



**GREEN
CLIMATE
FUND**

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24 November 2016

Consideration of funding proposals – Addendum I

Funding proposal package for FP028

Summary

This addendum contains the following three parts:

- a) A funding proposal summary titled “Business loan programme for GHG emissions reduction” submitted by XacBank LLC;
- b) No-objection letters issued by the national designated authorities or focal points; and
- c) Environmental and social report(s) disclosure;

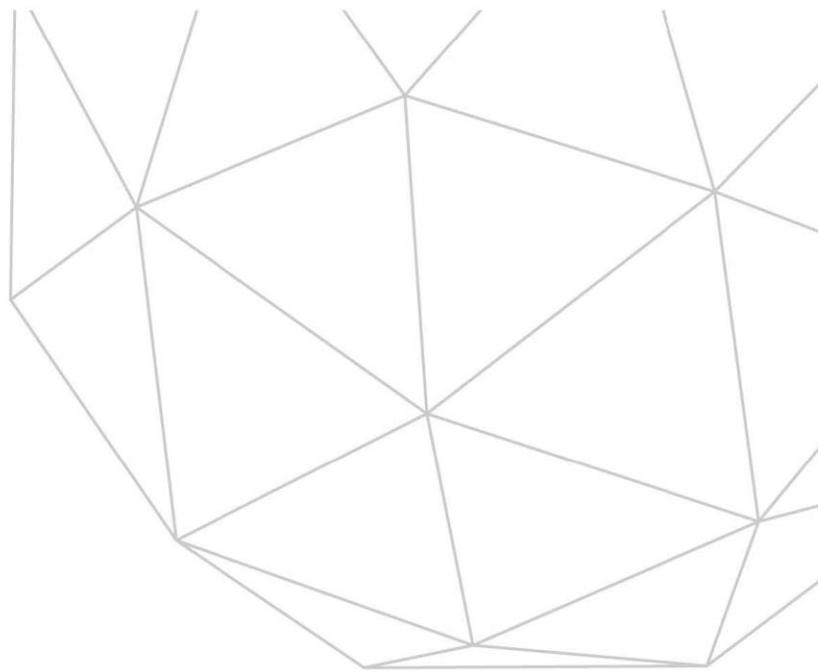
These documents are presented as submitted by the accredited entity and the national designated authority(ies) or focal point(s), respectively. Pursuant to the Comprehensive Information Disclosure Policy of the Fund, the funding proposal titled “Business loan programme for GHG emissions reduction” submitted by XacBank LLC is being circulated on a limited distribution basis only to Board Members and Alternate Board Members to ensure confidentiality of certain proprietary, legally privileged or commercially sensitive information of the entity.

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Funding Proposal

Version 1.1

The Green Climate Fund (GCF) is seeking high-quality funding proposals.

Accredited entities are expected to develop their funding proposals, in close consultation with the relevant national designated authority, with due consideration of the GCF's Investment Framework and Results Management Framework. The funding proposals should demonstrate how the proposed projects or programmes will perform against the investment criteria and achieve part or all of the strategic impact results.

Project/Program Title: MSME Business Loan Program for GHG Emission Reduction

Country/Region: Mongolia

Accredited Entity: XacBank LLC

Date of Submission: November 4th, 2016

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Note to accredited entities on the use of the funding proposal template

- Sections **A, B, D, E** and **H** of the funding proposal require detailed inputs from the accredited entity. For all other sections, including the Appraisal Summary in section F, accredited entities have discretion in how they wish to present the information. Accredited entities can either directly incorporate information into this proposal, or provide summary information in the proposal with cross-reference to other project documents such as project appraisal document.
- The total number of pages for the funding proposal (excluding annexes) is expected not to exceed 50.

Please submit the completed form to:

fundingproposal@gcfund.org

Please use the following name convention for the file name:

“[FP]-[Agency Short Name]-[Date]-[Serial Number]”

A.1. Brief Project / Program Information		
A.1.1. Project / program title	Business Loan Program for GHG Emission Reduction	
A.1.2. Project or program	programme	
A.1.3. Country (ies) / region	Mongolia	
A.1.4. National designated authority (ies)	Nature Conservation Fund, Ministry of Environment and Tourism	
A.1.5. Accredited entity	XacBank	
A.1.5.a. Access modality	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> International	
A.1.6. Executing entity / beneficiary	Executing Entity: XacBank Beneficiary: MSMEs (target 50% women-led)	
A.1.7. Project size category (Total investment, million USD)	<input checked="" type="checkbox"/> Micro (≤ 10) <input checked="" type="checkbox"/> Small ($10 < x \leq 50$) <input type="checkbox"/> Medium ($50 < x \leq 250$) <input type="checkbox"/> Large (> 250)	
A.1.8. Mitigation / adaptation focus	<input checked="" type="checkbox"/> Mitigation <input type="checkbox"/> Adaptation <input type="checkbox"/> Cross-cutting	
A.1.9. Date of submission	November 4 th , 2016	
A.1.10. Project contact details	Contact person, position	Tuul Galzagd, Director of Eco Banking Department
	Organization	XacBank
	Email address	Tuul.G@xacbank.mn
	Telephone number	+976-7577-1888 (ext. 701)
	Mailing address	XacBank HQ Bldg, Ulaanbaatar-14200, Post Branch 20A, PO Box-72, MONGOLIA

A.1.11. Results areas (<i>mark all that apply</i>)	
Reduced emissions from:	
<input checked="" type="checkbox"/>	Energy access and power generation (E.g. on-grid, micro-grid or off-grid solar, wind, geothermal, etc.)
<input type="checkbox"/>	Low emission transport (E.g. high-speed rail, rapid bus system, etc.)
<input checked="" type="checkbox"/>	Buildings, cities and industries and appliances (E.g. new and retrofitted energy-efficient buildings, energy-efficient equipment for companies and supply chain management, etc.)
<input checked="" type="checkbox"/>	Forestry and land use (E.g. forest conservation and management, agroforestry, agricultural irrigation, water treatment and management, etc.)
Increased resilience of:	
<input type="checkbox"/>	Most vulnerable people and communities (E.g. mitigation of operational risk associated with climate change – diversification of supply sources and supply chain management, relocation of manufacturing facilities and warehouses, etc.)
<input type="checkbox"/>	Health and well-being, and food and water security

- (E.g. climate-resilient crops, efficient irrigation systems, etc.)
- Infrastructure and built environment
(E.g. sea walls, resilient road networks, etc.)
 - Ecosystem and ecosystem services
(E.g. ecosystem conservation and management, ecotourism, etc.)

A.2. Project / Program Executive Summary (max 300 words)

The proposed Business Loan Program for GHG Emissions Reduction will be a \$60 million facility aimed at promoting the use of energy efficient and renewable energy solutions in the Mongolian MSME market. MSME's make up more than 90% of the businesses in Mongolia, the majority of which are currently using extremely outdated and inefficient equipment, processes and buildings (privately-held buildings only). The program's main objective is to promote both the use and production of EE/RE products in the domestic market. For more description on the specific types of eligible sub-projects, see the table titled "MSME Eligibility" in section C.3. Of the total \$60 million program, \$20 million would be funded from the GCF, which allows XacBank to improve its lending terms (longer loan tenor and lower interest rate) through blending with its current EE/RE funds, including the GCPF GHG emission reduction program, which this program will be an extension of.

Currently, XacBank has roughly 200 active corporate clients, more than 3,400 active SME clients (of 22,000 SMEs that have conducted business with the Bank over the years), and many more micro-sized clients at hand. As a result of this program, a paradigm shift can be achieved as many of these entities, as well as the rest of the roughly 60,000 registered MSMEs in Mongolia, will reap the benefits of a low cost, high efficiency loan product. Furthermore, as XacBank is the national implementing entity, the level of country ownership is extremely high, including working in concert with the NDA and engaging local stakeholders to ensure that the program will continue to align with Mongolia's INDCs, NAMAs, as well as other relevant legislation, such as the Green Development Policy of Mongolia.

Additionally, the program will look to support women-led MSMEs as much as possible by offering more concessional loan terms to such entities. The definition of women-led MSMEs can be found in the Gender Action Plan as attached in annex 8. By the end of the third year of the program, the facility's portfolio will be made up of at least 50% women-led MSMEs.

By implementing this program, it is estimated that the Bank would be able to finance projects to reduce carbon emissions by more than 1.2 million tons over its lifespan of 8 years.

A.3. Project/Program Milestone

Expected approval from accredited entity's Board (if applicable)	The Bank does not need its Board approval for this program
Expected financial close (if applicable)	31/1/2017
Estimated implementation start and end date	Start: <u>2017</u> End: <u>2025</u> All GCF funds will be fully repaid to GCF on the agreed date
Project/program lifespan	8 years



B.1. Description of Financial Elements of the Project / Program

The program will provide XacBank with a US\$20 million credit facility for energy efficiency (EE) and renewable energy (RE) projects. In addition to the funds received from the GCF, XacBank will blend with its existing EE/RE facilities to create a US\$60 million facility. As the MSME pilot program has been capped at US\$20 million per project/program, as well as being simplified to a credit facility from the GCF side, that is the financial instrument available for XacBank's first GCF co-financed program.

Component	Sub-component (if applicable)	Amount (for entire project)	Currency	Local currency	GCF funding amount	Currency of disbursement to recipient
1. Loans		60	<u>million USD (\$)</u>	60 million USD equivalent MNT	20	Mongolian National Tugrik (MNT)
Total project financing		60		60 million USD equivalent MNT	20	Mongolian National Tugrik (MNT)

B.2. Project Financing Information

	Financial Instrument	Amount	Currency	Tenor	Pricing		
(a) Total project financing	(a) = (b) + (c)	60	<u>million USD (\$)</u>				
(b) GCF financing to recipient	(i) Senior Loans	20	<u>million USD (\$)</u>	As outlined in the Term Sheet	As outlined in the Term Sheet		
	Total requested (i+ii+iii+iv+v+vi)	20	<u>million USD (\$)</u>				
(c) Co-financing to recipient	Financial Instrument	Amount	Currency	Name of Institution	Tenor	Pricing	Seniority

	<u>Senior Loans</u>	20	<u>million USD (\$)</u>	GCPF	<u>n/a</u>	<u>n/a</u>	<u>pari passu</u>
	<u>Senior Loans</u>	15	<u>million USD (\$)</u>	EBRD	<u>n/a</u>	<u>n/a</u>	<u>pari passu</u>
	<u>Senior Loans</u>	5	<u>million USD (\$)</u>	DWM	<u>n/a</u>	<u>n/a</u>	<u>pari passu</u>
<p>Lead financing institution: GCPF, GCF equally shared. Please see Financial Model included in annex 2 for further details regarding co-financing institutions and pricing information. Although the co-financing funders come with different tenors, XacBank's GHG Emission Reduction program is an on-going program, and as it has in the past, XacBank will continue to attract continuous sources of funding to perpetuate this program. Terms have already been discussed with the GCPF to extend the program beyond the original term of 2017. As such, the blending component of the MSME program will be sustainable and continuous.</p>							
<p>Please see annex 3 for relevant contractual agreements with co-funding entities.</p>							
(d) Financial terms between GCF and AE	<p>For the financing of the program, the GCF will enter into an agreement with XacBank, which will regulate the terms and conditions described in the term sheet and any necessary deviations from the AMA (currently under negotiation). In accordance with the AMA, XacBank shall administer the funds disbursed by the GCF.</p>						

B.3. Financial Markets Overview (if applicable)

Financial barriers are one of the primary reasons for the Mongolian market to not adopt new, energy efficient or renewable energy solutions. Currently, many Mongolian businesses or individuals operate heavily under the short-term cost savings method, and as such, usually opt to purchase/implement the cheapest possible solution, while not giving much thought to the long term cost potential of these cheaper, sub-par products or the cost saving potential of high quality, energy efficiency or renewable energy solutions. To compound this problem, the Mongolian market has extremely high financing costs, which come with relatively short loan tenors, and other mitigating factors such as grace periods, guarantees, and equity investments are not adequately available. The lack of available and accessible commercial finance on offer by local banks impedes the ability of MSMEs to invest in energy efficiency and renewable energy solutions.

Overview of available market rates

Typically, most commercial banks in Mongolia offer loans in the local currency, Mongolian National Tugrik (MNT) as well as U.S. Dollars (USD), however, as the Mongolian economy has been in recession since early 2015, and the foreign exchange risk continues to rise due to the depreciation of the MNT, most banks, including XacBank, have opted to offer loans in MNT only since late 2015. As XacBank plans to disburse the loans in this program in MNTs, the below information of available market rates only take into consideration the available MNT loans to the consumers of Mongolia.

The low-interest rate government loans are distributed through commercial banks. The market interest rates for obtaining a loan vary widely, from low to extremely high. Loan rates typically available to the average MSME looking to implement EE/RE solutions tend to land on the high side, which is the biggest barrier for most of them, followed by general awareness of the possibility of such a solution's availability. As such, the program aims to offer rates on the lower side of the spectrum of available, non-government subsidized rates to promote and catalyze EE/RE projects and awareness in the market. Doing so will not cause a disruption in the market, but rather will incentivize many MSMEs to pursue EE/RE solutions from both the market and demand side.

XacBank's own EE/RE business loan program offers rates between 18.0% and 19.2% per annum in MNT. These rates are comparably lower than the average business loan, which are usually above 20.2%. The reason that XacBank has been able to offer lower than market rates on these types of loans is that we are constantly looking for ways to offer more competitive products by finding concessional sources of funding from outside of Mongolia in order to offer better interest rates and longer loan tenors. In the past, we have worked with international partners such as the European Bank for Reconstruction and Development (EBRD) and the Global Climate Partnership Fund (GCPF) to implement programs aimed at EE/RE solutions.

However, even with these partners, XacBank haven't been able to meet the market demand for the ideal EE/RE product that sufficiently incentivizes a critical mass of Mongolian MSMEs to adopt environmentally friendly and energy efficient solutions into their everyday business as of yet. XacBank received US\$20 million from the GCPF in 2013 and also US\$15 million from the EBRD (MonSEFF) in 2014 to establish its own Business Loan Program for GHG Emission Reductions (to which this GCF program will be an extension of). Still, as can be seen, the interest rate and loan tenor for both these products are not a marked improvement over other loans available on the Mongolian commercial banking market due to the fact that these funds were given to XacBank at relatively high costs, the breakdown of which can be found in the financial model included in annex 2.

C.1. Strategic Context

National

Regulatory

In order to achieve the Mongolian government's stated goal of a 14% reduction in total national GHG emissions, the INDC outlined a number of policies across the energy, industrial, agricultural, and waste sectors. The MSME program falls under the following INDC goal: "increase the share of renewable electricity capacity to 30% of total electricity generation capacity, from 7.62% in 2014." For information on other national priorities, such as INDCs, NAMAs, etc. see section E.5.

With regards to the Mongolian national context, the MSME program is entering the market at precisely the right time. Energy usage regulations that have been in debate for years have finally been passed and are beginning to be implemented. Primary among these regulations is the Energy Conservation Law. The law mandates that large energy users in Mongolia reduce energy consumption by 15%, as audited by experts. For more information on this regulation, see E.2.4.

Political

In mid-2016, Mongolia held national elections and the incumbent Mongolian Democratic Party was overwhelming replaced by the Mongolian Peoples' Party. The incoming government has pledged to introduce more consistent and favorable policies to encourage foreign investment. Other than this, there is no material political difference that will effect this proposal.

Economic

Mongolia is currently in the midst of an economic crisis with ballooning government debt and a rapidly depreciating local currency. Thus, it is a difficult climate to convince businesses to invest in anything that costs more than the market-minimum. However, in the recession, saving costs has become ever more important and companies are looking to cut their budget. Thus, it is the right time for the entry of our program to support entrepreneurs in the cutting of costs to increase profits. The government has raised Central Bank interest rates 5 points to 15%. With hard monetary policy in place and forecasted to continue into the near future, future cheaper sources of funding will become even more crucial to MSMEs wishing to obtain a loan from commercial banks.

Sub-National/Municipal

Rural and non-capital city MSME outreach are crucial components of this proposal, as many energy-intensive MSMEs are based outside the city. That being said, the key geographic focus of the program remains Ulaanbaatar (UB), home to half the Mongolia population and the base of the overwhelming majority of Mongolian MSMEs. Thus, it is relevant to discuss the context of Ulaanbaatar municipality and how this context strategically supports the entry of the XacBank MSME program. In 2013, Mongolian parliament passed the *Green Development Strategic Plan (GDSP) for Ulaanbaatar 2020*. The GDSP highlights air pollution as the primary environmental challenge faced by Ulaanbaatar, writing "as long as we are dependent on burning coal with old technology we will have air pollution." The GDSP proposes the mitigation measure of increasing efficient utilization of energy, which includes as a sub-clause "promote use of energy efficient technologies in the private sector." The MSME program would directly support the Ulaanbaatar government in achieving their greening goals by removing market barriers to investing in energy efficient solutions. Another stated priority is increasing the supply of clean energy in the Mongolian market. By supporting both energy efficient and renewable energy technologies, the MSME program also helps the municipal

government achieve this second priority. For more information on the GDSP, see: <https://asiafoundation.org/resources/pdfs/GreenDevelopmentStrategicActionPlanforUlaanbaatar2020.pdf>

Mongolian Private Sector

As mentioned above, business conditions are particularly difficult in Mongolia at this time. However, this is good news for the MSME program, as the program helps businesses struggling to achieve profits through added revenue cut costs by receiving favorable financing terms. While organic investment in RE and EE might otherwise be slow, the above described Energy Conservation Law has mandated such investments. The combination of these elements bodes well for the MSME program project pipeline. Private sector entities need to comply with new regulations during a time when they are particularly concerned about their bottom line and government interest rates are rising.

XacBank

XacBank is primed to launch this women-centered MSME program. The Eco Banking Department has added staff and capacity in order to ensure smooth and effective implementation. Capturing the women-led MSME market has been a strategic priority of XacBank since the 2014 IFC study (referred to throughout this Funding Proposal). In addition, XacBank has demonstrated the ability to implement similar programs to the one here proposed. See section E.5.2 for more information on XacBank's relevant past experience.

C.2. Project / Program Objective against Baseline

Electricity and Fuel Mix

There are five types of fuel used for the national electricity generation in Mongolia: coal (lignite), wind, hydro, diesel, and imported electricity¹. The share of the overall electricity generated from 2013 to 2015 by the type of fuel used is shown in Table 1 and Figure 1 of Annex 10: [Calculation of Emission Factor of Mongolia](#)². Majority of the total electricity supply is provided from lignite accounting for 90% in 2015. The amount of electricity from wind and hydro power plants was 0.11 TWh (2% of total) in 2013, 0.18 TWh (3% of total) in 2014 and 0.22 TWh (4% of total) in 2015.

The Mongolian national grid is composed of five interconnected electricity systems (Figure 2 in Annex 10): CES, WES, AUES, EES, and SES. The national grid imports electricity from Russia and China (6% of all electricity supplied in 2015). Electricity from China is also supplied to the Oyu Tolgoi area in the southern region and areas in the southern, western and eastern region. However, these areas are not connected to the Southern Energy System, Western Energy System, or Eastern Energy System. Therefore, these areas and their electricity imports from China are excluded from the calculation of the national grid emission factor.

Calculation of Emission Factor

XacBank will use the latest available calculation on emission factor of Mongolia. Currently, the latest study on emission factor of Mongolia was completed by the Institute of Global Environmental Strategies (IGES) in March 2016. It calculated the Central grid emission factor of Mongolia for the period of 2010-2012 at 1.129tCO₂/MWh³.

¹ National Dispatching Center, Ministry of Energy Mongolia, 2016

² IGES, Calculating the Conservative Emission Factor of Mongolia, Sep 2016

³ [IGES Climate Policy and Market Mechanism Status Report, March 2016](#)

Grid Emission Factor

Grid name	2010-2012 Emission Factors (t-CO ₂ / MWh)	
	OM	BM
Central grid system	1.1542	1.0566

Source: MEGD

XacBank will use this data for projects to be connected to the Central grid. For other projects to be connected to other grids, XacBank will use standardized baseline, developed by UNFCCC in collaboration with the IGES as part of Regional Collaboration Center. The draft of this standardized baseline has been calculated, pending approval from the Government of Mongolia. If the approval is complete within 2016, the standardized emission factor of Mongolia is scheduled to be officially published in April 2017.

IGES has also calculated emission factor for solar PV projects as part of Joint Crediting Mechanism in Sep 2016. Such available calculations will be used for applicable PV projects. For other projects, standardized baseline will be used. **Sources of GHG Emissions**

The **energy** sector is the most significant source of CO₂ emissions in Mongolia. The contribution of different sectors to solid fuel mainly includes energy, manufacturing, transport, agricultural and other industries. The following table illustrates energy and carbon intensity in Mongolia

Table 3.1 Energy and carbon intensity of Mongolia

Gross Domestic Product (GDP) (billion 2005 USD)	Total Primary Energy Supply (million toe)	Emissions from fuel combustion (million tCO ₂)	Energy Intensity (TPES/GDP)	Carbon Intensity (CO ₂ /GDP)
5.1	5.2	18.7	1.0	3.6

Source: International Energy Agency 2015

When comparing GHG emission to other countries, Mongolia's total GHG emission level is low. But GHG production is high per capita when compared to other developing countries. This can be attributed to Mongolia's extremely cold climate, the widespread use of fossil fuels for energy, and low efficiency of fuel and energy use.

Energy Sector

In terms of emissions, the energy sector accounted for 51.9% of all GHG emissions, and the second largest GHG emission is the agricultural sector, accounting for 36.6% in 2012. The contribution of emission from each sector is illustrated in the following table.

Table 3.2 CO₂ emissions from solid fuel

Year	Sector						
	Energy Industries	Manufacturing Industries	Transport	Commercial	Residential	Agriculture	Other
2012	6,751.67	624.90	47.11	12.34	702.17	4.15	629.15

Projections of GHG emission between 2006 and 2030 have been estimated in Mongolia's Second National Communication in 2010 in the following table.

Table 3.2

Sector	GHG emissions on Gg Co2-eq.						Average annual growth rate %			
	2006	2010	2015	2025	2025	2030	2006 - 2015	2015 - 2020	2020 - 2030	2006 - 2030
Energy	10,220	14,033	20,233	25,930	32,796	41,815	10.89	5.63	6.13	12.88
Industry	891	1,354	1,602	1,836	2,065	2,318	8.87	2.92	2.63	6.67
Agriculture	6,462	6,405	6,573	6,657	6,762	6,867	0.19	0.26	0.32	0.26
LULUCF	-2,083	-1,932	-1,785	-1,420	-1,000	-680	-1.59	2.84	4.07	-2.81
Waste	138	158	183	209	254	294	3.62	2.84	4.07	4.71

Source: MNET, UNEP

Total GHG emissions are projected to increase 3.25 times from 2006 to 2030. Generally, energy consumption is expected to increase rapidly due to economic and population growth. GHG emission in energy sectors from 2006 to 2030 are expected to increase by 4 times.

Technology Needs Assessment/Available EE and RE Technologies

An extensive [Technology Needs Assessment](#) (TNA) report was conducted for the climate change mitigation activities in Mongolia in 2013 by United Nations Environment Programme (UNEP) and the UNEP-Risoe Centre in collaboration with the Regional Centre Asian Institute of Technology. It analyzed key mitigation technologies in priority sectors of Mongolia such as large scale Hydro-power plants; Wind parks, Super critical coal fired power plants; energy efficient lighting; and improvement of insulation of panel apartment buildings. Barrier Analysis and Enabling Framework accesses the barriers and measures identified for all technologies with Action Plan and Project Idea for each technology. In addition, the report analyzed the financial feasibility of these projects, the local certification system, and other crucial technological information for the purposes of this program.

Top priority technologies were selected based on the costs and benefit of technologies in consideration of national social, environmental and economic development priorities as well as weighted score from stakeholder consultation as shown below:

Technology Prioritization for:	Projects:
Energy industries/supply subsector:	<ul style="list-style-type: none"> - Large hydropower plant; - Wind turbines (onshore, large scale); - Pulverized coal combustion technologies.

Residential and commercial subsector	Efficient lighting and improved insulation of panel apartment buildings
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Barrier Analysis

Mongolia faces challenges in mobilizing its full potential to achieve energy efficiency in these sectors. Barrier analysis in the UNEP’s TNA considers financial, economic and technical challenges faced by different prioritized technologies in the energy industry sub-sector. The most common barriers include the following:

Type of Common Barriers:	Barriers:
Economic and financial barriers	inappropriate financial incentives; high cost of capital; high transaction cost; lack or inadequate access to financial resources and uncertain macro-economic environment.
Policy, legal and regulatory barriers	lack of long-term political commitment and uncertain government policies (political risks for investors); lack of government control for implementation of laws and regulations; government or utility monopoly of energy sector.
Market and network barriers	underdeveloped competition, insufficient coordination between relevant ministries and other stakeholders.

The priorities of barriers are different in many cases in selected specific technologies. For example, for the large scale HPP technology, policy-related barriers have first priorities. Regarding the wind park, barriers of the highest priority are system constraints (capacity limits of the grid system). The major barriers are shown in detail as follows:

- Price barriers: new EE and RE technologies are high cost therefore does not make investing in newer technologies appealing. Also on top of paying high amount upfront for EE and RE technologies, interest rates for loans are high at financial institutions.
- Technical knowledge barriers for assessment of loan risks: Majority of the financial institution does not have EE or RE loan programs, therefore lacks the knowledge, experience, and expertise in providing energy efficiency loan. These financial institutions often don’t know the opportunities and know-hows of energy costs saving, energy audits, and performing feasibility studies.
- Lack of knowledge on available loans, EE and RE benefits and technologies: potential borrowers are not aware of EE and RE loan program, for example how the loan is processed at a bank. Also potential customers don’t know the positive impact of new EE and RE investment towards the environment.
- Additional barriers for renewable energy technology: renewable carry additional barriers vis-à-vis energy efficiency upgrades. The primary barrier is the additional costs of installing renewable technology (e.g. re-wiring, land flattening for solar), compared to the direct one-to-one replacement of energy efficiency technologies. In addition, the perceived risk of renewable is higher, even though the eventual cost savings are likely lower, due to dependency on natural elements.

With all of these energy usage and greenhouse gas barrier contributing in the energy and carbon intensity in Mongolia, XacBank sees potential and opportunity in making a positive impact to these barriers. At the same time, the bank will be supporting the sustainable energy market in public and private sectors through our program.

The objective of XacBank’s program are:

1. Providing commercially feasible financing and climate resilience financing

The program will provide efficient and effective financing mechanism for energy efficiency and renewable projects through our business models, which are designed to create incentive for our current and potential customers. With GCF participation, the MSME program would be able to offer interest rates that make investment in EE and RE technology more feasible as well as support the new but growing domestic EE and RE producers, suppliers, and service providers that also fall under the category of MSMEs.

2. Increase women's access to climate finance by bolstering their economic empowerment

The program's gender-mainstreamed approach hopes to simultaneously support the ventures of women-led MSMEs, and reward MSMEs that employ women at top positions, while correcting historic market gaps in the financial services industry's ability to serve the needs of female customers.

3. Show expertise and skill in the field

With our current and ongoing learning experience in the sustainable financing field, the Bank will provide an experienced service to our customers. Such expertise includes support in energy audits, monitoring services, possible eligible projects, as well as financial guidance.

4. Raising awareness about sustainability in general

The bank will launch its program by engaging with relevant stakeholders, creating public awareness about sustainable energy and climate resilience projects. This would not only create demand for our program, but it would also engage with stakeholders, create potential customers, and increase public knowledge in general.

C.3. Project / Program Description

Project Description

The proposed Business Loan Program for GHG Emissions Reduction will provide XacBank with a 20 million USD revolving facility for energy efficiency and renewable energy projects dedicated to MSME lending in the Mongolian market. Additionally, the program will promote gender equal access to the funding by making sure that women-led MSMEs are a core focus of the loan activities. The program aims to define women-led MSMEs as satisfying either of the following conditions:

- a) Firms with 51% or more ownership by women; or
- b) Firms with at least 30% women on the Board of Directors or in senior management positions; or
- c) At least 40% women employment.

As such, by the end of the third year of the program (the initial final drawdown period suggested by the GCF), the facility's portfolio will be made up of at least 50% women-led MSMEs.

The loan facility is aimed at the MSME. It aims to install energy efficient processes and equipment within existing/new factories, with businesses as end-users of energy efficient product. In addition, producers, traders, retailers and installation service providers of energy efficient and renewable energy products would also be eligible for the loan, thereby incentivizing the production and use of such products within Mongolia. The facility would also support the MSME loan market from demand side. It would promote energy efficient and renewable energy product use and energy efficient business practices with loan incentives.

Many of the businesses operating in Mongolia are utilizing old and inefficient infrastructure. The climate impact potential for each loan is large. XacBank has seen demand for its energy efficient and renewable loan products in the past, but the interest rate is too high for many potential customers at current rates. Although XacBank offers their energy efficiency and renewable energy loan products at lower than market rates, they are still not concessional enough to incentivize the majority of the market.

GCF financing would increase the number of businesses receiving energy efficiency and renewable energy loans and make a large climate impact. XacBank would utilize GCF financing to improve its lending terms (longer tenors, lower rates) and increase the disbursement of energy efficiency and renewable energy loans to Mongolian MSMEs.

The Business Loan Program for GHG Emissions Reduction will be an expansion of the currently existing program that XacBank has been running since 2013, and will have an ever stronger positive impact on local MSMEs, including further market development; develop institutional capacity for local MSMEs through knowledge and process sharing; encouragement of the deployment of new technologies in Mongolia, a developing country; regional impact (as the program is open to all 21 aimags in Mongolia, throughout which XacBank has an active presence with its 86 branches); targets micro-sized as well as women-led enterprises and in a developing and vulnerable country (Mongolia). More in-depth detail regarding the existing program can be found in section C.4.

Developing the institutional capacities of local MSMEs is a crucial tenant of the proposed program. Knowledge of what constitutes energy efficiency, or renewable energy, or “green”-ness, is lacking in Mongolia beyond the basic concept of individual-use solar cells or hybrid cars. Past experience has demonstrated that MSMEs are initially interested in green lending programs due to the lower rates, but often do not know what eligible projects include, and why they make sense for their bottom line. Thus, the program will educate business-owners about what it means to be green, how to become green, and why it makes sense for them from a business-standpoint to institute these changes. In this way, beyond access to the favorable rates, participation in the program and even an initial meeting regarding program participation will strengthen institutional capacity of Mongolian MSMEs.

XacBank’s own institutional capacity will be developed to allow the AE to evaluate the institutional capacity of MSMEs and deliver evaluations about the most cost-effective way to increase energy-efficiency through the program.

Main Objectives

- Enable increased energy efficiency and renewable energy amongst end-user SMEs
- Stimulate supply and demand for energy efficient and renewable energy products by enabling activity amongst producers, traders, installation service providers and users.

Gender action plan

The MSME program will aim to promote gender equality in the implementation of the program. For this, gender disaggregated data will be assessed against the appropriate indicator to measure enhanced access for women to loans. The program aims to define women-led MSMEs as satisfying one of the following conditions:

- a) Firms with 51% or more ownership by women;
- b) Firms with at least 30% women on the Board of Directors or in senior management positions; or

c) At least 40% women employment.

XacBank has prepared an overall Gender Action Plan, which includes specific activities, expected outputs, outcomes and impacts as well as monitoring indicators. Resources will be allocated to integrate these into the implementation of the program. Further details regarding gender considerations can be found in the Gender Action Plan attached in the annex 8 of this document.

Anticipated Outcomes

Currently, XacBank has roughly 200 active corporate clients, more than 22,000 SME clients (of which 3,400 are active clients), and many more micro-sized clients at hand. As a result of the GHG emission reduction program, many of these entities, as well as the rest of the roughly 60,000 registered SMEs in Mongolia, will reap the benefits of a low cost, high efficiency loan product.

C.4. Background Information on Project / Program Sponsor (Executing Entity)

XacBank overview

Since its founding in 2001, XacBank has created sustainable growth in the banking and financial sector of Mongolia, with continuously expanding operations. Through this expansion, XacBank has remained true to its original vision of “People, Planet, Profit” and aims to represent the interests of all its clients, from mainstream customers to traditionally marginalized Mongolians, such as those in the ger district.

The Bank has an extensive reach throughout the project’s host country of Mongolia. It comprises 86 branches, units and business service centers throughout the nation. XacBank employs 1,700 specialized personnel and more than 1,800 merchants who swiftly serve more than 700 thousand customers with complex financial services using latest state-of-art technology. XacBank’s audited yearly financial statements and annual reports for every year since 2001 are readily available on the website at <http://www.xacbank.mn/en/96/about-xacbank/report/annual-report>. XacBank is hailed as a model for corporate responsibility and social-impact driven business in Mongolia.

As of September 30th, 2016:

Capital Adequacy Ratio: 18.65%

Credit Rating: B3 (Moody’s)

XacBank relevant experience

As the project sponsor, XacBank brings a wealth of past management experience on similar projects in similar areas. XacBank is the market leader in providing business loans for energy efficiency and renewable energy solutions with a SME portfolio of about US\$15 million.

Beginning in 2009, XacBank started distributing consumption loans under the “Energy Efficient Product Distribution Program”, which was financed by the Millennium Challenge Account, the World Bank’s “Clean Air Project”, and the government of Mongolia’s special “Clean Air Fund”. These financiers combined to allow for a subsidy that let residents of the Ger Residential Area to purchase energy efficient stoves, ger blankets, vestibules and to energy efficient houses at a largely discounted price, which is crucial, as this segment of the population is economically challenged, and don’t have access to basic amenities including running water, central heating, or a sewage system. This project allowed about 80% of the 185,000 households in the area

to purchase one or more of the products through XacBank product centers, which helps to reduce the massive amounts of pollution produced from burning low quality coal in old, traditional inefficient stoves to endure the 8 month long heating season of Ulaanbaatar, during which the temperatures can drop as low as -40C during some of those months.

Then, starting in 2012, XacBank began disbursing energy efficient housing and mortgage loans. In 2013, XacBank implemented the Business Loan for GHG Emission Reduction program, and through this program, the Bank began disbursing loans to SMEs for energy efficient and renewable energy product producers, traders, installation service providers, and end users based on the requirement that they are able to produce a 20% increase in energy efficiency or reduction in emissions.

Finally, in 2015, the bank introduced two new products. The first being an expansion to the GHG reduction program, a facility called MonSEFF – Mongolian Sustainable Energy Financing Facility, in cooperation with EBRD, to further support energy efficiency and renewable energy projects for end users, which requires a 15% increase in energy efficiency cases, and all renewable energy projects are qualified. One major benefit of MonSEFF is the complementary technical advisory provided to the client and the bank through an international team of energy experts and engineers that help evaluate the projects. The second product was Green Car Loans, which allows Mongolians to gain access to better than market loan rates to purchase hybrid cars.

As a result of these projects, XacBank is a trusted name in the SME business community with already-established direct lines of communication. These prior SME loan programs have laid the ground work for this larger-scale project and given XacBank valuable project management and monitoring capabilities.

Currently, the MonSEFF loan terms are 18% annual interest rate (in local currency) with a maximum loan term of five years, with a total facility size of US\$15 million. Another source of funding dedicated to EE/RE projects have a 19.2% annual interest rate (local currency), also with a maximum loan term of five years, with a total facility size of US\$20 million. In the upcoming months, XacBank is set to receive US\$5 million in funding another source of funding for EE/RE projects at similar rates as the previously mentioned two facilities.

Although these facilities provide lower-than-market rates and longer loan terms, they still have the same collateral requirements (no guarantee funding) and they are still deemed too expensive for most clients of the bank. The reason being that they are all made available to the Bank in USD, which is then converted to MNT (Mongolian National Tugrik). The final interest rates of these facilities include costs such as currency risk, operational and overhead costs, risk costs, currency swap fees, etc. However, the Bank does not stand to make a profit margin on its EE/RE loans.

XacBank plans to combine existing sources of funding that the Bank uses for its current GHG emission reduction program with GCF funding to do blending and lending through the expanded GHG emission reduction program. As mentioned elsewhere in this concept note, the main need for GCF funding stems from the demand for lower interest rates, longer loan terms, and lower collateral requirements for loans. By combining the GCF funding with the currently existing funding, the Bank would be able to accomplish all of those goals.

C.5. Market Overview (if applicable)

Historical and forecasted market for the product

A 2013 report for XacBank conducted by the Asia Development Bank (attached to this application) found that the market size of the high priority investment opportunities for EE and RE in SMEs has been conservatively estimated to be USD 296 million, with an estimated carbon emission reduction potential of over 230,000 tons of CO2 equivalent per annum. Additional low-priority investment opportunities also exist in areas such as cashmere production and poultry farming. The report's market predictions are summarized in the below table:

	Investment Opportunity	Primary Target	Estimated Market Size	Estimated Carbon Emission Reduction Potential
1	Investment opportunity in commercial buildings	Market Segment(s) Primary Target Market Segment(s)	Estimated Market Size	Estimated Carbon Emission Reduction Potential
2	Demand-side energy efficiency in pre-cast panel residential buildings in Ulaanbaatar	SMEs Households	USD 42 Million	14,400 tCO2 equivalent per annum
3	Energy efficiency in pre-cast panel residential buildings in Ulaanbaatar	Households	USD 80 Million	38,500 tCO2 equivalent per annum
4	Roof-top solar in commercial buildings in Ulaanbaatar	Small and medium sized mines	USD 200 Million	150,000 tCO2 equivalent per annum
5	Mining sector - diesel hybridization and replacement by solar	Small and medium sized mines	USD 32 Million	10,500 tCO2 equivalent per annum
5	Renewable energy in agriculture sector - biogas potential in dairy and chicken farms	SMEs	USD 21 Million	56,500 tCO2 equivalent per annum

The ADB report includes significant findings on the projected energy market: "As the economy continues to grow, demand for electricity and heat in Mongolia has grown significantly too. Mongolia is already facing power shortages, with peak power demand in the country amounting to over 1000 MW whereas available supply capacity is only 836 MW. In order to bridge this demand-supply mismatch, the country already imports 120-140 MW of power from Russia every year. This dependence has undesirable political implications for Mongolia. However, power and heat demand in the country is expected to grow significantly over the next few years, given the rapid growth in power demand in Ulaanbaatar and in the mining region of South Gobi. ADB estimates that power demand in Mongolia, in the medium growth scenario, will more than triple between 2011 and 2020 (from 774 MW to 2404 MW), driven primarily by an over 900 MW increase in power demand from the two large mines (Tavan Tolgoi and Oyu Tolgoi) that are currently under development in the mining region of South Gobi. In the low (CAGR 9.3%) and high (CAGR 10.5%) growth scenarios estimated in the ADB report, total power demand by 2030 is 4073 MW and 4961 MW respectively."

Current Market Challenges

Despite more favorable terms and high demand for SMEs' energy efficient projects, the loans are still considered too expensive for a majority of MSMEs and corporates in Mongolia. The current concessional loans vary from 18%-19.2% per year (in local currency), depending on the facility that the EE loan is coming from, which is below a normal business loan that XacBank offers, which range from 21%-29% per year (in local currency). The lower interest rate is still not enough to entice many customers to take an EE loan during the prolonged economic down turn that Mongolia has experienced since early 2015. XacBank's market research for a similar SME loan through the MonSEFF program demonstrated that SMEs were interested in the program and had high potential to fully leverage the loan for improved energy efficiency; however, the high rates deterred these prospective program recipients.

In addition to high rates, the loans require large collateral requirements. Even if willing to burden the high interest rates, most Mongolian SMEs do not own the assets needed to back a loan. XacBank would like to utilize GCF financing to improve its lending terms (lower interest rates, longer loan terms, lower collateral requirements) and increase the disbursement of energy efficiency and renewable energy loans to Mongolian companies. Collateral requirements are very high for customers. There are tax benefits for some EE products, but there are no other incentives to support the use of EE/RE solutions. With GCF funding,

XacBank could improve its loan terms by blending it with its currently existing sources of funding and be able to provide a cheaper, longer, and more flexible loan product to incentivize Mongolia MSMEs and corporates to pursue EE/RE solutions.

Despite rapid growth in banking and financial services sector in Mongolia and a growing awareness among businesses, government institutions and the general population about the importance of clean energy and energy efficiency to the country's economy, financing challenges remain, especially in making financing available to small and medium enterprises (SMEs) at terms that are required for making clean energy and energy efficiency projects financially viable. A major constraint is the low availability of long-term capital for banks, which is critical for them to provide long-term loans to infrastructure projects, including energy efficiency and clean energy projects.⁴

Hence, the relatively lower access to finance for SMEs is a major gap in Mongolia's financial sector, which can be termed as the 'missing middle'. According to the World Bank Enterprise Survey,⁵ more than 30% of firms in Mongolia identified access to finance as the biggest constraint to their growth, when compared to the East Asia and Pacific regional average of 17%. This is further confirmed by the fact that 47% of all loans in 2011 were made to large enterprises, 28% to households and retail borrowers but only 9% to SMEs.⁶ Access to finance to SMEs is further constrained if the borrowing requirement is for sunrise sectors such as clean energy and energy efficiency, due to perceived risks by banks and lack of technical capacity within both banks and SMEs to develop, assess and evaluate such project proposals.⁷

Key competitors, market shares, customer base

Though demand for this product is high amongst SMEs, there is almost no competition in the market. XacBank is currently the only provider of energy efficiency loans in Mongolia, with a US\$15 million SME loan portfolio in this field. As mentioned above, though lower than regular interest rates, the rates on EE/RE loans are still quite high. The current customer base of XacBank includes 200 active corporate clients, more than 3,400 active SME clients, and many more micro-sized clients; though many of these clients are not able to take advantage of the EE/RE loans due to the existing limitations. However, it is anticipated that with lower collateral requirements and cheaper and longer term loans, a much larger portion of the Bank's clients would be able to partake in the program, as well attract new clientele who are interested in doing the same.

As EE is still a new idea to Mongolian businesses, there is a huge pool of potential for this market to develop further, especially in the SME/corporate sector. On August 18th, 2016, Mongol Bank (the country's central bank) raised its benchmark interest rate by 4.5 percentage points to 15%, in an effort to stabilize the MNT, which had seen a decline in value for a record 24 straight days at that point. As a result, loan conditions will continue to toughen, mainly through further increased interest rates. With the hard monetary policy in place and forecasted to continue in the near future, cheaper sources of funding will become even more crucial to entities wishing to obtain a loan from commercial banks. Upon securing GCF funds, XacBank will be able to provide EE/RE loans at an even more attractive position, considering the recent benchmark rate hike.

In addition to diversifying through better loan terms, the target entities of this loan facility would be broader than they have been. As of now, the main beneficiaries of the GHG program are the energy end-users themselves, as that portion of the market is eligible to receive MonSEFF financing, which has the most

⁴ ADB report

⁵ <http://www.enterprisesurveys.org/>

⁶ Source: Bank of Mongolia

⁷ ADB report

concessional rates available at XacBank. As the Bank cannot lower the interest rates sufficiently to entice all segments of the market, this is a big barrier to further development of the EE/RE loan market. Through blending with GCF funds and being able to provide lower interest rates with longer loan terms and lower collateral requirements, XacBank would be able to expand its EE/RE loan services to all market segments, including producers, traders, installation service providers, etc.

Currently, the only competitor is Khan Bank, which recently became a partner institution of MonSEFF to provide the same EE loans that XacBank has been providing since 2015. However, they have only disbursed two loans and the loan conditions are largely the same as the current XacBank EE loans.

Pricing structure

XacBank's loan policy states that the Bank shall only disburse loans in the same currency as the business's income is in. Therefore, if a company's income is in USD, then they are eligible for USD loans, and the same applies for MNT income businesses. As nearly all of Mongolian business' incomes are in MNT, the Bank carries the brunt of the currency exchange risk because the Bank receives large sources of funding in USD, and then converts it to MNT with a currency swap with the Bank of Mongolia (BoM), Mongolia's central bank, in order to disburse in MNT, which represents a large cost to the Bank and in turn, the customer.

For this pilot MSME program from the GCF, part of the requirements are that each program/project is capped at US\$20 million, and it is also stipulated that the GCF cannot be the single largest financier of the program. As such, XacBank will drawdown the GCF's US\$20 million, convert the dollars into MNT with a swap with the BoM, then blend with its already existing EE/RE facilities. The program's pricing structure is included in the financial model attached in the annex 2.

C.6. Regulation, Taxation and Insurance (if applicable)

Regulation

XacBank acquired its commercial banking license on December 28th, 2001. A copy of said license can be made available if necessary. XacBank does not need to obtain any additional licenses or permits to carry out the proposed activities in this program.

Taxation

As the GCF is an international entity, XacBank is not required to pay any withholding tax upon receiving funding from the GCF.

Insurance

XacBank holds the following insurance policies:

- Corporate Liability Insurance
- Bankers Blanket Bond and Electronic & Computer Crime Insurance Policy
- Directors & Officers Liability Insurance
- Comprehensive Crime Insurance

C.7. Institutional / Implementation Arrangements

XacBank (AE) will be the executing entity of this program. As such, XacBank will manage the facility and have overall responsibility for the program, and will provide the necessary governance and oversight over the Facility.

Sub-loans will be distributed through traditional channels at XacBank branches upon receiving the facility.

XacBank will publicize this program as a new line of MSME loans, which must be used for products that achieve 20% reduction in energy usage or 20% reduction in CO2 emissions (15% for end-users)

The process of distributing Eco Business loans follows normal bank disbursement procedures with additional steps to ensure the 20% CO2 reduction is achieved. These steps are as follows:

- 1) Loan officer interviews potential borrower to assess the potential project based on XacBank “5-C” analysis:
 - a. Customer behavior /CHARACTER/: determine business structure, management, employee background, experience, productivity, credit history and purpose of loan etc;
 - b. Business environment /CONDITION/: explore the business, premise, equipment, product/service and determine the micro element or consumers, suppliers, competitors, legal environment and other impacting factors and reveal their potential impact on loan repayment;
 - c. Loan repayment capacity/ CAPACITY/: analyze loan repayment resources, short and long term objectives of the business, business plan, and determine the loan efficiency of the business;
 - d. Capital for risk coverage capacity/ CAPITAL/: based on the financial analyses define the real value of the legal entity and study the equity fund, secondary investment (loan from the shareholders) and debts held by related companies
 - e. Collateral asset /COLLATERAL/: define the collateral asset type, quality, structure, ownership/occupancy, liquidity, adequacy and insurance. These elements shall be regulated by the “Procedure on Collateral Requirements”
 - f. For business loans more than 50 million MNT (25k USD), the loan officer will conduct a Environmental and Social Responsibility evaluation.
 - g. For Eco Business loans, the borrower will present an ISO or MNS (Mongolian National standard) certificate to demonstrate the products/technology’s energy efficiency. If there is no such certificate, the borrower will present laboratory test results for the energy or CO2 savings for each product. The loan officer will submit these verification documents to the Eco Banking Department and Eco Banking Department specialists will evaluate the anticipated energy savings and CO2 reductions against the baseline scenario. Based upon this analysis, the specialists will verify whether the borrower’s project meets the additional criteria necessary to qualify for the SME business loan for GHG emission reduction program and rates.
- 2) The above mentioned 5C process covers all necessary due diligence measures, including AML and KYC measures, such as where the organization’s income, original capital, investors, shareholders, etc. all originate from. For new clients, during the process of completing the loan proposal, the loan officer utilizes the Bank’s internal AML software, Flex Terra, to check against the Bank’s sanction list (provided by Mongolia’s central bank) as well as watch list, which is a list of high-risk clients compiled by XacBank. For existing clients, all information related to KYC has already been obtained, and is kept in a register for reference.
- 3) Loan officer conducts an on-site visit to verify information obtained during the interview process. Information on customer behavior, debt coverage capacity, and collateral assets are obtained and verified via interviews with third parties.

- 4) Following the interview and in-person site visit, the loan applicant and loan officer prepare a loan proposal which includes:
 - a. Description of the project or the activity for which the loan will be used;
 - b. Monthly cash flow projections
 - c. 1-3 year balance sheets
 - d. Repayment schedules;
 - e. Financial reports;
 - f. Loan officer’s opinion on potential risks for repayment and ways to decrease risks

- 5) Loan proposals for amounts greater than 300 million MNT (150k USD) will be assessed by one of XacBank’s Credit Risk analysts at corporate headquarters. The credit risk analyst will provide an independent assessment regarding loan risks.

- 6) The loan proposals are then reviewed by either the small (less than 150k USD) or large (over 150k USD) Credit Committee. After receiving approval from the Credit Committee, the loan is disbursed via the relevant branch.

- 7) Following the disbursement, the credit officer conducts scheduled monitoring (for loans more than 150k USD) of the borrower to ensure that the loan is being used for its original GHG reduction purposes. The monitoring will be completed with remarks as to whether the MSME is operating normally or whether any risk has arisen.

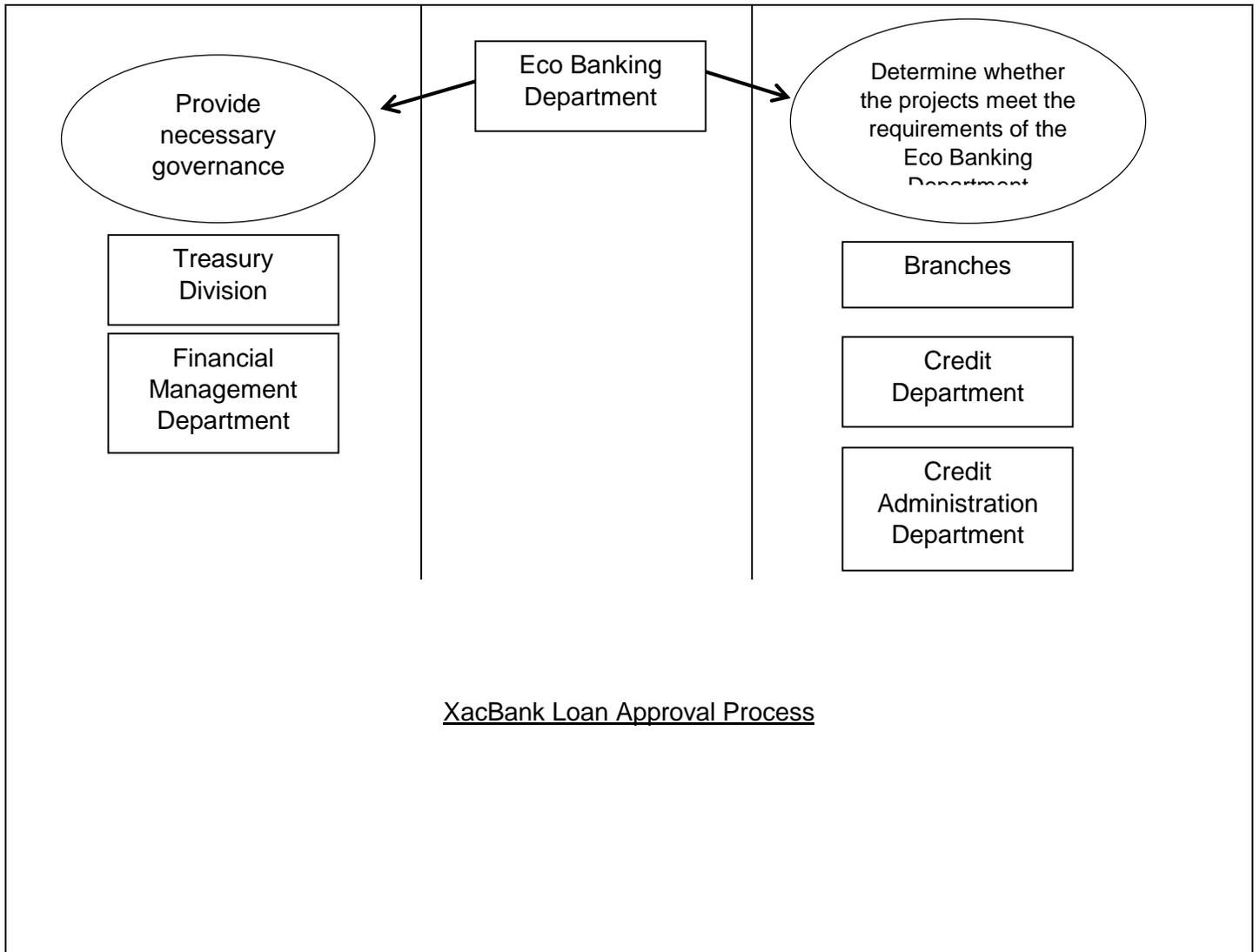
- 8) If a necessity is seen by XacBank with regard to larger loans, then a post-evaluation will be conducted.

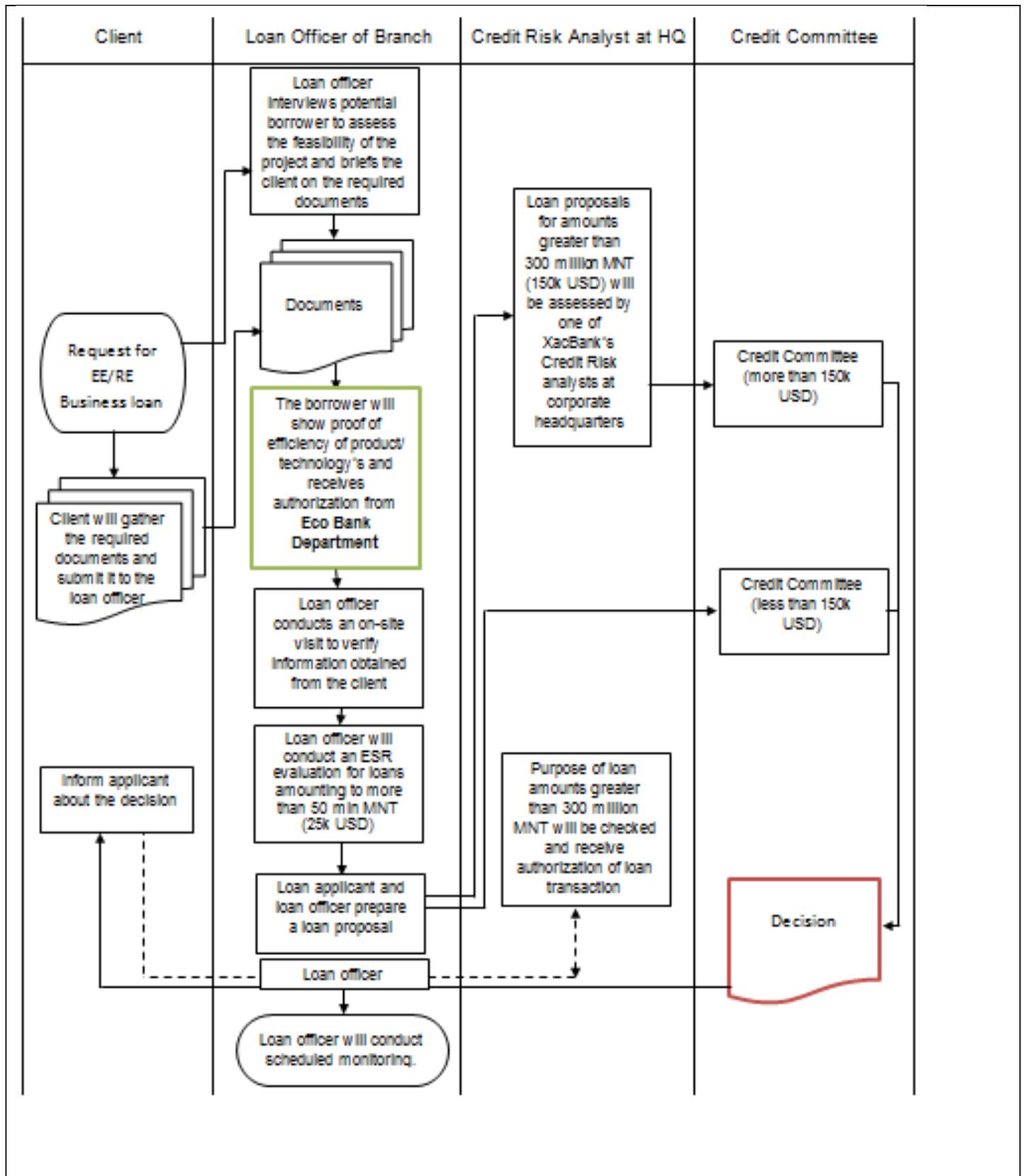
Organigram of Project Structure

Governance

Overseeing

Implementing





C.8. Timetable of Project/Program Implementation

For more details on the outputs referred to in this table, and the corresponding activities, see section H1.2

TASK	Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15	Q 16	Q 17	Q 18	Q 19	Q 20	Q 21	Q 22	Q 23	Q 24	Q 25	Q 26	Q 27	Q 28	Q 29	Q 30	Q 31	Q 32		
Output 1: Identification and financing of RE and EE projects																																		
Output 2: Capacity building																																		
Output 3: Increased awareness																																		
Output 4: Interim Evaluation report																																		
Output 5: Completion report	1 MONTH AFTER THE END OF THE TENOR OR THE EXTENDED TENOR, AS APPLICABLE																																	
Output 6: Final Evaluation report	2 MONTHS AFTER THE END OF THE TENOR OR THE EXTENDED TENOR, AS APPLICABLE																																	

D.1. Value Added for GCF Involvement

GCF involvement is indeed critical for the success of the here proposed MSME program. Currently, funding for XacBank's SME EE and RE programs comes from a combination of funders including the EBRD and the GCPF. While these funders are important to XacBank's program, their funding alone is limited, as explained below. As such, GCF involvement in the program would allow the MSME program to achieve the greatest paradigm shift, at the most appropriate rates, and with the primary inclusion of women-led MSMEs.

With GCPF funding (which XacBank plans to blend for this program), XacBank is able to offer loans to all segments of the EE and RE supply chain (e.g. traders, producers, installers, etc.). However, the rates available for this loan are not attractive enough to incentivize the expansion of the EE and RE market. In XacBank's experience, many MSMEs are interested in participating, but the rates are simply too high considering the capital investment. Blending in GCF funding would allow us to lower our rates, which is the crucial market barrier that this here proposed program seeks to address.

Accessing GCF funds would allow us to expand the eligible MSMEs and enact a true paradigm shift by expanding the entire EE and RE market.

XacBank hopes that by accessing GCF funds, the MSME program will be able to integrate a gender-mainstreamed approach that has not been attempted in previous EE and RE programs led by the bank with these funders. With the concessional terms available from the GCF, XacBank hopes to provide more favorable rates to women-led MSMEs, thereby aiding women's economic empowerment in Mongolia through climate finance. The strong gender component of this program aligns with the GCF's priorities and would benefit from the gender best practices resources made available by the GCF.

D.2. Exit Strategy

Exit Strategy

Once the facility is provided, GCF does not need to be highly involved in program operations. The Fund's support is initially required to provide a more affordable source of financing to businesses, with an emphasis on women-led enterprises. XacBank will report on the facility disbursement to GCF periodically to describe how funding is being used, including financial statements (balance sheet, income statement), GCF loan portfolio quality report, and emission reduction report together with GCF loan portfolio.

The GCF's exit strategy is quite simple, as XacBank will be paying the GCF back directly, based upon the terms that the GCF is able to offer. Exit risk is minimal

In this section, the accredited entity is expected to provide a brief description of the expected performance of the proposed project/program against each of the Fund’s six investment criteria. Activity-specific sub-criteria and indicative assessment factors, which can be found in the Fund’s [Investment Framework](#), should be addressed where relevant and applicable. This section should tie into any request for concessionality made in [section B.2](#).

E.1. Impact Potential

Potential of the project/program to contribute to the achievement of the Fund’s objectives and result areas

E.1.1. Mitigation / adaptation impact potential

The MSME program has great potential to achieve the GCF’s mitigation objectives as outlined in the Investment Framework. Many of the businesses operating in Mongolia are utilizing old, inefficient infrastructure, so the climate impact potential for each loan is large. XacBank has seen increased demand for its energy efficiency and renewable energy loan products as awareness of the long-term financial benefits of energy efficient products has increased in the Mongolian business sector. For example, whereas previously outreach from Eco Banking to potential SME clients for EE products had to be done by XacBank, now the common method for client finding is by SMEs reaching out to Eco Banking directly, with an existing knowledge of their products.

However, the existing loan conditions are difficult to accept for many potential clients due to the high interest rate. Businesses are discouraged from making any long-term investments in their operations due to this initial financial barrier, particularly investments whose economic benefits are perceived as intangible, such as “energy savings” investments, which do not produce tangible increased revenues, but rather intangible cost savings. The GCF financing could increase the number of businesses receiving energy efficient loans and make a large climate impact by spurring business-driven shifts to low-emission sustainable development pathways. With regards to mitigation, one of the GCF indicative assessment factors is the degree to which the program supports the scaling-up of low emission energy in the affected region by addressing key barriers. The here proposed program has high impact potential not only because the field of EE and RE in Mongolia is ripe for entry, but also because the program features directly address the key barriers that have slowed the market expansion of EE and RE in Mongolia, namely high interest rates.

E.1.2. Key impact potential indicator

<i>GCF core indicators</i>	<i>Expected tons of carbon dioxide equivalent (t CO₂ eq) to be reduced or avoided (Mitigation only)</i>	<i>Annual</i>	149,290 tons (average per year)
		<i>Lifetime</i>	1,194,324 tons The tCO ₂ eq total reduced was calculated based on XacBank’s experience with the currently existing GHG emission reduction program. As the GCF MSME program will be an extension of this current program, financing mainly

			the same type of activities and same sized enterprises.
	<ul style="list-style-type: none"> • <i>Expected total number of direct and indirect beneficiaries, disaggregated by gender (reduced vulnerability or increased resilience);</i> • <i>Number of beneficiaries relative to total population, disaggregated by gender (adaptation only)</i> 	<i>Total</i>	N/A
		<i>Percentage (%)</i>	N/A, this program is a mitigation program
<i>Other relevant indicators</i>	<ul style="list-style-type: none"> • Expected total number of direct beneficiaries of the program <ul style="list-style-type: none"> ○ Annual USD in EE and RE loans disbursed (See financial model) <p style="text-align: center;">Dollar cost of 1 ton of CO2 savings (See financial model)</p> <ul style="list-style-type: none"> ▪ Total: 50.24 USD ▪ GCF cost: 16.74 USD ▪ The above expected lifetime emission reductions savings were calculated based on the amount of tCO2eq reduced through the leveraging of existing dedicated funds since 2013, then projected over the life time of the program, based on the amount of total financing of sub-projects. • Expected number of MW of low-emission energy capacity installed, generated or rehabilitated <ul style="list-style-type: none"> ○ To be calculated through program duration. 		

For the method by which the above indicators were calculated, please see each relevant section in the above table.

E.2. Paradigm Shift Potential

Degree to which the proposed activity can catalyze impact beyond a one-off project/program investment

E.2.1. Potential for scaling up and replication (Provide a numerical multiple and supporting rationale)

Scale-up potential:

Regional

The geographic focus of the program is the geographic locus of SMEs in Mongolia-- Ulaanbaatar. However, the government has begun to prioritize the development of alternative urban centers such as Erdenet and Darkhan. Currently, these cities are largely economically fueled by the presence of large mining corporations such as Erdenet Mining Corporation. However, a number of SMEs are in operation to support the growing urbanization of these areas. As these cities continue to develop and economically diversify, the presence of local SMEs will increase accordingly. The program is implementable in any Mongolian area where SMEs exist. XacBank has branches throughout Mongolia and currently offers its EE and RE financial products nation-wide. For example, many hybrid car loans have been issued outside UB. In addition, rural based SMEs have been recipients of business loans. The program thus has the adaptability and the AE has the geographic know-how and experience to easily expand the program into these new urban centers

as well as into the remaining 21 aimags across Mongolia and into the increasingly entrepreneurial non-urban agricultural economy.

In the areas where the program is expanded, it would have a direct regional impact. Mongolia is made up of 4 regional electric grids, each facing their own over-use issues. The central grid is over-used due to the energy demands of Ulaanbaatar. The eastern grid is over-capacity due to the energy intensity of oil exploration taking place in that region. The Western grid is unable to fully provide electricity to its region, and thus imports energy from Russia at a high cost, and faces frequent blackouts when bills are not paid in time, a dangerous occurrence in a region with average winter temperatures of -30 degrees Celsius. In 2014, Doing Business ranked Mongolia the 76th best place to do business globally. One of the reasons cited for the poor ranking by the agency was the difficulty of accessing reliable electricity (see IFC report). By increasing the low-emission capacity in these regions, the program would lessen the burden on Mongolia's grid system, saving local governments imported energy costs and contributing to regional economic development by preventing the disruption of electric blackouts and promoting a more reliable and efficient electricity use system. In addition to this major regional benefit, the program would have a knowledge-sharing and capacity-building regional benefit. As it stands, the majority of EE and RE awareness and developmental activity is based in Ulaanbaatar. However, a number of energy-intensive SMEs operate outside of Ulaanbaatar and have historically had more limited access to finance and energy related innovations due to their remote locations. With this program, the FP hopes to "spread the wealth" so to speak, of climate-finance access and capacity to areas of Mongolia where there is high potential for RE and EE but have often been left behind by bank's Ulaanbaatar-focus.

In order to achieve this geographic scale-up potential, XacBank plans to re-activate previously taken steps in the geographic expansion of RE and EE programs targeted at SMEs. After developing case studies highlighting successful clients of the program in Ulaanbaatar, the FP plans to disburse these materials to regional XacBank branches, with a particular emphasis on non-Ulaanbaatar urban centers, and non-urban agricultural projects. In addition to marketing materials, the Eco Banking team, based in Ulaanbaatar, plans to conduct regional trainings to capacity-build these other branches, so that they are knowledgeable about the program and able to offer it to eligible regional clients.

Post-GCF replicability

In addition to scaling-up the program across Mongolia, the FP plans to replicate the program without GCF participation in the near future. This program has an 8-year life span. For various reasons stated throughout this funding proposal, it is crucial during these 8 years to have GCF support, as loan rates need to be lowered to incentivize RE and EE investment. However, even after GCF support ends, the demand for climate finance access will persist and likely increase. The increase in interest will result from two factors, the first being that the cost-saving impact of RE and EE investment will begin to make a real impact on the bottom line of participating SMEs. The second being that the program itself will stimulate the production of RE and EE products and offer them at a cheaper price to the market, thus making the ease of transitioning to RE and EE easier for SMEs.

E.2.2. Potential for knowledge and learning

SME and consumer knowledge acquisition:

The MSME program would strengthen local knowledge about RE and EE investment. In order to access the financing, firms have to achieve certain energy savings. Thus Mongolian SMEs will begin to undertake analysis of their energy usage and areas of improvement. Regardless of whether these SMEs end up qualifying for a loan or not, the act promotion of such monitoring activities in SMEs has significant paradigm shift potential for best practices in EE processes.

If successfully implemented, the program has the potential to impact SMEs and consumers beyond those directly participating in the program. As the program expands the production and supply of energy efficient, it has the potential to re-price the entire supply chain of energy efficient products. By making available low-cost initial loans, the price of energy efficient products will become more attractive throughout the market, and the ensuing result will be SMEs (in the case of SME-to-SME transactions) and consumers (in the case of SME –to-consumer transactions) increasingly encountering these products and educating themselves about the long-term savings potential in order to maximize their individual utility in the transaction.

E.2.3. Contribution to the creation of an enabling environment

Contribution to the creation of an enabling environment:

The availability of low interest rate loans through this program creates enabling market conditions for energy efficient innovations. Respondents to an IFC market study on Mongolian SMEs listed access to finance more frequently than any other obstacle when asked what the greatest business challenge they faced was. Indeed, for both men and women, finance-related trainings were the most frequently attended capacity-building activities. Innovation in the RE and EE area has been hampered by interest rates which disincentivize capital investments. The program intends to, at least partially, eliminate systematic barriers to the production, supply, and purchase of low carbon emitting solutions from end-users, producers, traders, and service providers. By re-balancing initial investment incentives to favor the change to energy efficient products, the program creates an environment in which the multi-faceted long-term benefits of energy efficient investment are reflected in the favorable up-front costs of said investment versus traditional energy products.

Innovation:

The availability of attractive financing options for energy efficient products will stimulate the domestic development of an eco-products market. As of now, many small producers exist, but the majority of RE and EE products are imported. Manufacturers have the capacity to build energy efficient products with an initial capital investment in re-outfitting their factories with more up-to-date, energy efficient equipment and processes to replace the existing decades-old, Soviet era machinery currently used in the majority of such factories.

Similarly, many suppliers have the capacity to expand their product streams to include energy efficient products and renewable energy solutions with the help of an initial investment. The SME loan program would foster the expansion of the existing appliance market to include these new market segments. In addition, over time, domestic production could lead to Mongolia-specific innovations that are uniquely crafted to the natural challenges and resources of Mongolia. Examples of past Mongolia-specific innovative products include the high-tech insulation blankets designed specifically for gers and distributed by XacBank in order to reduce the coal emissions of the ger district during the heating season by increasing insulation and reducing heat loss from entry ways.

E.2.4. Contribution to regulatory framework and policies

Regulatory

This program is entering the market at an optimal time to have an impact on the implementation of new national regulations on energy usage. In November, 2015, the Mongolian parliament passed the Energy Conservation Law (ECL). The ECL stipulates that large energy consumers (referred to as 'designated consumers') (note: large energy consumers does not necessarily refer to large enterprise and can encompass MSMEs in energy-intensive industries) audit their energy usage and make plans to reduce their energy intensity by 15% in the course of 5 years after they have been appointed. XacBank's MSME program will have a critical role in the implementation of this important national priority. Many of the designated consumers did not budget for capital investments and as such, will be seeking the best possible financing rates for these new nationally-mandated investments. XacBank stands to become the de facto financial institution partner for the successful implementation of this law, and thus for the private-sector enablement of public sector energy priorities. By helping the ECL implement by reducing investment costs in RE and EE, XacBank can aid the Mongolian government in demonstrating the proof of concept of the ECL and thus promote the passing of further energy regulations for the private sector.

E.3. Sustainable Development Potential

Wider benefits and priorities

E.3.1. Environmental, social and economic co-benefits, including gender-sensitive development impact

Economic

There are numerous economic benefits to this program. The first is the direct impact that low-interest SME loans and ensuring increased energy efficiencies will have on the SMEs themselves. These businesses will save money on utility costs and therefore, production costs of all products, including any energy efficient products. Lower production costs on the part of the producers are likely to be realized in both direct cost savings for the producer as well as price lowering and savings in the pocket of the consumer. Whether it is the producer or the consumer who receives the majority of the financial benefit, in either case the market as a whole is economically incentivized. The incentive for producers to produce energy efficient goods as well as the incentive for consumers to purchase energy efficient goods is greater vis-à-vis their more energy inefficient competition, which have, until now, enjoyed lower costs and thus lower prices.

There are also economic benefits that extend beyond participating SMEs and their customers. More efficient businesses increase the availability of heat and electricity for an already overtaxed central grid which is subject to frequent power outages as a result of its limited capacity, which is further exacerbated by aging transmission lines and substations. Currently, the domestic grid cannot meet the power demand, and up to 30% of the electricity is imported from Russia to meet this demand.

In addition, the SME loan program will contribute to economic diversification of Mongolia and job creation. Mongolia's economy is largely dependent on mineral exports, mostly to China. Fluctuations in commodity prices, especially for coal and copper and weaker global demand have led to repeated boom-bust cycles.

The loan program will serve to stimulate alternative sectors of the Mongolian economy that are more stable than its current commodities basis.

Social

The project has the potential for significant social development improvements in the area of health and safety. This is true across multiple time frames. Energy inefficient products pose health risks to their immediate users, such as aging cook stoves, which use heat from burning raw coal, which have the potential hazard of burning the user as well as emitting deadly PM 2.5 particles which are then directly inhaled. Thus, in the short-term, on an employee and user health level, investment in higher efficiency and new appliances on the part of SMEs will improve the health and safety of the operations workers. Furthermore, energy efficient factory equipment is inherently more automated and thus requires less manual labor and maintenance, further reducing any workplace-related injury or death risks.

There are even greater gains to health and safety on a macro level. Health scientists have conservatively estimated that air pollution in Ulaanbaatar is the major contributor to 10% of mortality in the city (<http://www.ncbi.nlm.nih.gov/pubmed/23450113>), with the same report writing that “air pollution represents a major public health risk to the residents of Ulaanbaatar.” A significant portion of this pollution is generated by the energy inefficient activity of the roughly 60,000 SMEs around the city. Thus aside from improving the health and safety of the actual EE product users, the entire urban population of Ulaanbaatar stands to gain from the program in fundamental ways. In addition, the majority of this pollution originates from the coal burning in the ger districts that surround the city. The new energy efficient products domestic market segment will promote the availability and lower the price of domestically-produced heating products to the poverty-stricken ger district end-users.

Environmental

The majority of the environmental benefits for this project are concentrated in the areas of improved air quality. As has been mentioned throughout this report, air quality in Ulaanbaatar is literally death-inducing.

Mongolia has one of the highest carbon dioxide emissions per capita in the world, at 4.33 tons⁸. This is mostly due to excessive dependence on coal for electricity and heat generation, old and inefficient infrastructure (characterized by high transmission losses), old energy intensive equipment in industries, and traffic congestions.

Poor air quality has an effect beyond the human dimension. The most vulnerable sectors to climate change are “the agricultural, livestock, land use, water resources, energy, tourism and residential sectors”⁹. Melting of permafrost (covering 60% of Mongolia’s surface) will affect agricultural practices, water resources and infrastructure. The agricultural and livestock areas are expected to be severely impacted, which will in turn affect the country’s society and economy.

⁸ OECC. “Report of the Cooperation Program on Developing the JSM Seeds in Mongolia, Feasibility Studies on Joint Crediting Mechanism Projects towards Environmentally Sustainable Cities in Asia”, *The Overseas Environmental Corporation Center, Japan*, (2014): 1.

⁹ Ibid

For example, one major reason that so many farmers and herders have been flocking to Ulaanbaatar over the past 10 years has been directly related to the devastating effect of a *dzud*, which is a severe winter that occur every few years, which results in many livestock die, primarily due to starvation due to being unable to graze, and in other cases, directly from the cold. One-third of Mongolia's population's livelihoods are dependent largely on pastoral farming, and harsh dzuds can and have caused economic crises and food shortages. As more and more of these herders move to Ulaanbaatar, settling in the ger area, the city becomes more and more polluted due the raw, low-grade coal being burned for heating and cooking purposes during the 8 month heating season.

All SMEs rely on the central power grid to provide energy to their businesses. Ulaanbaatar's central power grid is coal-powered. Therefore any reduction in the energy use of SMEs directly enhances the capacity of the central grid, allowing more users to access the central grid's power supply. The same can be said of loans to energy efficient product producers. By reducing their power supply demand through more energy efficient operations, the central grid will be able to provide greater access to power across the city, and the rest of the country.

Depending on what kind of project proposals from SMEs the facility receives, there is the possibility that other areas of environmental sustainability will benefit. One area in particular that has the potential to benefit from the facility is the status of soil quality.

Gender-sensitive development impact

Unlike many other developing countries, Mongolia has a strong presence of women in the formal workforce and in particular in managerial positions. A 2013 World Bank report estimates that female participation in the Mongolian workforce is 57%. SMEs, which make up 98% of all Mongolian enterprises, are no exception to this gender-balanced development. However, despite relatively high employment rates in SMEs, the Enterprise Survey of 2013 found that only 38.9% of SMEs in Mongolia have a female participation in ownership and that 36.6% employ a female top manager.

EE and RE development in Mongolia is perfectly suited to promoting gender equality. Women are under-employed in leadership positions. Despite having higher rates of attending finance-related training sessions, lower rates of outstanding loans (male-led SMEs are 53% with female-led at 49%), and higher rates of seeking loans from financial institutions, women-led SMEs are more often rejected for loans from banks. They are thus a financially-underserved segment. XacBank is perfectly suited to capture the niche market of women-led SMEs. Whereas XacBank has 8% market share for male-led SMEs, the bank has 17% market share for women-led SMEs.

The program particularly focuses on the creation of an enabling environment for women-led SMEs, which in turn will create economic opportunity for female employees as women-led SMEs employ women at significantly higher rates than male led SMEs (54% versus 34%). It will do so through the setting of fund-wide gender goals. While these gender goals are further elaborated in the attached Gender Action Plan (annex 8), the primary tenets can be summarized as follows:

1. More than 50% of participatory MSMEs must be women-led from 3 years into the program until program completion
2. An SME qualifies as women-led if it fulfills one of the three below definitions:

- a. Greater than 50% women's ownership
- b. At least 30% of women in the Board of Director or in senior management positions
- c. At least 40% of employees are women

Based on the market findings of women and SMEs conducted by IFC, the XacBank MSME program aims to position itself at the intersection of climate finance and gender-sensitive development and, in doing so, align itself with the GCF's priorities as well as the market opportunity posed by women-led MSMEs.

(For more information on the role of women in Mongolian SMEs, please see the report by the International Finance Corporation, from which these statistics have been drawn.)¹⁰

Gender Sensitive Technologies

Gender – sensitive technologies are those that are designed to benefit both women and men; reduces drudgery; is safe and secure to use; is easy to operate; is economically viable; is socially acceptable and empowers especially women in decision – making processes; and does not place an undue burden on the time, efforts and costs of the end – user. Through this here proposed program, XacBank plans to support MSMEs whose products not only reduce GHG but are also gender-sensitive technologies. The integration of gender sensitive technology into this Funding Proposal is an acknowledgement that just as women-led MSMEs will be targeted for support through this MSME program (alongside non-women led MSMEs), so is it important to support MSMEs (regardless of leadership) that promote gender-sensitive technological products. The gender situation in Mongolia is unique and different from much of the rest of Asia. Women make up the majority of both the workforce and education populations in Mongolia. Therefore, it is important to keep in mind that the promotion of gender sensitive technologies will impact both genders. Currently, XacBank does not have the capacity to conduct these assessments. However, once readiness support becomes available through the GCF, XacBank plans to apply for funding to capacity build on these capabilities in order to develop an assessment system.

Benefits to the bottom of the pyramid

The MSME program will bring about significant benefits to the bottom of the pyramid. Mongolia is a developing country and more than a quarter of all Mongolians live under the national poverty line (UNDP). By reducing the cost of capital and investment, the MSME program is encouraging the expansion of Mongolian businesses. Though the owners of SMEs are certainly not the bottom of the pyramid, many of those they employ are, particularly in hard-labor and service sectors. Indeed it is often those at the bottom of the pyramid who are in charge of operating old and inefficient machinery which can pose health and safety risks, and thus these same employees stand to directly benefit from the social impacts of the program. Stimulating the development of SMEs promises to provide jobs at progressive businesses for poor Mongolians.

The MSME program also includes micro-sized clients. XacBank has its roots in aiding the economic development of micro-sized businesses. Micro-enterprises remain an active customer base of XacBank

¹⁰ <http://www.ifc.org/wps/wcm/connect/d85f65804697b853a598bd9916182e35/Women+SME-Mongolia-Final.pdf?MOD=AJPERES>

and are served via the retail banking department. Indeed, most Mongolian enterprises fall under the micro classification, with 90% of registered enterprises employing fewer than 9 individuals. The FP plans to track the clients served by the program using disaggregated data along a number of lines: gender, sector, and size, in order to ensure we are available to larger, more successful MSMEs as well as newer, or smaller MSMEs, that are often run by new businesspeople at a lower socio-economic status and yet face higher costs and smaller loan sizes.

The MSME program recognizes the connection between micro-sized clients and formalization. A study by the International Labor Organization in Mongolia found that 68% of micro-enterprises were not registered. The program intends to prioritize access to climate finance from informal SMEs, which, according to the IFC study, make up a large portion of all active Mongolian SMEs. Drawing on the findings of a 2015 study regarding formalization of Mongolian MSMEs conducted by the International Labor Organization, XacBank sees great potential in this sector.¹¹ Informal businesses often borrow capital from other informal networks at sky-high and unreliable rates. In addition, the FP plans to produce materials to provide information on how to formalize a business and distribute said materials across all branch locations, including ger-district branches. Many of XacBank's individual clients access the bank for consumer services, but not for business services due to the fact that their businesses are informal. There is high potential for cross-selling with these existing customers, by providing them with information on how to formalize their businesses and what they stand to gain in accessing this program through such actions.

E.4. Needs of the Recipient

Vulnerability and financing needs of the beneficiary country and population

E.4.1. Vulnerability of country and beneficiary groups (Adaptation only)

N/A this is a mitigation program

E.4.2. Financial, economic, social and institutional needs

Vulnerability of the country

Mongolia is at high risk from climate change. The key impacts of climate change in Mongolia as explicated in the INDC of Mongolia are:

- 70% of pastoral land degraded; biodiversity compromised
- Increased risk of winter *dzud* (heavy snow, cold fronts, storms); death of livestock; economically forced urban migration, exacerbating the challenges of urban settlements
- Declining water resources, with 12% of rivers, 21% of lakes, and 15% of springs having already been depleted, destroyed, or dried up.
- Intensification of dry climatic conditions; increased forest and steppe fire frequency; forest area has been reduced by 0.46% annually due to these conditions

¹¹http://www.ilo.org/public/english/dialogue/actemp/downloads/publications/formalizing_enterprises_mongolia.pdf

- Climate zone shifts; increased outbreaks of new emerging infectious diseases.

Ulaanbaatar, where the program will be based, is home to half of the Mongolian population. Based on a study in 2011 by World Health Organization, Ulaanbaatar ranked as the second most polluted city in the world. Much of this pollution comes from the purchase and use of energy-intensive inefficient products, in particular for transportation and heating, on both an individual and corporate level. The annual average for PM 2.5 in Ulaanbaatar is 12 times the World Health Organization guidelines, and highs in the winter months can reach 75 times that level. The resulting air pollution is a significant health risk for all residents.

Economic and social development level of the country and affected population

For this project, the affected population comprises Mongolia's SMEs. According to the National Statistics Office, there were 54,929 active SMEs in 2013. SMEs play a large role in the Mongolian economy. SMEs make up 98% of all enterprises in Mongolia. They contribute 25% to GDP and employ 52% of the workforce.¹² Of all enterprises, 63% are located in Ulaanbaatar. According to the NSO, 38% of active enterprises are engaged in wholesale and retail trade, repair of vehicles and household goods, 17% in real estate and construction business and 17% other businesses.¹³

Conditions for SME business operations have been improving in Mongolia. An IFC report writes "Mongolia ranked 56th among 189 countries in Doing Business 2016 report, an improvement of 20 ranks compared to the 2014 report. The report recognized two regulatory reforms that contributed to the improvement of the business environment from June 2014 to June 2015: (i) starting a business; and (ii) getting credit."¹⁴

However, the greatest challenge for SMEs remains the lack of affordable capital. Reports by the International Labor Organization, IFC, and ADB on the SME sector all highlight access to financing as the primary market obstacle for Mongolian SMEs.¹⁵ XacBank and other Mongolian banks offer business loans to SMEs at an average of 22.7% interest per annum.

Scope and needs across beneficiary groups

¹² <http://www.ifc.org/wps/wcm/connect/d85f65804697b853a598bd9916182e35/Women+SME-Mongolia-Final.pdf?MOD=AJPERES>

¹³ <http://www.ifc.org/wps/wcm/connect/d85f65804697b853a598bd9916182e35/Women+SME-Mongolia-Final.pdf?MOD=AJPERES>

¹⁴ [Ibid.](#)

¹⁵ For International Labor Organization report see:

http://www.ilo.org/public/english/dialogue/actemp/downloads/publications/formalizing_enterprises_mongolia.pdf

For IFC report see:

<https://www.ifc.org/wps/wcm/connect/d85f65804697b853a598bd9916182e35/Women+SME-Mongolia-Final.pdf?MOD=AJPERES>

ADB report is in progress and forthcoming.

In addition to articulating the project benefits across sectors, previous work by the ADB has divided the helpfully divided the project across stakeholders/beneficiary groups. Below are listed the scope of these groups, their needs, and the benefits they stand to gain from the MSME program:¹⁶

Stakeholder/beneficiary groups	Needs	Benefits
<p>Government of Mongolia: Ministry of Environment and Green Development (MOEGD) Ministry of Energy (MOE) Ministry of Finance (MOF)</p>	<ul style="list-style-type: none"> • Burden eased on national power grid • Budget spent on energy imports reduced • Pace of climate change slowed • Private sector co-operation with national energy and climate related priorities including the Energy Conservation Law and stated goals of economic diversification • Strengthened institutional capacity to functionally implement and regulate energy laws 	<ul style="list-style-type: none"> • Reduction in demand for electricity from residential, commercial and industrial consumers due to demand-side energy efficiency measures • Reduction in GHG and other harmful emissions; reduction in air pollution in Ulaanbaatar thereby improving air quality and quality of life in the city • Reduction in electricity shortages due to increased demand-side energy efficiency and decentralized clean energy generation • Reduction in dependency on imported and expensive energy sources such as petroleum products • Increase in private sector and SME participation in Mongolia’s energy sector • Increase in domestic production and use of renewable energy, a step towards reaching the government’s 2020 RE deployment targets • Increased financial access to under-served sections such as SMEs • Local job creation due to increased demand for clean energy and energy efficiency products and human resource development • Reduction in energy intensity of economy, which can grow with lower energy requirement than before

¹⁶ Extracted and modified from ADB report

		<ul style="list-style-type: none"> • Diversification of economy with increase in clean energy and energy efficiency manufacturing and installation activities
Borrowers - MSMEs	<ul style="list-style-type: none"> • Affordable financing • Strengthened energy auditing and self-regulatory practices 	<ul style="list-style-type: none"> • Access to affordable and long-term financing • Reduction in dependence on grid electricity due to decentralized renewable energy generation • Reduction in impact of upcoming electricity shortages due to energy efficiency improvements and decentralized power generation • Reduction in operating costs of businesses in off-grid or unreliable grid areas such as telecom towers due to reduction in diesel consumption for power generation • Improved economic productivity and opportunities, thereby enabling business activities and economic growth • Sustainable and scalable business opportunity to enhance competitiveness and business growth • Economies of scale will make clean energy and energy efficiency products more affordable in the local market • Marketing opportunity as a green and socially responsible business • Access to locally available trained human resources to support and sustain scale-up
Financial Intermediary - XacBank	<ul style="list-style-type: none"> • Diversified customers with particular emphasis on strengthening existing momentum in the women-led SMEs demographic • Access to a new line of credit at a low cost to 	<ul style="list-style-type: none"> • Access to low-cost and long-term source of capital for on lending to clean energy and energy efficiency infrastructure projects • New customers and asset classes to finance, thereby increasing its outreach which in turn will increase growth in portfolio and profitability

	<p>stimulate EE and RE investment during trying economic conditions</p>	<ul style="list-style-type: none"> • Marketing opportunity (financing a green and socially responsible business) • Support construction of sustainable energy infrastructure and reduction in GHG emissions and air pollution in Mongolia • Ability to further its mission of financing projects that can create financial, social and environmental impact in the country
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Absence of alternative sources of funding

Other sources of funding for these programs exist, though they are offered at far less favorable terms. In order to maximize the effectiveness of the program, XacBank plans to blend GCF funding with these alternative funding sources. However, GCF funding is itself necessary to bring down the interest rates in order to feasibly be financially attractive to MSMEs. In addition, GCF funding is needed as a separate entity from MonSEFF and GCPF funding for the program-related reasons stipulated in section D.1.

E.5. Country Ownership

Beneficiary country (ies) ownership of, and capacity to implement, a funded project or program

E.5.1. Existence of a national climate strategy and coherence with existing plans and policies, including NAMAs, NAPAs and NAPs

Alignment with the country’s national climate priorities

The program is in line with a number of explicitly stated policy initiatives on the part of both the Mongolian government and the Ulaanbaatar municipality. Mongolia has submitted an Intended National Determined Contribution (INDC) which outlines national priorities, goals and approaches to the mitigation of and adaption to climate change. Mongolia’s priorities vis-a-vis climate change can be considered in two categories: mitigation and adaptation. In order to achieve the Mongolian government’s stated goal of a 14% reduction in total national GHG emissions, the INDC outlined a number of policies across the energy, industrial, agricultural, and waste sectors. The program will help achieve the overarching goal of the INDC, which is a 14% reduction in total national GHG emissions by promoting the production of products that are energy efficient and/or renewable. In addition to this general alignment, the program falls under the following INDC goal: “increase the share of renewable electricity capacity to 30% of total electricity generation capacity, from 7.62% in 2014.” The program here proposed is in line with Mongolia’s INDC as it incentivizes businesses to increase their renewable energy capacity and/or to provide products that allow consumers to increase their renewable energy capacity and their energy efficiency.

In 2016, the Mongolian government approved the Green Development Policy, which aims to couple Mongolia’s continued economic development with environmental sustainability by incorporating

Partnership for Action on Green Economy (PAGE) initiatives. One of the goals of the plan is to leverage tax, credit, and incentive mechanisms to finance a green economy. This program creates a facility that economically incentivizes green purchases for profit-minded SMEs. As such, the program aligns with domestic INCD, NAMAs, and the Green Development Policy as well as the mission of the Green Climate Fund.

Finally, as explicated earlier, in November, 2015, the Mongolian parliament passed the Energy Conservation Law (ECL). The ECL stipulates that large energy consumers (referred to as 'designated consumers') audit their energy usage and make plans to reduce their energy intensity by 15% in the course of 5 years after they have been appointed. The ECL is to take effect beginning in 2017, and designated consumers have already begun to be appointed. Thus, the Mongolian has begun to mandate investment in EE and RE technology from businesses. In this way, XacBank's new MSME program will be the private sector partner to this national policy ordinance, by providing the new designated consumers the financial support they need to implement the required changes. Indeed, historically Mongolian energy regulations have been strong on paper but weak in implementation due to lack of supporting mechanisms and private-sector buy-in. The MSME program would contribute to lessening these roadblocks and thus successfully implementing this important legislation.

E.5.2. Capacity of accredited entities and executing entities to deliver

XacBank relevant experience

As the project sponsor, XacBank brings a wealth of past management experience on similar projects in similar areas. XacBank is the market leader in providing business loans for energy efficiency and renewable energy solutions with a SME portfolio of about US\$15 million.

Beginning in 2009, XacBank started distributing consumption loans (funded by FMO) under the "Energy Efficient Product Distribution Program", which was financed by the Millennium Challenge Account, the World Bank's "Clean Air Project", and the government of Mongolia's special "Clean Air Fund". These financiers combined to allow for a subsidy that let residents of the Ger Residential Area to purchase energy efficient stoves, ger blankets, vestibules and to energy efficient houses at a largely discounted price, which is crucial, as this segment of the population is economically challenged, and don't have access to basic amenities including running water, central heating, or a sewage system. This project allowed about 80% of the 185,000 households in the area to purchase one or more of the products through XacBank product centers, which helps to reduce the massive amounts of pollution produced from burning low quality coal in old, traditional inefficient stoves to endure the 8 month long heating season of Ulaanbaatar, during which the nighttime temperatures can drop as low as -40C during some of those months.

Then, starting in 2012, XacBank began disbursing energy efficient housing and mortgage loans. In 2013, XacBank implemented the Business Loan for GHG Emission Reduction program, and through this program, the Bank began disbursing loans to SMEs for energy efficient and renewable energy product

producers, traders, installation service providers, and end users based on the requirement that they are able to produce a 20% increase in energy efficiency or reduction in emissions.

Finally, in 2015, the bank introduced two new products. The first being an expansion to the GHG reduction program, a facility called MonSEFF – Mongolian Sustainable Energy Financing Facility, in cooperation with EBRD, to further support energy efficiency and renewable energy projects for end users, which requires a 15% increase in energy efficiency cases, and all renewable energy projects are qualified. One major benefit of MonSEFF is the complementary technical advisory provided to the client and the bank through an international team of energy experts and engineers that help evaluate the projects. For more information on MonSEFF, please visit the www.monseff.com. The second product was Green Car Loans, which allows Mongolians to gain access to better than market loan rates to purchase hybrid cars.

As a result of these projects, XacBank is a trusted name in the SME business community with already-established direct lines of communication and a proven capability to work with the private sector to reduce CO2 emissions in Mongolia. These prior SME loan programs have laid the ground work for this larger-scale project and given XacBank valuable project management and monitoring capabilities.

E.5.3. Engagement with NDAs, civil society organizations and other relevant stakeholders

XacBank has well-established processes for engagement with relevant stakeholders as well as civil authorities so as to ensure both country and private sector ownership. These processes are detailed below.

Stakeholder engagement process with funding partners

Since 2012, XacBank has worked closely with multiple stakeholders for the existing Business Loan Program for GHG Emission Reduction, the two main being the EBRD, GCPF, with the soon to be added DWM Securitizations, becoming the third main stakeholder. It will be the organization's first time entering the Mongolian banking market. As GCF funding is disbursed to XacBank to expand the existing program, the GCF will become the fourth main stakeholder.

Furthermore, XacBank has also worked with IFC, Deutsche Bank, ADB, and others on the energy efficiency market for businesses in Mongolia. XacBank's activities in the sector serve as an ongoing engagement between parties interested in improving the energy efficiency in Mongolian business. For contractual engagements with relevant funding partners for this program, see annex 2.

Stakeholder engagement process with the NDA

In addition to SME engagement, XacBank has an established relationship with the NDA. The AE has worked closely with the NDA as well as other civil authorities, such as the Ulaanbaatar Municipality, on the

implementation of previous projects. Government entities have been consulted on both a formal level, as in the case of the No Objection Letters, and on an informal level, as valuable consultative assets.

These stakeholder engagement processes have already been activated for this program. The NDA has been consulted on the development of the concept note related to this funding proposal, contributing valuable country-specific knowledge, and has indicated their support for the project through the signing of a No Objection Letter. Lines of communication between the FP and the NDA will continue to be utilized in later stages of program development, such as during the composition of the funding proposal.

Stakeholder engagement process with civil society organizations

The FP is currently in the process of engaging with civil society organizations to increase awareness of the program and receive private sector input on program design.

In addition, the FP plans to collaborate with local NGOs with regard to gender-equal development issues. For more information on this, please see the attached Gender Action Plan (annex 8).

In addition, XacBank plans to engage local NGOs and public-sector organizations. Example of which is the Building Energy Efficiency Center, which is affiliated with the Mongolian University of Science and Technology. We will work together with these organizations to help XacBank define baselines and make comprehensive measurements. In the future, this kind of stakeholder engagement with NGOs will be increased.

Gender-sensitive stakeholder engagement

As the program is highly targeted toward women-led SMEs, it is increasingly important that women from both a client and a partner side are consulted in decision-making and program design. The Eco Banking Department is 50% women, including the bank senior leadership. As a result, program design has taken into consideration the particular needs of working women. In addition, from the client side, in 2014, XacBank ran a focus group with women-led SMEs to understand their specific financing needs. The results of this study were used in the design of the program. Finally, XacBank has utilized the GCF's gender resources and expertise through consultative meeting and the development of a strong Gender Action Plan.

Crucial to gender-sensitive stakeholder engagement is the engagement of local NGOs who work on issues of women's economic empowerment. More engagement activities are planned with government gender-equity concerned entities, as well as other NGOs. The FP is currently in the process of conducting a landscape study to identify other relevant NGOs with whom the program can partner. Some of these gender-based NGOs have agreed to support the program through in-kind donations.

E.6. Efficiency and Effectiveness

Economic and, if appropriate, financial soundness of the project/program

E.6.1. Cost-effectiveness and efficiency

The AE is confident that the program would be both economically and financially sound due to its past experience in the field, having been disbursing loans to the market since 2012. Since the Bank has been carrying out similar activities over the past almost 5 years, there would be no crowding out of private or other public investment, as the investment needs for EE/RE are estimated at close to US\$100 million per year, which is much more than this facility can offer.

As highlighted throughout this document, the main challenges to fully leveraging the market demand are the current cost of financing sustainable financing projects. This program aims to ameliorate these issues, and as such, would present an attractive option for interested MSMEs and corporate entities.

Through XacBank’s own calculations, the emission reduction potentials of the Program shows that 1 ton of CO2 equivalent emission reductions can be achieved with US\$50.24 of mitigation investments in this program. The GCF will be able to achieve unit emission reductions with US\$16.74 of its own funds on mitigation activities.

E.6.2. Co-financing, leveraging and mobilized long-term investments (mitigation only)

Domestic co-financing is not widespread, however, certain large or mega-projects have been co-financed by international financial institutions (IFI’s).

For this program, XacBank’s co-financing ratio (through blending with its currently existing EE/RE facilities) is as such:

- GCF portion of total program: 33.3%
- XacBank co-financing portion of total program: 66.7%

On the project level, XacBank will be using the funds to finance projects with loans only, no equity investments will be made for any projects under the program.

E.6.3. Financial viability

Each sub-project under the program will be required to meet certain profitability criteria (e.g. IRR > 10%). These assessments will be made for each individual sub-project during the technical eligibility assessment to ensure the economic feasibility of the projects and asset quality. Incorporating EE/RE elements into MSMEs would increase the creditworthiness status of these entities, as these EE/RE processes often lead to reduced operational costs through increased energy savings and more production reliability. The GCF’s exit strategy is simple, as XacBank will be paying the GCF back directly, based upon the terms that the GCF is able to offer.

E.6.4. Application of best practices

The program’s activities have been developed with consideration of best practices and lessons learned from past and ongoing initiatives.

E.6.5. Key efficiency and effectiveness indicators

Estimated cost per t CO₂ eq, defined as total investment cost / expected lifetime emission reductions (mitigation only)

<i>GCF core indicators</i>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px 5px;">(a) Total program financing</td> <td style="text-align: right; padding: 2px 5px;">US\$60,000,000.00</td> </tr> <tr> <td style="padding: 2px 5px;">(b) Requested GCF amount</td> <td style="text-align: right; padding: 2px 5px;">US\$20,000,000.00</td> </tr> <tr> <td style="padding: 2px 5px;">(c) Expected lifetime emission reductions overtime</td> <td style="text-align: right; padding: 2px 5px;">1,194,323.98 tCO₂eq</td> </tr> <tr> <td style="padding: 2px 5px;">(d) Estimated cost per tCO₂eq (d = a / c)</td> <td style="text-align: right; padding: 2px 5px;">US\$50.24 / tCO₂eq</td> </tr> <tr> <td style="padding: 2px 5px;">(e) Estimated GCF cost per tCO₂eq removed (e = b / c)</td> <td style="text-align: right; padding: 2px 5px;">US\$16.74 / tCO₂eq</td> </tr> </table>	(a) Total program financing	US\$60,000,000.00	(b) Requested GCF amount	US\$20,000,000.00	(c) Expected lifetime emission reductions overtime	1,194,323.98 tCO ₂ eq	(d) Estimated cost per tCO₂eq (d = a / c)	US\$50.24 / tCO₂eq	(e) Estimated GCF cost per tCO₂eq removed (e = b / c)	US\$16.74 / tCO₂eq
	(a) Total program financing	US\$60,000,000.00									
	(b) Requested GCF amount	US\$20,000,000.00									
	(c) Expected lifetime emission reductions overtime	1,194,323.98 tCO ₂ eq									
(d) Estimated cost per tCO₂eq (d = a / c)	US\$50.24 / tCO₂eq										
(e) Estimated GCF cost per tCO₂eq removed (e = b / c)	US\$16.74 / tCO₂eq										
<p>The above expected lifetime emission reductions savings were calculated based on the amount of tCO₂eq reduced through the leveraging of existing dedicated funds since 2013, then projected over the life time of the program, based on the amount of total financing of sub-projects.</p>											
<p>Expected volume of finance to be leveraged by the proposed project/program and as a result of the Fund's financing, disaggregated by public and private sources (mitigation only)</p>											
<p>The total program financing is US\$60,000,000, of which GCF financing is US\$20,000,000. Of the remaining US\$40,000,000 from co-financing funds, 62.5% is private and 37.5% is public. As such, the total private financing amount is US\$20,000,000. For every GCF dollar invested, the expected net benefit is US\$3.</p>											
<p>Other relevant indicators (e.g. estimated cost per co-benefit generated as a result of the project/program)</p>											

** The information can be drawn from the project/program appraisal document.*

F.1. Economic and Financial Analysis

GCF Concessionality

Section B.3 outlines the existing interest rates and loan tenors typical to the Mongolian commercial banking market.

Blending concessional funding from the GCF with XacBank's existing EE/RE financing facilities, which offer below market rates, will bring impactful benefits to the loan recipients: incentives to establish and/or expand on new business models for integrating EE/RE solutions; capacity building of Mongolian MSMEs as mentioned in other sections of this document, and the promotion of gender equality through the support of women-led MSMEs.

Concessionality will consist of reduced pricing compared to Mongolian pricing and the international market finance available thus far to XacBank. The provision of reduced pricing is the most crucial element in attracting clients to utilize EE/RE solutions. Gaining access to reduced pricing loans will incentivize the Bank's clients to accept the enhanced reporting and monitoring requirements, as well as the expenditure in setting up new lines of businesses to incorporate EE/RE measures.

Without access to the maximal concessional financing provided by the GCF, operating on an as-is basis under the current market conditions, EE/RE financing has not been able to achieve anywhere near its potential on the Mongolian market. Since the inception of the GHG Emissions Reduction Program, XacBank has been able to leverage approximately US\$ 15 million over more than 3 years to reduce CO₂ emissions by about 76,769.25 tons. These loans have been mostly been disbursed to MSMEs on small scale projects, however, many opportunities to finance larger scale projects have been lost due to the high interest rates currently available for EE/RE financing.

As can be seen in the financial model, the current rates are at 18.0% and 19.2%, with tenors up to only 5 years for such projects. Even with the Bank not making any profits with the EE/RE loans (only covering costs), we are not able offer further concessional rates. With concessional funding from the GCF, XacBank will have the opportunity to reduce this interest rate down to as little as 14-15%, with loan tenors of up to 8 years. In this case, the EE/RE financing product would have a much wider appeal, thus, allowing the Bank to better leverage the funds to make a much larger scale impact in Mongolia, home to the most polluted capital city in the world, Ulaanbaatar.

For specific details regarding interest rate concessionality, please refer to the attached financial model.

F.2. Technical Evaluation

Projects using the GCF will meet technical performance requirements as specified in the below statement:

- Energy savings ratio of projects must be at least 20% compared to baselines or CO₂ emission reduction ratio of project must be at least 20 % compared to baselines. End-users that are upgrading their equipment and vehicles must achieve at least 15 % of energy savings ratio compared to baseline scenario.
- Internal Rate of Return (IRR) of projects must be greater than 10%
- Global/regional/national consultants will provide a list of equipment and measures that meet the MSME GHG reduction loan program criteria and that are appropriate for the local

market context. For complex industrial or building projects, experts procured by XacBank will conduct technical evaluations for the individual project and prepare technical evaluation reports.

F.3. Environmental, Social Assessment, including Gender Considerations

1. Social and Environmental Management System (SEMS)

XacBank will establish a comprehensive SEMS for the program, based on its established Social and Environmental Management System. This will ensure that sub-projects financed through the program will comply fully with all requirements needed to ensure mitigation of environmental and social risks related to the implementation of these projects. XacBank will also define roles and responsibility for designated staff members for the oversight and on-going implementation of our SEMS. As this has been the Bank's practice since the SEMS was internally adopted in 2002, with revisions made in 2008, 2011, and 2014, all of which had to be approved by XacBank's Board of Directors.

XacBank provides annual reports on environmental and social practice to the Mongolian Bankers Association (as part of the Sustainable Finance Initiative) and other international partners, in conformity with the respective credit agreements and the Shareholders' Agreement. Reporting to the GCF will be based on the results of this monitoring.

Environmental and Social Responsibility Risk Evaluation

Risk evaluations are carried out for all Bank loans that are more than MNT 50,000,000 (approximately US\$25,000) and have tenors more than 12 months, based on a comprehensive scorecard, including sections on environmental issues, social and labor issues, and compliance issues. Each risk category is rated from 6 to 1, with 6 being the least risk and 1 being the highest. The Bank is determined to demonstrate the utility of its SEMS to its stakeholders, including clients, and closely monitors the environmental performance of these borrowers and actively manages any instances of non-compliance to rectify such situations.

Each sub-project under the MSME program will be considered on a case-by-case basis. When evaluating the environmental and social risks associated with a sub-project, the Bank will consider a wide variety of factors, including the following:

1. Nature of the sub-borrower's business (e.g. micro, small, or medium-sized business sector).
2. Does the sub-borrower have any particular current exposures that represent high environmental and social risks?
3. Does the sub-borrower have appropriate waste management solutions?
4. Does the sub-borrower have any water pollution management?
5. Does the sub-borrower's activities cause any damage or contamination to the local soil or cause excessive dust?
6. Does the sub-borrower's activities cause any undue air pollution?

Also taken into consideration are the sub-borrower's employee work place safety, health and hygiene practices and whether or not they cause any adverse effect to the local areas and community.

Furthermore, all sub-projects financed by the Bank must comply with the Bank's SEMS List of Excluded Activities and Mongolia's national environmental, health, safety and labor regulations and standards.

Monitoring

All sub-borrowers will be required by the Bank to submit environmental and social reports on an annual basis according to the format provided by the Bank. The format will integrate the Environmental and Social Responsibility Risk Evaluation, which is a comprehensive assessment comprising environmental, social, labor, and compliance issues. The Bank reserves the right to conduct site visits to financed sub-projects to monitor the implementation of the Bank's requirements as necessary. For further details about monitoring, including how monitoring is conducted and what elements are to be monitored for in the MSME program, please refer to the attached Social and Environmental Monitoring System document.

2. Gender Considerations

The MSME program will aim to promote gender equality in the implementation of the program. For this, gender analysis will be conducted before the program is implemented to undertake a baseline assessment with sex-disaggregated data. The program aims to define women-led MSMES as satisfying either of the following conditions:

- d) Firms with 51% or more ownership by women;
- e) Firms with at least 30% women on the Board of Directors or in senior management positions; or
- f) At least 40% women employment.

XacBank has prepared an overall Gender Action Plan, which includes specific activities, expected outputs, outcomes and impacts as well as monitoring indicators. Resources will be allocated to integrate these into the implementation of the program. Further details regarding gender considerations can be found in the Gender Action Plan attached in the annex 8 of this document.

F.4. Financial Management and Procurement

XacBank has implemented a robust Financial Data Management System with world-class certified data-secure IT infrastructure. The Bank uses a fully updated version of the FlexCube software developed by Oracle as the Financial Information System. All reports produced by FlexCube are then run through an internally developed system called XacBanker, which translates reports and distributes them to the correct departments at the correct intervals. These systems will be used to facilitate the financial management and reporting of the MSME program. All reporting is done in accordance with International Financial Reporting Standards. The bank is fully audited by internationally recognized auditing firms such as Deloitte and Ernst & Young, in accordance with International Standards on Auditing.

Financial management of the program will be guided by XacBank's accounting policies and procedures, as well as by procedures related to the financial and operational aspects of project management administration. Details regarding the Bank's financial and operational aspects can be found within the Funding Management Strategy (available in English), as attached in annex 11 of this proposal. Further information is included in the Bank's Funding Accounting Policy, and Chart of Accounts, both of which are only available in Mongolian language.

GCF funds will be registered following XacBank's "chart of accounts" under the relevant "GL" (General Ledger) account, which will be opened specifically for GCF –related activities; separate from the Bank's other sources of funding.

XacBank will be the Executing entity of this program. Therefore, the disbursement will be conducted in accordance with the Credit Risk Management Policy (CRMP); the General Procedure on Loan Operations, the Loan Operations Guideline, the Procedure on Business Loans, and the Guidelines on Appraisal/Assessment and Monitoring of Business Loans, and all other relevant credit activity guidelines and procedures. These procedures also defined the monitoring methods on loan disbursement and credit monitoring.

XacBank has the capacity to implement variable frequencies of reporting to ensure with the utmost transparency that the funds are being used effectively and appropriately.

Financial reporting on the GCF will be provided on a semi-annual basis, as is standard, covering the period of January to December (inclusive). If more frequent financial reporting is required, this will be subject to negotiations at the time of the signing of the relevant funding agreement.

XacBank has an Internal Audit Division. Its mission is to add value through an independent appraisal of all of XacBank's operations and activities and governance. The result of such appraisal is improved operational efficiency, risk analysis and management, and internal control systems so as to aid XacBank in achieving its corporate objectives. As is stated in XacBank's Audit Division Charter, the division operates under the principles of "integrity, objectivity and confidentiality." Currently, the Emission Reduction program has not undergone audits by the Internal Audit Division, as it has not been required by our existing funders.

Beyond the Internal Audit functions, the regular and on-demand monitoring function also serves as an Internal Control check at both the branch and headquarters level.

XacBank will use its own procurement policies for operations that receive financing from this program. However, the initial funding from GCF is a facility for lending purposes. Therefore, borrowers' procurement of the borrowed fund will be regulated by appropriate loan policies and guidelines. XacBank's policies on such matters require that funds from XacBank loans be used only for procurement of activities specifically contracted with borrowers. According to XacBank's loan procedure, business loans of US\$150,000 or more, an annual process monitoring is performed. During the credit committee approval process, this once a yearly monitoring can be made to be performed monthly, quarterly, or semi-annually, based on a case-by-case basis. The loan's intended purpose usage will be monitored by the credit risk analyst (who is responsible for making the independent analysis as described in this proposal). Furthermore, the borrower must receive explicit consent from this risk analyst to perform any transactions with the loan funds. After the loan has been disbursed, if the loan purpose needs to be changed, then the loan must be re-submitted to the Bank's credit committee to be approved. The measures to be taken in these instances are clearly outlined in the Bank's General Procedure on Credit Activities, and the Procedure and Guideline on Business Loans.

G.1. Risk Assessment Summary

The program's success could be impinged by the following key risks: cannibalization by SEFF program (recently approved by GCF), lack of interest or uptake from Mongolian MSMEs in EE and RE solutions, currency risks, MSME loan defaults, and loans not being used for the agreed upon purpose. These risks are considered to be largely moderate, and the probability of both their occurrence and the severity of their impact on the program is to be limited by mitigation measures, as described below.

XacBank has over seven years of experience operating RE and EE financing projects with international partners in the domestic market. As such, stringent control systems and fully developed risk assessment and mitigation tools specifically geared to the challenges of the RE and EE market remain in place and utilized by XacBank.

Other than the below specified risks, see annex 5 for a social and environmental risk assessment conducted for a project for the MonSEFF program, which is relevant in nature to the currently proposed program.

G.2. Risk Factors and Mitigation Measures

Please describe financial, technical and operational, social and environmental and other risks that might prevent the project/program objectives from being achieved. Also describe the proposed risk mitigation measures.

Selected Risk Factor 1

Description	Risk category	Level of impact	Probability of risk occurring
Lack of interest in loan program from MSMEs/limited uptake of EE and RE products	Technical and operational	Medium (5.1-20% of project value)	Low

Mitigation Measure(s)

Demand for loans in previous programs has been strongly correlated with the favorability of the interest rate. There is no doubt that MSMEs want to make EE and RE investments, but merely need financial assistance lowering the capital burdens. In addition, with the new Energy Conservation Law, in many ways demand for EE and RE solutions will no longer be a choice for those designated consumers. which are to begin with large energy users (note: not necessarily large enterprises, as designated consumers could be MSMEs in energy intensive industries) and trickle down to all the private sector. The current recession in Mongolia will further encourage MSMEs to seek cost-cutting measures, such as EE and RE solutions.

Risk of low demand will be mitigated by these environmental aspects in addition to XacBank's publicizing of the favorable interest rates available. In addition, the FP plans to initiate increased marketing research from XacBank's internal team. In addition to educating businesses on the importance of energy efficiency

and renewable energy, the FP expects that demand will be high if the favorable interest rates, and long-term cost-reductions of EE and RE investments, are clearly communicated.

Selected Risk Factor 2

Description	Risk category	Level of impact	Probability of risk occurring
Currency risk/FX fluctuations	Financial	Medium (5.1-20% of project value)	Medium

Mitigation Measure(s)

Exchange rates from USD to MNT frequently fluctuate, and have been particularly strained starting in the second half of 2016. XacBank hedges against this currency risk by performing currency swaps with the central bank, the Bank of Mongolia (BoM), in short or long-term swaps. XacBank has limited its USD lending activities, and over the past 2 years, have been lending in MNT almost exclusively. As such, XacBank would take the funds received from the GCF and perform a swap with the BoM to convert the USD into MNT. For the MSMEs, the currency fluctuation risk poses in higher loan default rates is low, as the loans would be made in MNT.

It is important to note that the currency risk is not passed on to the borrower but rather is taken on by the bank.

Selected Risk Factor 3

Description	Risk category	Level of impact	Probability of risk occurring
MSMEs default on loans	Financial	Low (<5% of project value)	Medium

Mitigation Measure(s)

XacBank's NPL rate is at 8%, so this is certainly a risk. The Mongolian banking sector's overall NPL ration is 8.99%, which is mostly due to bad loans in the construction and mining sectors, of which XacBank does not give loans to the mining sector. Additionally, there are no comparable EE/RE/GHG programs in Mongolia at the moment. Regardless, the bank is prepared to take on this risk. XacBank has a strong and conservative risk policy, which includes the Bank's status as having the deepest reserve of loan loss provisions compared to the other three major commercial banks in Mongolia. This means that when non-performing loans occur, the operation has the capacity to handle it. In addition, loans are only issued in the currency that the business receives income in, which lessens the default risk due to currency fluctuations. In addition to these institutional mitigation tactics, the risk of NPLs will be incorporated into the pricing structure of the MSME loan program.

Selected Risk Factor 4

Description	Risk category	Level of impact	Probability of risk occurring
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Funds not being used for intended EE and RE purposes	Technical and operational	Medium (5.1-20% of project value)	Low
Mitigation Measure(s)			
<p>XacBank has a long history of implementing projects similar to this one (see section E.5.2). Through these projects, the Bank has developed strong monitoring capacity, including a department entirely dedicated to the monitoring of XacBank’s eco products. The same thoroughness will be applied to this program, using existing internal processes and mechanisms, as outlined in section H.2. In addition, the steps taken to verify the use of the funds and to monitor the use through interviews and on-site visits are outlined in section C.7</p>			
Selected Risk Factor 5			
Description	Risk category	Level of impact	Probability of risk occurring
Technology-related risk, e.g. failure of installed RE and EE components, installed technologies not suited for required task, inexperienced staff unable to operate the equipment to achieve efficiency gains	Technical and operational	Low (<5% of project value)	Low
Mitigation Measure(s)			
<p>The technological elements of proposed products will either be verified through supplier documentation of testing, or tested in collaboration with XacBank’s local partner Building Energy Efficiency Center (BEEC), which XacBank has worked with on many projects. In addition to verifying the actual functionality of the products, XacBank will provide technical advisory to ensure the selected product is appropriate for the task required of it. Finally, the primary focus of awareness raising activity with regard to EE and RE will center around reducing perception of risk with these products (closing technological knowledge risk). Many MSMEs know that these products exist, but they perceive them as a risky investment. Making them aware of the extensive testing and risk reducing measures that are integrated into the program will cull more interest in participation.</p>			
Other Potential Risks in the Horizon			

** Please expand this sub-section when needed to address all potential material and relevant risks.*

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H.1. Logic Framework.

H.1.1. Paradigm Shift Objectives and Impacts at the Fund level¹⁷

Paradigm shift objectives

<i>Shift to low-emission sustainable development pathways</i>	The MSME program will mainstream energy efficiency and renewable energy investments in the Mongolian private sector. It will do so by developing market conditions conducive to RE and EE investment, allowing it to compete alongside the traditionally cheaper, conventional, high-emission alternatives. The program will access all sectors of the RE and EE supply chain, from producers to traders to installers to end-users, in order to significantly shift the needle on the green sector in Mongolia and allow the significant benefits of such investment to trickle down to the consumer level as well. In making capital available, capacity building and robust knowledge sharing between these sectors, the program will lessen the perceived and the actual barriers to investment in EE and RE.
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Expected Result	Indicator	Means of Verification (MoV)	Baseline	Target		Assumptions
				Mid-term (2021)	Final (2025)	

Fund-level impacts

<i>M1.0 Reduced emissions through increased low-emission energy access and power generation</i>	Tonnes of carbon dioxide equivalent (t CO ₂ eq) reduced or avoided	XacBank program monitoring reports	0	262,564.49 tCO ₂	525,128.98 tCO ₂	Majority of the emission reduction is likely to be achieved from energy efficiency projects
<i>M3.0 Reduced emissions from buildings, cities, industries and appliances</i>	Tonnes of carbon dioxide equivalent (t CO ₂ eq) reduced or avoided	XacBank program monitoring reports	0	334,597 tCO ₂	669,195 tCO ₂	Emission reduction will be achieved mostly from building sector as it is the majority

¹⁷ Information on the Fund's expected results and indicators can be found in its Performance Measurement Frameworks available at the following link (Please note that some indicators are under refinement):
http://www.gcfund.org/fileadmin/00_customer/documents/Operations/5.3_Initial_PMF.pdf

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						of the emissions. ¹⁸
Sum				597,161.49 tCO ₂ eq	1,194,323.98 million tCO ₂ eq	

H.1.2. Outcomes, Outputs, Activities and Inputs at Project/Program level						
Expected Result	Indicator	Means of Verification (MoV)	Baseline	Target		Assumptions
				Mid-term (end of 2021)	Final (end of 2025)	
Project/program outcomes	Outcomes that contribute to Fund-level impacts					
M6.0 Increased number of small, medium and large low-emission power suppliers	6.3 MWs of low emission energy capacity installed, generated or rehabilitated	XacBank program monitoring reports	0		60 MW	As this calculation is based on the minimum capacity factor of 20% for a technology to be adopted, this indicator is most conservative, and can increase for technologies with higher capacity factor.
M7.0 Lower energy intensity of buildings, cities, industries and appliances	7.1 Energy intensity/improved efficiency of buildings, cities, industries and appliances	XacBank program monitoring reports	0	51,564 MWh/year	103,309 MWh/year	Same as assumption in M3.0

¹⁸ Emission reduction for cities, industries and appliances are not specified in our calculation, but included as the bulk of “other”.

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Project/program outputs	Outputs that contribute to outcomes					
1. Commercially viable EE and RE projects are identified, financed and implemented	Volume of financing	XacBank program monitoring reports	0	USD 30 million	USD 60 million	n/a
2. Sustainable energy project identification awareness capacity increased across local institutions	Number of loan officers are trained to offer Eco Products Number of SMEs who reach out to XacBank about participating	XacBank program monitoring reports	0	240 loan officers (60 per year for first 4 years)	400 loan officers	n/a
3. Increased awareness of benefits of EE and RE projects	Number of contacts made through various marketing events	XacBank program monitoring reports	0	900 MSMEs (25% of active MSMEs)	1,700 MSMs (50% of active MSMs)	Based on existing data of active MSMEs that XacBank worked with
	Number of unique page views on Eco Banking program website		479 (from Jan-Oct 2016)	2400	4800	Based on most up to date analytics data on existing EE program website
	Number of loan inquiries (regardless of ultimate acceptance)		3 loan inquires per week (144 per year)	576 loan inquires	1,152 loan inquiries	Based on current experience with existing EE loan program
	Number of case studies published		0	16 case studies published (4/year)	32 case studies	

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				with emphasis on showcasing women-led MSMEs)	published (4/year)	
Activities	Description	Inputs	Description			
1. Financing of projects which increase the generation of renewable energy, the efficient use of resources of MSMEs		Financial resources and technical expertise deployed to develop, assess, finance and report on projects				
1.1. Financing of MSMEs	Checking and financing of MSME-sized, standardized investments following credit analysis and eligibility assessment based on pre-established list of BATs with the aid of technical advisory	Internal financial, technical, environmental and IT experts; External experts to be contracted when necessary	<ul style="list-style-type: none"> • Financial, technical and environmental experts required for customized investment plan formulation and assessment, including for on-site visits to clients' facilities; • Financial, technical and IT experts required for the compilation of pre-assessed standardized BAT measures, to be used by XacBank to verify eligibility of smaller-scale investments; • Financial resources, on commercial and/or concessional terms, deployed to support the implementation of the eligible projects; 			
1.2. Reporting	Estimating and reporting the level of enhancement of resource use efficiency and/or climate resilience at the Program levels	Internal expertise to aggregate database, webpage; Use verification methods	<ul style="list-style-type: none"> • Dedicated expertise required for the aggregation and maintenance of results tracking databases and webpages with the estimated impact of the financed projects and measures; • Verification methods required to verify the physical implementation of projects (on a sample basis) 			

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			for the smaller scale projects).
1.3. Financing women-led MSMEs	Finance 50% women-led MSMEs fund-wide	Same as 1.1.	Same as 1.1.
2. Capacity building of financial institutions in originating, assessing, financing and tracking sustainable energy and climate resilience projects		Expertise and skills transfer for capacity enhancement	
2.1. Internal Training	Training of Business Banking department staff and retail staff to market the benefits of EE and RE projects, and training of client relationship managers to recognize clients with investment potential;	Conduct internal training every first quarter of the year.	Training experts, complemented by financial and technical experts, required to develop training materials and deliver targeted training sessions for a range of XacBank staff: sales, client relationship managers, credit experts, lender's engineers (the latter applies to 2.2 as well).
2.2. Customer Training	Development of MSME training programs to teach basic ability to identify potential projects from MSME leaders	Conduct minimum 1 training per year	Training offered to Mongolian MSMEs about how to identify potentially fruitful projects in their own business venture, opening up the pipeline of eligible projects and increasing capacity of local businesses to access climate finance.
3. Awareness raising among MSMEs and individual clients		Experience and skills transfer for marketing and awareness raising	
3.1. Development of Marketing Strategy	Development of marketing strategies for XacBank catered to the offerings of this specific program. Create specific marketing tools (such as brochures etc) to market XacBank's capacity to finance RE and EE projects	Use internal experts on marketing and design works	Marketing and design experts from XacBank's marketing team to complement implementing financial experts, so as to develop marketing tools, and program website;
3.2. Marketing events	Engagement of XacBank's existing and prospective clients on MSME and individual levels via targeted marketing events;	Organize minimum 1 marketing event per year using internal and external resources, including the engagement of clients	Same as 3.1, plus marketing experts and event organizing resources for client events, including access to civil organizations, and women in business organizations
3.3. Website update	Development of a program-specific content on XacBank's website to	Make website update as necessary	Same as 3.1

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GREEN CLIMATE FUND FUNDING PROPOSAL | PAGE 56 OF 57

	market the facility and to report on the progress of the program.		
3.4. Awareness raising	Ensure additional effort is put forth for awareness raising within women's spaces and businesswomen communities	Same as 3.2.	Same as 3.2.

H.2. Arrangements for Monitoring, Reporting and Evaluation

Monitoring

For information on monitoring, including what will be monitored and how monitoring will be conducted please see the attached Social and Environmental Monitoring System document as well as the tables in section C.3 titled "MSME Eligibility." To explicitly clarify, XacBank is the entity responsible for monitoring, and bears the cost of monitoring and verifying emissions savings, as well as keeping evidence/invoices. XacBank calculates final savings by sub-project and in total, and the project owner will be the owner of reduced GHGs.

Monitoring, reporting, and evaluation arrangements will comply with the relevant GCF policies as appointed in the MAF, AMA, etc. XacBank will report to the GCF on a periodic basis as agreed with the GCF, on the status of GCF funded activities throughout the relevant reporting period. These reports will include the disbursements made during the relevant period, the implementation status of the sub-projects and the monitoring of results and impacts of sub-projects.

Milestones/Reports	Expected Dates
Start of Implementation	<i>upon effectiveness of the FAA</i>
Interim Evaluation report	<i>Three years after the effectiveness of the FAA</i>
Completion report	<i>1 month after the end of the Tenor or Extended Tenor, as applicable</i>
Final Evaluation report	<i>2 months after the end of the Tenor or Extended Tenor, as applicable</i>

Reporting

Internally, reports will be conducted on a quarterly basis. These reports will be conducted based upon internal processes as outlined in section C.7 (implementation arrangements). For external reports to GCF, the timing and cadence of such external reports will be negotiated and decided upon at the signing of the funding agreements.

Evaluation

For the evaluation mechanisms for RE and EE loans, see the tables in section C.3 titled "MSME Eligibility"

RESULTS MONITORING AND REPORTING

GREEN CLIMATE FUND FUNDING PROPOSAL | PAGE 57 OF 57

I. Supporting Documents for Funding Proposal

- NDA No-objection Letter server
- Feasibility Study
- Integrated Financial Model that provides sensitivity analysis of critical elements (xls format, if applicable)
- Confirmation letter or letter of commitment for co-financing commitment (If applicable)
- Project/Program Confirmation/Term Sheet (including cost/budget breakdown, disbursement schedule, etc.) – see *the Accreditation Master Agreement, Annex I*
- Environmental and Social Impact Assessment (ESIA) or Environmental and Social Management Plan
- Appraisal Report or Due Diligence Report with recommendations (If applicable)
- Evaluation Report of the baseline project (If applicable)
- Map indicating the location of the project/program
- Timetable of project/program implementation

* Please note that a funding proposal will be considered complete only upon receipt of all the applicable supporting documents.



**MINISTRY OF ENVIRONMENT
AND TOURISM OF
MONGOLIA**

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E-mail: contact@mne.gov.mn, <http://www.mne.mn>

Date 15 Aug 2016
Ref. 13/123

To: The Green Climate Fund ("GCF")

Re: Funding proposal for the GCF by XacBank regarding the Facility and Guarantee Fund for SMEs

Dear Madam, Sir,

We refer to the programme titled Facility and Guarantee Fund for SMEs in Mongolia as included in the funding proposal submitted by XacBank to us on August 8, 2016.

The undersigned is the duly authorized representative of the Ministry of Environment and Tourism, the National Designated Authority/focal point of Mongolia.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the programme as included in the funding proposal.

By communicating our no-objection, it is implied that:

- (a) The government of Mongolia has no-objection to the programme as included in the funding proposal;
- (b) The programme as included in the funding proposal is in conformity with Mongolia's national priorities, strategies and plans;
- (c) In accordance with the GCF's environmental and social safeguards, the programme as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the programme as included in the funding proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme.

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,

BATJARGAL Zamba

National Focal Point for UNFCCC, IPCC, GCF in Mongolia



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Date 01 September 2016

Ref. 13/607

To: The Green Climate Fund ("GCF")

Ulaanbaatar, Mongolia, September 1, 2016

Re: Project Preparation Funding (PPF) for the GCF by XacBank regarding the Business Loan Program for GHG Emission Reduction (Facility and Guarantee Fund for SMEs)

Dear Madam, Sir,

We refer to the programme titled Business Loan Program for GHG Emission Reduction (Facility and Guarantee Fund for SMEs) in Mongolia as included in the Project Preparation Funding (PPF) proposal submitted by XacBank to us on September 1, 2016.

The undersigned is the duly authorized representative of the Mongolian Ministry of Environment and Tourism, the National Designated Authority/focal point of Mongolia. Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the programme as included in the funding proposal.

By communicating our no-objection, it is implied that:

- (a) The government of Mongolia has no-objection to the programme as included in the funding proposal;
- (b) The programme as included in the funding proposal is in conformity with Mongolia's national priorities, strategies and plans;
- (c) In accordance with the GCF's environmental and social safeguards, the programme as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the programme as included in the funding proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme.

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,

BATJARGAL Zamba

National Focal Point for UFCCC, IPCC, GCF in Mongolia

Environmental and social report(s) disclosure

Basic project/programme information	
Project/programme title	MSME Business Loan Program for GHG Emission Reduction
Accredited entity	XacBank LLC
Environmental and social safeguards (ESS) category	Intermediation 2 (I2)
Environmental and Social Impact Assessment (ESIA) (if applicable)	
Date of disclosure on accredited entity's website	N/A
Language(s) of disclosure	N/A
Link to disclosure	N/A
Other link(s)	N/A
Environmental and Social Management Plan (ESMP) (if applicable)	
Date of disclosure on accredited entity's website	N/A
Language(s) of disclosure	N/A
Link to disclosure	N/A
Other link(s)	N/A
Resettlement Action Plan (RAP) (if applicable)	
Date of disclosure on accredited entity's website	N/A
Language(s) of disclosure	N/A
Link to disclosure	N/A
Other link(s)	N/A
Any other relevant ESS reports and/or disclosures (if applicable)	
Description of report/disclosure	Environmental and Social Management System (ESMS)
Date of disclosure on accredited entity's website	2016-11-11
Language(s) of disclosure	English and Mongolian
Link to disclosure	English: http://xacbank.mn/en/552/about-xacbank/social-responsibility/eco-bank/esms Mongolian: http://xacbank.mn/mn/552/about-xacbank/social-responsibility/eco-bank/esms
Other link(s)	N/A