



GGGI - Mongolia Country Planning Framework 2016-2020



All images are property of GGGI
unless otherwise credited.

*Photo courtesy of Jon M. L. Lyons for the
images on pages 1, 18, and 34*



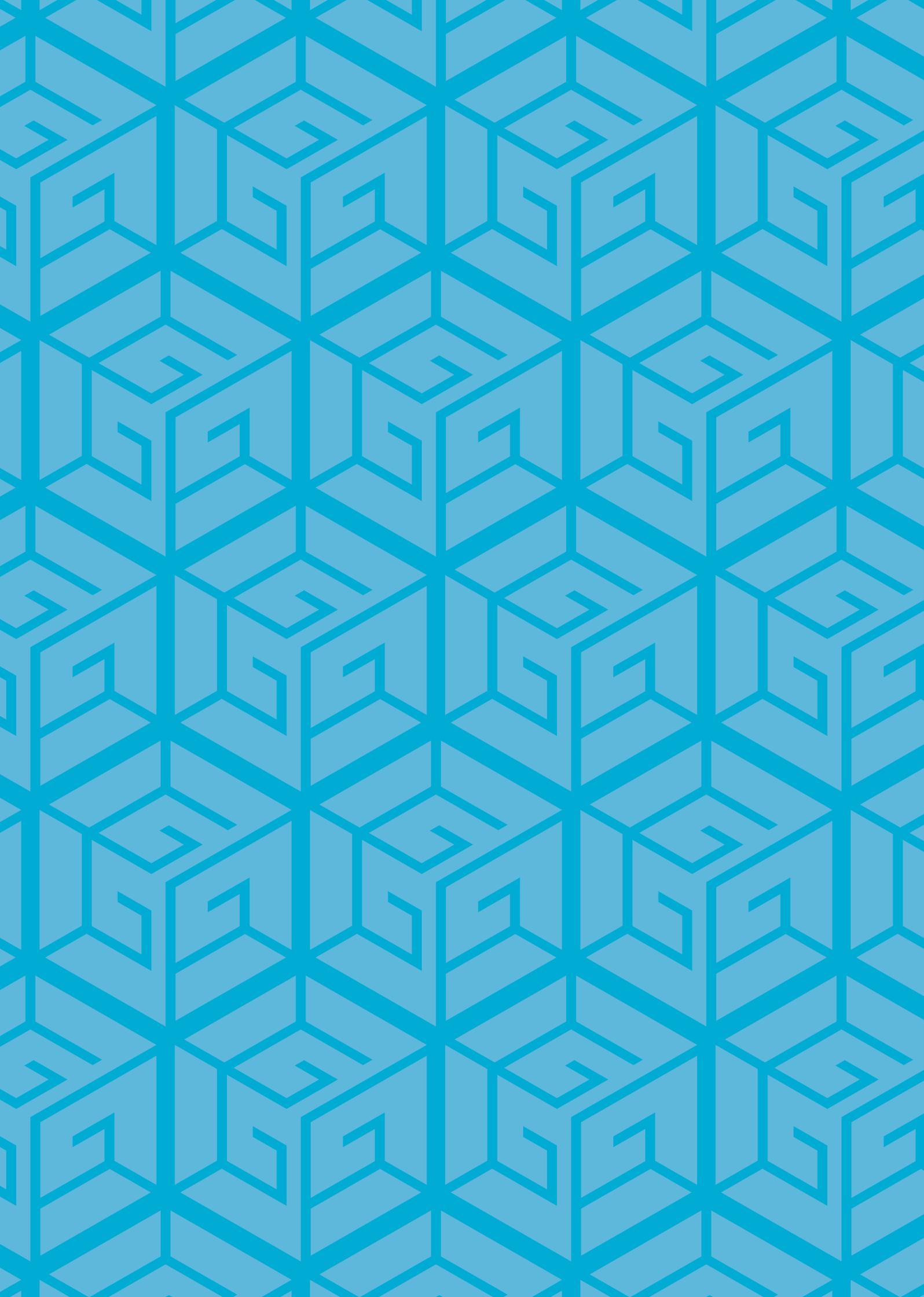


TABLE OF CONTENTS

Introduction to the Country Planning Framework	5
Country Overview	9
Mongolia's National Priorities	13
GGGI Engagement in Mongolia	17
Mongolia Country Planning Framework Analysis	21
Strategic Response	27
Acronyms	35



LOUIS VUITTON

WI FI

Introduction to the Country Planning Framework

GGGI's Country Planning Framework (CPF) lays out the green growth objectives that GGGI's interventions aim to support its Member countries in achieving. The CPF Strategic Response is derived from organizational priorities¹ that reflect GGGI's comparative advantage and are in alignment with national goals of economic growth, poverty reduction, social inclusion and environmental sustainability.

The CPF is thus a contextualized planning document for in-country programming and any new project design, aimed at delivering services on-the-ground that will ensure the sustainability of results, the capacity for continued delivery of results, and greatly increase the likelihood of sustained funding.

Given that the heart of GGGI's delivery model lies with the Green Growth Planning and Implementation (GGP&I) division, the CPF broadly reflects integration of the corporate value chain and service offerings from the Knowledge Solutions Division (KSD) to strengthen in-country delivery.

The CPF objectives will require the support of the in-country government, private sector, and other partners in translating corporate commitments into country-level strategic goals, and is contingent on the CPF's adherence of the following key principles:

- **Ownership** – It is co-owned by the government and endorsed by the lead Ministry with which GGGI has an agreement.
- **Mutual Accountability** – It demonstrates commitment in a particular country, given the availability of adequate resources, to achieve agreed objectives. By endorsing the CPF, the Government in turn commits to collaborate and provide support in implementing the CPF.
- **Alignment** – It is aligned to national objectives and informed by GGGI's Strategic Plan 2015-2020.
- **Leadership** – Its formulation is led by the GGGI country team.

Finally, the CPF presents the in-country strategy for the delivery of measurable results against the GGGI Results Framework, and responds to the post-2015 Development Agenda through the proposed Sustainable Development Goals. (SDGs). The CPF outcomes are designed to align with national commitments to the SDGs, to be more formally linked upon finalization of the SDGs.

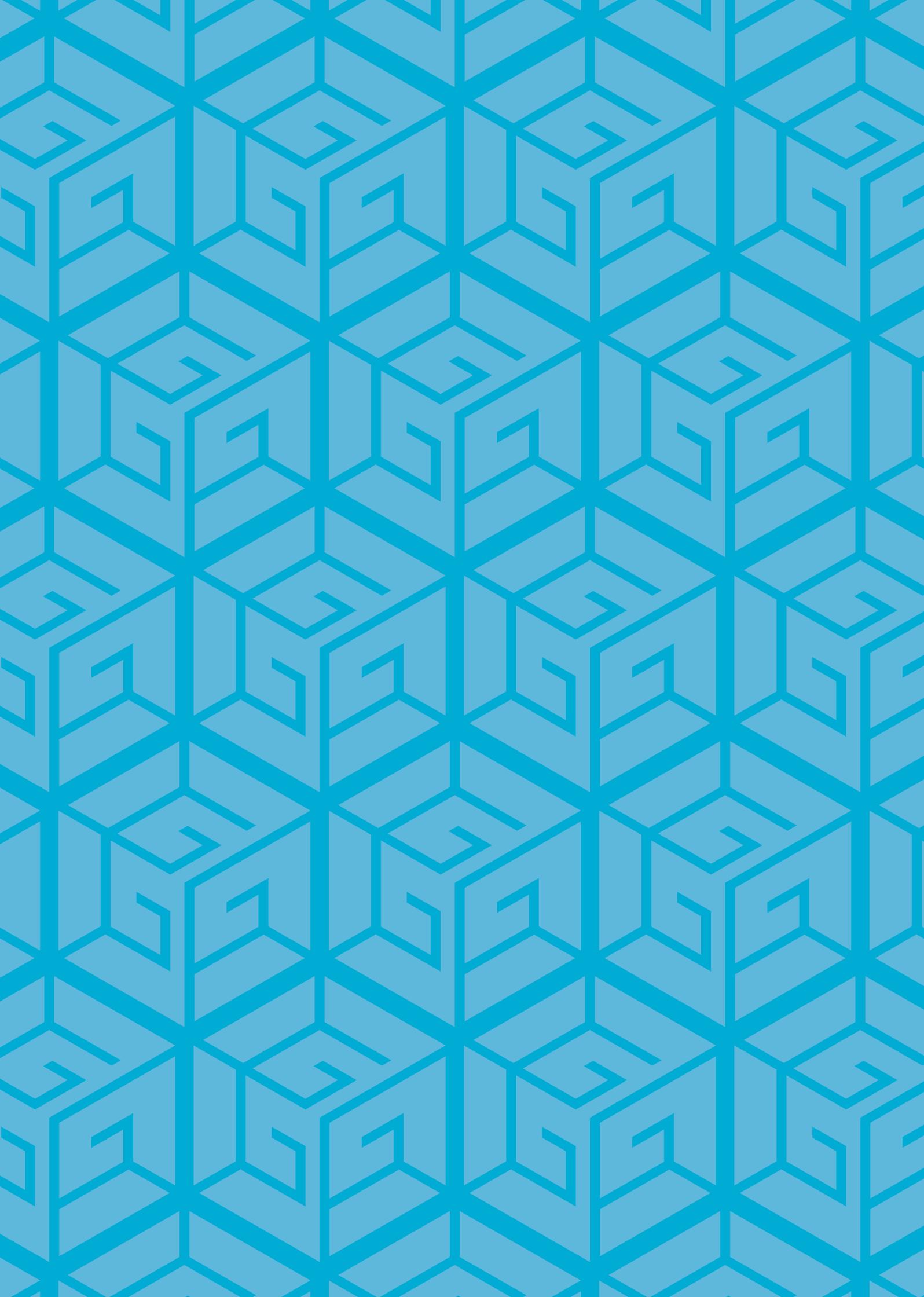
'We own a bright future if, among a few other factors, we manage these resources wisely to benefit present and future generations.'

H.E Mr. Tsakhiagiin Elbegdorj, President of Mongolia, 2012, Scenarios for Mongolia Report by the World Economic Forum

¹ GGGI Strategic Plan 2015-2020 – Accelerating the Transition to a New Model of Growth

Introduction to the Country Planning Framework

Mongolia At a Glance	
Population (2015, NSO) Area (sq km); (2015, NSO)	3 million 1,564,120
GDP (current US\$); (2014, WB) GNI per capita, PPP (current international \$); (2013, WB) OECD DAC classification (2011)	12.0 billion 8,810 Lower Middle Income
Human Development Index (2014, HDR) Percentage of population under the national poverty line (2012, NSO)	0.698 – ranked 103 rd 27.4
CO2 emissions (metric tons per capita); 2010, WB) Environmental Performance Index (2014, Yale)	4.24 44.67 – ranked 111 th
GHG emissions, total and by sector (million metric tonnes CO2 equivalent); (GoM, 2010)	21.9 Energy 63.9% Agriculture 29.2% Industry 6.2% Waste 0.7%
Share of renewable electricity generation (% of total installed capacity); (2013, NSO) Total installed electricity generation capacity (megawatts); (2014, MoE) Projected electricity demand in 2030 (megawatts); (2014, MoE)	4.5 922 MW 3,800 MW
Water productivity (2005 US\$GDP per cubic meter of total freshwater withdrawal); (2013, WB) Percentage of population with access to water supply systems (2010, MSIC)	9 21.2%
National water demand by sector (% of total); (2010, MEGD)	Irrigation 30.2% Livestock 23.5% Drinking (urban) 15.9% Mining 12.7% Energy 10.4%
Land desertification (% of land area); (2012, MEGD) Forest area (% of land area); (2012, WB)	72% 6.96%





Country Overview

Mongolia presents significant opportunities for realizing green growth. Its natural resource-intensive industries and urban development to date have endangered rivers, fouled city air and desertified fragile pastures. GGGI's services to the Government of Mongolia (GoM) and cooperation with development partners seek to tap the most urgent and catalytic opportunities for effecting green growth transitions.

Socio-economic situation

Mongolia's shift to democracy in 1990 paved the way for the country's current development path. Through the reduction of government subsidies combined with trade liberalization, Mongolia's market economy grew steadily, if unevenly and with intensive per capita use of fossil fuels. Mineral exploration and mine development have helped drive Mongolia's economy, peaking at a world-leading 17.3% GDP growth in 2011. However, vulnerability to natural disasters and commodities price cycles persists. Despite graduating to the ranks of "lower middle income" countries in 2011, economic challenges remain—such as loose monetary policy, waning foreign investment and high inflation.² Mongolia's growth potential has yet to be fully realized.

The pace of poverty reduction for the country has lagged behind its steep growth in GDP. The official poverty rate has trended downward, decreasing from 38.7% in 2010 to 27.4% in 2012.³ However, the inequality in household per capita consumption (as measured by the Gini coefficient) increased 9% from 2003 to 2008. Mining-led growth may further exacerbate inequality, given its capital intensity and automation. Although the mining sector accounted for 25% of GDP in 2010, the sector has provided little in the way of employment creation, directly accounting for as few as 2% of jobs.⁴ The agriculture sector employs over 40% of the workforce, yet accounts for less than 15% of GDP. Against this background, the richest 30% of the population has come to control at least a 65% share of national income.⁵

At the same time, poverty remains higher among the rural population (33.3% in 2011) than in urban centers (26.6%). Although women are more likely to have completed higher education and maintain full-time employment, they earn less than men and are underrepresented in high-level positions in business and politics. Importantly, women's participation in elected office and civil service is increasing, as promoted in part by the passage of gender quotas for civil service management positions at both national and local levels in 2011. Since the 2012 parliamentary election, the proportion of women in parliament increased to 14.7% from 3.9%. Barriers to women's political and economic participation remain, such as high campaign costs and gender stereotyping.⁶

Mongolia's main economic risks are linked to commodities prices, demand for Mongolia's exports, and energy security. In recent years, Mongolia has failed to implement counter-cyclical fiscal measures to combat commodities price fluctuations, especially for coal and copper. Simultaneously, China has come to absorb the majority of Mongolia's exports, creating high dependency on a single market. Mongolia is a net energy importing country, with roughly 90 percent of its petroleum products acquired from Russia. Beyond minerals and mining, Mongolia's economic diversification prospects are highly dependent on the availability of capital and skilled labor, both areas in which Mongolia remains relatively uncompetitive.

² International Monetary Fund, 2013 *Article IV Consultation*, Country Report No. 14/64, 2014, viewed at <<http://www.imf.org/external/pubs/ft/scr/2014/cr1464.pdf>>.

³ Government of Mongolia, *Achieving the Millennium Development Goals, Fifth National Progress Report*, 2013: p. 31.

⁴ Business Council of Mongolia, *Labor Analysis* 2012.

⁵ Government of Mongolia, 2010, *Mongolia Second National Communication Under the United Nations Framework Convention on Climate Change*, p.47.

⁶ United Nations Development Programme Mongolia, 2014, *Achieving the Millennium Development Goals: Fifth National Progress Report 2013*; viewed at <<http://www.mn.undp.org/content/mongolia/en/home/mdgoverview/overview/mdg3.html>>

Environmental conditions

Natural capital is the bedrock of Mongolia's growth, with a majority of the country's potential wealth in minerals, forest resources, cropland, and pastureland. The Mongolian climate is expected to continue to change dramatically over the 21st century, including higher average temperatures year round, more snow in winter and less rain in summer, as well as more variable weather conditions with longer and more frequent droughts.⁷ The pace of climate change in Mongolia for the period between 1940 and 2014 was significantly higher than the global average, with the annual mean air temperature increasing by 2.07C.⁸ Given these growing impacts, Mongolia's new climate reality requires green development models to ensure economic security.

Fresh water is arguably the most critical ingredient for realizing green growth, providing ecosystem services and fundamental security to people and livestock. Surface water resources are at risk of irreversible decline, with growing competition from industry, pastoralism, conservation flows and human consumption. A combination of forces—especially overgrazing, industrial development and climate change—have led to over 70% of Mongolia's territory at some stage of desertification.⁹ Future mine development and agricultural projects will demand significant water, particularly in the parched Gobi region. Ensuring the security of its long-term water supplies is perhaps Mongolia's most critical environmental and commercial challenge.

Mongolia is the least densely populated country in the world, yet its capital, Ulaanbaatar is home to at least 45 percent of the population, nearly two-thirds of which live in the peri-urban (or *ger*¹⁰) districts surrounding the city center.

Increasing rural-urban migration is evident in Mongolia's provincial (or *aimag*) centres as well as the settlements close to major mining sites. Around 85% of urban residents rely exclusively on coal- and wood-burning stoves for heating and cooking, which, when taken together with coal-fired heat-only boilers, is the most significant source of air pollution. Studies have estimated that 1,600 people die prematurely every year due to exposure to harmful levels of airborne particulate matter (i.e. PM2.5).¹¹ Contrary to the rising GDP, the quality of life in urban settlements has deteriorated.

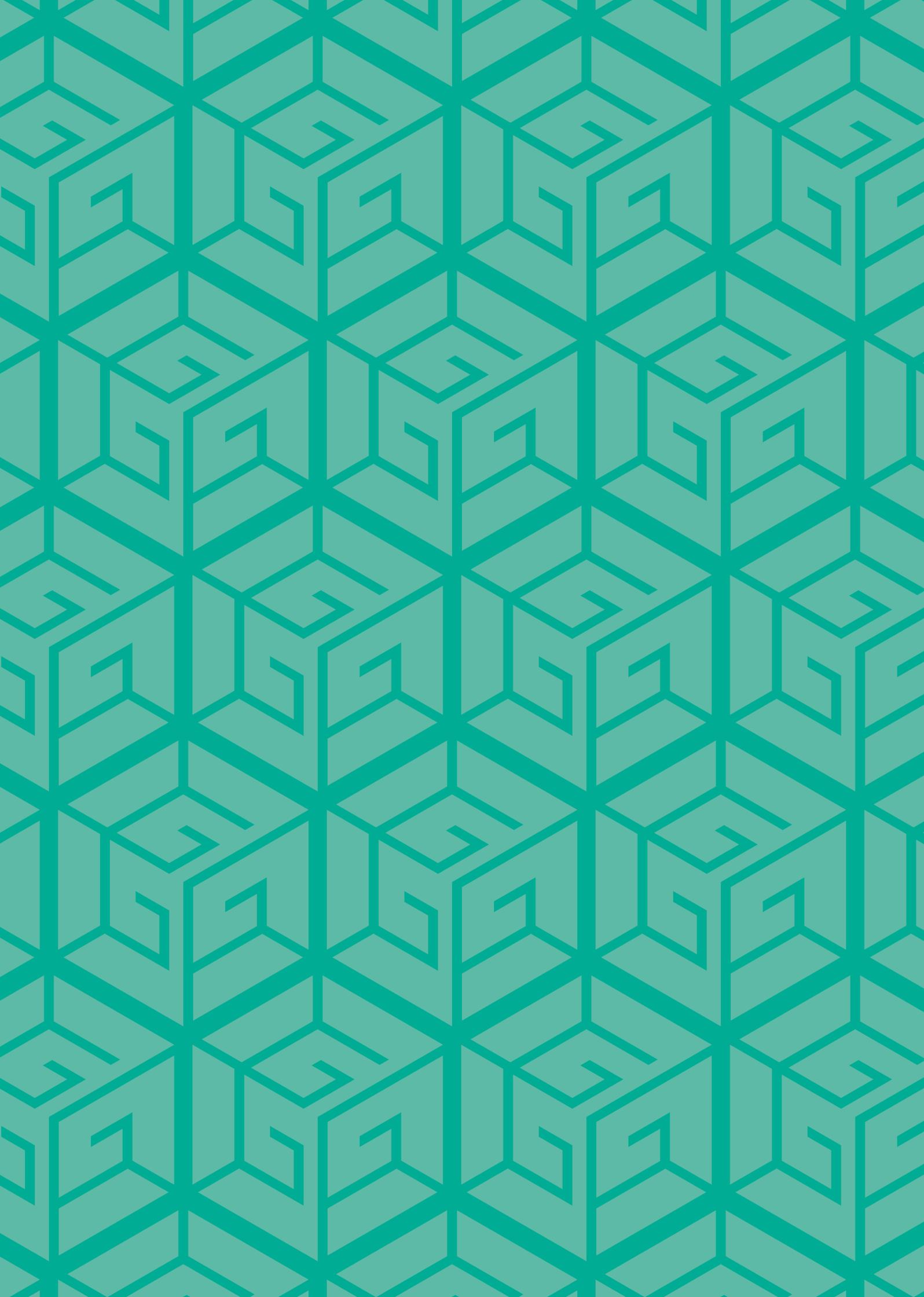
⁷ Asian Development Bank, 2014, *Demand in the Desert: Mongolia's Water-Energy-Mining Nexus*, p. 9

⁸ Government of Mongolia, 2015, *Intended Nationally Determined Contribution Submission by Mongolia to the Ad-Hoc Working Group on the Durban Platform for Enhanced Action*.

⁹ Ministry of Environment and Green Development, 2014, *Desertification Atlas of Mongolia*, p.9.

¹⁰ A "ger" is the circular-shaped, moveable traditional dwelling composed of a latticework frame, layered felt and canvas exterior. It is also the term for "home".

¹¹ World Bank, 2011, "Together for a green clean Ulaanbaatar". Viewed at <<http://www.worldbank.org/en/news/feature/2011/07/11/together-green-clean-ulaanbaatar>>.





Mongolia's National Priorities

Three national policies have positioned Mongolia towards its green growth transition: **National Development Strategy** (2008), **National Security Concept** (2010) and **National Green Development Policy** (2014). Each framework builds upon its predecessor, reflecting the iterative and dynamic nature of Mongolia's policy making.

The parliament-approved Millennium Development Goals-Based Comprehensive National Development Strategy of Mongolia 2008-2021 (NDS) is an ambitious commitment to the MDGs in national-level policy aimed at promoting human development. The NDS's 14-year development path was defined in two phases: 1) 2007-2015 targeted the Millennium Development Goals and intensive economic development, and 2) 2016-2021 targets the transition to a knowledge-based economy. The NDS highlights six priority areas as follows:

1. *Achieve the Millennium Development Goals and provide for an all-round development of Mongolian people.*
2. *Intensively develop export-oriented, private sector-led, high technology-driven manufacturing and services, with particular focus on information, communication development, promoting bio and nanotechnology, transit transportation, logistics, financial mediation services, deeper processing of agricultural products, and create a sustainable, knowledge-based economy.*
3. *Exploit mineral deposits of strategic importance, generate and accumulate savings, ensure intensive and high economic growth, and develop modern processing industry.*
4. *Ensure intensive development of the country's regions, their infrastructure, and reduce urban-rural development disparities.*
5. *Create a sustainable environment for development by promoting capacities and measures on adaptation to climate change, halting imbalances in the country's ecosystems and protecting them.*
6. *Consolidate further political democracy, foster a transparent, accountable, just system free from corruption and red tape.*

Similarly, Mongolia's National Security Concept (NSC) explicitly cites environmental security as fundamental to the prosperity and well-being of all Mongolians. The NSC lays out the case for green growth by integrating geopolitics, food security and the economy with climate change risks and mitigation measures. Once the GoM adopted the NDS and NSC, it recognized additional opportunities for a transition to a greener economy and responded through its Green Development Strategy. After eighteen months of parliamentary review, this strategy culminated in the approval of the National Green Development Policy of Mongolia in June 2014.

'Evolve as an advanced nation having built the basics of a green civilization combining and enriching its natural environment, culture, historical heritage and traditions with up-to-date achievements, featuring good governance cherishing the citizens of Mongolia, maintaining a knowledge-based economy with environmentally friendly technologies, wisely adapting to climate changes, achieving a national conscience of treasuring nature and the environment'

Vision Statement, NGDP, June 2014.

The NGDP defines “green development” as “a pattern of development that reduces poverty through an inclusive economy in which resources are used efficiently and without waste, supports ecosystem services, lowers greenhouse gas emissions and waste”. Importantly, the NGDP shaped Mongolia's Intended Nationally Determined Contributions (INDC) to the UNFCCC as well as its expected commitments under the Sustainable Development Goals. The NGDP provides the primary guidance for GGGI's Country Planning Framework in Mongolia.

The six strategic objectives of the NGDP follow the themes of climate compatible development, alternative financing, green employment, promotion of environmental and cultural heritage, and urban infrastructure, articulated in the NGDP as follows:

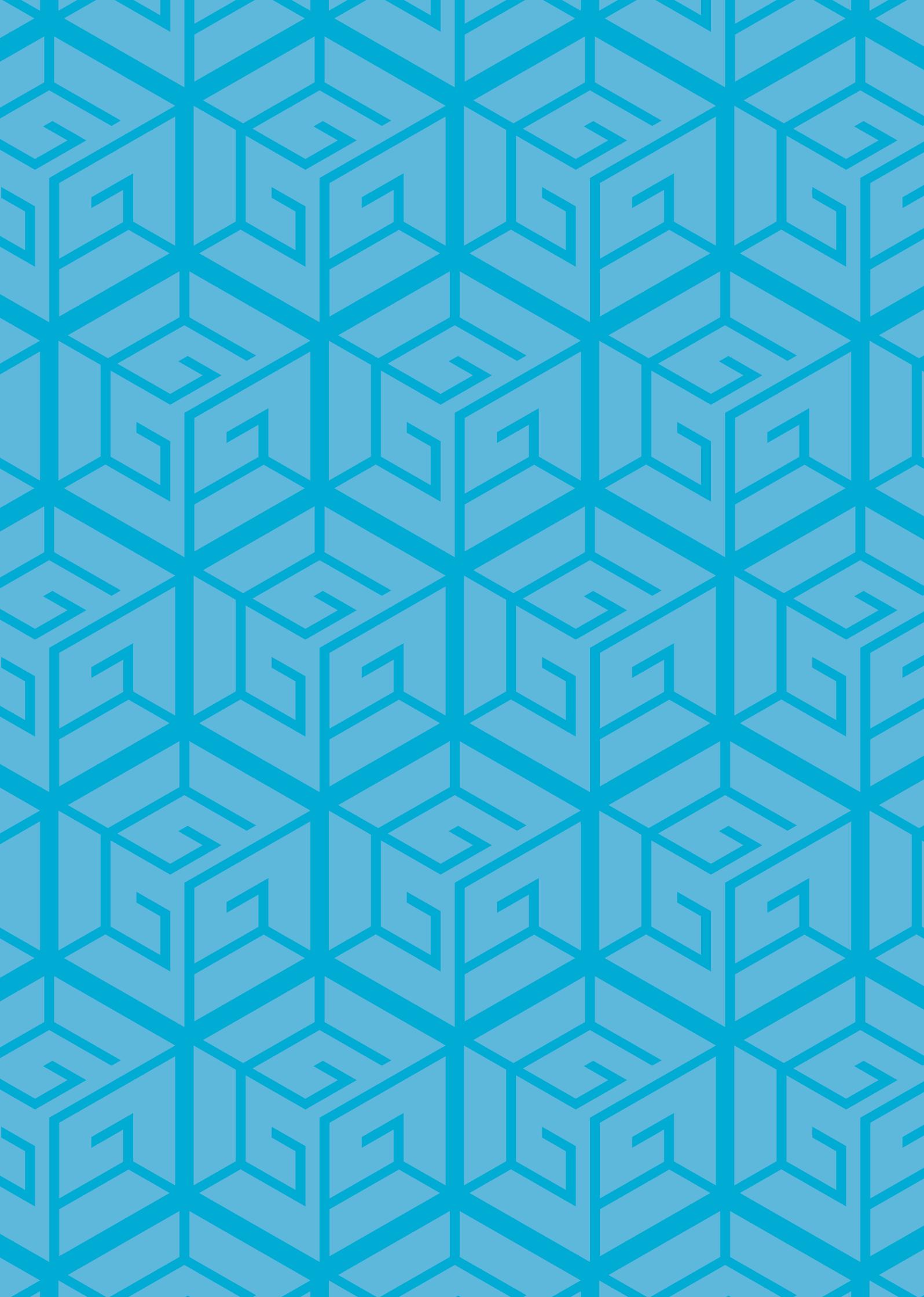
1. *Promote a sustainable consumption and production pattern with efficient use of natural resources, low GHG and reduced waste generation.*
2. *Sustain ecosystem's carrying capacity by enhancing environmental protection and restoration activities and reducing environmental pollution and degradation.*
3. *Increase investment in natural capital, human development and clean technology by introducing financing, tax, lending and other incentives for supporting a green economy.*
4. *Engrain a green lifestyle by reducing poverty and promoting green jobs.*
5. *Encourage education, science and technology to serve as the catalyst for green development, and develop cultural values and livelihoods that are in harmony with nature.*
6. *Develop and implement a population settlement plan in accordance with climate change, while considering the availability of natural resources and the resilience of regions.*

The NGDP commits the government to transition to green development through the following national targets by 2020:

- *20% share of renewable electricity in total installed capacity of energy production*
- *20% reduction of building heat loss compared to 2010 levels*
- *20% share of waste recycling*
- *2% of total GDP will be allocated for green development*
- *2% of total GDP will be allocated for science and technology research*
- *20% share of green procurement in total government procurement*
- *25% share of total territory is designated as protected*

- *20% increase in investment in environmental protection and restoration*
- *8.5% of territory is designated as forest*
- *80% of population with access to safe drinking water*
- *40% of population connected to improved sanitation facilities*
- *24% poverty level compared to 2013 levels*
- *15% of greenery spaces in Ulaanbaatar and other settlement areas*
- *28% of GDP generated from agriculture and manufacturing sectors*

To enable private investment flows, the State Policy on PPP (2009) and the Law on Concessions (2010) helped establish the foundations for green infrastructure concessions and related services. In 2015, GoM sought to identify and build commitment to the steps needed to achieve its green growth ambitions through the formulation of national action and investment plans, such as the NGDP Mid-Term Implementation Plan.





GGGI engagement in Mongolia

Past engagement

GGGI and the Government of Mongolia formally initiated cooperation in November 2011 through the execution of a Memorandum of Understanding with the Ministry of Nature, Environment and Tourism (now, the Ministry of Environment, Green Development and Tourism). In June 2013, Mongolia began the process of becoming a GGGI Member country, and its membership came into full force in July 2014. GoM has actively participated in GGGI global platforms, such as South-North-South capacity building, and supported GGGI in-country programming through the provision of office space and operational counterparts. GGGI programming in Mongolia has been made possible through the generous support of GGGI core contributing Members and the Swiss Agency for Development and Cooperation.

From 2012 to 2014, GGGI provided technical assistance in the areas of Green Cities Development, Energy, Water and Green Growth Planning.

Under the Cities theme, GGGI conducted a technical and economic assessment of Ulaanbaatar's transportation systems management and the potential for replacing diesel buses to reduce GHG emissions. GGGI recommended data-driven approaches to promote alternative public transport systems and analyzed the potential impacts of such approaches on GHG emissions reduction, involving civil servants and key stakeholders in capacity building. In 2014, GGGI began its support of design research and preliminary assessment of green technologies for public kindergartens in Mongolia's peri-urban settlements. In partnership with the Green Technology Center Korea (GTCK), GGGI facilitated the site selection, stakeholder consultations and initial design and economic analysis for a green public kindergarten facility in a *ger* district of Ulaanbaatar.

In the energy sector, GGGI and local stakeholders developed three green energy scenarios, along with a business-as-usual reference, through the Long-range Energy Alternatives Planning System (LEAP) software tool. The resulting scenarios provided clear evidence of the potential benefits of large-scale conversion to renewable energy generation for export, helping shape the NGDP target of 30% share of electricity generated from renewable sources by 2030, as reflected in its INDCs.

Following the passage of the NGDP in 2014, GGGI supported a complex multi-stakeholder green growth planning process to identify key challenges and implementation opportunities within the NGDP's six strategic objectives, resulting in the initial draft of the NGDP roadmap in December 2014. In parallel, GGGI helped support Mongolia's development of green growth indicators by providing capacity building assistance and, later, an analysis of Mongolia's environmental data collection practices, cross-referenced with NGDP indicators.

GGGI Work Program and Budget 2015-2016

GGGI's 2015-2016 biennial program for Mongolia supports the government's planning and implementation of the NGDP through technical services, knowledge development and private sector solutions. This period also witnessed significant integration of GGGI services, with Knowledge Solutions Division providing direct, in-country support across all thematic priorities. GGGI's services focused on energy, cities, public-private partnerships, green growth planning and the water-green growth nexus. These interventions have helped to embed green growth into sectoral and sub-national policy and action planning.

Energy and Cities programming focused on sub-sectoral assessment (i.e. alternative heating systems planning) and energy efficient building planning (i.e. green public kindergarten design and assessment). GGGI efforts to increase local knowledge exchange and development were reflected in increased Mongolian language publications and multi-stakeholder learning opportunities.

As the impact of large-scale infrastructure on environment and climate change is significant, GGGI worked with GoM to improve its capacity in project preparation and financing for green infrastructure. GGGI provided policy and project-level advice in areas co-identified with government counterparts for public private partnerships (PPP).

GGGI began assisting the government in greening its concessions projects through developing PPP models for educational infrastructure and conducting a pre-feasibility assessment of Ulaanbaatar waste-to-energy concessions.

Systematic adaptation of the NGDP to local contexts began in late 2014. The GoM designated five *aimags* as models for green development, initiating the strategy and action plan development process with GGGI support. Similarly, in 2015, Ulaanbaatar began crafting its own green development strategy and action plan, in which GGGI actively participated.

GGGI's water programming, supported by SDC, focused on the development and improvement of the government's water information platform and associated institutional capacity building. Cumulatively, these collaborations have positioned GGGI as a strategic partner of the government in its transition to green growth.

The Case for Green Growth in Mongolia

The relevance for green growth in Mongolia lies in enhancing livelihoods and sectoral capacity through increasing climate resilience in energy generation and efficiency, water resources management, and infrastructure development.

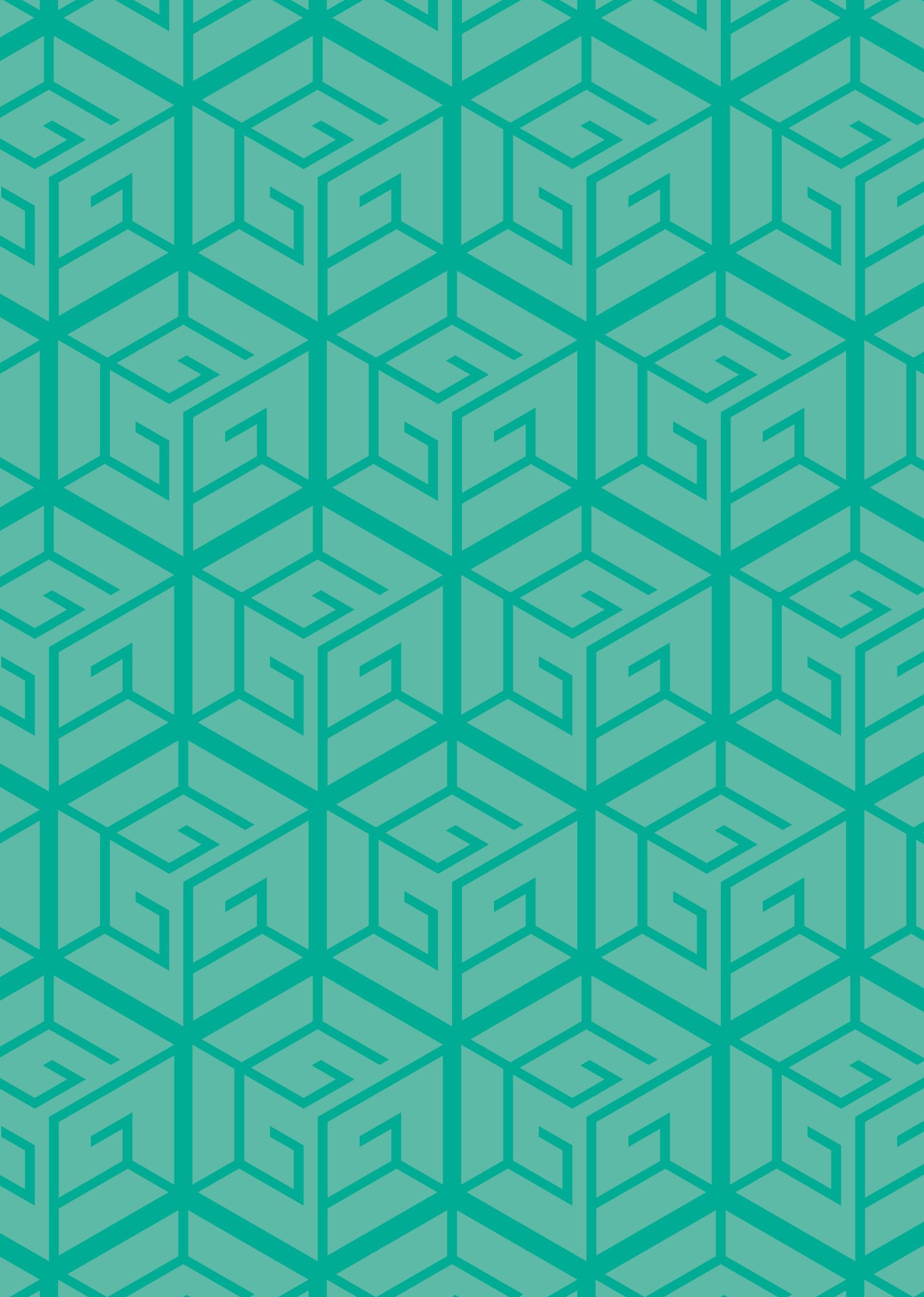
Greener energy generation and increased energy efficiency will improve energy security and reduce the costs of energy, especially for low-income households.

Coordinated, climate-resilient urban infrastructure planning and development will accelerate both national and regional economic growth.

Reduced water intensity and development of water efficient technologies will improve the security of Mongolia's water supplies.

Building technical capacity and expertise in green growth offers the best potential to decouple Mongolia's economy from fossil fuel-intensive infrastructure and industry.







Mongolia Country Planning Framework Analysis

GGGI's Country Planning Framework for Mongolia combines GoM's mid-term green growth ambitions with the *GGGI Strategic Plan 2015-2020*. Together with the government, GGGI identified, screened and validated its key strategic areas of intervention through consultative dialogue and internal assessments on priority setting and results programming, including four stakeholder workshops between March 2014 and March 2015.

A comprehensive survey of other domestic and international cooperation efforts in green growth also helped define GGGI's intervention focus in Mongolia. In March 2015, a consultative workshop on the GGGI CPF brought together nearly 80 participants representing relevant government agencies as well as civil society, private sector, academia and international organizations. Through a series of group discussions and tool-based exercises, participants prioritized key problems, objectives and action frameworks for each of GGGI's four global thematic areas—energy, green city development, water and land use. The following key green growth issues were identified per GGGI global thematic area:

- Energy – green energy transition
- Green Cities – green cities demonstration models and lifestyle change
- Water – water quality and supply improvement
- Land-use – shift to integrated land management and its enforcement

Subsequently, GGGI and the government analyzed the above priorities and proposed actions, refining to identify those best matched to GGGI's mandate, position and capacity to act. The following three green growth priority issues emerged:

- i. **Brown energy and energy inefficiency threaten economic security.**
- ii. **Poorly coordinated urban infrastructure development constrains growth.**
- iii. **Mismatched supply-demand and climate vulnerability of water undermine development.**

Brown energy and energy inefficiency threaten Mongolia's economic security

In 2014, during peak winter demand, Mongolia generated the equivalent of 825 megawatt hours of electricity, of which 96.2% came from coal-fired thermal stations.¹² Mongolia's energy demand is projected to reach 3,800 MW by 2030, one-third of which the mining sector alone will consume¹³. The off-grid, rural locations of major mining projects offer opportunities for grid balancing and base load pairing for green energy producers, given satisfactory incentives. Access to heating is a matter of human survival in Mongolia, with the demand for heating over twice that of electricity due to the cold climate.¹⁴ Nationally, corporate entities consume the majority of all electricity (73%), followed by *ger* households (17%) and apartment dwellers (9.9%) respectively¹⁵. *Ger* area residents on average spend 4% to 5% of their monthly income on electricity¹⁶.

¹² Energy Regulatory Commission of Mongolia, 2015, *Energy Statistics 2014*.

¹³ "Ministry of Environment, Green Development and Tourism of Mongolia and United Nations Partnership for Action on Green Economy, 2014, "Mongolia's Transition to a Green Economy: A Stocktaking Report", p. 14

¹⁴ Asian Development Bank, 2014, *Demand in the Desert: Mongolia's Water-Energy-Mining Nexus*, p. 13

¹⁵ *Ibid.*, p.31

¹⁶ World Bank, 2010, "Managing Urban Expansion in Mongolia: Best Practices in Scenario-Based Urban Planning", p. 70.

Coal is in great abundance in Mongolia. Energy generation infrastructure consists primarily of coal-fired sources (91.6%¹⁷). Government subsidies to Mongolia's brown energy system represent a key challenge to the viability of Mongolia's renewable energy resources. Under current tariff schedules, even brown energy producers barely cover operating costs, let alone badly needed capital improvements. To promote investment in energy generation, especially green energy, the GoM announced plans to liberalize tariffs and retail pricing in 2015. In practice, however, removing coal subsidies and increasing energy rates face political resistance.

In Mongolia, the average energy required for industrial output is seven times greater than the world average.¹⁸ High energy intensity in both industrial and residential applications offers potential for energy efficiency improvements and consequently growth. In 2014, Mongolia's electricity production increased by 5.1% and heating supply increased by 3.5% year-on-year. Simultaneously, imported electricity rose by 17.3%.¹⁹ Energy demand in the industrial sector, particularly mining, is expected to grow more quickly than any other, overtaking buildings as the largest energy user in the coming decade.

Improving the energy efficiency of the construction sector is one of the core areas of Mongolia's initial Nationally Appropriate Mitigation Action (NAMA) proposals as well as its Intended Nationally Determined Contributions (INDC) to reduce greenhouse gas emissions. By some estimates, nearly 40% of the heat supplied to houses and buildings is lost²⁰. Correspondingly, energy efficiency can play a significant role in energy savings, reducing not only GHG emissions from buildings, but also contributing to poverty alleviation (e.g. heating cost reduction) and public health improvement.

Poorly coordinated urban infrastructure development constrains growth

The greening of infrastructure is crucial to addressing air pollution and driving sustainable growth. The suite of

yet-to-be-developed urban infrastructure for transportation, water services, waste management, and social services has significant green growth potential. With rapid rural-urban migration, the GoM faces the challenges of providing basic services through inclusive and green city development plans in Ulaanbaatar, provincial (or *aimag*) centres and village (or *soum*) settlements²¹. In 2012, 68% (1.9 million) of Mongolia's population lived in urban areas, of which at least 1.3 million lived in the capital city. From 2000 to 2012, Ulaanbaatar's population increased by an annual average of 6%, due primarily to rural-urban migration. Urban settlements in Mongolia are characterized by severe disparity between the central, formally planned (apartment) areas, and the peripheral semi-planned (*ger*) areas, largely lacking improved roads and infrastructure services.²²

Air pollution is a source of increasing concern nationwide, particularly in Ulaanbaatar. The calculated exposure of the population to harmful fine particulate matter (PM2.5) in Ulaanbaatar has been reported at up to seven times greater than the WHO's recommended tolerable threshold on average throughout the year²³. An estimated 80% of Ulaanbaatar's air pollution is thought to originate from its *ger* areas, where annually some 542,900 tons of mostly raw coal are consumed.²⁴ While sources of air pollution vary, the problem points to the urgent need for greener energy infrastructure, particularly for heating.

The number of registered motor vehicles in Mongolia has increased 4.4 times since 1998, yet the transportation infrastructure and services have failed to respond correspondingly. Systemic traffic congestion contributes to loss of productivity and hazardous air pollution—the third largest source in Ulaanbaatar, by some estimates²⁵. Beyond Ulaanbaatar's main thoroughfares, public transportation access is very limited, disproportionately affecting low-income households. To accelerate economic growth, increased public transport connectivity, less-polluting vehicles and non-motorized vehicle promotion are needed.

*The Ulaanbaatar Master Plan 2020 and Development Approaches for 2030*²⁶ targets infrastructure expansion

¹⁷ Ministry of Environment, Green Development and Tourism of Mongolia and United Nations Partnership for Action on Green Economy, 2014, "Mongolia's Transition to a Green Economy: A Stocktaking Report", p. 14.

¹⁸ Ministry of Environment, Green Development and Tourism of Mongolia and United Nations Partnership for Action on Green Economy, 2014, "Mongolia's Transition to a Green Economy: A Stocktaking Report", p. 17

¹⁹ Energy Regulatory Commission of Mongolia, 2015, *Energy Statistics 2014*, p 4

²⁰ Government of Mongolia, 2010, *NAMA submission to UNFCCC Secretariat from Mongolia*.

²¹ An *aimag* is the territorial unit of province, directly below the national designation. A *soum* is the territorial unit of county, below the province designation.

²² Asian Development Bank, 2013, *Interim Country Partnership Strategy: Mongolia, 2014–2016*.

²³ World Bank, 2011, "Air Quality Analysis of Ulaanbaatar: Improving Air Quality to Reduce Health Impacts".

²⁴ SICA Consulting, 2014, *Census for Static Air Pollution Sources*.

²⁵ World Bank, 2009, "Air Pollution in Ulaanbaatar: Initial Assessment of Current Situation and Effects of Abatement Measures", p. 42.

²⁶ The Ulaanbaatar Master Plan 2020 and Development Approaches for 2030 is a combined plan and policy approved by the State Great Khural under Resolution 23 in February 2013.

to meet rapid population growth and increased provision of services to peri-urban areas. Priority issues stipulated in the plan include improvements to the *ger* areas by providing basic infrastructure, such as water supply, sewerage, drainage, roads and other basic amenities. The key challenges to providing infrastructure are the limited availability of public funds, weak technical capacity to prepare and finance projects and low-income and vulnerability of households in target areas. Like the national government, the *aimag* and municipal governments may solicit infrastructure funds through a variety of mechanisms, such as PPP, although capacity and access remain restricted.

The development of regional centers and upgrading of peri-urban areas may help reduce overcrowding in Ulaanbaatar and boost regional development, requiring better integrated urban planning at the national, provincial and municipal levels for green growth. Efforts to build local municipal capacity to apply and implement green growth policies need up-scaling in order to achieve lasting regional development.

Mismatched supply-demand and climate vulnerability of water undermine development

Mongolia's water resources appear potentially adequate for its modestly sized population and economic growth ambitions, but mismatched with demand and costly to exploit. Managing water as a tool for greener growth means that the government proactively works with key stakeholders to appropriately pair water supply and demand and improve long-term water security.

Total national water use was 327.1 million m³ in 2010. The total surface water resources have been estimated at 598.5 billion m³ per year, which is approximately 1,800 times greater than the 2010 national water consumption²⁷. However, estimates of exploitable renewable ground water resources appear considerably smaller, at just 10.8 billion m³ per year²⁸. Inefficient use and climate change threaten surface and ground water

resources alike, causing some springs, lakes and their associated ecosystems to vanish. Through amendments in 2004 and a comprehensive overhaul in 2012, the Law on Water established river basin-based management practices with the goals of optimizing use of water resources and protecting ecosystems. As elsewhere, the policy intent appears conducive to green growth, but lacks even implementation and local adaptation.

Water policy and regulations must respond to seasonal and regional variation, requiring timely information and enforcement. The variable quality and limited completeness of water data remains a significant constraint to water policy-making, regulation and enforcement. Despite the GoM's initial efforts to streamline water data collection, disclosure and analysis, institutional complexity and weak capacity inhibited the timely, accurate flow of critical water information to key stakeholders, including regulators and policy makers. Since water resources are distributed unevenly in Mongolia, water may not be available at the right place and time and in the required quantity and quality.²⁹

In 2010—the most recent year for which complete data on annual water use in Mongolia was available—agriculture and livestock were the largest water users. Mining registered as the fourth largest water user, accounting for 12.7 percent of national use, but this proportion is forecast to increase significantly by 2030³⁰. For example, upon commissioning in 2013, the Oyu Tolgoi mine alone went on to consume raw ground water of 13.5 million m³ in 2014—equivalent to roughly 4% of total 2010 national water use by comparison.

In 2008, only 65% of public water infrastructure operating costs was recovered through the prevailing pricing. Recent analysis recommended creating a transparent incentive structure, focused initially on urban households and mining³¹. In 2013, MEGD mandated major water users to re-use a minimum of 60% of process water, resulting in an estimated annual water savings of approximately 73 million m³ in 2013³². Further water savings potential exists in the mining, agriculture, residential and energy sectors, particularly within thermal power plants.³³

²⁷ Ministry of Environment and Green Development 2012, *Integrated Water Management National Assessment Report*, Vol 1.

²⁸ Government of Mongolia, 2010, *Mongolia Second National Communication: Under the United Nations Framework Convention on Climate Change*, p. 44.

²⁹ *Ibid.*, p.14

³⁰ 2030 Water Resources Group, 2014, *Mongolia: Targeted Analysis on Water Resources for Management Issues*, p.12

³¹ 2030 Water Resources Group, 2014, *Mongolia: Targeted Analysis on Water Resources for Management Issues*.

³² Ikon, 2014, "New Conditions Established for Reducing Water use", ikon.mn, viewed at <<http://www.ikon.mn/n/ade>>.

³³ Asian Development Bank, 2014, *Demand in the Desert: Mongolia's Water-Energy-Mining Nexus*, p. 44.

Mongolia faces the urgent challenge of increasing economic development while lowering water use intensity. *Ger* area redevelopment into residential areas with full-service infrastructure is expected to significantly increase the demand for water, given that the average water use per apartment resident is more than ten times greater than that of *ger* area dwellers. Current fee and penalty structures for use, treatment, recycling and discharge (and the enforcement thereof) have a long way to go to adequately incentivize water efficiency measures. Reduced water intensity and development of water efficient technologies will help improve the security of Mongolia's water supplies.

Partners

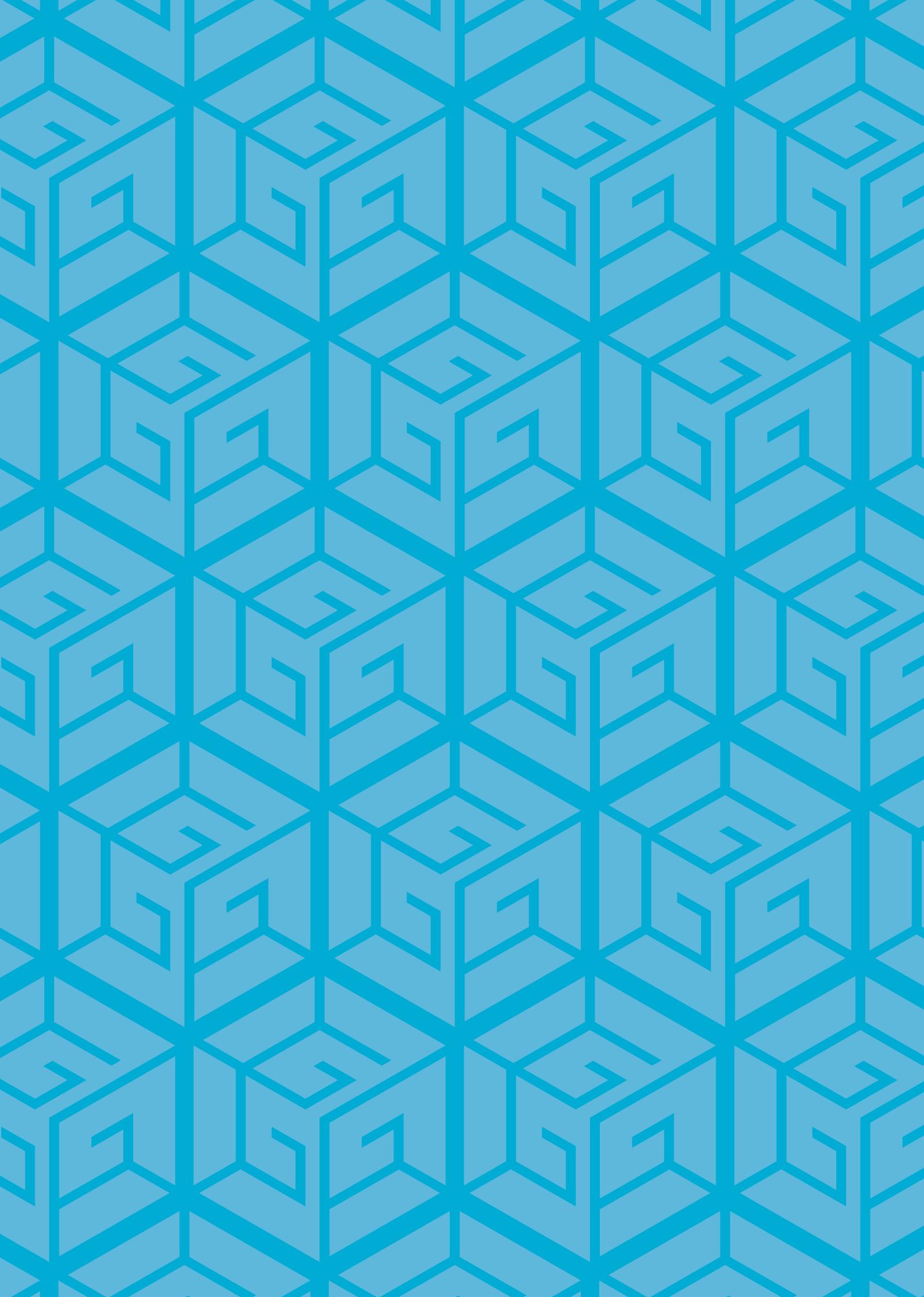
The GoM cooperates with development partners to promote green development through a range of initiatives. The United Nations Development Programme (UNDP) helped develop and institutionalize building codes and initial energy efficiency promotion. Multi-lateral development banks have supported energy efficient lending initiatives, particularly through commercial onlending, such as EBRD's Mongolian Sustainable Energy Facility. These have been challenged with the lack of commercially viable projects, particularly outside Ulaanbaatar. Development assistance from the World Bank (e.g. Ulaanbaatar Clean Air Project), German International Cooperation Agency (e.g. Grid efficiency and Energy efficiency project) and others has helped

establish policy foundations in air quality, energy and building infrastructure. Now, the challenges lie in integrating policy and developing regulatory guidelines while extending coordination and implementation to the subnational level.

The government also cooperates with a range of public and private partners on urban planning and development. The Japanese International Cooperation Agency (JICA), The Asia Foundation, World Bank and Asian Development Bank have appeared particularly active in advising Ulaanbaatar City on its development planning and implementation. The majority of commercial investment in urban infrastructure has focused on Ulaanbaatar. There is considerable interest in enabling greater private financial flows into infrastructure services—for example, with ADB's transaction advisory services on the Central Heating Plant No. 5—yet weak government capacity and limited understanding of project bankability delay the potential benefits.

Amongst urban infrastructure, the water infrastructure and services sector has received support from multilateral and bilateral development assistance in Mongolia since the mid-1990s. Such assistance has focused on *ger* area upgrading, including various policy and infrastructure interventions in wastewater management and sanitation.³⁴ A smaller number of recent regional interventions have focused on the Western *aimags* (e.g. SDC Country Program 2012-2016) and those jurisdictions with major mining potential, such as the South Gobi.

³⁴ Asian Development Bank, 2014, "Development Coordination Brief, Darkhan Wastewater Management Project".





Strategic Response

GGGI's intervention goal is to enable Mongolia to transition to a green economy through inclusive green growth based on national priorities and legal frameworks. Mongolia's national policy frameworks and action plans provide the context for applying the *GGGI Strategic Plan 2015-2020*. GGGI will support efforts to strengthen planning, financing and institutional frameworks, especially at the sectoral and subnational levels, through technical assistance, capacity building and knowledge sharing. Extensive in-country consultations with government and other stakeholders revealed a strong desire for implementation of tangible infrastructure and behavioral change for green growth. Taken together, GGGI's strategic response aims to increase green investment flows into Mongolia. Within this context, GGGI's objective is to support the Government of Mongolia in its green growth transition with three strategic outcomes in mind:

Outcome 1:

Mongolia transitions from brown to green energy and improves energy efficiency.

GGGI's Mongolia Country Program has created strategic partnerships with national and international partners to support Mongolia's green development transition. In addition to MEGDT—GGGI's core operating counterpart in Mongolia—GGGI will actively collaborate with the Ministry of Energy, Ministry of Roads and Transportation, Ministry of Education, Science and Culture, Ministry of Construction and Urban Development, Invest Mongolia Agency, Administrations of cooperating *aimags*³⁵, and other relevant government agencies per thematic area. International partners will include UNDP, UNEP, 2030 Water Resources Group/IFC, Green Growth Knowledge Platform, JICA, GTCK and others, as relevant. The Business Council of Mongolia will remain an important partner in liaising and consulting with the private sector on program design and delivery. Civil society cooperation involves both international organizations—such as The Nature Conservancy—and domestic actors—such as the Mongolian Association of Urban Centers.

To assist the government in achieving these Outcomes, GGGI will provide a range of professional services based on demand for technical advisory, knowledge development and private sector solutions for pro-poor green growth.

Outcome 2:

Mongolia accelerates urban green infrastructure development.

For each Outcome, GGGI hereby seeks to build upon its past interventions, integrated service delivery model and value chain, as required in Mongolia's unique country context. The following indicative activities will inform further program planning per CPF Outcome:

Outcome 1: Mongolia transitions from brown to green energy and improves energy efficiency.

GGGI will support Mongolia's transition to green (and "greener") energy systems for electricity and heating. Satisfying growing energy demand will require both new capacity and rehabilitation of existing facilities, the former of which offer the greatest transformative potential. In the absence of experience planning, designing or operating alternative energy systems—particularly for central heating—research and capacity building are urgently needed. The identification and analysis of green energy systems and measures will help the government to integrate national targets at the sectoral and subnational levels.

Outcome 3:

Mongolia strengthens water management to improve supply-demand alignment and mitigate climate change risks.

³⁵ The government designated the following five *aimags* as model green *aimags*: Arkhangai, Bulgan, Khentii, Khovd, and Uvurkhangai.

Research will examine alternative energy systems for peri-urban areas of Ulaanbaatar and *aimag* centres. Key opportunities for pairing household and industrial (especially mining) energy demand with renewable power and transferring renewably generated electricity into district heating will be assessed. Through jointly conducted analysis, stakeholders will learn firsthand the potential of alternative energy systems. GGGI will support government capacity building in designing green energy measures designed to support the poor. GGGI's Knowledge Services Department will ensure technical research and capacity building are aligned with international best practices, with the support of KSD's Energy Specialist, and shared across global knowledge platforms, such as the GGKP. Ulaanbaatar City and the model *aimags* are expected to lead in the formulation of green energy strategies and plans that align with national energy goals.

Well-designed energy efficiency measures have the potential to drive growth in the market for green energy technologies while simultaneously reducing harmful emissions, enhancing property values and decreasing health risks. Energy efficiency will be an integral component of GGGI's support to the government for design and assessment of green building measures, with an initial focus on public education buildings. GGGI-supported research and capacity building aim to help the government measure and verify its progress towards green energy and energy efficiency targets. GGGI will help develop baseline measurement methodology, data collection arrangements and quality assurance mechanisms to ensure that policy makers can assess results in a timely fashion. Ministry of Energy will lead from the government, with additional coordination with GIZ's urban nexus and energy efficiency programs. Given the significant ongoing and expected support for household-level air pollution reduction, GGGI's intervention will focus on policy and programming in energy generation and efficiency and transportation systems to help reduce air pollution.

GGGI will help the government to develop guidelines, methodologies and tools for planning and designing energy systems and efficiency measures, particularly those suitable for private participation. Quantifying the potential benefits of green energy projects is a new process in Mongolia, requiring clear guidance tailored to local context. GGGI's assistance will help integrate environmental and social safeguards into the early stages of the infrastructure project cycle through analysis and policy implementation guidance. GGGI's initial

cooperation with GoM on energy project development will build upon prefeasibility work on Ulaanbaatar waste-to-energy concessions, led by the Invest Mongolia Agency and supported by KSD's green investment advisory unit. Waste-to-energy project development has emerged across GGGI Member countries, with cooperation expected with India and Rwanda programs.

GGGI will help design renewable energy and energy efficiency incentives and support schemes to reduce project risk and attract investment. Support for public-private collaboration in the design and implementation of fiscal incentives will help increase the attractiveness and bankability of green energy projects. GGGI will support the government to engage in platforms for public-private sector dialogue on greening infrastructure, such as national business associations and global green finance platforms. Ultimately, GGGI aims to enable the government to attract infrastructure financing, especially from climate facilities.

GGGI will support the government to develop tangible infrastructure through project design, pre-feasibility assessment and facilitation of project financing. More specifically, GGGI's support for project preparation will include multi-stakeholder consultative planning, cost-benefit analysis, financing assessment for green energy generation and building efficiency improvements. Priority will be given to green energy projects for small and medium sized entities, especially at the subnational level (such as co-generation facilities), in line with Mongolia's national development strategy and poverty reduction goals. Energy projects have relatively strong commercial potential. Consequently, GGGI support is expected to focus on non-financial risks, subnational project preparation and aggregation.

Outcome 2: Mongolia accelerates urban green infrastructure development.

GGGI aims to help translate policy into practice and infrastructure concepts into construction—building upon the lessons learned from previous interventions in green growth planning, public building design and transportation assessment. Initially, GGGI will work with Ulaanbaatar and designated model green *aimags* to develop localized strategies and plans for green growth. While these efforts are by nature multi-sectoral, GGGI will place special emphasis on green building and public transportation systems. Support for green building stems from GGGI's design and assessment of a public kindergarten facility

in a low-income district of Ulaanbaatar, developing the case for demonstration and replication at the subnational level and seeking to apply lessons learned to other public buildings and private construction. GGGI works closely with the UN-PAGE initiative to develop design guidelines and conduct capacity building. GGGI's cooperation in developing a model eco city in the Philippines and other Green Cities-themed interventions will offer examples of strategies and plans that enabled green growth in other Member Countries.

Similarly, GGGI support for greening public transportation systems will examine public transport fleet alternatives and infrastructure modalities suited to peri-urban areas. The so-called "eco station" concept introduced through GGGI's 2013-14 research will be elaborated and refined for specific subnational action planning in Ulaanbaatar and selected model green *aimags*. GGGI work on public bus fleet replacement in Mexico provides insights from other Member countries that GGGI will help Mongolia to adapt and apply appropriately. Taken together, these Green Cities strategy and planning efforts will help Mongolia to advance towards both infrastructure construction and behavior change.

GGGI aims to help Mongolia's peri-urban settlements to avoid locking into fossil-fuel intensive, costly and climate vulnerable infrastructure. GGGI will support the government to develop investment plans for urban green infrastructure projects, particularly those suitable for PPPs. GGGI's cooperation with GoM on bankable project development will build upon collaboration in social infrastructure project preparation, specifically the work on public kindergarten facilities, and transportation systems planning—with potential cooperation with ADB and Ulaanbaatar City. GGGI will analyze and propose urban infrastructure incentives and support schemes to reduce project risk and attract investment, as currently underway with Invest Mongolia and Ministry of Education, Science and Culture.

To increase green investment flows, GGGI's support for bankable project preparation will include multi-stakeholder consultative planning, cost-benefit analysis, financing assessment for green urban infrastructure. Priority urban green infrastructure projects will be small and medium sized, targeting peri-urban areas and rural settlements. Such areas have the greatest potential for green growth transformation and the least amount of infrastructure finance historically. The case for demonstration infrastructure will be data-driven and intended for replication, informed by research and analysis.

As a neutral advisor, GGGI will support the government to present its jointly designed projects for financing to potential ODA and private investors.

Outcome 3: Mongolia strengthens water management to improve supply-demand alignment and mitigate climate change risks.

The water-green growth nexus lies in the strategic consideration of water resources in economic decision making. To this end, GGGI will provide technical assistance in the design of information and technology platforms for water resource management. Improvements in government data collection, access and analysis have the potential to improve water-related development planning and reduce the potential for conflict over water. GGGI will help the government to collect, analyze and disclose key water resources information. Accurate, timely and complete information will strengthen capacity in designing and monitoring water polices and regulations. There is a particularly urgent need to develop regionally specific water use regulations and normative standards to ensure that industrial and residential development are appropriately paired with water availability.

GGGI will help strengthen government capacity in applying water information analysis and technology assessment to sectoral and subnational issues, such as irrigation systems efficiency or regional water scarcity. Industrial and residential development depends on some combination of supply, distribution, treatment, reuse and/or discharge infrastructure. Policy should reward water users who re-use wastewater after treatment, purify and process water for household consumption or collect water from natural sources (such as snow, rain, and floods) by for example exempting from a portion of water usage fees. GGGI will provide technical support in the identification and evaluation of greener processes and technologies that reduce water intensity of industrial and urban development. Technology assessment efforts will necessarily engage multiple stakeholders to appropriately craft policies and promote technology adoption widely.

Key partners in this effort include MEGDT and the multi-stakeholder platform of the 2030 Water Resources Group. Together with partners, GGGI will showcase Mongolia's efforts in water policy development and technology assessment through South-North-South cooperation and knowledge exchange. GGGI Member countries with resource-driven economies can share

specific implementation experiences that will benefit from the identification and transfer of best practices, such as those being developed in Peru.

GGGI aims to help the government to avoid locking into water-intensive pathways for urban and industrial development. GGGI will help the government to determine the potential value for money of available financing and implementation mechanisms for water services, especially waste water treatment. GGGI's initial cooperation with GoM on water services investment planning will build upon and help apply its water

information and technology platforms. GGGI will help design water use incentives and services conditions to improve water security, reduce project risk and attract investment. Support for public-private collaboration in the design and implementation of fiscal incentives will be critical to realizing the intended benefits of water policy and regulatory changes, particularly in those regions where water supply-demand is most mismatched. Private sector engagement through such platforms as the Business Council of Mongolia (BCM) and the mining roundtable will help shape the design of pro-poor growth policy and incentives. Ultimately, GGGI aims to enable the

CPF Strategic Response			NGDP Strategic Priorities	GGGI Thematic Priority	GGGI Value Chain
Impact: Mongolia transitions to green economy through inclusive green growth based on national priorities and legal frameworks					
Strategic Outcomes	Indicative Outputs				
1	Mongolia transitions from brown to green energy and improves energy efficiency	Analytical research on policy and pricing for national energy goals completed.	Efficient use of natural resources, low GHG and reduced waste generation	Energy	Sector/Sub-sector strategy and planning (i.e. analysis of costs and sector investments; development of sectoral investment plans and selection) Design, financing and implementation
		Government capacity to attract and implement public and private investment in energy generation and efficiency improved.			
		Inclusive green energy generation and efficiency projects designed in priority sectors.			
2	Mongolia accelerates urban green infrastructure development	Green city strategies and plans designed.	Increase investment in natural capital, human development and clean technology by introducing financing, tax, lending and other incentives for supporting a green economy	Green City Development	Sector/Sub-sector strategy and planning (i.e. analysis of costs and sector investments; development of sectoral investment plans and selection) Design, financing and implementation
		Government capacity to attract and implement public and private investment in urban green infrastructure improved.			
		Inclusive urban green infrastructure projects designed in priority sectors.			
3	Mongolia strengthens water management to improve supply-demand alignment and mitigate climate change risks.	Information and technology platforms informing Mongolia's water resource management developed.	Efficient use of natural resources, low GHG and reduced waste generation Encourage education, science and technology to serve as the catalyst for green development, and develop cultural values and livelihoods that are in harmony with nature	Water	Green Impact Assessment Design, financing and implementation (i.e. policy preparation)
		Government capacity to attract and implement public and private investment in water services improved.			
		Inclusive water services projects designed in priority sectors.			

government to conduct consistent, achievable investment planning for water services for its growing urban and industrial needs.

GGGI will support the government to develop tangible water services infrastructure through project design, pre-feasibility assessment and facilitation of project financing. More specifically, GGGI's support for project preparation will include multi-stakeholder consultative planning, cost-benefit analysis, financing assessment for water infrastructure, such as supply enhancement, distribution, treatment, re-use and disposal. Key government partners on water include MEGDT, the National Water Council

and Invest Mongolia, where concessions and private investment are involved. GGGI support will prioritize small and medium sized projects that target public budget sources, especially in those regions with acute water shortages, such as the Gobi *aimags*. By helping design and implement more resilient, efficient water services solutions, GGGI will contribute to Mongolia's green growth transition.

The aforementioned GGGI strategic outcomes and outputs are mapped in the following table to illustrate how these are aligned with the NGDP strategic objectives and the GGGI thematic priorities and value chain.

GGGI Contributions to the Sustainable Development Goals in Mongolia

The outcomes given in the Mongolia Country Planning Framework will contribute to GGGI's corporate goal of "strengthening of national, sub-national, local green growth planning, financing and institutional framework". The CPF for Mongolia responds directly to four Sustainable Development Goals (SDGs).

- SDG #6: Ensure availability and sustainable management of water and sanitation for all
- SDG#7: Ensure access to affordable, reliable, sustainable, and modern energy for all
- SDG #9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- SDG #12: Ensure sustainable consumption and production patterns

Additionally, the integration of private sector development is a key priority areas for Landlocked Developing Countries to integrate into the SGDs. In this context, the Mongolia CPF contributes to the strengthening of institutional capacity in designing and implementing public-private partnerships and greening of public procurement practices.

Outcome 1 of the Mongolia CPF addresses SDG #7.

SDG #7—Energy. In the context of SDG #7, the Mongolia CPF is relevant to 7.3 "the global rate of improvement in energy efficiency". Energy is a cross-cutting enabler for development with energy efficiency integral to the transformation of energy systems.

The Mongolia program will support sustainable energy development particularly through interventions aimed at enhancing the use of green energy and energy efficiency measures for low-income households in peri-urban or rural settlements.

Outcome 2 of the Mongolia CPF addresses SDG #9.

SDG #9—Resilient Infrastructure. In the context of SDG #9, the Mongolia CPF is relevant to 9.4 "upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities", through demonstration of community-led green urban development projects at the sub-national level.

Outcome 3 of the Mongolia CPF addresses SDGs #6 and #12.

SDG #6—Water. The Mongolia CPF is relevant to several sub-targets in SDG #6, including 6.4 "substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity" and 6.5 "implement integrated water resources management at all levels".

SDG # 12—Sustainable consumption and production. The program is relevant to SDG #12.2 to “achieve the sustainable management and efficient use of natural resources” through interventions in capacity-building support in public water resource management, and to promote the use of greener technologies to improve industrial water efficiency.

Private Investment & Green Growth in Mongolia

Private investment—especially foreign direct investment (FDI) in the mining sector—has driven Mongolia’s rapid economic growth over the past decade. However, with the dramatic reduction of FDI in 2013-2014, economic conditions deteriorated and growth stalled. In 2011, Mongolia attracted 4.7 billion USD in FDI, fueling its world-leading GDP growth of 17.3% that same year. In contrast, FDI inflows shrunk to just 644 million USD in 2014, with GDP rising just 7.8% and projected to slow further. Resuscitating FDI to beyond its previous 2011 peak is a cornerstone of Mongolia’s Coalition Government that took power in December 2014.

Critically, the Government of Mongolia (GoM) recognizes that increased green investment from both the public and private sectors will be indispensable to achieving its green development transition. Mongolia’s NGDP defines “Green investment” as the financing of and investing in projects and activities that use technologies to reduce energy, water and raw material consumption, while seeking to maintain the value of ecosystem services. Increased investment in green

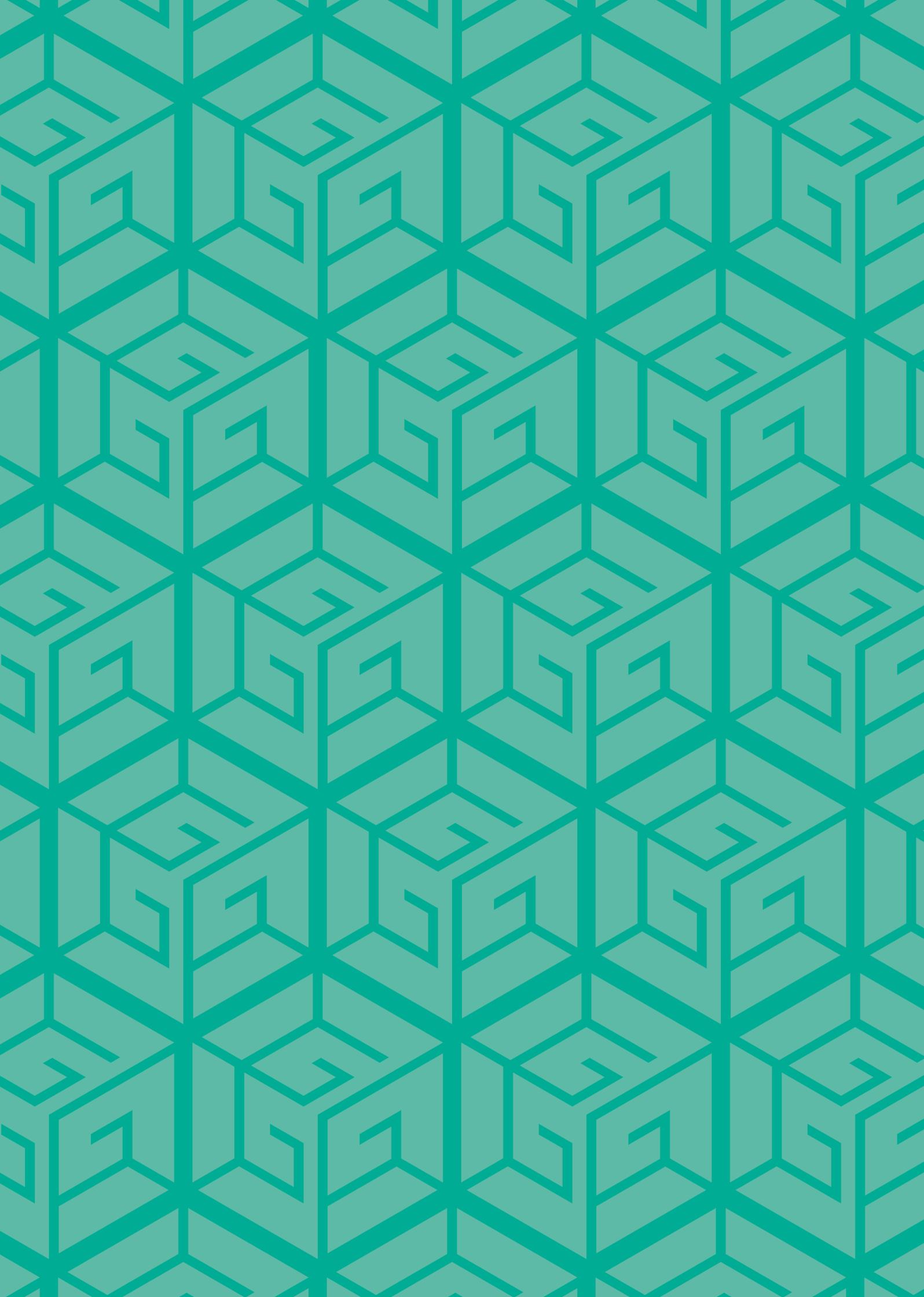
infrastructure or in the greening of conventional infrastructure is an area where government efforts are essential for the transition to the green development model.

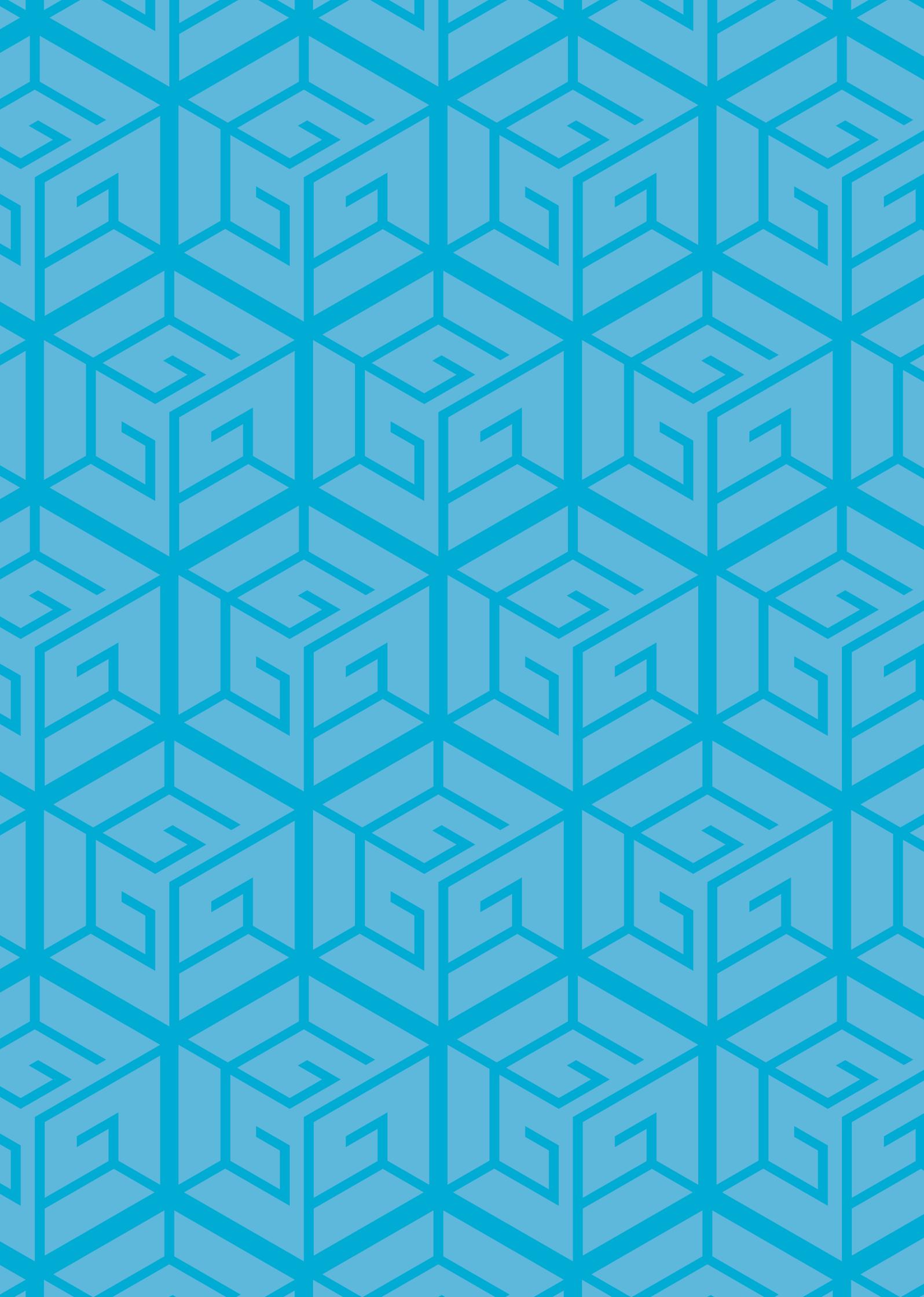
The legal and policy frameworks for public-private partnership (PPP) investments in infrastructure were established in Mongolia with the introduction of the State Policy on PPP (2009) and the Law on Concession (2010). However, progress has been slow as the government and private sector have faced various challenges in the planning, preparation, and implementation of large- and small-scale projects alike. While many PPP projects have been proposed, few have progressed beyond the conceptual stage.

Noteworthy challenges to attracting and sustaining private investment include:

- Inconsistency and weak credibility in government plans and policies;
- Lack of institutional capacity in project selection, design and management;
- Lack of coordination among relevant ministries and agencies;
- High levels of project and non-project risks;
- Weak (or non-existent) incentives for private participation.

GGGI’s services in Mongolia will directly address these challenges by assisting the government along the green growth value chain to build capacity, improve coordination and confront risks and rewards associated with its infrastructure development needs.





Acronyms

ADB	Asian Development Bank	MoE	Ministry of Energy
BCM	Business Council of Mongolia	MSIC	Mongolian Statistical Information Center
CPF	Country Planning Framework	NDS	Millennium Development Goals-Based Comprehensive National Development Strategy of Mongolia 2008-2021
GGGI	Global Green Growth Institute	NGDP	National Green Development Policy of Mongolia
GGP&I	Green Growth Planning and Implementation	NSC	National Security Concept of Mongolia
GHG	Greenhouse gases	PPP	Public Private Partnership
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German Agency for International Cooperation)	SDC	Swiss Agency for Development and Cooperation
GoM	Government of Mongolia	SDG	Sustainable Development Goal
IFC	International Finance Corporation	UNDP	United Nations Development Programme
JICA	Japanese International Cooperation Agency	WB	World Bank
KSD	Knowledge Solutions Division	WHO	World Health Organization
MEGDT	Ministry of Environment, Green Development and Tourism	WRG	Water Resources Group



Global
Green Growth
Institute

Follow our activities
on Facebook and Twitter



www.gggi.org