste); proper sorting and storage of waste equipment, technology, industrial plastic packaging, telephone cartridges, clothes hangers, recyclable material, household waste (3Rs, 4Rs, circular economy, EPR, cradle to cradle, etc.)	Waste reduction and recycling	• The amount of waste to be reduced, calculation and validation of results • Comply with the requirements of Waste Law and relevant standards • Reduce the amount of waste and regularly ship the waste under a contract with a licensed waste management organization • Sort waste by type (toxic, non-toxic, reusable, and non-recyclable) and size • Follow the procedures and guidelines for the establishment, operation, and closure of a centralized waste disposal site
2	Introduce **organic matter composting facilities**	Waste reduction and recycling	
3	Purchase **packaging, paper labels, and auxiliary materials** that rapidly decompose in nature and can be recycled	Waste reduction and recycling	• Made of 100% recycled materials • Have an eco-label

CRITERIA: ENERGY EFFICIENT/GREEN BUILDINGS

Scope: Construction of energy efficient or green factory building

Notes: This section only covers the construction of new buildings, and energy-saving window and door insulation, and technical upgrades are included in Criteria 1. The appendix provides an EE financing product process (see Appendix 7). For more instructions, please refer to the Building Energy Efficiency Rating Criteria (MSFA & GIZ, 2020).

№	Sample loan product	Green impact	Technical criteria
1	Construction of energy efficient buildings	Save energy	• Construction energy savings of 20% or more • A general conclusion on the feasibility of the construction blueprint has been obtained • Have a building energy certificate with an A ++, A +, A, or B rating • Must be certified by a specialized organization or auditor
2	Build a green building	Save energy, water, and materials	• Energy, water, and material savings of 20% or more • Have an assessment in accordance with internationally and domestically accepted standards and certificates, such as EDGE, LEED Gold or Platinum

Sample verification

- Construction Development Center, design company conclusion
- Construction energy, material and water saving certificate
- International energy efficient or green building certificates, labels and standards

Energy certificate template for EE buildings

The Energy Regulatory Commission (ERC) has developed and piloted a building energy certificate template. Certification covers two areas: design and operations. In the first stage of loan review, the design certificate is considered. Once the loan financing has been disbursed and building has been constructed and commissioned, an operations certificate must also be obtained to measure and verify the green effect of the loan.

Figure 5. Energy certificate template for EE buildings

Number: ..... Date of issue Valid date

20 ... year ... day 20 ... year ... day

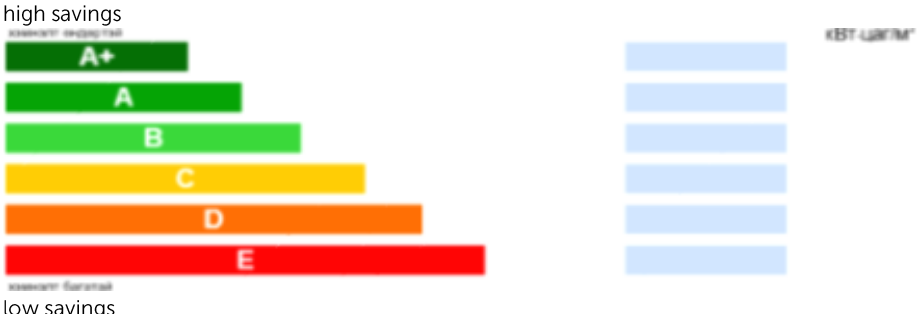
Energy Certificate of Construction of a Facility

Purpose of construction:
Capacity:
Year of construction: Facade of the building
Areas to be considered in the construction assessment:

Building address

City, aimag: District, soum:
khoroo, bag: Building number:

Building heat demand and consumption



Personal heating needs for the building: kW hours / m2
Annual heating needs of the building: kW hours/annual

Building owner: Rated:
Name: Name:
Organization: Organization:
Address: Address:
Phone: Phone:

Certificate of the applicable authority : Based on the Energy Conservation Law and relevant norms and standards in force .... gave

Source 4. MSFA, GIZ (2020). "Building Energy Efficient Rating Criteria"

Box 2

1. *IFC's EDGE[13], or Green Building Certification, is an evaluation methodology that ensures that a project saves at least 20% in materials, energy, and water for building construction. The methodology allows the project team to estimate the project's green operations, and energy and water savings, by entering construction data into the platform (see Appendix 8).*

2. *Leadership Energy and Environmental Design (LEED) construction certification[14]*

Green building labels developed by the U.S. Green Building Council are available worldwide, regardless of country, and LEED assessments can be made on both new and existing buildings. The assessment considers the environmental impact of all stages of construction, such as construction planning, installation, and operation, in five main categories. Points will be awarded and all credits will be labelled LEED Platinum, Gold, or Silver.

Key indicators:

- *Integrative process*
- *Location and transportation*
- *Sustainable sites*
- *Water efficiency*
- *Energy and atmosphere*
- *Materials and resources*
- *Indoor environmental quality*
- *Innovation*
- *Regional priority*

[13] http://edgebuildings.com
[14] https://www.usgbc.org/leed

CRITERIA: LOW CARBON AND CLEAN TRANSPORT

Scope: Electric and hybrid vehicles, their parts and related technology

№	Carbon and technical solutions	Green purpose, green impact	Technical criteria
1	Purchase of **low-carbon industrial vehicles (electric or hybrid)** such as (small trucks, employee buses, etc.)	Decreasing air and environmental pollution	• Vehicle models, labels and factory certification • Preliminary assessment and fuel consumption should be calculated • Calculate efficiency according to set standards, including the calculation of alternatives if available: ○ MNS EN 16247-4:2019 Energy audit. Part 4. Transportation ○ MNS IEC 60034-2-1:2019 Rotating electric machines (standard methods for determining losses and efficiency from test results) ○ MNS IEC 60034-30-1:2019 Rotating electric machines, Classification of AC power system for AC motors (IE code)
2	**Introduction of smart technology for clean transport** (distributing public transport news, rideshare vehicles, smart card systems, etc.)	Decreasing air and environmental pollution	
3	**All types of vehicle exhaust filters**	Decreasing air and environmental pollution	
4	**Air intake device** to support the complete combustion of automotive fuel and reduce emissions	Decreasing air and environmental pollution	
5	Vehicle fuel and exhaust-reducing **hydrogen generator**	Decreasing air and environmental pollution	

Sample verification

- Vehicle or technology technical specifications and green certificates

CRITERIA: SOURCING SUSTAINABLE RAW MATERIAL AND PASTURE MANAGEMENT

This category criteria is specifically developed for green capital working capital loan.

Scope: Sustainable pasture management, sustainable livestock management, and sustainable raw material procurement

Sample type	Green purpose, by loan purpose type	Technical criteria	Verification
1. Purchase raw materials from responsible herders	<u>Green purpose:</u> Improvement of rangeland and reducing its degradation; maintaining proper pasture carrying capacity; sustaining animal welfare <u>Loan purpose type:</u> • Stabilize seasonal rotation of pastures • Increase feed supply and quality • Improve hayfields • Improving pasture water supply • Adjust the number of livestock to the carrying capacity of the pasture • Improve winter shelters • Improve animal health • Improve the preparation of livestock raw materials	1. **Must meet the MNS standard for sustainable livestock management and have a certificate for complying with the following criteria:** • Be a member of a herder group or pasture user group (PUG) • Have a pasture user agreement • Have a contract with the soum veterinary clinic • Have a veterinary e-certificate 2. **To be registered in the Responsible Nomads raw material traceability system (RMTS)**	MNS:2021 Sustainable Livestock Standards Verification Certificate[15] Responsible Nomads electronic system of the Mongolian National Federation of Pasture User Groups <u>Verifying organizations:</u> ▪ Mongolian National Federation of Pasture User Groups (NFPUG) ▪ Independent technical committee
2. Purchase raw materials from responsible cooperatives	<u>Green purpose:</u> Finance sustainable raw materials, pasture management, or animal welfare <u>Loan purpose type:</u> • Construction of a warehouse • Semi-processing of livestock products • Establishment of a core herd	1. **Must meet the MNS standard for sustainable livestock and raw material management and have a certificate.** The standard includes the following criteria for registration in the Responsible Nomads RMTS. For example:	1. MNS:2021 standard for sustainable textile production 2. Responsible Nomads RMTS database for PUGs 3. Sustainable cashmere or voluntary certificates of origin: • Responsible Nomads certificate • Sustainable cashmere certificate (AVSF)

[15] As the standard is under review, an MNS standard code has not been assigned yet.

	• Prepaid working capital for purchasing raw materials from herders • Purchase of veterinary medicine • Purchase of vehicles for raw materials transportation	• At least 80% of members of the group are herder households • Have a raw material procurement agreement with their members • Have a raw material supply agreement • Supply of raw materials in accordance with stable and quality contracts for the last three years 2. Cooperatives must have a certificate of sustainability or sustainable cashmere production	• International sustainable textile certificates
3. Factory preparation of raw wool and cashmere (includes factories of all levels)	<u>Green funding:</u> Sustainable raw material procurement <u>Loan purpose type:</u> • Development of a green procurement system • Improvement of raw material transportation • Development of product and a raw material traceability system • Improve packaging with the labelling of raw materials and recycled materials • Provide professional and methodological support, training, and advocacy on raw material quality and supply • Promoting a final product made from sustainable raw materials, organizing events, participating in domestic and foreign exhibitions • Create green jobs for sustainable production	1. **Must meet the MNS:2021 standard for sustainable textile production and have a certificate** 2. **Supply of raw materials of known origin prepared in a sustainable manner**. This includes voluntary sustainable certification. For example: • Responsible Nomads certificate • Sustainable cashmere certificate (AVSF) • Other sustainable textile certification	MNS:2021 standard for sustainable textile production <u>Verifying organization:</u> Certification body of the Mongolian Wool and Cashmere Association or Voluntary certificates of origin or cashmere produced in a sustainable manner <u>Verifying organization:</u> Verification/accreditation bodies for voluntary standards or international sustainable textile certificates (certificates and eco-labels that meet the IFOAM group of standards for sustainable raw material production systems in GOTS) <u>Verifying organization:</u> international certification bodies

Chapter 4. Green loan monitoring and reporting

Progress monitoring

The bank's progress monitoring may include the following three types of monitoring, which should be reviewed at least once a year:

- Obtain relevant quantitative and qualitative data, progress information, and reports from the borrower
- Bank review and on-site inspections (verify If the loan is being used for its intended green purpose[s])
- External audit, evaluation, control and certification

It is recommended that the bank's loan supervision team and the Textile Technical Committee (consisting of specialized energy, water, chemical, and equipment auditors in the textile sector) shall evaluate the progress of the project. The bank shall develop a project checklist in accordance with the principles of impact reporting, project results, and the ESG risk mitigation plan, and monitor the progress. Due to the seasonal nature of the textile processing industry, external and internal factors (pandemics, engineering leave, etc.), production is often disrupted, so the use of the resulting equipment should be estimated according to the instructions of the industry's specialized technical committees and auditors.

It is recommended that FI and the Textile Technical Committee (consisting of specialized energy, water, chemical and equipment auditors in the textile sector) shall evaluate the progress of the project. The Bank shall develop a project checklist in accordance with the principles of impact reporting, project results and the ESG risk mitigation plan and monitor the progress. Due to the seasonal nature of the textile processing industry, external and internal factors (pandemics, engineering leave, etc.), production is often disrupted, so use of the resulting equipment should be estimated according to instructions of the sectoral engineers.

Impact reporting

FIs and borrowers shall receive an annual environmental and green impact assessment in the form of a report for each type of green loan use. The FI loan officer measures the environmental and social impacts of eligible green projects, assessing and reporting on the overall impact indicators or key performance indicators for each category of green project in the report (see Table 3).

An impact report shall be prepared once a year for the following indicators and, if possible, quarterly depending on the feasibility of the indicators. The impact indicators referred to below will be complemented by documentation on how the use of proceeds contribute to the international and domestic policies on green development and climate change.

Table 3. Impact indicators

Green criteria Category	Impact indicators/ KPIs	Contribution to the national development targets and SDGs

Energy efficiency	▪ Amount of energy saved (kWh) ▪ Tonnes of CO2 avoided/annual GHG avoided in tCO2-eq/year	– Increase energy efficiency by 30% by 2030 – SDG 7.3: Increase energy efficiency (Affordable and Clean Energy)
Renewable energy	▪ Tonnes of CO2 avoided ▪ Replaced fuels ▪ Installed capacity of renewable energy project (kW) ▪ kWh of power generated from renewable energy annually	– Bring the share of renewable electricity capacity to 30% of total electricity generation capacity by 2030, up from 7.62% in 2014 (NDC)[16] – SDG 7: Affordable and Clean Energy – National Program for Reducing Air and Environmental Pollution[17]
Sustainable raw materials	▪ Increased level of rangeland health (RMTS) ▪ Reduced livestock population ▪ Tonnes of CO2 avoided/annual GHG avoided in tCO2-eq/year ▪ Quantity of raw materials prepared by responsible (sustainable) herders and cooperatives (in tons) ▪ Number of finished products made from sustainable raw materials	– Up to 10% of the total pasture in each soum is rotated; at least 2,000 hectares are cultivated per year by 2030 – Increase the amount of fully processed raw materials (wool and cashmere) produced to 60% by 2020, 80% by 2030, to produce 2.2 million pieces of finished products in 2021 (CP)[18] – Incentivize herders to contribute to preventing pasture degradation[19] – Bring GDP share of agriculture and processing up to 25% by 2025 (SDG 2.1.3), 30% by 2030 (MGDP) – SDG 12: Responsible Consumption and Production – SDG 13: Climate Action – SDG 15: Life on Land
Sustainable water consumption	▪ Annual amount of water savings (m^3/kg) ▪ Reduce toxicity of industrial wastewater (BOD, COD, etc.) ▪ Reduced wastewater output (m^3/kg)	– Access to safe drinking water, sanitation (MGDP 2.9, 2.10)[20]. At least 30 percent of water used for industrial purposes is reused.

[16] Government of Mongolia (2015). Nationally Determined Contribution (NDC).
[17] Mongolian National Program for Reducing Air and Environmental Pollution (2017).
[18] Cashmere Program (2018-2021) https://www.legalinfo.mn/annex/details/8271?lawid=13204
[19] Mongolian Green Development Policy (MGDP) 4.7. Create and promote an incentive mechanism, like payment for ecosystem services, for herders who take the initiative to contribute to preventing pasture degradation by preserving water resources and springs, and by breeding livestock in accordance with pasture capacity.
[20] MGDP 2.9: Provided 90 percent of the population with access to safe drinking water, and provide 60 percent of the population with access to improved sanitation facilities by increasing water supply and sewage system capacity and productivity; 2.10. Promote the introduction of technologies for treating wastewater at permissible standards and reusing recycled water while limiting the use of ground freshwater for industrial purposes.

		– SDG 6: Clean Water and Sanitation – SDG 9: Industry, Innovation, and Infrastructure
Chemical prevention Solid waste management	▪ Introduced or replaced chemicals with those that meet international standards and certification ▪ Reduced amount of chemicals used or removed the use of toxic chemicals ▪ Amount of waste reduced (in tons), ▪ Share of waste recycled (%)	– Reduce landfilled waste by 20% by 2020, 30% by 2030 (MGDP) – Increased share of waste recycling by 20% by 2020, 30% by 2025, and 40% by 2030 (SDGs, other policies)[21] – SDG 8: Industry, Innovation, and Infrastructure – SDG 12: Responsible Consumption and Production – SDG 11: Sustainable Cities and Communities
EE green buildings	▪ Annual energy saved in kWh (Annual GHG avoided in tCO2-eq/year) ▪ Water saved ▪ Materials saved	– Reduce building heat loss by 40% by 2030 compared to 2010 levels (NDC)
Clean transport	▪ Tonnes of CO2 avoided ▪ Replaced fuels or purchased factory/company electric or hybrid vehicles	– Increase the share of private hybrid road vehicles from approximately 6.5% in 2014 to approximately 13% by 2030 – Decrease air pollutants by 80% by 2025 (APP)[22]
Social indicators	▪ Number of employees trained in sustainable textile production, grazing, and responsible herder system training ▪ Number of female employees receiving wages and benefits ▪ Number of local people, herders, and cooperatives who have received support, capacity building, and training ▪ Improved social policies, programs, or strategies. These include social issues such as occupational safety, forced labour, freedom of association, working hours, child labour, the work environment, gender equality, community ownership etc. ▪ Improved workplace performance	– SDG 5: Gender Equality

FI internal and external reporting

[21] National Program on Improvement of Waste Management (2014). Resolution No. 198 (2018) of the Government of Mongolia on banning disposable plastic bags.
[22] National Program on the Reduction of Air and Environmental Pollution. (2017)

In accordance with Mongolian Sustainable Finance Principle 7, the principle of "Promoting Transparency and Accountability", FIs shall report the results of impact assessments to internal and external stakeholders.

- Internal reporting may include board/management team reports, a bank's annual report, sustainability reports, etc.
- External reporting includes monthly green loan statistics reported to the Bank of Mongolia, bi-annual sustainable finance implementation reports submitted to the MSFA, reports to investors and foreign partners, and so on.

Appendix 1. Sustainable standards in the textile sector

The most prestigious international and domestic certifications and codes of practices for the textile industry are listed below.

Global Organic Textile Standards

Global Organic Textile Standards (GOTS)[3] is the worldwide leading textile processing standard for organic fibres, including ecological and social criteria, backed up by independent certification of the entire textile supply chain. GOTS certified final products may include fibre products, yarns, fabrics, clothes, home textiles, mattresses, personal hygiene products, as well as food contact textiles and more (GOTS, 2020).

The aim of this standard is to define requirements that ensure the organic status of textiles, from harvesting of the raw materials, through environmentally and socially responsible manufacturing, up to labelling in order to provide credible assurance to the end consumer.

Textile processors and manufacturers are enabled to export their organic fabrics and garments with one certification accepted in all major markets. The standard covers processing, manufacturing, packaging, labelling, trading, and distribution of all textiles made with at least 70% certified organic natural fibres. The final products may include, but are not limited to, fibre products, yarns, fabrics, clothes, and home textiles.

GOTS assess the E&S issues of textile production in the following four areas:

Figure 6. GOTS criteria scope

STeP certification by OEKO-TEX

STeP certification by OEKO-TEX® is an independent certification system for brands, retailers, and manufacturers from the textile and leather industry.[23] by OEKO-TEX® is an independent certification system for brands, retailers and manufacturers from the textile and leather industry. Certification is suitable for production facilities at all processing stages who want to communicate their environmental measures externally in a credible and transparent way.

[23] https://www.oeko-tex.com/en/apply-here/step-by-oeko-tex

STeP enables an integrated view of production conditions from sustainable perspectives. Independent OEKO-TEX® institutes carry out analysis and scoring in the following six modules:

Figure 7. Scope of STeP certification criteria

Following are the national well-known standards in the cashmere sector.

"Responsible Nomads" Raw Material Tracebility System

The **Responsible Nomads** Codes of Practice (CoP) and Raw Material Traceability System (RMTS) were developed by the Mongolian National Federation of Pasture User Groups (NFPUG) with support from the Green Gold Animal Health Project of the Swiss Agency for Development and Cooperation (SDC).[24] The CoP and RMTS are designed to create awareness and appreciation among domestic and international customers of best practices in nomadic livestock herding, and to incentivize herders to maintain sustainable rangeland and herd management practices to live in harmony with wildlife and the environment. The Codes of Practice were developed for more than a decade in collaboration with thousands of nomadic herders living in different

[24] http://en.greenmongolia.mn/responsible-herders

parts of Mongolia. Local and international researchers also participated in the Green Gold Project to rehabilitate degraded rangelands (MONTSAME, 2020).

The Responsible Nomads Codes of Practice incorporate animal health and animal welfare indicators selected with input from herders, local specialists, and researchers, based on the context of how nomadic herding and best practices have evolved.

RMTS verifies that a product (cashmere, meat, etc.) is manufactured from livestock raw materials that qualify for certification under the Responsible Nomads framework.

As of 2020, with the support of the SDC and NFPUG, more than 1,575 pasture user groups (PUGs) in 18 aimags (provinces) have established rangeland use agreements that are signed by the local governor and herders (SDC, 2020).

Figure 8. Scope of RMTS Certificate

Source 5. Green Gold Animal Health Project

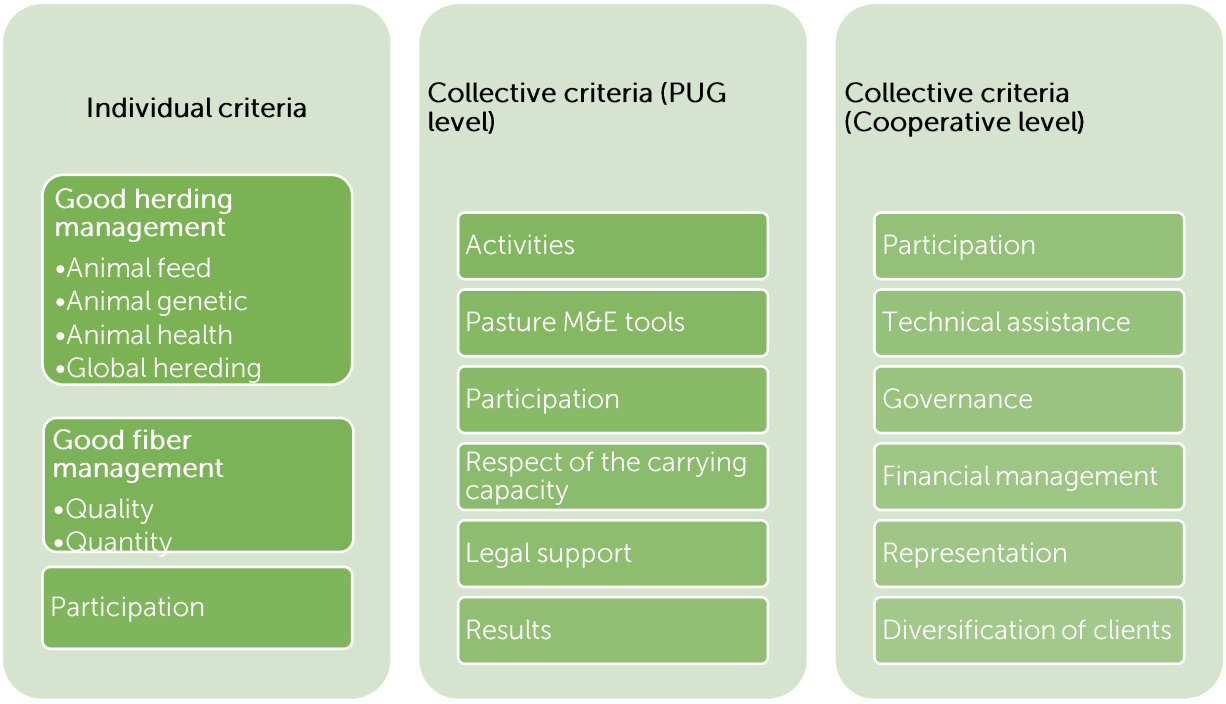
Verification body– Mongolian National Federation of Pasture User Groups (NFPUG)

Sustainable Cashmere Certificate from Sustainable Cashmere Union

The Sustainable Cashmere Union (SCU) of Bayankhongor Province[25] was established in 2017 with the support of AVSF Mongolia[26] at the initiative of the Sustainable Cashmere Project. Under the project, a Sustainable Cashmere certification mechanism is steered and implemented by an independent body, the Sustainable Cashmere Certification Committee (S3C).[27] The S3C is a neutral actor and the guarantor of certification credibility. The S3C is composed of a management board (representatives of state authorities and civil society organizations), a scientific committee (experts on the environment and agricultural value chain development), and a consultative committee (representatives of herders, processors, and buyers), who provide feedback to the S3C for continuous improvement of the certification process. The S3C acts at a national level and relies on province branches to conduct external controls, promote certification locally, and to facilitate upscaling of the mechanism.

AVSF strives to reach a critical mass of sustainable cashmere that will attract internationally recognized third-party certification bodies to strengthen the credibility of the certification, and acknowledgment by sector actors worldwide.

Figure 9. Criteria for Sustainable Cashmere Certification



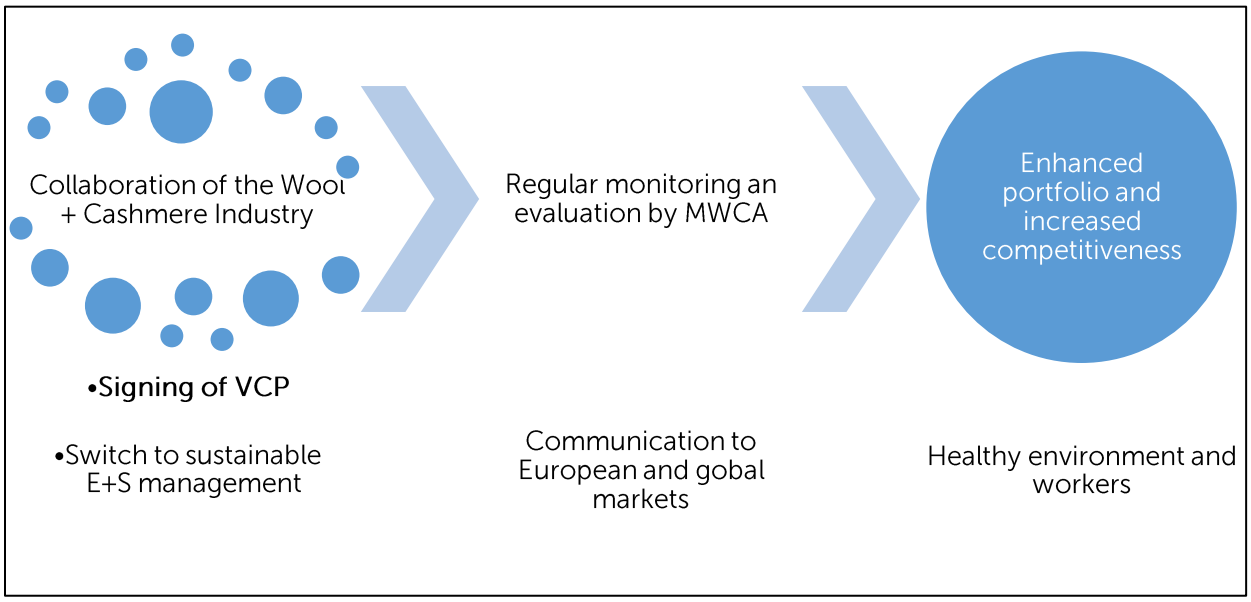
[25] https://www.sustainablecashmere-mongolia.com/#
[26] https://www.avsf.org/fr/posts/1742/full/une-filiere-de-fibre-de-cachemire-durable-en-mongolie
[27] https://www.sustainablecashmere-mongolia.com/wp-content/uploads/2020/11/Certification-2020-.pdf

Verification body–Sustainable Cashmere Certification Committee (S3C)

Voluntary Code of Practice of the Mongolian Wool and Cashmere Industry – MNS Standard

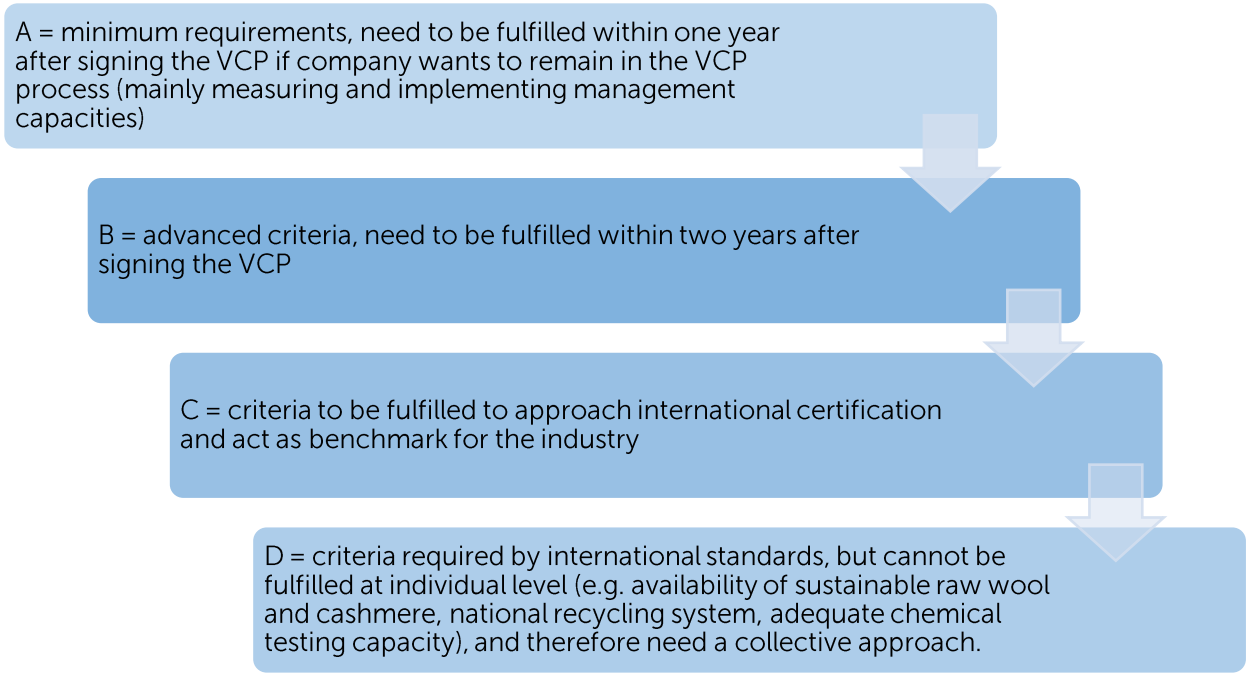
The **Voluntary Code of Practice (VCP)** has been developed under the STeP EcoLab project. Its objective is to enhance and ensure a strong sustainability profile for the Mongolian wool and cashmere industry, allowing for better recognition in the global wool and cashmere market and increased sales due to a sustainability performance that stands out against ordinary textiles. The project aims to enhance access to European and other global markets, which have increasing demand for sustainable textile goods. By complying with all criteria set in the VCP, Mongolian textile companies will be better equipped to comply with the key requirements of the most globally recognized and relevant sustainability standards.

Figure 10. VCP framework



Source 6. AVSF (2020) STeP EcoLab project

The criteria is classified as follows:



Criteria require by international standards: Even though the VCP is an ambitious approach to the sustainable production of cashmere goods, and is oriented toward leading sustainability standards, certification under the named standards requires compliance with further and more elaborate criteria than listed in the VCP.

These criteria comply with the requirements of:

1. Ten Principles of the UN Global Compact for VCPs
2. UN Guiding Principles on Business and Human Rights
3. The "Five Freedoms" of the OIE's Terrestrial Animal Health Code
4. Social and environmental criteria of the internationally recognized sustainability standards GOTS, STeP by OEKOTEX, Responsible Wool Standard and Nordic Ecolabel

MNS ISO (2021) Standard for Sustainable Textile Production

In February 2021, **MNS Sustainable Textile Production** (a Mongolian national standard) was launched with support from AVSF's STeP EcoLab project, funded by EU SWITCH-Asia Programme. AVSF's sustainability processing standard (Voluntary Code of Practices) is now a standard to be enforced at the national level. Currently, the standard is in the public consultation stage, led by the Mongolian Agency for Standardization and Metrology, and will soon be released and publicly available.

The purpose of the standard is to establish, evaluate, and validate the basic principles and requirements for sustainable textile production.

Criteria for MNS Standard for Sustainable Textile Production

Environment	Social	•Animal welfare
Environmental policy	•Child labor	Certificate of sustainable cashmere which has criteria for livestock management, aimal welfare, and origin of raw material
CO2 footprint measures	•Discrimination	
Water use	•Insult, violiation	
•Wastewater treatment	•Wage	
•Energy use (electricity, heat, steam)	•Health, labour protection	
•Use of chemicals		
•Solid waste		
•Packaging		

Verification body- Certification body under MWCA

"Mongolian Noble Fibre" quality certification mark

The **Mongolian Noble Fibre** (MNF) certification mark was developed by the Mongolian Wool and Cashmere Association (MWCA), with the initial support of Asian Development Bank and MOFALI, and finalized in 2019. The MNF certification mark certifies high quality wool and cashmere products, made from 100% Mongolian cashmere that meets international standards. The MNF certification mark certifies the following:

- Compliance with the quality control system for production
- Meets MNS and ISO standards
- Committed to stable and socially responsible wool and cashmere production

Cashmere standards include:

1. MNS 3683:2015 (2015-11-26). Processed cashmere
2. MNS 4950:2015 (2015-11-26). Dehaired camel wool
3. MNS 5248:2015 (2015-11-26). Dehaired yak hair
4. MNS 6809:2019 (2019-12-30, valid from 2020-01-07). Finished wool and knitwear products made of cashmere and yak hair

Verification body- Certification body under the MWCA

Other relevant MNS ISO standards

MNS ISO 14001 : 2020 Environmental management system

MNS ISO 50001 : 2020 Energy management system

MNS ISO 26000 : 2012 Social responsibility

Appendix 2. Sample energy-saving, water-saving and RE equipment

For more information on the technology, see the "Guidelines for Increasing Energy Saving in the Textile Industry"[23] and the following list of examples.

№	Energy saving technologies	(Green impact)	HS code
1	Electric motor (low power)	Energy saving	850110
2	Electric motor for circulating water pump in the heating furnace	Energy saving	841370
3	Automatic motor tuner or frequency converter	Energy saving	8502
4	Energy saving LED (LED-Light-emitting diode)	Energy saving	85395000
5	ES CCF (CCF-Cold cathode fluorescent)	Energy saving	85393920
6	Industrial boilers (steam, heating)	Reduce heat loss and Energy saving	8402
7	Boiler and pipe insulation (stone wool, etc.)	Reduce heat loss and Energy saving	7019
9	Energy saving of factory buildings or window and door insulation (new installation, reduction of window area, etc.) is explained in the following page.	Reduce building heat loss by 20% or more	
10	Polyethylene pipe for heat absorption collector	Energy saving	391721
11	Expansion tank (less than 50)	Energy saving	731029
12	Vacuum radiator	Energy saving	73221900
13	Heat pump (air-water, air-air, water-water, water-air, ground-water, ground-air heat pump)	Energy saving	84186100 84158100
14	Nanotechnical electric heater	Energy saving	841989
15	Smoke filter	Energy saving	842139
16	Emergency valve	Energy saving	848140
17	Special apparatus for welding polyethylene pipes	Energy saving	851519
18	Flexible electric heater	Energy saving	851629
19	Vacuum tube	Energy saving	85408900
20	Heater temperature regulator for floor, wall and ceiling heating	Energy saving	903210
21	Control panel	Energy saving	90328900
22	Electrical current measuring and monitoring equipment (1 and 3 phase electrical equipment to compensate for illusory power and control the power factor)	Energy saving	9030
23	Energy-efficient textile machinery and equipment (equipment with a green label identified by the British, German and Italian textile machinery manufacturers' associations, such as VDMA, BTM ACHIMIT - Annex 4)	Energy saving	

	Energy-efficient knitting products production equipment: knitting products, knitting kettle, washing machine, dryer, steam iron, straight sewing, product inspection light, etc. /		

№	RE technologies	Green impact	HS code
	WIND ENERGY		
1	Reinforced concrete tower for wind turbine generators	RE	6810.91.50
2	Wind turbine generator tower	RE	7308.20.00
3	Wind turbine generator tower connecting parts	RE	7308.90.00
4	Wind turbine	RE	8412.80.10
5	Wind turbine blades and flags	RE	8412.90.10
6	Wind turbine bearings	RE	84.82
7	Wind turbine gearbox	RE	8483.40.00
8	Electric generator (capacity not more than 75 kVA)	RE	8501.61.00
9	Electric generator (more than 75 kVA but not more than 375 kVA)	RE	8501.62.00
10	Electric generator (more than 375 kVA but not more than 750 kVA)	RE	8501.63.00
11	Electric generator (capacity more than 750 kVA)	RE	8501.64.00
12	Wind turbine generator equipment	RE	8502.31.00
13	Electrical control and management equipment for voltages not exceeding 1000V	RE	8537.10.00
14	Electrical control and management equipment for voltages above 1000V	RE	8537.20.00
15	Electricity generation and supply meters	RE	9028.30.00
16	Oscilloscope, oscilloscope	RE	9030.20.00
17	Universal wind energy measuring instrument (without recording device)	RE	9030.31.00
18	Universal wind energy measuring instrument (with recording device)	RE	9030.32.00
19	Ammeter, potentiometer, voltmeter, wattmeter, capacitance and induction meter, ohmmeter, phase meter, frequency meter, logometer (without recording device)	RE	9030.33.00
20	Ammeter, potentiometer, voltmeter, wattmeter, capacitance and induction meter, ohmmeter, phase meter, frequency meter, logometer (with recording device)	RE	9030.39.00
	SOLAR ENERGY	RE	
21	EVA-Ethylene vinyl acetate film	RE	3920.10.00
22	Tedlar- Polyvinyl fluoride film	RE	3920.99.00
23	Solar distance face glasses	RE	7003.12.00
24	Parabolic, silver glass reflective mirror (unfinished)	RE	7009.91.00
25	Parabolic, silver reflective mirror (framed)	RE	7009.92.00
26	Parabolic, silver-plated metal reflector	RE	7115.90.00

27	Non-welded, iron or low-quality steel pipes for solar heat collection and reception	RE	7304.31.00
28	Welded stainless steel pipe for collecting and receiving solar heat	RE	7304.41.00
29	Welded quality steel pipe for collecting and receiving solar heat	RE	7304.51.00
30	Metal supports for installation of solar reflectors and PV modules	RE	7308.90.00
31	Copper strip with foil sheath for connecting solar elements (thickness 0.15 mm)	RE	7409.31.00
32	Copper strip with foil sheath (not more than 0.15 mm thick) for connecting solar elements	RE	7410.12.00
33	Copper-zinc alloy or brass tube for collecting and receiving solar heat	RE	7411.21.00
34	Copper-nickel-zinc alloy or silver-nickel pipes for collecting and receiving solar heat	RE	7411.22.00
35	Other copper alloy pipes for solar heat collection and reception	RE	7411.29.00
36	Solar aluminum frame	RE	7610.90.00
37	Aluminum support for solar reflectors and PV modules	RE	7610.90.00
38	Parabolic-shaped, polished aluminum reflector	RE	8306.30.00
39	Steam turbine (with a capacity of more than 40 MW)	RE	8406.81.00
40	Steam turbine (capacity not more than 40 MW)	RE	8406.82.00
41	Stirling engine	RE	8412.80.90
42	Vacuum and flat collectors with solar heating pipes	RE	8419.19.00
43	Sunlight receiver	RE	8419.89.00
44	Water tank with heating device	RE	8419.89.00
45	Solar tracking system equipment	RE	8479.89.00
46	Solar cell cutting, sorting, connecting, sealing, assembly equipment, solar generator assembly equipment	RE	8486.40.00
47	Solar generator equipment	RE	8502.39.00
48	Inverter, converter	RE	8504.40.00
49	Connector and distribution box for voltage not exceeding 1000V	RE	8536.90.00
50	Electrical control and management equipment for voltages not exceeding 1000V	RE	8537.10.00
51	Solar cell element, PV module	RE	8541.40.00
52	Optical element replacement mirror	RE	9001.90.00
53	Fresnel lens	RE	9002.90.00
54	Solar reflector heliostat	RE	9005.80.00
55	An instrument for measuring the intensity of solar radiation	RE	9015.80.00
56	Electricity generation and supply meters	RE	9028.30.00
57	Oscilloscope, oscilloscope	RE	9030.20.00
58	Universal solar energy meter (without recording device)	RE	9030.31.00
59	Universal solar energy meter (with recording device)	RE	9030.32.00
60	Ammeter, potentiometer, voltmeter, wattmeter, capacitance and induction meter, ohmmeter, phase meter, frequency meter, logometer (without recording device)	RE	9030.33.00

61	Ammeter, potentiometer, voltmeter, wattmeter, capacitance and induction meter, ohmmeter, phase meter, frequency meter, logometer (with recording device)	RE	9030.39.00
62	Solar power meter	RE	9030.82.00
	UNDERGROUND AND SOIL TREATMENT ENERGY	RE	
63	Non-welded steel or low-quality steel pipes for the collection and reception of geothermal energy	RE	7304.31.00
64	Non-welded, stainless steel pipe for geothermal heat collection and reception	RE	7304.41.00
65	Non-welded quality steel pipe for collection and reception of geothermal energy	RE	7304.51.00
66	Copper-zinc alloy or brass pipe for collecting and receiving geothermal heat	RE	7411.21.00
67	Copper-nickel-zinc alloy or silver-nickel pipe for geothermal collection and reception	RE	7411.22.00
68	Other copper alloy pipes for geothermal collection and reception	RE	7411.29.00
69	Geothermal heat pump	RE	8414.80.00
70	Heat exchanger	RE	8419.50.00
71	Heat pump	RE	8418.61.00
	HYDRO POWERPLANT	RE	
72	Water turbine and water fan (capacity not more than 1000 kW)	RE	8410.11.00
73	Water turbine and water fan (more than 1000 kW but not more than 10000 kW)	RE	8410.12.00
74	Water turbine and water fan (more than 10000 kW)	RE	8410.13.00
75	Water turbine and propeller parts	RE	8410.90.00
76	Water pump	RE	8413.81.00
77	Swing crane to be placed inside the station	RE	8426.11.00
78	Water intake barrier	RE	8481.80.00
79	Electric generator (capacity not more than 75 kVA)	RE	8501.61.00
80	Electric generator (more than 75 kVA but not more than 375 kVA)	RE	8501.62.00
81	Electric generator (more than 375 kVA but not more than 750 kVA)	RE	8501.63.00
82	Electric generator (capacity more than 750 kVA)	RE	8501.64.00
83	Hydrogenerator	RE	8502.39.00
84	Electric generator parts	RE	8503.00.00
85	Connectors and distribution boxes for voltages greater than 1000V	RE	8535.90.00
86	Electrical control and management equipment for voltages above 1000V	RE	8537.20.00
87	Pyrometer	RE	9025.11.00
88	Hydrometer	RE	9025.80.00
89	Hydrometer and pyrometer parts	RE	9025.90.00
90	Water level and flow meter, manometer	RE	9026.10.00
71	Heat pump	RE	8418.61.00

	BIO ENERGY	RE	
91	Biofuel stove firebox	RE	8416.20.00
92	Steam turbine (with a capacity of more than 40 MW)	RE	8406.81.00
93	Steam turbine (capacity not more than 40 MW)	RE	8406.82.00
94	Bio power plant generator (capacity not more than 75 kVA)	RE	8501.61.00
95	Bio power plant generator (more than 75 kVA but not more than 375 kVA)	RE	8501.62.00
96	Bio power plant generator (more than 375 kVA but not more than 750 kVA)	RE	8501.63.00
97	Bio Power Plant Generator (with a capacity of more than 750 kVA)	RE	8501.64.00
98	Gas turbine (capacity not exceeding 5000 kW)	RE	8411.81.00
99	Gas turbine (with a capacity of more than 5000 kW)	RE	8411.82.00

№	Water technologies	Green impact	HS code
Equipment for efficient use of natural resources			
1	Water filtration and treatment equipment	Water saving	84212100
2	Drip irrigation hoses, pipes and hoses	Water saving	39173900
3	Consumer water heating volume boiler (10l-200l)	Water saving	851610
4	Water sampling equipment	Water saving	902780
5	Flow valves and checks	Water saving	848180
Main factory equipment			
6	Machinery and equipment for washing, dyeing, weaving and knitting raw materials	Water saving	84514000
7	Air blower for wastewater treatment equipment	Sewage treatment	841480
8	A device for steam heating of softened cold water with wool and cashmere washing and dyeing technology	Water saving	841989
9	Centrifuge to shake wool and cashmere after washing and dyeing	Water saving	842119
10	Sewage filtration equipment, ultra and micro filters	Sewage treatment	842129
11	Sewage and sludge air filtration device	Sewage treatment	842139
12	Water softening machine equipment	Water saving	84451900
13	Technologically softened hot and cold water barriers; steam barriers for steam heating equipment for process softened cold water; sewage treatment plant barrier	Water saving and Sewage treatment	848180
Sewage treatment equipment			
15	Flotation equipment of the wool and cashmere wastewater treatment	Sewage treatment	8421
16	Mechanical grille	Sewage treatment	84212100
17	Sand sediment catcher	Sewage treatment	841990
18	Anaerobic facilities	Sewage treatment	84199090

19	Biological treatment plant	Sewage treatment	84212190
20	Membrane biological reactor	Sewage treatment	84212190
21	Vacuum pump	Sewage treatment	841410
22	Ventilation pump/ Airflow pump or blower	Sewage treatment	8410
23	Fat catcher	Sewage treatment	841990
24	Sewage pump	Sewage treatment	84137035
25	Pump with crusher	Sewage treatment	8413
26	Sludge pump	Sewage treatment	8413
27	Compressor	Sewage treatment	841480
28	Sludge thickener	Sewage treatment	8479
29	Press filter	Sewage treatment	8451
30	Vacuum filter	Sewage treatment	842139
31	Centrifuge	Sewage treatment	84219100
32	Screw Press	Sewage treatment	732020
33	Sludge processing screw device	Sewage treatment	732020
34	Sludge and water separation PAM and PAC substances	Sewage treatment	8479
35	Dosing pump	Sewage treatment	8413
36	PAC and PAM mixing and mixing facilities	Sewage treatment	8479
37	Microfilter	Sewage treatment	84213915
38	Microbable device	Sewage treatment	842139
39	Sand and quartz filters	Sewage treatment	8421
40	**Water-saving machinery and equipment (named after international textile machinery and equipment associations such as VDMA, BTMA, UK, Germany and Italy)**	Water saving	

Appendix 3. Template for pre-loan assessment for textile sector green loans

Date: _____

Borrower/Client: _____Company name_____

Choose the company category in the textile sector:

- ☐ Fully integrated company
- ☐ Partially integrated company
- ☐ Company engaged in knitting and garment making
- ☐ Primary processing company engaged in raw cashmere washing and combing
- ☐ Other specify: _____

Project name: _____

SECTION 1. PROJECT PURPOSE AND RATIONALE

1.1. Please describe your Environmental Objectives as part of your project strategy and reasoning for developing a project.

1.2. Which environmental objective does your Green Textile Project contribute to (as specified in the NDC, MGDP, and Mongolian Green Taxonomy)? Choose all that apply.

Climate objectives:

- ☐ Climate change mitigation
- ☐ Climate change adaptation

Mongolia Green Taxonomy:

- ☐ Renewable energy
- ☐ Low pollution energy
- ☐ Energy efficiency
- ☐ Sustainable pasture and livestock (sustainable agriculture, land use, forestry, and eco-tourism)
- ☐ Chemical use (sustainable agriculture, land use, forestry, and eco-tourism)
- ☐ Water efficiency, wastewater (sustainable water and waste use)
- ☐ Waste management (sustainable water and waste use)
- ☐ Green buildings
- ☐ Clean transport

Sustainable Development Goals: _____

1.3. Please share any additional information that may be relevant to this section.

SECTION 2. PROCESS FOR SELECTION OF GREEN PROJECTS

2.1. Please describe the process of ensuring alignment of the project with the Green Textile Loan Framework: (1) contributions to Mongolia's sustainable development (sustainable textile production and consumption – ESG 12); (2) ESG risk level/rate; (3) compliance with green loan criteria; (4) certificate of sustainable cashmere or green label; (5) Other activities

(1) (2) (3) (4) (5)

2.2. Identification of supply chain stages. Mark (X) the stages that are applicable to the project and company. Choose all that apply.

2.3.

	Supply chain stages	*Project level*	*Company level*	*Not applicaple*	*Comment*
1	Livestock, pasture				
2	Combing (dehairing) wool and cashmere				
3	Deliver the combed (raw) cashmere to a cooperative, trader or factory				
4	Sorting				
5	Washing				
6	Combing				
7	Dying				
8	Blending				
9	Spinning				
10	Knitting				
11	Execution and processing of knitting products				
12	Weaving				
13	Woven finishing				
14	Printing				
15	Sewing, embroidering				
16	Final product				
17	Packaging				
18	Marketing and sales				
19	Delivery/transportation to stores, export etc,				
20	Disposal of finished products, recycling				
	Other specify: _____				

2.4. Please share any additional information that may be relevant to this section.

SECTION 3. MANAGEMENT OF PROCEEDS

3.1. Please describe the means of management and commitment to using the loan proceeds in accordance with Principle 3 Management of Proceeds set in the Green Textile Loan Framework. The information must include the person/division responsible for tracking, monitoring, and managing the loan.

SECTION 4. REPORTING

4.1 Please provide the name of the report, its location (e.g., website), and the reporting frequency.

4.2 When and at which frequency impact reports will be published:

4.3 Please explain the qualitative and quantitative impact metrics/indicators that will be used to demonstrate the contribution to environmental objectives per project.

Indicator	Metric	Result (base & after)	Verification

4.4 Please provide an environmental and social impact estimation for the green project financed by the proceeds of the green loan.

4.5 Please provide any additional information that may be relevant to this section.

4.6 Additional information

Appendix 4. Textile machinery and equipment manufacturers

4.1 Equipment and technologies certified by Stoll brand sustainability measures.

For example:

- Fabric take-down in the knitting machines
- Flexible voltage connection (230 V / 400V single-phase or three-phase)
    - Models: CMS 530 ki, CMS 520 ki C, ADF 530 ki, ADF 830 ki
- Energy-efficient lighting in the knitting machine production hall

4.2 Italian machinery and equipment manufacturers

AIGLE
AIGLE MACCHINE S.R.L.
Via Donatello, 8 - 10071 BORGARO TORINESE (TO)
Phone: +39 011 2624382
E-mail: info@aigle.it Internet: www.aigle.it

MACTEC
MACTEC S.R.L.
Via L. Einaudi, 12 - 61032 FANO (PU)
Phone: +39 0721 853611
E-mail: info@mactec.it Internet: www.mactec.it

ARIOLI GROUP
ARIOLI S.P.A.
via G. P. Clerici, 2 - 21040 Gerenzano (VA)
Phone: +39 02 9639931
E-mail: info@arioligroup.com
Internet: www.arioligroup.com

MARZOLI
MARZOLI MACHINES TEXTILE S.R.L.
Via S. Alberto, 10 - 25036 PALAZZOLO S/OGLIO (BS)
Phone: +39 030 73091
E-mail: marzoli@marzoli.it
Internet: www.marzoli.it

BIANCO
BIANCO S.P.A.
Strada Tagliata, 18 - 12051 ALBA (CN)
Phone: +39 0173 314111
E-mail: info@bianco-spa.com
Internet: www.bianco-spa.com

MCS
MCS DYEING AND FINISHING MACHINERY S.P.A.
Via Provinciale, 581 - 24059 URGNANO (BG)
Phone: +39 035 4822811
E-mail: mcs@mcsgroup.it Internet: www.mcsgroup.it

BIGAGLI
PROXIMA S.R.L.
Via Traversa di Maiano, 34/36 - 59100 PRATO (PO)
Phone: + 39 0574 701029
E-mail: info@bigagli.net Internet: www.bigagli.net

MESDAN
MESDAN S.P.A.
Via Masserino, 6 - 25080 RAFFA DI PUEGNAGO (BS)
Phone: +39 0365 653142
E-mail: sales@mesdan.it Internet: www.mesdan.it

BRAZZOLI
BRAZZOLI S.R.L.
Via alla Chiesa, 41 - 20030 SENAGO (MI)
Phone: +39 02 9901921
E-mail: info@brazzoli.it Internet: www.brazzoli.com

MS PRINTING SOLUTIONS
MS PRINTING SOLUTIONS S.R.L. A SOCIO UNICO
Via Bergamo 1910 - 21042 CARONNO PERTUSELLA (VA)
Phone: +39 02 9650169
E-mail: info@msitaly.com Internet: www.msitaly.com

BRONGO
BRONGO S.R.L.
Via del Fornaccio, 14 - 50012 LOC. VALLINA - BAGNO A RIPOLI (FI)
Phone: +39 055 696061
E-mail: sales@brongo.com
Internet: www.brongo.com

NEXIA
NEXIA S.R.L.
Via Cassola, 4 - 36027 ROSA' (VI)
Phone: +39 0424 591040
E-mail: info@nexiaitaly.com
Internet: www.nexiaitaly.com

BTSR
BTSR INTERNATIONAL S.P.A.
Via Santa Rita - 21057 OLGIATE OLONA (VA)
Phone: +39 0331 323202
E-mail: info@btsr.com Internet: www.btsr.com

NOSEDA
NOSEDA S.R.L.
Via Briantea, 3 - 22038 TAVERNERIO (CO)
Phone: +39 031 360360
E-mail: noseda@noseda1893.it
Internet: www.noseda1893.it

CIBITEX
CIBITEX S.R.L.
Via Venezia, 7 - 21058 SOLBIATE OLONA (VA)
Phone: +39 0331 642644
E-mail: cibitex@cibitex.com
Internet: www.cibitex.com

PAFASYSTEM
PAFASYSTEM S.R.L.
Via E. Strobino, 24 - Zona Ind.le Macrolotto 2 - 59100 PRATO (PO)
Phone: +39 0574 592557
E-mail: services@pafa.it; sales@pafa.it Internet: www.pafa.it

COLOR SERVICE
COLOR SERVICE S.R.L.
Via Divisione Julia, 15 - 36031 DUEVILLE (VI)
Phone: +39 0444 366000
E-mail: sales@colorservice.net
Internet: www.colorservice.net

REGGIANI MACCHINE
REGGIANI MACCHINE S.P.A.
Via Zanica, 17/O - 24050 GRASSOBBIO (BG)
Phone: +39 035 3844511
E-mail: reg-info@efi.com Internet: www.efi.com/reggiani

CORINO
CORINO MACCHINE S.P.A.
Strada Statale 231 - 12066 MONTICELLO D'ALBA (CN)
Phone: +39 0173 440576
E-mail: corino@corinomacchine.com
Internet: www.corinomacchine.com

ROBUSTELLI
F.LLI ROBUSTELLI S.R.L.
Via Firenze, 3 - 22079 VILLA GUARDIA (CO)
Phone: +39 031 483319
E-mail: info@fratellirobustelli.com
Internet: www.fratellirobustelli.com

CROSTA
MARIO CROSTA S.R.L.
Corso Sempione, 67 - 21052 BUSTO ARSIZIO (VA)
Phone: +39 0331 631380
E-mail: info@mariocrosta.com
Internet: www.mariocrosta.com

SALMOIRAGHI
SALMOIRAGHI S.P.A.
Viale Stucchi, 66/3 - 20900 MONZA (MB)
Phone: +39 039 206961
E-mail: sales@salgroup.it Internet: www.salgroup.it

DURST
DURST PHOTOTECHNIK AG
Via Vittorio Veneto, 59 - 39042 BRESSANONE (BZ)
Phone: +39 0472 810111
E-mail: info@durst.it Internet: www.durst-group.com

SANTONI
SANTONI S.P.A.
Via Carlo Fenzi, 14 - 25135 BRESCIA (BS)
Phone: +39 030 376711
E-mail: santoni@santoni.com
Internet: www.santoni.com

FADIS
FADIS S.P.A.
Via Colombera, 70 - 21048 SOLBIATE ARNO (VA)
Phone: +39 0331 989511/989533
E-mail: sales@fadis.it; fadis@fadis.it Internet: www.fadis.it

SAVIO
SAVIO MACCHINE TESSILI S.P.A.
Via Udine, 105 - 33170 PORDENONE (PN)
Phone: +39 0434 397357/397400
E-mail: order@saviospa.it Internet: www.saviospa.it

FERRARO
FERRARO S.P.A.
Via Busto Arsizio, 120 - 21015 LONATE POZZOLO (VA)
Phone: +39 0331 302994
E-mail: ferraro@ferraro.it
Internet: www.ferraro.it

SMIT
SMIT S.R.L.
Località Colombara, 50 - 36070 TRISSINO (VI)
Phone +39 0445 1761441
E-mail: smit@santexrimar.com
Internet: www.santexrimar.com

FK GROUP
FK GROUP S.P.A.
Via Friuli, 21 - 24044 DALMINE (BG)
Phone: +39 035 565633
E-

SPEROTTO RIMAR
SPEROTTO RIMAR S.R.L.
Località Colombara, 50 - 36070 TRISSINO (VI)
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rnet: www.fkgroup.com

sperottorimar@santexrimar.com
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FLAINOX
FLAINOX S.R.L.
Via G. Leopardi, 5 - 13854 QUAREGNA CERRETO (BI)
Phone: +39 015 980680
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Internet: www.flainox.com

TECNORAMA
TECNORAMA S.R.L.
Via Onorio Vannucchi, 15/1 - 59100 PRATO (PO)
Phone: +39 0574 51321
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Internet: www.tecnorama.it

GUALCHIERI E GUALCHIERI
GUALCHIERI E GUALCHIERI & C. S.R.L.
Via Nea Ionia, 43 - 59100 PRATO (PO)
Phone: +39 0574 590587
E-mail: info@gualchieriegualchieri.it
Internet: www.gualchieriegualchieri.it

TESTA
TESTA GROUP S.R.L.
Via Crema, 8/C - 24050 ZANICA (BG)
Phone: +39 035 670444
E-mail: info@testagroup.eu
Internet: www.testagroup.eu

ITEMA
ITEMA S.P.A.
Via Cav. Gianni Radici, 4 - 24020 COLZATE (BG)
Phone: +39 035 7282111
E-mail: info@itemagroup.com
Internet: www.itemagroup.com

TONELLO
TONELLO S.R.L.
Via della Fisica, 1/3 - 36030 SARCEDO (VI)
Phone: +39 0445 343200
E-mail: tonello@tonello.com
Internet: www.tonello.com

LAWER
LAWER S.P.A.
Via Amendola, 12/14 - 13836 COSSATO (BI)

TRIVENETA
TRIVENETA GRANDI IMPIANTI S.R.L.
Via Luigi Cazzola, 39 - 36015

Phone: +39 015 9899511
E-mail: contactus@lawer.com
Internet: www.lawer.com

SCHIO (VI)
Phone: +39 0445 575180
E-mail: info@trivgi.com Internet: www.trivgi.com

LGL
LGL ELECTRONICS S.P.A.
Via Ugo Foscolo, 156 - 24024 GANDINO (BG)
Phone: +39 035 733408
E-mail: lgl@lgl.it Internet: www.lgl.it

UGOLINI
UGOLINI S.R.L.
Via Lago di Misurina, 18 - 36015 SCHIO (VI)
Phone: +39 0445 576110
E-mail: ugolini@ugolini.net
Internet: www.ugolini.net

LONATI
LONATI S.P.A.
Via Francesco Lonati, 3 - 25124 BRESCIA (BS)
Phone: +39 030 23901
E-mail: sales.department@lonati.com
Internet: www.lonati.com

UNITECH
UNITECH INDUSTRIES S.R.L.
Via Parugiano di Sotto, 41/43 - 59013 MONTEMURLO (PO)
Phone: +39 0574 68201
E-mail: info@unitech.it - Internet: www.unitech.it

LOPTEX
LOPTEX S.R.L.
Via Valtellina, 16 - 22070 MONTANO LUCINO (CO)
Phone: +39 031 471199
E-mail: info@loptex.it Internet: www.loptex.it

4.3 Common technologies used for cashmere and wool production

Note: Green certificates and labels are required to ensure water and energy efficiency of the machineries and equipment.

№	Company	Country	Technology	Technology mark	Contact
1	Autefa Solutions	Italy	Combing machine, comb machine parts	Octir carding machine	Giacomo.Meucci@autefa.com
2	Proxima Srl	Italy	Spinning machines and their spare parts	Spining machine B7DD	l.cambi@proximaautomation.com
3	Saurer Technologies GmbH & Co., KG Twisting Solutions	German	Rotating machine, its parts and spare parts	Twisting machine VTS-07 8.11 Saurer Volkmann	Jean-Marc.Creuset@saurer.com
4	Fadis S.p.A	Italy	Duplicating machine, its parts and spare parts	Winding machine Sincro D SW, Winding machine Sincro MRL, Doubler machiine SINCRO Plus B40	Marianna.digiorgio@fadis.it
5	Gaudino	Italy	Spinning machines and their spare parts	Spining machine FST/350, Spining machine FSTO3/320, Spining machine GB20101208, Worsted spinning C.P.S.Tex	gaudinoricambi@gaudino.com
6	HISAKA	Japan	Painting machines and their spare parts	Dyeing machine LLC-100/114, Dyeing machine HTHC-50/90, Dyeing machine HTHC-100/114, Fiber press machine HFP-110/100	k-sugiyama@hisaka.co.jp

7	Loris belline	Italy	Painting machines and their spare parts	Dyeing machine 25, Dyeing machine 100, Fiber press machine, hydra extractor machine, Loose diber dying machine RBNV, Fiber press machine INT	service@lorisbellini.com
8	Murata Machinery, Ltd	Japan	Transfer and spinning machines and spare parts	Winding machine 21C Muratec, Doubler machiine M/48 Muratec, Twisting machine 3CA Muratec, Winding machine C13 Muratec, Transplantation machine QPRO Plus	yuko.iwami@drw.muratec.co.jp
9	Sant Andrei Novara	Italy	Fine spinning machines and their spare parts	Mixer gill box VSN+ARM, Gill box VSN, Combing machine P90, Bobbiner RF2A	Chiara.Fiaccone@santandreatm.it
10	STALAM	Italy	Drying machine and its spare parts	Drying machine RTA/S, Drying machine LTRF-RFA/S	a.zanocco@stalam.com
11	Conti Complett	Italy	Kettel machines and spare parts	Linking machine complett 66-DD, Basting sewing machine conti complett 360-ov	luigi.maggioni@complett-ks.it
12	ELECTROLUX	Sweden	Washing and drying machine and its spare parts	Washing machine FLE-220, Washing machine W4240H, Washing machine W3240H-21, Drying machine TT-600, Drying machine T4530, wascator machine T5350	Batis He <batis.he@electrolux.com>

13	Shima seiki	Japan	Knitting machine Printing machine Embroidery machine Apex computer Knitting machine parts	Knitting machine SSG122 SV 12G, Knitting machine SIG123 SV, Knitting machine SIG123 SC, Knitting machine SIR122 SC, Knitting machine SVR 122SC , Knitting machine NSSG122 SV, Knitting machine NSSG122-SC, Knitting machine MACH, Knitting machine MACH2X173, Knitting machine MACH2XS153 Knitting machine SES202, Knitting machine SES, Knitting machine NSES, Processing machine SUM100, Steam chamber SSM100, Inket printing machine SIP-160-FL, Multi-Ply Fabric Cutting Machines P-CAM161S Knit socks and gloves machine SWG091N	n-kishi.3019@shimaseiki.co.jp sakashita@shimaseiki.co.jp r-uomi.7048@shimaseiki.co.jp h-yamamori.5046@shimaseiki.co.jp nakashima@shimaseiki.co.jp m-yukawa.3037@shimaseiki.co.jp s-kamitani@shimaseiki.co.jp
14	STOLL	German	Knitting machine and its spare parts	Knitting machine CMS 330 TC, Knitting machine CMS 340 TC, Knitting machine CMS520C, Knitting machine CMS530 HP, Knitting machine CMS822 TC, Knitting machine ADF16W	marina.rajkovic@stoll.com
15	Union industry	Japan	Lonaty Socks knitting machine spare parts	knit socks machine LONATI DC-88	spareparts@unionindustry.com
16	RENZACCI		dry cleaning toner machine	Dry cleaning machine XTR-30	stefania@renzacci.it
17	Rubiera	Italy	Simet wrapping machine	Wrapping machine Simet SED/6	info@simet.it
18	AMFReece	America, Czech	Sleeve loop sewing machine	Electronic button stitcher machine S-4001	amfreece@amfreece.cz

19	Malkan	Turkey	Press irons and ironing boards and its accessories	Jacket chest form ironing press UPP10DIUPP11DI, Jacket back form ironing press UPP16DIUPP17DI, Triple collar ironing press UPP9D3, Armhead and shoulder ironing press KKO03, Jacket lapel rounding press MYYPDI, Jacket front and clay binding ironing press UPP10A11AEL, Jacket lapel and edge ironing press KMKP2B, Ironing press UPP15, Elbow seam opening press KDPPDI, Jacket retouching table UP106DPC, Jacket front and side part seam opening table UP20MC, Jacket shoulder ironing machine UP109ZD, Jacket liner ironing machine UP21PC, Ironing board with vacuum and blowing UP101AKC, Bonding adhesive ironing machine UP10A11AT, Jacket lapel seam opening table UP107, Jacket sleeve head seam pucker ironing table MKMU01, Jacket triple back, side and shoulder seam opening ironing machine UP29MC, Jacket triple back, side and shoulder seam opening ironing machine UP29MC, Pneumatic chain stretched pants side seam opening ironing machine UP22XPV, Pants belt ironing press UPP3A, Trousers line ironing press UPP19KI	emre@malkan.com.tr
20	Indupress	Germany	Paragenerator, Press iron, ironing boards and its spare parts	Woman jacket breast form ironing press IPN-SCV-21-10B-10590, Sleeve closed form ironing press IPN-SCV-21-07C-077/0740, Woman jacket back form ironing press IPN-SCV-21-13C-139, Vacuum pump IPN-AS-80/30-4, Steam generator MAXI-180	m.rettinger@indupress.de

21	JUKI	Japan	Various sewing machines and spare parts	AMB-289, DD-8500, DDL8500, DDL-5550 N7, DDL-8700, DDL-9000B, DDL9000BL, DDL-9000C, DLN-9010A-SS, DLU-5490 N7, LBH1790AN, LH3168, LH-896N, LK-1900, LK1900BN, LK-1900B-SS, LZ2280A, LZ-2290A-SS-7, LZ-586, MEB 3200SS, MF-7523, MF-7523D, MH-382, MH484-5, MO6714DA, MO-6714S, MO-6916S, MP-200N, MX-5204	zhaowenkai <zhaowenkai@jukichina.com>
22	BROTHER INDUSTRIES	China	Various sewing machines and spare parts	S7300A-403-AP, B-917, BE-438F, BE-438FS, BE-438HS, BM-917C-001, CM-B933, DB2-B735-3, DH3-86, EF4, EF4-B511, HE-800A-3, HE-800B-3, KE-430FX, KE-4630FS, PR-1050, PR-650E, R571652, RH9820-01, S7200-303A, S-7200A, S7200C, S7300A-403-AP, T-8452C, X7200C, X7300A-303A, Z-8550A-031, MX-5204	Ren.Liming@brother-cn.net
23	BRUECKNER TEXTILE	Germany	Textile processing machines		gmeyer@brueckner-textile.com
24	CIMI TEXTILE MACHINES S.R.L.	Italy	Shrinkage and baking machine and its spare parts	Humidity Room VCA/A , Steaming machine VCA/A, Shrinkage machine CMI-4, Humidity Room VCA/A	commerciale@cimi.it
25	DORNIER	Germany	Dornier knitting machine and its spare parts	Weaving machine PTS 8/J 320, Weaving machine PTS 8/S 320, Weaving machine PTS 8/S C 230, Weaving machine PTS 8/J C 230	anastasia.laschizkaja@lindauerdornier.com
26	itema group	Switzerland	Sulcer weaving machine and its spare parts	Weaving machine P7100 W190 N4 SP D1, Weaving machine 85 VSD 125 KT,	Mladenka.Bogdanovic@itemagroup.com
27	Karl Mayer	Герман	Base wire winding machine and spare parts	Warp Preparation machine ERGOTEC -M3400/800	Oliver.Posselt@karlmayer.com

28	LAFER	Italy	Textile processing machines	Fringing machine FRV2200, Splitting machine SSM Lafer spa, Raising Sharing machine GR190-H1800 Lafer macchine tessili, Fringing machine 10FRV4347 LAFER	paola@laferspa.com
30	TAIXING CITY GRETE TEXTILE MACHINERY	China	ASH washing machine	Scouring machine LFB006-152	jsxinggang@163.com
31	Qingdao Dongjia Textile Machinery Group Co.,Ltd	China	Combing hair sorting machine	De-hairing machine MD160+LFN397+LFN186+LFN258 Dongjia textile	Bi Chenfeng Dongjia <bichenfeng@163.com>
32	HYDROTEC	England	Water softener	water softener VAD600-CSB HYDROTEC	roudy@hydrotec.co.uk
33	Handsman		Paints and substances		
	Others - Electrolux laundry, dryer, Italian kettle, Steammaber, Brother, Juki, Berrina, Singer, PFAFF, etc.				

Source: Gobi JSC

Appendix 5. Sustainable finance implementation in Mongolia

Mongolian Sustainable Finance Principles

Since 2013, Mongolian FIs have agreed to follow the Mongolian Sustainable Finance Principles.[28]

The principles were developed to help Mongolian banks address sustainability issues and play a leading role in shaping the Mongolian economic development agenda. The approach is one of sustainable finance that seeks to avoid, minimise, or mitigate negative environmental and social impacts, and contribute to the diversification of the Mongolian economy by encouraging the financing of projects, goods, and services that are consistent with the country's green economic growth and development objectives:

1. Protect the natural environment
2. Protect people and communities
3. Protect cultural heritage
4. Promote the growth of the "green economy"
5. Promote financial inclusion
6. Promote ethical finance and corporate governance
7. Promote transparency and accountability
8. Practice what we preach

Moreover, the principles were developed in line with the IFC's Social and Environmental Performance Standards[29].

Mongolian Green Taxonomy

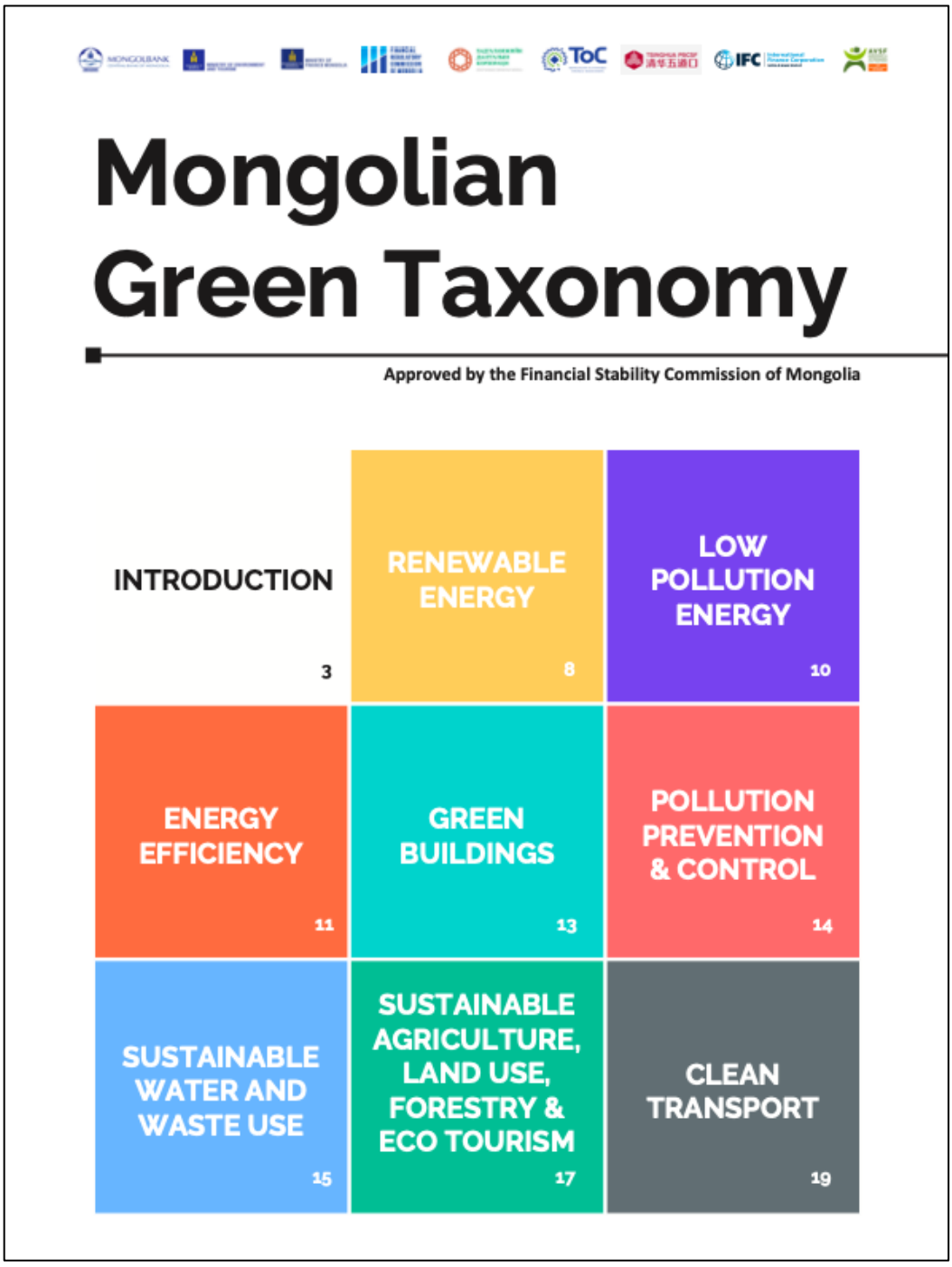
The Mongolian Green Taxonomy in the Mongolian banking and financial system is a classification of green economic activities and defines 58 sub-activities in eight key sectors as green (see Figure 11).[24] A green taxonomy is a fundamental document that identifies green loans and green investment projects and programs, monitors green financial flows in the financial system, and enables the development of green financial products.

The document was approved by the Financial Sustainability Board of Mongolia on December 10, 2019, consisting of the Ministry of Finance, the Bank of Mongolia, the Financial Regulatory Commission, and the Deposit Insurance Corporation. It is also aligned with international practices, including the EU Taxonomy on sustainable finance. The purpose of this document is to establish a nationally defined classification of green economic activities, thereby reducing

[28] http://toc.mn/principles#1
[29] https://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/Sustainability-At-IFC/Policies-Standards/Performance-Standards

greenhouse gas emissions and environmental pollution, and promoting the proper use of natural resources.

Figure 11. Classification of the Mongolian Green Taxonomy



Source 7. Mongolian Green Taxanomy, 2019

Textile sector environmental, social, and governance risk assessment tool

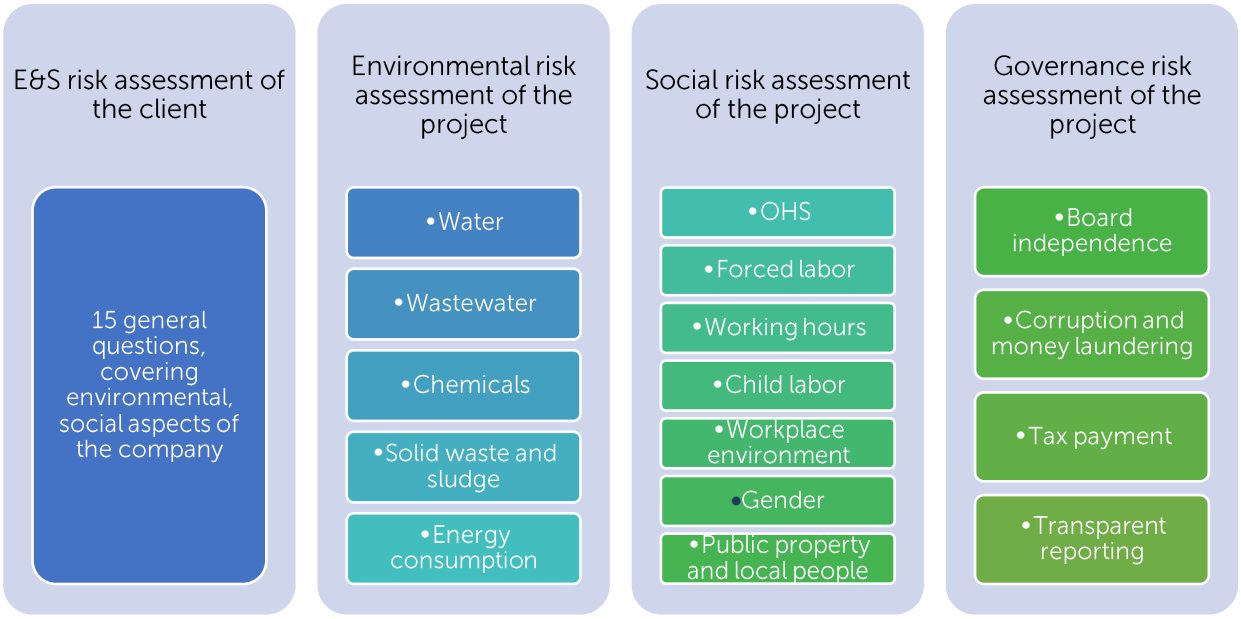
One of the key components of sustainable finance is environmental, social, and governance (ESG) risk management. Today, all commercial banks in Mongolia are conducting ESG risk assessments for all types of business loans over MNT 50 million with terms of more than 12 months. However, assessing the ESG risk of textile sector projects and companies needs specific questions which incorporate sectoral context.

Therefore, with the support of the STeP EcoLab project, the **Textile Sector ESG Risk Assessment Tool** was developed by the Mongolian Sustainable Finance Association (MSFA) (see Figure 12). The tool uses simple "yes" or "no" questions to help determine an ESG risk rating: low, medium, or high. The overall scoring of the assessment determines whether the project needs a more detailed ESG risk assessment.

The first step in the ESG assessment is to verify that the client or project area is **not included** in the following lists:

1. List of excluded activities (see Appendix 6)
2. List of due diligence required activities (see Appendix 6)

Figure 12. Scope and criteria of textile sector ESG risk assessment tool



Source 8. MSFA under the STeP EcoLab project (2020)

Based on the assessment, if the project or client considers the loan to be of medium or higher ESG risk, an ESG risk mitigation plan and measures will be approved by the FI in consultation with the client, noted in the minutes of the loan committee meeting or in the loan agreement. Alternatively, if the bank agrees to conduct action for the high ESG risk customer or refuses to finance the project. Some funding agencies monitor the implementation of these measures and

plans, along with loan repayments, and in the event of non-compliance, may take action until lending is suspended.

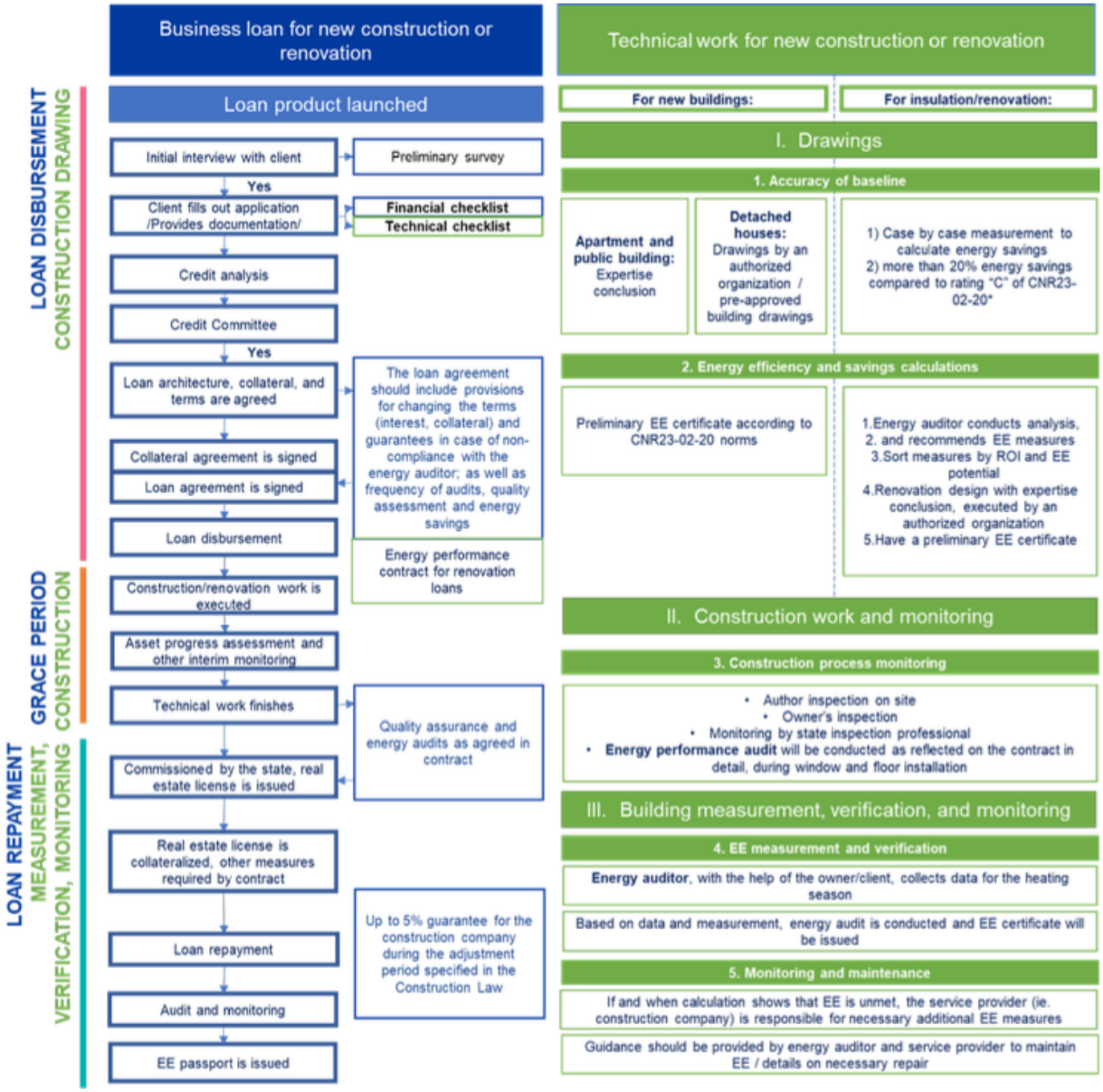
Appendix 6. List of excluded activities

The project engaged in any of the following activities[30] are not eligible for loan:

1. Activities prohibited by Mongolian law or any international law, conventions and agreements Mongolia assigns to;
2. Plantation of psychoactive plants, production, transport, trade of narcotics if not regulated by the law;
3. Inappropriate or illegal gambling or casino businesses;
4. Marketing, supporting, and organizing pornographic acts;
5. Harmful and exploitative forms of forced labour, intolerable forms of child labour, discrimination, and any activity that limits worker's freedom of association and the right to collective bargaining as prescribed in the law;
6. Production, trade of guns and weapons of war;
7. Profiting through multi-level marketing and pyramid scheme;
8. Exporting, importing, and trading across countries without proper licenses and permission from applicable countries;
9. Activities located in international and nationally protected areas;
10. Activities prohibited by the international conventions and agreements on protection of biological diversity, historic and cultural heritage;
11. Production, trade, and usage of asbestos and any product containing it;
12. Production and trade of any products containing PCBs-Polychlorinated biphenyls;
13. Production, trade of products and products containing internationally banned ozone depleting substances;
14. Production, trade of internationally banned medicine, tablets, insecticides, and other harmful substances;
15. Trade of speciments of wild animals and plants as prohibited by the CITES;
16. Unsustainable fishing methods (e.g., blast finishing)
17. Transportation and disposal of internationally banned waste materials;
18. Timber production in forestry areas with a high conservation value (e.g. Khangai forest) and any trade of forestry and logging equipment linked to protected areas;
19. Timber production, trade of wool and forest products that did not originate from sustainably managed forests;
20. Eliminated and prohibited items as outlined in Rotterdam Convention and Stockholm Convention.

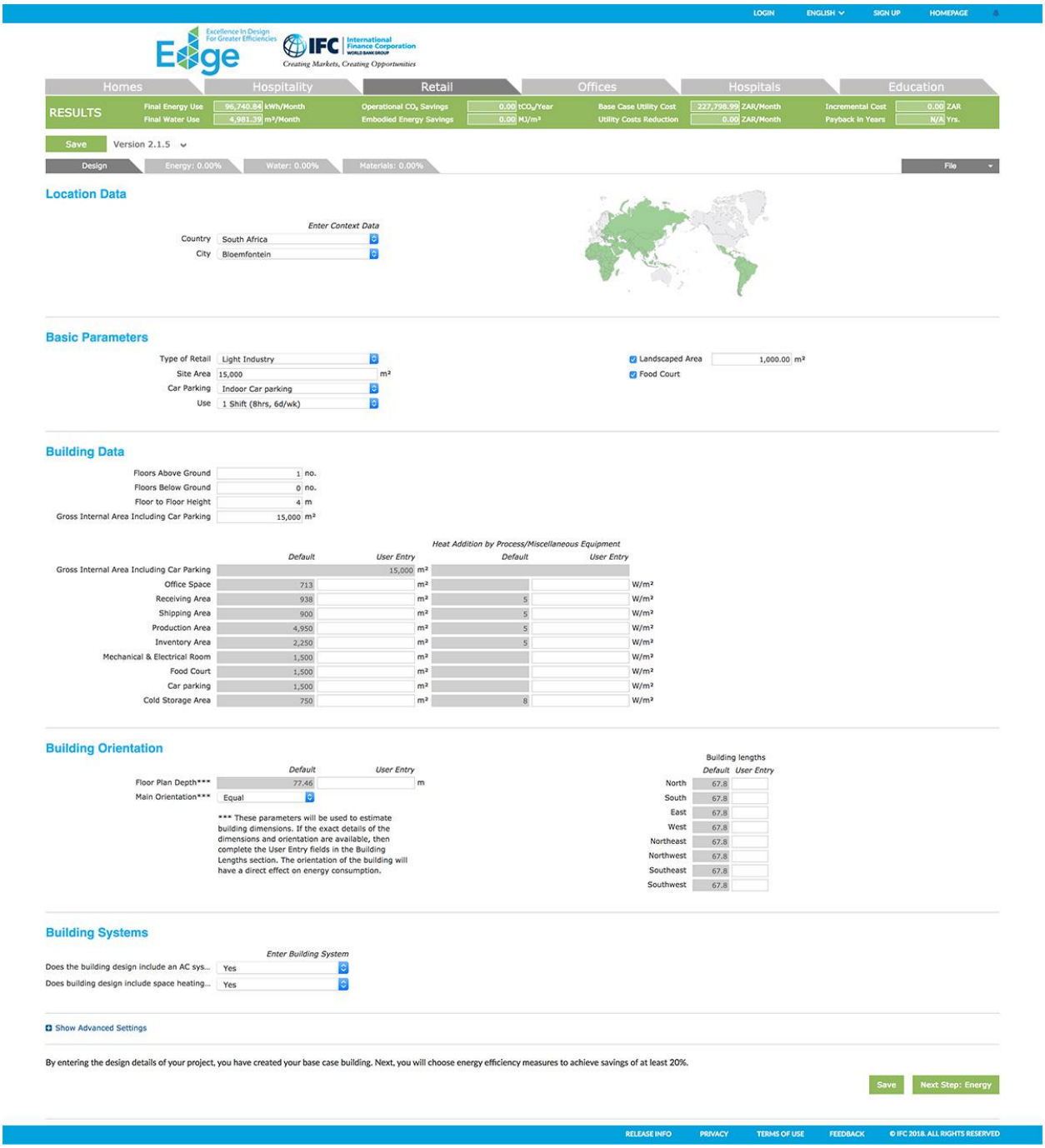
[30] MSFA. http://toc.mn/post/26

Appendix 7. EE building financing product process



Appendix 8. EDGE green building certification platform

More information: https://edgebuildings.com



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