MONGOLIA
TRANSITION TO GREEN DEVELOPMENT - PHASE II

OVERVIEW

<table>
<thead>
<tr>
<th>Country / Global implementation</th>
<th>Mongolia Lower Middle Income Country (LMIC)</th>
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</thead>
<tbody>
<tr>
<td>Thematic area</td>
<td>Multi-sectoral</td>
</tr>
<tr>
<td>Project start date</td>
<td>Q1 2017</td>
</tr>
<tr>
<td>Funding source</td>
<td>Core Earmarked: Germany, GCF</td>
</tr>
<tr>
<td>2017 budget</td>
<td>USD 1,174,212</td>
</tr>
<tr>
<td>% of budget disbursed</td>
<td>74%</td>
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</tbody>
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RELEVANT SDGs

7.2. By 2030, increase substantially the share of renewable energy in the global energy mix
12.2. By 2030, achieve the sustainable management and efficient use of natural resources
13.a. Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly USD 100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate fund through its capitalization as soon as possible.

HIGHLIGHTS

- The Mongolian Green Credit Fund (MGCF) was launched, through the signing of a Memorandum of Understanding (MOU) between Ministry of Environment and Tourism (MET), Ministry of Finance (MOF), the Mongolian Bankers Association (MBA) and GGGI at the 5th Mongolian Sustainable Finance Forum on 6 September 2017.
- GGGI, in cooperation with Ulaanbaatar Mayor’s Office and the Energy Regulatory Commission has launched a pilot for energy efficient retrofitting of residential public buildings.
- The National Energy Efficiency Action Program (NEEAP) was designed with key support of GGGI and later adopted by the Government of Mongolia Cabinet in September 2017.

CONTEXT

Mongolia’s resource-intensive development and climate change vulnerability have created urgency for a transition to green growth. Economic transformation over the past 20 years has been driven by the extraction of Mongolia’s mineral resources and rapid urbanization. However, Mongolia’s reliance on commodities exports for growth has not only left it vulnerable to price fluctuations, but has exacerbated the impacts of climate change.

Sustaining recent development gains in Mongolia faces a number of challenges:

- Electricity generation infrastructure reliance on coal-fired sources.
- Rapid urbanization with 68% of population living in settlements - primarily in Ulaanbaatar.
- Lagging poverty reduction despite strong GDP growth.
- Exposure to harmful urban air pollution.
- Limited capacity to finance green growth in the country.

OVERALL OBJECTIVES

- Support Mongolia’s efforts toward fostering economic growth with greater resource efficiency, greater social inclusion and lower GHG emissions intensity.
- Increase awareness and inclusion of green growth principles in policies and planning.

GLOBAL IMPACTS

- Increased awareness and understanding of green growth principles among policy makers and stakeholders.
- Enhanced capacity of key institutions to develop and implement green growth strategies.
- Increased investment in green growth projects and initiatives.

In 2017, through cooperation with Ulaanbaatar Mayor’s Office and the Energy Regulatory Commission, GGGI launched a pilot for energy efficient retrofitting of residential public buildings. This initiative has the potential to significantly reduce energy consumption and greenhouse gas emissions from the public sector.

The National Energy Efficiency Action Program (NEEAP), designed with the support of GGGI, was later adopted by the Government of Mongolia Cabinet in September 2017. This program aims to improve energy efficiency across various sectors, including buildings, transport, and industry, and is expected to contribute to a reduction in greenhouse gas emissions.

GGGI Mongolia: Project Results Report

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# RESULTS ACHIEVED IN 2017

## OUTCOME 1

**Key recommendations adopted by MET and/or relevant agencies to displace fossil fuels with renewables and promote green public buildings.**

- In 2017, GGGI supported the development of two key policy documents contributing to the implementation of Mongolia’s energy laws.
- The GGGI Mongolia Cities program helped launch the participatory process for the revision of the Law on Urban Development, and provided relevant databases to promote greener construction practices.
- At the subnational level, GGGI supported the Municipality of Ulaanbaatar in determining its contribution to the country’s NDCs and associated Climate Investment Strategy, and helped prioritize 18 climate friendly projects from the Ulaanbaatar City Development Master Plan, with estimated 2.2 MtCO2-eq reduction potential.

## OUTPUT 1.1

- Support the development of at least 3 green energy project proposals.
- GGGI signed an MoU with the Energy Regulatory Commission (ERC) in February 2017. GGGI supported the development of two major policy documents: (i) the National Energy Efficiency Action Programme (NEEAP) adopted by Mongolia’s Cabinet in September 2017, and (ii) the ongoing design and adoption of an energy standards and labelling regulation (S&L Regulations) for appliances. Both contribute to the implementation of the Energy Conservation Law (2015) and the State Policy on Energy (2015). GGGI also participated in the design and drafting of an action plan for the NEEAP to be approved by the minister of energy in early 2018.

## OUTPUT 2.1

- Support the development of at least 3 green energy project proposals.
- GGGI, in cooperation with Ulaanbaatar City’s Mayor’s Office and the Energy Regulatory Commission, has launched a pilot for energy efficient retrofitting of residential buildings. Three precast concrete buildings were selected in one district of Ulaanbaatar City and have undergone heat metering, to model the potential heat efficiency and financial gains derived from retrofitting. The project is expected to highlight the business case for Energy Performance Contracting (EPC) and Energy Service Company involvement in helping finance part of the retrofitting works, under a pay-for-performance type of scheme, with opportunities for scaling-up, structuring and financing.
- GGGI supported the ERC in developing a pipeline of energy efficiency pilot projects for 15 (out of 192) large energy consumers exceeding the threshold set by Mongolia (also referred to as Designated Entities or DEs), to improve their energy efficiency. The 15 investment grade energy audits commissioned helped size a market of around USD 60 million for capital investments in energy efficiency, with an average payback period of 3 years. GGGI considers that the total market potential for the 198 designated entities could be exceeding USD 500 million. The corresponding market will be one of the main targets of the Mongolian Green Credit Fund (MGCF).

## OUTPUT 2.2

Support the development at least 3 green public building project proposals.

- Initiated in 2017, GGGI Mongolia Cities program initial focus on green public education buildings promotion has expanded to help create an enabling environment for these to develop. In May 2017, GGGI signed an MoU with the Ministry of Construction and Urban Development (MCUD) and helped launch of a participatory process to revise Mongolia’s Law on Urban Development, a foundational work for the promotion of low-carbon, resilient and inclusive cities growth.
- GGGI also developed the Green Construction Products Database and associated market survey under MCUD, an important enabling factor for property developers willing to adopt greener construction practices.

## OUTCOME 2

**At least seven infrastructure projects developed and at least one project financed.**

GGGI’s Mongolia Program supports the development of bankable projects in the areas of industrial energy efficiency, residential building retrofitting, low carbon public education infrastructure and air pollution reduction, four areas with a strong potential for green and inclusive growth.

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RESULTS ACHIEVED IN 2017

OUTPUT 2.2 STATUS ON TRACK

Support the development at least 3 green public building project proposals.

- GGGI completed the business case for a low carbon and cost efficient public infrastructure PPP starting with selected pilot project sites – 9 primary school and 1 kindergarten – in Ulaanbaatar city. The city benefited from GGGI’s support in designing a project financing and implementation structure that is beneficial and affordable via a performance based/availability payment PPP model, the first of its kind for social infrastructure projects. The cost-benefit analysis applied including environmental, health and educational cost and benefits) underlined a 13.3% higher value for money in favor of the public–private partnership option compared to the baseline option.

- GGGI completed a market sounding exercise, including the organization of a “climate investment partnership forum” and business case development. Draft procurement documents including technical terms of reference, evaluation criteria and methodology designed for bidding proposals were prepared and handled to Ulaanbaatar city as part of this assignment.

OUTPUT 2.3 STATUS ACHIEVED

Prepare a project design and financing proposal for at least 1 green urban infrastructure project.

The business case for a low carbon and cost efficient public infrastructure PPP successfully secured additional funding from the federal ministry for economic cooperation and development of Germany (BMZ) through the NDC partnership to support the project’s procurement preparation and market sounding activity. Completed by the end of December 2017, it and obtained Ulaanbaatar city’s official endorsement letter for its successful completion.

OUTPUT 3.1 STATUS DELAYED

Develop operational arrangements for a National Green Credit Fund.

- The successful completion of the first phase of MGCF’s development, which included concept, legal/regulatory framework assessment and detailed business planning/modelling made way for the official endorsement and launching of the MGCF, materialized by the signing of a MoU between MET, MoF, MBA and GGGI at the 5th Mongolian Sustainable Finance Forum on September 6 2017.

- GGGI secured additional earmarked resources from the GCF Readiness Programme to carry on with the development of the MGCF. Through consultations with potential investors (FMO, ADB, etc.) in the fund, and the parallel development of a pipeline of projects, a first estimation of the market potential and investment needs was determined.

- Three market assessments have been launched to support MGCF’s product design and operationalization phase. GGGI helped MGCF partners identify suitable options for the fund structure as well as capitalization options. Early engagement with potential investors resulted in raising the interest of the GCF and other potential investors in the fund. GGGI now cooperates with the Green Climate Fund in providing project preparatory support and detailed market assessment.

OUTPUT 4.1 STATUS ON TRACK

Design a regulatory standards & labelling (S&L) programme aimed at stimulating market demand for alternative heating solutions.

GGGI contracted International Institute for Energy Conservation to carry out an impact assessment of the draft regulation, and identify preferred institutional arrangements and potential barriers in implementation. The regulation is to be approved by the Government upon consultation with Line Ministries, relevant government authorities, academia and CSOs by end-2017. The regulation defines a regulatory framework for promoting energy efficient electric appliances, including electric heaters for residential facilities not connected to district heating systems. One major expected benefit of the regulation is to help phase out polluting heating technologies.
# PARTNERS

## LOCAL
- Ministry of Environment and Tourism - Ministry of Construction and Urban Development
- Ministry of Finance
- Ministry of Energy
- Energy Regulatory Commission
- Ulaanbaatar Capital City Municipality
- Mongolian Bankers Association
- Business Council of Mongolia

## INTERNATIONAL
- GIZ
- Green Climate Fund
- UNPAGE/UNEP

# LESSONS LEARNED
- The nature of the development of the operational arrangements for the MGFC requires extensive consultative work to be held, rendered complex by the change of Government in September 2017. In order to speed up decision making, a Working Group was formed with key stakeholders involved, which was later transformed in a Steering Committee for the project.