



MINISTRY OF ECONOMY  
AND DEVELOPMENT



# MONGOLIA SDG Investor Map

Report on Investment Opportunity Areas



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# Acronyms

<b>B2B</b>	Business-to-Business
<b>B2C</b>	Business-to-Consumer
<b>CAGR</b>	Compound Annual Growth Rate
<b>CO2</b>	Carbon Dioxide
<b>COVID 19</b>	Coronavirus Disease 2019
<b>EV</b>	Electric Vehicles
<b>FDI</b>	Foreign Direct Investments
<b>GDP</b>	Gross Domestic Product
<b>GHG</b>	Greenhouse Gases
<b>GGGI</b>	Global Green Growth Institute
<b>GoM</b>	Government of Mongolia
<b>HDI</b>	Human Development Index
<b>IOA</b>	Investment Opportunity Area
<b>MSMEs</b>	Micro, small and medium enterprises
<b>NBFI</b>	Non-banking financial institutions
<b>NCDs</b>	Non-communicable diseases
<b>NDC</b>	Nationally Determined Contribution
<b>NGO</b>	Non-Governmental Organizations
<b>NSO</b>	National Statistics Office
<b>MoF</b>	Ministry of Finance
<b>MNT</b>	Mongolian Currency Tugrik
<b>PV</b>	Photovoltaic
<b>ROI</b>	Return on Investment
<b>SASB</b>	Sustainability Accounting Standards Board
<b>SDG</b>	Sustainable Development Goal
<b>UN</b>	United Nations
<b>UNDP</b>	United Nations Development Programme
<b>UNICEF</b>	United Nations Children's Fund
<b>US\$</b>	United States Dollar
<b>VAT</b>	Value added tax
<b>VNR</b>	Voluntary National Review



# Glossary of key terms

Term	Definition
<b>Blended financing</b>	Refers to the use of public or philanthropic funds to catalyze private capital investment, particularly in emerging or frontier markets. Blended finance is most relevant for investments with high sustainable development impact that are not attracting private investment but still have a business rationale and potential cash flows to repay the private partner.
<b>Business to-Business (B2B)</b>	Refers to commerce between businesses where a business engages in services or products with other businesses.
<b>Business to-Consumer (B2C)</b>	Refers to commerce between businesses and consumers where a business sells
<b>Concessional financing</b>	These are loans that are extended on terms substantially more generous than market loans. The concessionality is achieved either through interest rates below those available on the market or by grace periods, or a combination of these. Concessional loans typically have long grace periods.
<b>Investment Opportunity Area (IOA)</b>	Describes the space where new capital can facilitate the scale of existing impactful business models or where new business models can achieve significant impact.
<b>Investment size</b>	The amount of funds needed for an investment
<b>Market size</b>	The amount of sales, revenue or customers in a given industry over a given period of time for the potential addressable market to investors.
<b>Priority sector and priority sub-sector</b>	Priority sectors and priority sub-sectors are classified by SASB's Sustainable Industry Classification System (SASB SICs) which, through research and stakeholder engagement, has been recognized as important for the sustainable development of the country and could be driven by capital flows from the private sector.
<b>Sustainable Development Goals (SDGs)</b>	The Global Goals were adopted by 193 Member States at the historic United Nations General Assembly Summit in 2015 in Addis Ababa. They are a universal call to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030. The Sustainable Development Goals (SDGs) consist of 17 goals that emphasize the interconnected environmental, social and economic aspects of sustainable development by putting sustainability at their center.
<b>White space</b>	Describes Investment Opportunity Areas (IOAs) that have the potential for high development impact and have high growth potential, but face certain obstacles from having insufficient policy momentum, limited private sector participation, or are currently hindered by certain types of risks such as business risk, market risk, capital risk, etc.

# Executive Summary



Globally, an unprecedented reallocation of capital will be needed to realize national climate and development plans flowing from the Paris Agreement based Nationally Determined Contribution (NDC) and the commitment towards Sustainable Development Goals (SDGs). In the pre-COVID-19 estimates showed a funding gap of US\$ 2.5 trillion annually to achieve the SDGs by 2030. The funding gap has increased to US\$ 4.2 trillion due to the COVID-19 emergency, global economic down-turn followed by geopolitical tensions, and shifting of resources towards COVID-19 response spending in developing countries.<sup>1</sup>

COVID-19 has massively affected the livelihood of Mongolians, especially vulnerable women. The micro and small-medium sized enterprises, a sector largely dominated by women, faced challenges in terms of cash flows, reduced supply and demand, and disruption in the value chain and were unable to pay rents, and interest on bank loans. The economy contracted by 4.6 percent in 2020, resulting in a 12.3 percent fiscal deficit and an increase in sovereign debt by around 10 percentage points to over 74 percent of GDP, increasing from 63 percent in 2019.<sup>2</sup> Mongolia achieved a modest GDP growth of 1.6 percent and 4.8 percent in 2021 and 2022, respectively.<sup>3</sup> Further, the outcomes of COVID-19 widened the educational gaps in remote areas, where even though there were efforts to pivot to digital education following social distancing norms, children lacked access to basic electronic facilities. It negatively impacted girls' education due to increased household and care work, which limiting available time for women as well as girls for educational pursuits. Medical services were limited for pregnant women with disabilities. As a result, maternal mortality rate increased by 27.8 percent compared to past three years. Despite high uncertainty surrounding the course of the pandemic, the Mongolian Government adopted a Long-term development plan 'Vision- 2050', that aims to transform the country by fighting poverty, creating a greener economy, improving the education system and gender equality for enhanced job access, and redefining the social strategy in a more citizen-centered way. The Vision-2050 ensures greater legal clarity and greater policy coherence. The Vision-2050 combines goals, targets, outcomes, actions, indicators and monitoring, into one long-term development policy, that covers 83 percent of SDG targets.

In December 2021, the Prime Minister announced a New Recovery Policy as the bedrock of the broader economic recovery policy post-pandemic. It aims at meeting the goals and objectives of the first phase of the Vision-2050 by maintaining the economic growth at an average of 6 percent in the long run, and doubling per capita national income and increasing the labor force participation rate to 65 percent.

In parallel with this, the Government of Mongolia raised the country's NDC target to 22.7 percent, with a conditional emissions reduction target of 27.2% by 2030. A national program was also launched to plant 1 billion trees by 2030.<sup>4</sup>

According to the UNDP's estimation, Mongolia would require US\$ 44.2 billion (MNT 126 trillion) in additional spending to achieve the nationally determined SDGs by 2030, and about an additional US\$ 22.5 billion (MNT 64 trillion) is needed by 2025<sup>5</sup>. The financial need to meet NDC in Mongolia,



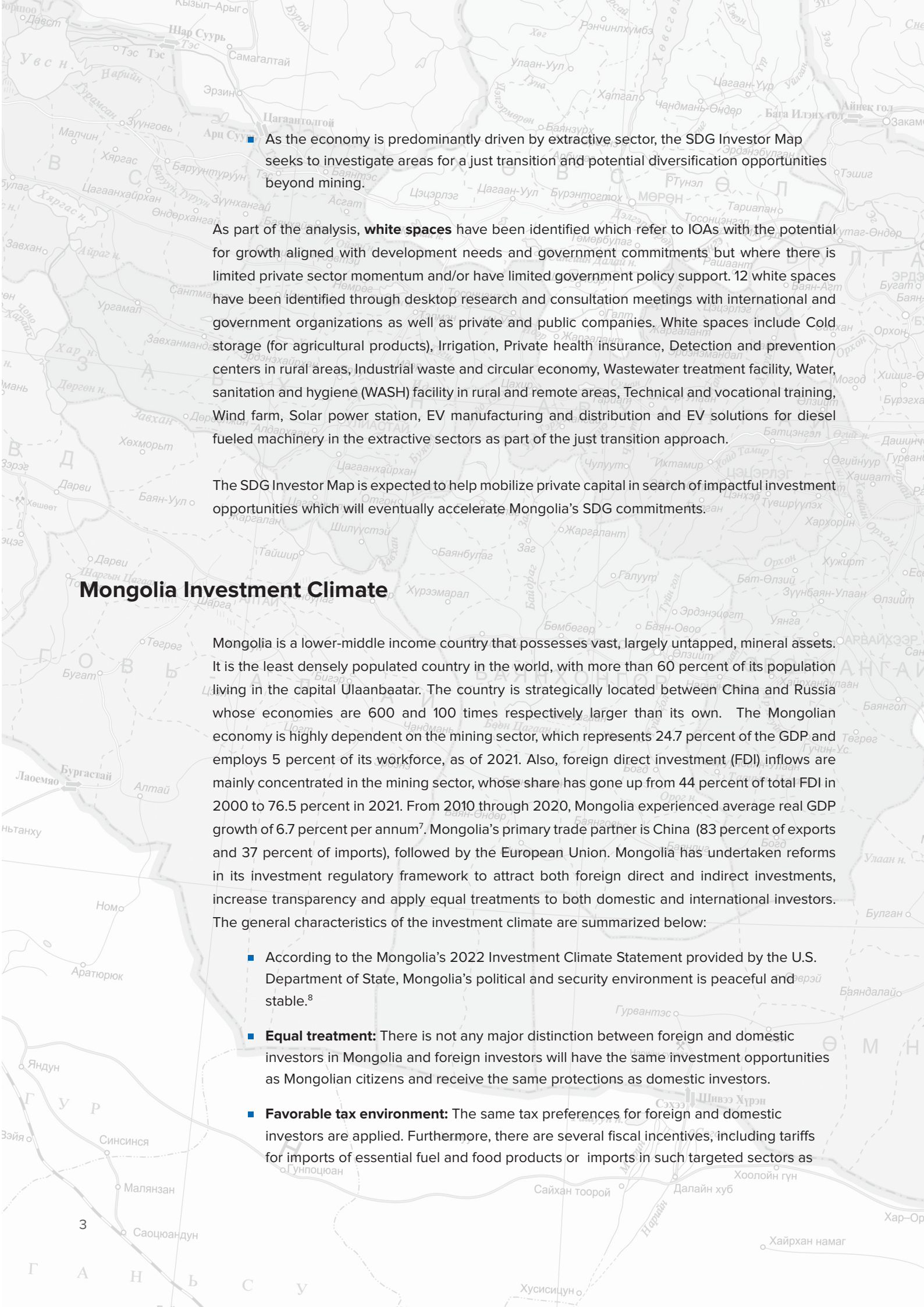
is at US\$ 11 billion. For a country whose national GDP is US\$ 15 billion<sup>6</sup> as of 2022, putting available resources to the best use and mobilizing all potential resources, including from the private sector, to accelerate the implementation of the SDGs is vital for the Government of Mongolia.

In order to incentivize private investment in sustainable development, the United Nations Development Programme (UNDP) Mongolia has collaborated with partners in the Government and the private sector on the first ever Mongolia SDG Investor Map as the primary tool in illustrating Investment Opportunity Areas (IOAs) to domestic and global investors around the world. SDG Investor Maps, that have been developed and launched for over 30 markets around the globe, present market intelligence to support investment decision-making, such as sector and sub-sector justification, business models, return on investment, potential sustainability benefits, relevant policy, regulatory, financial landscape and relevant risks. Each potential investment opportunity (or Investment Opportunity Area – IOA) sits at the cross section where there is government policy to support it, a national sustainable development need and where promising business models already exist. The map also applied **gender, digital and climate** as underpinning themes. This report presents highlights from the Mongolia SDG Investor Map, which was developed based on secondary data research and a highly consultative process involving in-depth consultations with 32 private sector, governmental officials, development partners, non-governmental organizations, and experts from UN agencies.<sup>1</sup> As a result of this process, Mongolia’s SDG Investor Map has identified 14 IOAs from six priority sectors, the key characteristics of which can be summarized as follows:

- The 14 IOAs cut across 6 sectors of Food and Beverage (6 IOAs), Health Care (2 IOAs), Services (2 IOAs), Infrastructure (2 IOAs), Renewable Resources and Alternative Energy (1 IOA) and Financials (1 IOA).
- In terms of ticket size, 50 percent of the IOAs identified seek financing in the range of US\$ 1 million to US \$10 million, 35 percent of the IOAs require funding that is between US\$ 0.5 million and \$0.5 million and 1 million, and the remaining are classified in greater than \$10 million category.
- Approximately 65 percent of IOAs are expected to generate a return on investments within a period of five years (short term), 21 percent within 5-10 years (medium term), and the remaining in more than 10 years (long term). IOAs in the areas of food and agriculture, education and renewable resources and alternative energy generally have a shorter term to generate return, while health and infrastructure IOAs have a medium to longer term gestation period.
- Concerning the financial structure, 35 percent of the IOAs are expected to be financed through concessionary capital. In contrast, the remaining are expected to be funded with either commercial capital or through blended financing. In terms of the impact case, all IOAs address SDG 5 – Gender equality, while 3 IOAs offer technology-based solutions to improve accessibility, thereby reducing regional disparities. 5 IOAs are expected to contribute to reducing climate change effects and protecting and preserving the environment.

<sup>1</sup> UNDP, FAO, UNICEF, UNIDO, and ILO (See Annex 1. List of organizations and experts consulted).





■ As the economy is predominantly driven by extractive sector, the SDG Investor Map seeks to investigate areas for a just transition and potential diversification opportunities beyond mining.

As part of the analysis, **white spaces** have been identified which refer to IOAs with the potential for growth aligned with development needs and government commitments but where there is limited private sector momentum and/or have limited government policy support. 12 white spaces have been identified through desktop research and consultation meetings with international and government organizations as well as private and public companies. White spaces include Cold storage (for agricultural products), Irrigation, Private health insurance, Detection and prevention centers in rural areas, Industrial waste and circular economy, Wastewater treatment facility, Water, sanitation and hygiene (WASH) facility in rural and remote areas, Technical and vocational training, Wind farm, Solar power station, EV manufacturing and distribution and EV solutions for diesel fueled machinery in the extractive sectors as part of the just transition approach.

The SDG Investor Map is expected to help mobilize private capital in search of impactful investment opportunities which will eventually accelerate Mongolia's SDG commitments.

## Mongolia Investment Climate

Mongolia is a lower-middle income country that possesses vast, largely untapped, mineral assets. It is the least densely populated country in the world, with more than 60 percent of its population living in the capital Ulaanbaatar. The country is strategically located between China and Russia whose economies are 600 and 100 times respectively larger than its own. The Mongolian economy is highly dependent on the mining sector, which represents 24.7 percent of the GDP and employs 5 percent of its workforce, as of 2021. Also, foreign direct investment (FDI) inflows are mainly concentrated in the mining sector, whose share has gone up from 44 percent of total FDI in 2000 to 76.5 percent in 2021. From 2010 through 2020, Mongolia experienced average real GDP growth of 6.7 percent per annum<sup>7</sup>. Mongolia's primary trade partner is China (83 percent of exports and 37 percent of imports), followed by the European Union. Mongolia has undertaken reforms in its investment regulatory framework to attract both foreign direct and indirect investments, increase transparency and apply equal treatments to both domestic and international investors. The general characteristics of the investment climate are summarized below:

- According to the Mongolia's 2022 Investment Climate Statement provided by the U.S. Department of State, Mongolia's political and security environment is peaceful and stable.<sup>8</sup>
- **Equal treatment:** There is not any major distinction between foreign and domestic investors in Mongolia and foreign investors will have the same investment opportunities as Mongolian citizens and receive the same protections as domestic investors.
- **Favorable tax environment:** The same tax preferences for foreign and domestic investors are applied. Furthermore, there are several fiscal incentives, including tariffs for imports of essential fuel and food products or imports in such targeted sectors as



agriculture or energy, discounts on electricity rates or tax incentives for green energy. The government may also extend tax credits on a case-by-case basis to investments in minerals processing, agriculture, and infrastructure sectors. Under the Investment Law (2013) and its amendment of 2023, companies with foreign investments that are registered and paying taxes in Mongolia, qualify as domestic Mongolian entities for investment incentive packages that, among other benefits, offer tax stabilization for up to 27 years<sup>9</sup>. Moreover, according to the Budget Law of 2023 and amendments to the Personal and Corporate Income Taxation Law (2023), withholding tax for dividend and interest income has been reduced from 20 percent to 5 percent. Also, the income tax of investment funds has been exempted.

- **Ownership restriction:** Mongolia generally imposes no statutory or regulatory limits on foreign ownership and control of investments, except for foreign state-owned entities.
- **Business registration:** Since 2021, the procedures for permits and licenses have been facilitated due to legal changes and digitalization. In 2023, the Mongolian government made a significant move by establishing an Investment and Trade Agency under the Ministry of Economy and Development. This agency has been established with the core objective of fostering economic growth and attracting both domestic and foreign investments. The agency plays a crucial role in providing a wide range of services that support investors throughout the investment process.
- **Capital markets:** Mongolian capital market has seen the highest growth globally with a 130 percent growth in 2021<sup>10</sup>. Mongolian capital market has been included in the FTSE Russell's Frontier Market Status effective from September 2023. The classification process incorporated the assessment of Mongolian capital markets against a range of technical criteria and considered the perceptions of institutional investors. Mongolia has met the following criteria of the Frontier markets:<sup>11</sup>
  - Fair and non-prejudicial treatment of minority shareholders,
  - No incidence of foreign ownership restrictions,
  - No restrictions or penalties applied to the investment of capital or the repatriation of capital and income,
  - Imposition of taxes to be reasonable and comparable between domestic and non-domestic investors,
  - Efficient trading mechanism and transparency - market depth information / visibility and timely trade reporting process, and
  - Enhanced clearing, settlement and custody operations in place.

## Development needs and policy priorities

The investor map development process started with identifying priority sectors where the development need is the highest based on an analysis of Mongolia's four key national policy documents, including the Vision-2050, the Medium-Term Development Plan 2025, the Public Investment Program and the New Recovery Policy and 11 development assessment reports comprising of internationally recognized data sources.



A total of 18 themes were identified based on alignment with policy priorities, SDG needs and private sector participation from the desk review. Through public sector consultations, 13 themes were narrowed down to the 6 key sectors for further sectoral analysis. The main criteria were the degree of overlap between SDG needs and policy priorities and the themes identified more frequently were selected for consideration. It resulted in a shortlist of six sectors that identified according to an adjusted industrial categorization system presented by the Sustainability Accounting Standards Board (SASB)<sup>2</sup>: **(1) Food and Beverage (thereafter Food and Agriculture); (2) Health Care; (3) Services; (4) Infrastructure; (5) Renewable Resources and Alternative Energy; and (6) Financials.** Please refer to the detailed selection process from the Annex 4.

A key condition for selecting potential IOAs is that they must meet pre-defined business criteria (marketable, specific, at-scale, proven); and impact criteria (act to avoid harm, benefit stakeholders, contribute to solutions) that could address the identified needs.

- **Fundamentally marketable**, i.e. investments within which a private actor could invest independently of government co-investment, and where a private actor may be able to achieve a market- or above-market return.
- **Sufficiently specific** to the realm of an 'opportunity area', i.e. a field within which diverse kinds of deals/ transactions could take place, but broad enough for an investor to decide what kind of financial vehicle is best suited to deploy.
- **Sufficiently at-scale** for investments to be able to achieve depth and duration of potential impact.
- **Largely already proven in-market**, i.e. by a transaction having taken place, and return/ impact begun to be calculated.
- **Act to avoid** or reduce harm, including harm that detracts from achieving the SDGs: reduce (or mitigate) a negative outcome that is (or could be) caused by the business model.
- **Benefit Stakeholders** in relation to the SDGs: maintain or improve a positive outcome caused by the business model.
- **Contribute to solutions** towards achieving the SDGs: generate a new positive outcome caused by the business model for a stakeholder who would otherwise be underserved, most often due to market or policy failure.

<sup>2</sup> SASB Classification is commonly used in the business world and intended for use in communications to investors regarding sustainability issues that are likely to impact corporate ability to create long-term shareholder value.

## Investment Opportunity Areas: Overview of Findings

6 sectors, 14 investment opportunity areas, 12 white spaces

FOOD AND AGRICULTURE	HEALTH CARE	SERVICES
<p><b>Investment Opportunity Areas:</b></p> <ol style="list-style-type: none"> <li>1. High nutrient and organic milk and dairy products processing</li> <li>2. Upgrading sustainable wool and cashmere processing plants</li> <li>3. Organic fertilizer produced from animal byproducts and waste</li> <li>4. Energy efficient winter greenhouse</li> <li>5. Artisan cosmetics products made with agricultural byproducts</li> <li>6. Seabuckthorn tree plantations and affiliated products</li> </ol> <p><b>White Space:</b></p> <ul style="list-style-type: none"> <li>• Cold storage</li> <li>• Irrigation</li> </ul>	<p><b>Investment Opportunity Areas:</b></p> <ol style="list-style-type: none"> <li>1. Production and delivery of traditional medicine and supplements</li> <li>2. Digital healthcare service providers</li> </ol> <p><b>White Space:</b></p> <ul style="list-style-type: none"> <li>• Private health insurance</li> <li>• Detection and prevention health centers in rural areas</li> </ul>	<p><b>Investment Opportunity Areas:</b></p> <ol style="list-style-type: none"> <li>1. Hybrid upskilling education platform to meet evolving labor market needs and provide life-long learning opportunities</li> <li>2. Sustainable and cultural tourism</li> </ol> <p><b>White Space:</b></p> <ul style="list-style-type: none"> <li>• Technical and vocational training</li> </ul>
INFRASTRUCTURE	RENEWABLE RESOURCES & ALTERNATIVE ENERGY	FINANCIALS
<p><b>Investment Opportunity Areas:</b></p> <ol style="list-style-type: none"> <li>1. Affordable &amp; Energy efficient housing development</li> <li>2. Energy efficient construction materials</li> </ol> <p><b>White Space:</b></p> <ul style="list-style-type: none"> <li>• Industrial waste and circular economy</li> <li>• Wastewater treatment facility</li> <li>• Water, sanitation and hygiene (WASH) facilities in rural and remote areas</li> </ul>	<p><b>Investment Opportunity Areas:</b></p> <ol style="list-style-type: none"> <li>1. Solar photovoltaic (PV) distribution and decentralized electricity generation</li> </ol> <p><b>White Space:</b></p> <ul style="list-style-type: none"> <li>• Wind farm</li> <li>• Solar power plant</li> <li>• Electric solutions for diesel-fueled machinery in the mining sector</li> <li>• EV manufacturing and distribution</li> </ul>	<p><b>Investment Opportunity Areas:</b></p> <ol style="list-style-type: none"> <li>1. Affordable and accessible microfinance</li> </ol>

## FOOD AND AGRICULTURE

### National development priorities:

- Enhanced food security – Safe, organic and nutritious food supply network
- Increased level of processing of agricultural products and boosted exports of livestock products
- Fully meet domestic food consumption demands

### Sustainable Development Goals:



## Key Development Policies:

- Long-Term Development Plan 'Vision 2050'
- Medium-Term Development Plan
- Public Investment Program
- New Recovery Policy

- High nutrient and organic milk and dairy products processing
- Upgrading sustainable wool and cashmere processing plants
- Organic fertilizer produced from animal byproducts and waste
- Energy efficient winter greenhouse
- Artisan cosmetics products made with agricultural byproducts
- Seabuckthorn tree plantations and affiliated products

## FINANCIALS

### National development priorities:

- Develop flexible, digital-based, multi-faceted financial services that stimulate the economy

### Sustainable Development Goals:



- Affordable and accessible microfinance

## RENEWABLE RESOURCES & ALTERNATIVE ENERGY

### National development priorities:

- Produce its 30% of the energy from renewable resources by 2030
- Become an exporter of renewable energy by 2030

### Sustainable Development Goals:



- Solar photovoltaic (PV) distribution and decentralized electricity generation

14 INVESTMENT OPPORTUNITY AREAS



## SERVICES

### National development priorities:

- Equitable, inclusive and quality education for all
- Digitalized education system
- Preserved nomadic civilization and community-based tourism
- Reduced inequality between rural and urban population

### Sustainable Development Goals:



1. Hybrid upskilling education platform to meet evolving labor market needs and provide life-long learning opportunities
2. Sustainable and cultural tourism

## HEALTH CARE

### National development priorities:

- Quality, accessible and efficient health system
- Expanded e-services in healthcare

### Sustainable Development Goals:



1. Production and delivery of traditional medicine and supplements
2. Digital healthcare service providers

## INFRASTRUCTURE

### National development priorities:

- Increased access to urban infrastructure and introduction of smart technology innovation

### Sustainable Development Goals:



1. Affordable & Energy efficient housing development
2. Energy efficient construction materials

Figure 1. Policy priorities and IOA alignment

## Introducing the IOAs and key definitions:

The section below a snapshot for each of the 14 IOAs that have been identified in the Mongolia SDG Investor Map. The report only provides an overview, for more detailed information areas and the research thereof, please visit the SDG Investor Platform ([www.sdginvestorplatform.undp.org](http://www.sdginvestorplatform.undp.org))

For the benefit of the readers, the following template defines each of the information areas captured for the IOA snapshots in this report.

### Primary SDGs addressed

#### IOA #: Title of the Investment Opportunity Area

##### **BUSINESS MODEL:**

Describes the economic activity that creates value and is required within the IOA to achieve the significant impact; detailing the role of the investor within the space and the modality therein (B2C/B2B and so on)

##### **IMPACT THESIS:**

Summarises the expected impact of the IOA and its business model on people and planet in one sentence, based on the various impact data points

##### **IMPACT CLASSIFICATION:**

An IOA can be classified on the basis of potential outcomes experienced as Acting to Avoid Harm (A), Benefiting Stakeholders (B), or Contributing to Solutions (C) based on data across the data categories that underpin the five dimensions of impact (What, Who, Risks, How Much, Contribution). To understand more deeply this impact classification system, please visit- [www.impactmanagementplatform.org](http://www.impactmanagementplatform.org)

##### **MARKET ENVIRONMENT:**

**Investment opportunities introduction:** Describes in general terms the types of investment opportunities that exist at the intersection of the identified development need and policy priority

**Gender inequalities and marginalization issues:** Describes the unequal treatment, opportunities, rights, priorities, and constraints of individuals based on their gender, age, race, economic status and those differences in socially constructed inequalities that stems from distinctions, whether empirically grounded or socially constructed, that manifest in numerous dimensions within the larger investment area.

**Key bottlenecks introduction:** Describes in general terms the types of challenges that exist at the intersection of the identified development need and policy priority

### ECONOMIC PROFILE:

Key economic factors that establish commercial viability of the IOA

**Market Size:** Expressed in terms of US\$ value of expected revenue/sales over a projected timeframe, Compounded Annual Growth Rate (CAGR) or critical unit relevant to the IOA (for example, average spending by # of students on educational content in a year or # of smallholder farmers working in a crop value chain, etc.)

**Return Profile:** Expressed in terms of IRR, ROI or Gross Profit margins based on the availability of data

**Investment Timeframe:** Describes the time period in which the IOA will pay-back the invested resources based on asset expected lifetime as it will start generating accumulated positive cash-flows

### RISK PROFILE:

**Market risk:** Key risks that may impact the commercial viability of the business model as investments are made in the IOA

**Impact risk:**<sup>3</sup> Key negative externalities and unintended impacts that may result from investments in the IOA

**Gender inequality and/or marginalization risk:** Specific negative externalities and unintended impacts on women and marginalized communities that may result from investments in the IOA

### DIRECT AND INDIRECT USERS/ BENEFICIARIES:

Key consumer groups/communities and environmental aspects that benefit from investments in the IOA.

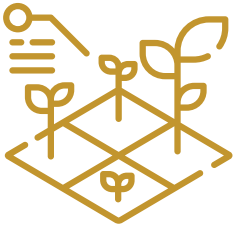
### ACTORS IN THE IOA SPACE:

Key players in the IOA ecosystem from public and private sectors.

### ENABLING ENVIRONMENT:

Key policy, regulatory and financial factors in the ecosystem that can support the flow of capital in the IOA.

<sup>3</sup> Key negative externalities and unintended impacts that may result from investments in the IOA.



# FOOD AND AGRICULTURE

# 1.



Mongolia has achieved significant progress in reducing the level of hunger, but a large proportion continues to face varying levels of food insecurity and malnutrition. The country faces a challenge in balancing economic growth and environmental sustainability. Agriculture, which contributes 13 percent to the GDP and employs 25 percent of the workforce, holds the high potential for economic diversification. However, inadequate agriculture and livestock practices result in land degradation and overuse of water, causing negative environmental impacts.

Under the objective to create an export-oriented economy, Mongolia's long-term development plan 'Vision-2050', clause 3.8.1 states that developing the processing industry and agricultural sector is one of the economic priority branches.

IOAs in this sector include:

- High nutrient and organic milk and dairy products processing
- Upgrading sustainable wool and cashmere processing plants
- Organic fertilizer produced from animal by-products and waste
- Energy efficient winter greenhouse
- Artisan cosmetics products made with agricultural byproducts
- Seabuckthorn tree planting and affiliated products



# IOA 1: HIGH NUTRIENT AND ORGANIC MILK AND DAIRY PRODUCTS PROCESSING

Direct  
SDGs:



Indirect  
SDGs:



## BUSINESS MODEL:

Invest in B2B/B2C milk processing plants focused on goat and camel milk and dairy products (i.e., formula milk, milk products for kids, powdered milk, cheese, butter and ice cream) sourced from nomadic herder families and cooperatives.

## IMPACT THESIS:

Increase production and export of milk and dairy products, thereby improving livelihood opportunities and contributing to the domestic availability of nutritious dairy products.

**IMPACT CLASSIFICATION:** Benefit Stakeholders (B)

## MARKET ENVIRONMENT:

**Investment opportunities introduction:** The country has over 70 mn livestock. There is huge potential to scale up productivity as it only uses 51 percent of total installed milk processing market which is 400,000 tons per year.<sup>12</sup> Global market size of milk and dairy products consumption is about US\$ 75 mn. Milk and dairy products are a source of essential nutrients, which are necessary for the growth and development of the body<sup>13</sup>. In particular, camel milk and goat milk have various health benefit<sup>14</sup>.

**Gender inequalities and marginalization issues:** Herders in Mongolia face challenges due to a weak supply chain, causing low prices for their produce, negatively impacting their income. COVID-19 restrictions have further affected food security and the milk and dairy supply chain. Women play a traditional role in preserving dairy products, including yogurt, cheese, and fermented milk.

**Key bottlenecks introduction:** The milk and dairy processing sector faces challenges, including lack of structured value chains, prevalence of subsistence livestock, high logistics costs impacting supply chains, and lack of equipment and skills.

## ECONOMIC PROFILE:

**Expected Financing Model:** Concessional financing (more generous than market standard)

Financing milk and dairy processing plants is profitable. However, a concessional financial model maybe required to support industry development as per the Government plan.

**Market Size:** US\$ 50 million – US\$ 100 million

**Return Profile:** >25 percent in ROI

**Investment Timeframe:** Short Term (Less than 5 years to generate return)



**RISK PROFILE:**

**Market risk:** Investments can be capital intensive area as a substantial amount of investment is required for setting up milk processing plants (i.e. powdered milk), warehousing space, cold storage and logistic services to enter new markets for export.

Inadequate quality of raw milk, animal health risks due to veterinary control, difficulty in determining the animal origin and ineffective vaccines for livestock are primary issues in the sector. The problem of underdeveloped cooling and storage infrastructure at border ports also needs to be addressed.

Other challenges for local dairy production include lack of fodder production leading to high cost of fodder, seasonality of milk demand due to the cold winter season, access to credit, and a lack of water supply. These issues result in increased raw material costs for the industry.

**Impact risk:**<sup>4</sup> Unaddressed malnutrition issues can have an adverse effect on other metrics, including those related to health and the economy at a macro level.

Other negative impacts may include animal and human health issues due to insufficient food safety and quality control across the value chain.

Overgrazing of pastures and unsustainable land use may aggravate biodiversity loss and deforestation.

**Gender inequality and/or marginalization risk:** In Mongolia, 60 percent of men have land ownership, in comparison to only 33 percent of women. Thus, decision making and control are male-dominated.

**USERS/BENEFICIARIES:**

**People:** Herder households, farmers and cooperatives benefit from improved income through better prices for their raw milk; Consumers benefit from increased access to high-quality milk and dairy goods.

**Gender & Marginalization:** Women benefit from higher representation in milk extraction jobs supported by improvement in the supply chain.

The improved livelihood of rural farmers (including clusters and cooperatives) and herders. Rural migrant families in peri-urban informal settlements (ger districts), people experiencing poverty and those affected by the pandemic are most vulnerable to food insecurity. The agriculture sector, especially livestock production extensively employs female workers. As of 2021, 56.5 percent of employees engaged in the livestock sector were women.

**Planet:** Efficient milk supply chain can help avoid water scarcity and conserve biodiversity, thereby reducing CO2 emission from livestock and milk production. For example a camel is highly adapted to the Mongolian ecosystem (Gobi desert) and contributes significantly to desert productivity in light of their production potential (mainly milk and meat) and the high added value of their products.<sup>15</sup>

**ACTORS IN THE IOA SPACE:**

**Corporates:** Milk and dairy processing factories such as Suu JSC, APU Dairy LLC, Milko LLC (Teso Corporation), Vitafit LLC, and Mongolian Artisan Cheesemakers Union LLC.

**Investors:** The European Bank for Reconstruction and Development, Commercial Banks including XacBank and Khan Bank.

**Government:** Ministry of Food, Agriculture and Light Industry (MOFALI), Local governments

**Multilaterals:** Food and Agriculture Organization, United Nations Development Programme, European Union, United States Agency for International Development, Asian Development Bank

<sup>4</sup> Key negative externalities and unintended impacts that may result from investments in the IOA.

**Non-Profit:** National Union of Agricultural Cooperatives of Mongolia

**ENABLING ENVIRONMENT:**

- In the Vision-2050, clause 5.11 aims to develop best-selling food and nutritional products, suitable for year-round consumption, using the traditional Mongolian five-colored foods including milk and provide state support to create Mongolian food chain.
- The National Movement on ensuring food supply and security 2022-2027 focuses on food processing: Internal processing of food raw materials supplied from animal husbandry and agriculture, and production of finished products.
- The clauses 8.3 and 8 of the Law on Food states that it shall provide cash incentives to farmers and intensive livestock farmers who supply raw milk from animals that meet the requirements including veterinary certification, registered livestock, and registration of sales tax. Commercial banks designed specific financial products for herders, i.e. herders' loan up to US\$ 10,000 with a term of 24 months. In addition, there are concessional green loans offered to SMEs to support sustainable business activities.

*More about this IOA, please visit [SDG Investor Platform](#)*

**IOA 2:  
UPGRADING SUSTAINABLE  
WOOL AND CASHMERE  
PROCESSING PLANTS**

Direct  
SDGs:



Indirect  
SDGs:



**BUSINESS MODEL:**

Invest in upgrading B2B/B2C models of cashmere and wool processing chains, primarily focused on spinning and knitting facilities in Mongolia to increase value-added end products and their exports

**IMPACT THESIS:**

Support cashmere processing, sourced from sustainable raw materials with a positive impact on herders' livelihood and cooperatives to increase exports and reduce pasture degradation in the country

**IMPACT CLASSIFICATION:** Benefit Stakeholders (B)

**MARKET ENVIRONMENT:**

**Investment opportunities introduction:** With over 70 mn livestock animals, Mongolia is the world's second largest cashmere producer. The cashmere industry contributes to 5 percent of the Mongolia's GDP. European countries, including Italy and the United Kingdom are Mongolia's main cashmere products importers.

Globally, there has been a rise in demand for sustainable textile. According to the market study, the global sustainable fabrics market is expected to grow, accounting for US\$ 69.5 billion by 2030, with a CAGR of 12.50 percent between 2021-2030.

**Gender inequalities and marginalization issues:** The wool and cashmere sector comprise about 100 textile industries, mostly micro and SMEs, providing over 20,000 jobs in the capital city. In addition, raw wool and cashmere make up 70 percent of herder household's income. Due to COVID-19, the micro and small-medium sized enterprises in the wool and cashmere sector, dominated mainly by women, they faced difficulties in terms of cash flow and reduced supply and demand, causing disruptions in the value chain. This resulted in difficulties in paying rents and loans.

**Key bottlenecks introduction:** Mongolian cashmere sector face various challenges due to growing competition from foreign processors and limited access capacity for spinning. Particularly, advancing the spinning industry is necessary to increase the number of finished products and improve product quality. The current capacity needs to meet the required volume hence less value added final products

#### ECONOMIC PROFILE:

**Expected Financing Model:** Concessional financing (more generous than market standard)

<b>Market Size:</b>	US\$ 50 million – US\$ 100 million
<b>Return Profile:</b>	20-25 percent in IRR, >25 percent in ROI
<b>Investment Timeframe:</b>	Long Term (more than 10 years to generate return)

#### RISK PROFILE:

**Market risk:** As cashmere production consists of multiple manufacturing processes and raw materials are sourced from herder households, logistic issues and risks are associated with the whole value chain. Most importantly, a lack of spinning mills is a major constraint.

Due to its geographical location (i.e. isolated from the European market and foreign consumers), poor infrastructure and logistics cost, Mongolian producers are less competitive than their larger counterparts.

**Impact risk:** Without addressing traceability, it will impact end-product sales. Most importantly, unsustainable pasture practices would increase pasture degradation.

#### USERS/BENEFICIARIES:

**People:** Over 20,000 people benefit from jobs created in this sector. In the supply chain, herders will benefit from increased income by supplying raw materials/ cashmere to the suppliers and manufacturers at fair prices. Population benefits from high-quality sustainable cashmere products.

**Gender & Marginalization:** Women in cashmere processing factories benefit from decent jobs and salaries.

**Planet:** Reduced level of water consumption, chemical usage, energy consumption and CO2 emissions. Reduced pasture degradation will help preserve biodiversity, avoid environmental risks and mitigate climate change.



Non-compliance with animal welfare practices would impact the production and sales of products, and hence the branding.

Underdeveloped logistics and transportation would impact the implementation of cashmere processing, sales and cost.

**Gender inequality and/or marginalization risk:** Lack of addressing gender issues in the management policy would impact gender inequality. It is essential to offer a fair price to the herders.

### ACTORS IN THE IOA SPACE:

**Corporates:** Gobi JSC, Khanbogd LLC, Goyol LLC

**Investors:** Commercial banks (Khan Bank, XacBank, Golomt Bank etc) and multinational/international development banks - The European Bank for Reconstruction and Development, International Finance Corporation

**Government:** Ministry of Food, Agriculture and Light Industry (MOFALI)

**Multilaterals:** United Nations Development Programme (Mongolian Sustainable Cashmere Platform), Asian Development Bank, The European Bank for Reconstruction and Development

**Non-Profit:** Mongolian Wool and Cashmere Association, National Pasture Group Association, Mongolian Sustainable Finance Association

### ENABLING ENVIRONMENT:

- In the Vision-2050, clause 4.2.22 aims to support the cashmere sector and increase the export of value-added wool and dehaired cashmere products.
- The Nationally Determined Contribution has measures to maintain livestock population at appropriate levels according to the pasture carrying capacity.
- “Cashmere” program was extended and approved by the Resolution No. 47 of 2018 of the Government of Mongolia to support the export of cashmere products.
- The Government and commercial banks issue loans for cashmere producers and herders. These loans are provided to producers on preferential terms as part of the Parliament Resolution (2011) of “Measures to Support National Manufacturers and Increase the Employment”.
- Mongolia has adopted the following standards:
- MNS 6926:2021 Sustainable Textile Production - Code of Practice.
- MNS 6891:2020 Responsible Nomads - Code of Practices for sustainable nomadic livestock.

*More about this IOA, please visit [SDG Investor Platform](#)*

## IOA 3: ORGANIC FERTILIZER PRODUCED FROM ANIMAL BYPRODUCTS AND WASTE

Direct  
SDGs:



Indirect  
SDGs:



### BUSINESS MODEL:

Production and distribution of animal byproducts and waste-based organic fertilizers

### IMPACT THESIS:

Increase the use of sustainable organic inputs and provide a means of living to the rural population while benefiting the environment.

**IMPACT CLASSIFICATION:** Benefit Stakeholders (B)

### MARKET ENVIRONMENT:

**Investment opportunities introduction:** In 2021, the agricultural sector contributed 13 percent of Mongolia's GDP and employed one-third of the country's workforce. However, Mongolia only produced 60 percent of its vegetable consumption. Despite some supply chain constraints, the agricultural sector has a high potential for job creation, particularly in emerging and rural farming, and value creation due to its extensive link to the rest of the agri economy. It is also essential for generating export-led growth.

In 2021, Mongolia imported US\$ 36 million worth of fertilizers, of which only US\$ 415 thousand was organic fertilizers.<sup>16</sup> Organic fertilizers are particularly beneficial for small-scale farmers, who make up a significant portion of Mongolia's agricultural industry. According to the National Statistics Office, in 2016, Mongolia had 17,415 small-scale and part-time smallholder farmers and/or vegetable growers.<sup>17</sup> Internationally, organic fertilizer producers are exporting mainly to Europe. The European biological organic fertilizer market is projected to record a CAGR of 7.7 percent during 2021-2026. The Global Organic Fertilizers Market is Expected to reach profits of US\$15.9 billion by 2030.<sup>18</sup>

**Gender inequalities and marginalization issues:** Most rural families are also employed in the agricultural sector. 32.9 percent of people in rural areas are living in poverty, with many living just above the poverty line.<sup>19</sup> Rural migrant families in poor areas including the vulnerable and those affected by the pandemic are less likely to have access to sufficient, healthy and diverse food products.<sup>20</sup>

**Key bottlenecks introduction:** Supply-chain constraints in export logistics are caused due to border closures resulting from regional geopolitical tensions and COVID-19 restrictions. Raw material price fluctuations are also a prevalent issue.

### ECONOMIC PROFILE:

**Expected Financing Model:** Commercial financing (at market standard)

Commercial models are viable for both local and international consumers. However, Low-income, rural, individual farmers would require subsidized pricing to access such products.

**Market Size:** < US\$ 50 million  
**Return Profile:** >25 percent in ROI  
**Investment Timeframe:** Short Term (Less than 5 years to generate return)

**RISK PROFILE:**

**Market risk:** Mongolia is a landlocked country sandwiched between Russia and China, through which most foreign exports pass. The border closures induced by the pandemic and the geopolitical tensions are slowing the distribution of goods and are fueling cost increases for organic fertilizer exporters.<sup>21</sup>

According to the local organic fertilizer producer, fluctuations in raw material (i.e., sheep wool) prices due to seasonal variations or natural disasters which affect the number of herds, may affect the overall production cost.

Organic fertilizers compete with cheap nitrogen fertilizers. Even though the quality is premium and the price is competitive, the novelty of the technology and product slows down the market penetration.

**Impact risk:** If not managed properly stockpiling organic waste may pollute the environment (i.e., methane emissions). Organic waste may also produce strong odors.

Dependence on imported chemical fertilizers would hamper the growth of local industries and the economy at-large and further degrade agricultural land.

The use of non-organic fertilizers will deteriorate the health of agricultural workers due to exposure to chemicals

**Gender inequality and/or marginalization risk:** High prices can be a barrier for small-scale, rural farmers, who are predominantly women, preventing them from being able to afford high quality fertilizers. Additionally, a lack of accessible information for these farmers can limit their engagement and adoption of sustainable farming practices, leading to suboptimal results.

**USERS/BENEFICIARIES:**

**People:** Herders will benefit from additional income sources generated from waste wool. Farmers will benefit from improved productivity/yield from high-performing fertilizers.

The population benefits from high-quality, nutritious, affordable agricultural products, and safer food sources.

**Gender & Marginalization:** Organic farming can improve the livelihood of rural and urban farmers. Rural women in Mongolia are heavily engaged in the agriculture sector. 32.9 percent of the rural population lives in poverty and is less likely to own properties and get paid for labor. Smallholder farmers, mostly women, residing in rural or semi-urban areas, make negligible returns.<sup>22</sup>

**Planet:** Using animal byproducts and waste protects the environment from the pollution caused by the disposal of agricultural waste.

**ACTORS IN THE IOA SPACE:**

**Corporates:** Monpellets LLC, Tumen Shuvuut LLC, Mongolia Ecological Fertilizer LLC, PromonTrade LLC, TESO Investment

**Government:** Ministry of Food, Agriculture and Light Industry, Ministry of Health; Ministry of Environment and Tourism

**Multilaterals:** The United Nations Industrial Development Organization, Australian Aid, Food and Agricultural Organization, The Swiss Agency for Development and Cooperation, European Bank for Reconstruction and Development

**ENABLING ENVIRONMENT:**

- The State policy on food and agriculture aims to introduce innovation to increase profit per animal and increase the level of primary processing of livestock raw materials and increase the production of value-added products.<sup>23</sup>
- The Ministry of Food and Agriculture aims to increase the percentage of certified agricultural products by up to 5 percent by 2030.<sup>24</sup>
- Under the recent government resolution on “Food supply and safety”, the Country is working to develop agricultural clusters and food production complexes. This initiative aims to secure domestic food supply, while supporting the country to become a food exporter.<sup>25</sup>
- Herders who provide raw materials such as sheep wool to domestic industries receive a small amount of financial incentive of US\$ 0.58 per kg.
- Wool and other agricultural byproducts are exempt from VAT. Fertilizers and other agricultural products are exempt from export tax.

*More about this IOA, please visit SDG Investor Platform*

## IOA 4: ENERGY EFFICIENT WINTER GREENHOUSE

Direct  
SDGs:



Indirect  
SDGs:

**BUSINESS MODEL:**

Invest in a year-around vegetable production through energy-efficient greenhouses and vertical farms, equipped with advanced and sustainable technological solutions and processing facilities.

**IMPACT THESIS:**

Boost crop production via modern sustainable and energy efficient technologies to ensure a steady supply of vegetables and fruits for year around local consumption.

**IMPACT CLASSIFICATION:** Contribute to Solutions (C)

**MARKET ENVIRONMENT:**

**Investment opportunities introduction:** According to recent market research, Mongolia’s fresh vegetable market is currently valued at US\$ 360 million, with an expected annual growth rate of 12.75 percent (CAGR 2022-2027)<sup>26</sup>. However, despite this growth, in 2021, Mongolia still imported US\$ 54 million worth of fresh vegetables

and fruits, representing 60 percent of domestic consumption staple vegetables<sup>27</sup> As a result, the market is becoming increasingly competitive, with emerging local suppliers competing on pricing with imported vegetables to meet growing demand.

Despite this trend, a significant gap exists between annual per capita vegetable consumption in Mongolia (52kg) and the WHO's recommended intake. In fact, vegetable production would need to increase by 45 percent to meet the WHO's recommendations. Therefore, investing in sustainable and innovative farming practices is crucial to increase production and meet the growing demand for fresh and healthy vegetables in Mongolia.

**Gender inequalities and marginalization issues:** Rural migrant families in ger areas, the poor and those affected by the pandemic are most vulnerable to food insecurity. 3 in 4 people experiencing food insecurity are from these groups (12 percent).<sup>28</sup>

Due to the limited supply of vegetables in colder months, vegetable price increased from 40 to 120 percent. Household and Business Socioeconomic survey revealed that revealed that 44 percent of the population reported their food consumption reduced due to price increases and vegetable products to make up less than 10 percent of their food consumption.<sup>30</sup>

**Key bottlenecks introduction:** Access to adequate finance to invest in new technology, as long payback periods and high risks limit cash flows and hinder rapid expansion. Additionally, high processing costs, expensive capital, and a shortage of skilled labor present significant challenges.

Low adoption of agricultural technology is a leading cause of low agricultural productivity. This lack of technology adoption significantly impacts the sector, as it reduces efficiency and increases costs. Finally, volatile commodity prices also challenge farmers and consumers, creating instability and uncertainty in the market.

### ECONOMIC PROFILE:

**Expected Financing Model:** Concessional financing (more generous than market standard)

Since emerging businesses are competing with cheap imported products, concessional/blended finance models would be suitable for ensuring low prices for marginalized population.

**Market Size:** US\$ 50 million – US\$ 100 million

**Return Profile:** 10- 15 percent in ROI

**Investment Timeframe:** Medium Term (5-10 years to generate return)

### RISK PROFILE:

**Market risk:** Mongolia experiences high vegetable price volatility due to uneven supply caused by climate restraints and multiple transactions with intermediaries affecting the cost.

The vegetable supply chain is underdeveloped and largely informal, leading to high transaction costs and low resilience against price fluctuation.

**Impact risk:**

A lack of agronomists, plant protection specialists, greenhouse managers and weak marketing and logistics capacities might limit the production.

### USERS/BENEFICIARIES:

**People:** The population benefits from high quality, nutritious and affordable agricultural products and safer food sources;

**Gender & Marginalization:** Female-headed households and rural migrant families in ger areas (peri-urban informal settlements), the poor and those affected by the pandemic are most vulnerable to food insecurity.

Customers lack awareness about the importance of organic, locally sourced vegetables. Thus, competition from cheap, imported vegetables may keep prices low and reduce potential profit.

**Planet:** The CO2 emissions from transportation for import activities will be reduced. Energy efficient and organic farming will reduce the impact of the farming industry on the planet.

#### ENABLING ENVIRONMENT:

- The State policy on food and agriculture aims to introduce innovation to increase the production of value-added products. The recent government resolution seeks to develop agricultural clusters, increase the domestic food supply and eventually become a food exporter country.
- Government-funded SME loans are available.
- The Parliament passed the Law on Organic Product Standardization in 2016 and standardized the certification and labeling. The Law is currently being reviewed with the involvement of the FAO.
- The Law on Ensuring food safety indicates that Good Agricultural Practice (GAP) should be introduced in the primary processing of food products.
- Commercial banks and financial institutions offer concessional loans for domestic individuals and businesses willing to invest in climate mitigation and adaptation technologies and services.
- The Law on Corporate Income Tax provides for exemption concerning the sale of imported equipment and machinery which is environmentally friendly and reduces environmental pollution and waste.

*More about this IOA, please visit SDG Investor Platform*

## IOA 5: ARTISAN COSMETICS PRODUCTS MADE FROM AGRICULTURAL BY-PRODUCTS

Direct  
SDGs:



Indirect  
SDGs:



#### BUSINESS MODEL:

Invest in B2C, women-led, natural, export-oriented cosmetic businesses using agricultural byproducts to make uniquely Mongolian, handmade and organic cosmetic products.

#### IMPACT THESIS:

Cosmetics SMEs can work with herders and cooperatives who may be marginalized or living in poverty, providing them with a market for their byproducts thus supporting sustainable livelihoods.

**IMPACT CLASSIFICATION:** Benefit Stakeholders (B)

## MARKET ENVIRONMENT:

**Investment opportunities introduction:** The cosmetics cluster was established in September 2019 as a part of the EU-funded Trade Related Assistance of Mongolia project. The project found that cosmetic products have a great potential for economic diversification and enter the European cosmetics market. Most cosmetics cluster companies are startups/micro-businesses with annual sales of less than US\$ 30,000 except for two larger companies. There is considerable export potential, especially to neighboring countries considering logistics and similar climate conditions, while exporting to the EU creates credibility in cosmetics products.

The global market value for natural cosmetics and personal care products is expected to grow from almost US\$ 35 billion in 2021 to roughly US\$ 59 billion in 2031.<sup>31</sup> The European market for natural cosmetics is expected to grow by 6 percent annually. Additionally, the main export segment of Mongolian organic cosmetics products is Asia. It indicates the growing importance of the natural and organic beauty products market.

**Gender inequalities and marginalization issues:** Most cosmetics business owners, employees and agricultural suppliers are women. The cosmetics industry plays a vital role in women's economic empowerment and in reducing the scope of the informal sector. Over 60 percent of MSME owners are women and they often lack access to finance. For example, if women have yet to name ownership of assets, they may not qualify for loans where the collateral is required.

**Key bottlenecks:** Cosmetics businesses, especially MSMEs have difficulty accessing the finance needed to scale up their production and marketing efforts for international markets. Key challenges relate to the underdeveloped legal framework, traceability of raw materials with the animal origin, lack of testing laboratories and technical advancement

## ECONOMIC PROFILE:

**Expected Financing Model:** Concessional financing (more generous than market standard)

<b>Market Size:</b>	US\$ 500,000 – US\$ 1 million
<b>Return Profile:</b>	20-25 percent in IRR and ROI
<b>Investment Timeframe:</b>	Medium Term (5-10 years to generate return)

## RISK PROFILE:

### Market risk:

While ~50 percent of raw materials are locally sourced, the remaining ingredients are imported. The cost and availability of raw material are subject to border closures and sanctions.

The lack of modern, high quality, commercial laboratories increase product development cost.

The Mongolian cosmetics market is reliant mainly on cheaper imported cosmetic products. Local cosmetics companies lack capacity to raise brand awareness and educate consumers about the importance of organic products.

## USERS/BENEFICIARIES:

**People:** Cosmetics business owners, suppliers, and distributors benefit from higher productivity and increased income.

### Gender & Marginalization:

Cosmetics businesses primarily target women as their key demographic, as women serve as the gateway for these businesses to transition towards a green economy. Over 90 percent of owners and employees are women within the cluster. It has the potential to increase women's entrepreneurship opportunities and also enhance their involvement in decision-making processes for their businesses.

**Impact risk:**

The small market size, high infrastructure costs and lack of brand recognition could make it difficult for businesses to grow rapidly with value-added products.

**ACTORS IN THE IOA SPACE:****Corporates:**

Cosmetic cluster businesses: Helen made LLC, Lhamour LLC.

**Investors:** European Bank for Reconstruction and Development

**Government:** Ministry of Food, Agriculture and Light Industry, Ministry of Health; Ministry of Foreign Affairs

**Multilaterals:** European Union, Food and Agriculture Organisation

**ENABLING ENVIRONMENT:**

- The Vision-2050 aims to support employment, business models, and skills, and improve the competitiveness of small and medium-sized enterprises. The recent government resolution seeks to develop agricultural clusters and increase the domestic supply of food and agricultural products including medical and organic cosmetics.
- Mongolia adopted the Law on Organic Product Standardization in 2016 and standardized the certification and labeling. The Law is currently being reviewed with the involvement of the FAO.
- Local agricultural products are exempt from export tax.

*More about this IOA, please visit SDG Investor Platform*

## IOA 6: SEABUCKTHORN TREE PLANTATIONS AND AFFILIATED PRODUCTS

Direct  
SDGs:



Indirect  
SDGs:

**BUSINESS MODEL:**

Invest in B2C businesses that handle seabuckthorn tree plantations and manufacture various products using seabuckthorn

**IMPACT THESIS:**

Reduce national food insecurity by enabling more high-quality domestically cultivated seabuckthorn in the market and reduce GHG emissions by planting more sea buckthorn trees throughout the country.

**IMPACT CLASSIFICATION:** Benefit Stakeholders (B)



## MARKET ENVIRONMENT:

**Investment opportunities introduction:** The crop production has 50 years of history with no use of chemicals and pesticides. Mongolia has an arable land of 1,2 mn ha of which 0.6 mn ha is in use<sup>32</sup>. In 2022, seabuckthorn accounted for 2214.5 tons or 86 percent of the total fruit and berry harvest in Mongolia.<sup>33</sup>

**Gender and marginalization:** While rural women in Mongolia are heavily engaged in agriculture, only 49.7 percent are employed in paid labor. Smallholder farmers in rural and semi-urban areas are more likely to be women. They struggle to make adequate profits from their produce due to insufficient marketing and the inability to sell their products directly to the retailers or final consumers but directly to the intermediary traders<sup>35</sup>.

**Key bottlenecks introduction:** Limited local storage facilities have made it difficult to stockpile products and have led to food losses and increased food prices. Likewise, maintaining a functioning food supply chain became more challenging because of shortage of working capital and workers.<sup>36</sup>

## ECONOMIC PROFILE:

**Expected Financing Model:** Blended financing (risk sharing and public support)

**Market Size:** < US\$ 50 million. Seabuckthorn was planted in 2695.3 ha of land in 2022 in Mongolia.<sup>37</sup>

**Return Profile:** > 25percent in ROI.

**Investment Timeframe:** Short Term (less than 5 years to generate return)

## RISK PROFILE:

### Market risk:

Seabuckthorns from China are imported at a lower price than domestic sea buckthorns, which increases the competition in the local market.<sup>19</sup>

The cost of capital in Mongolia is high due to the high deposit interest rate, a risk premium, and higher labor costs than in China.<sup>19</sup>

One of the biggest market risks relates to packaging as most packaging material is imported from China. Businesses experienced a supply shortage when the borders were closed due to COVID-19 restrictions.

### Impact risk:

Approximately 90 percent of Mongolia is at risk of desertification, with 41.3 percent land considered desert or desert steppe areas.<sup>38</sup> Without the seabuckthorn trees, the risk would only increase.

Underdeveloped infrastructure and higher logistics costs would impact the operations of processing factories located farther from the raw materials.

## USERS/BENEFICIARIES:

**People:** General public who consume seabuckthorn berries and products will benefit from improved nutrition intake, and the outstanding health properties of sea buckthorn. Seabuckthorn growers and producers will also benefit from capturing a bigger market and improved pricing.

**Gender & Marginalization:** Children with malnutrition and obesity issues would be directly impacted in relation to improved nutrition and diet.

**Planet:** Sea buckthorn trees prevent soil erosion and mitigate the effects of desertification on agroecosystems, reduce water loss in the soil, increase options for land reclamation, and it can create habitats for wildlife species.<sup>19</sup>

## ACTORS IN THE IOA SPACE:

**Corporates:** Uvs Food JSC, Teso Foods, Shine Birj LLC, Choros Gal LLC, Hatnii Ulaan LLC, Us Erdene Jims LLC, Ulaan Shuren, Solongo Talst LLC, Ulzii Nuur Hulst LLC, Netent LLC, DNNMG LLC, Munkhiin Altan Gadas LLC, Doctor Tseg LLC, Gazar Jims LLC, Bohch-Od LLC, Teso Group.

Unaddressed malnutrition issues can have an adverse effect on other metrics, including those related to health and the economy at a macro level.

**Gender inequality and/or marginalization risk:**

Women-led small or rural farms could find themselves at a competitive disadvantage due to larger producers offering a lower price and better marketing.

**ACTORS IN THE IOA SPACE:**

**Government:**

Ministry of Food, Agriculture and Light Industry, Ministry of Health; Ministry of Environment and Tourism, Provincial governments

**Multilaterals:** Food and Agriculture Organization, European Union, Asian Development Bank, Global Nature Fund, The Association of German Chambers of Industry and Commerce.

**ENABLING ENVIRONMENT:**

- In Vision 2050, clause 6.4.8 states that Mongolia will aim to increase CO2 sinking by increasing the forest area. Clause 8.3.6 states that Mongolia will increase the competitiveness and value of Mongolian crops grown on fertile soil, increase exports, and develop agriculture based on smart technology. Clause 8.3.7 states that Mongolia will zone and diversify the activities of intensive agricultural producers to stabilize the food supply and availability of the concentrated population, reduce the import of certain types of products, and support the export.
- In the Vision-2050, Clause 6.4.8 states that Mongolia will aim to increase CO2 sinking by increasing the forest area.
- The Government Resolution 36 of 2022: As part of the national movement “Billion Trees”, the Government will establish 30 hectares of agro-forestry in the aimag centers and 10 hectares in soum centers, establish fruit and berry seedling breeding centers, and create a forest strip by fencing crop fields.
- According to Government Resolution No. 117 of 2022, the Government is providing a loan of US\$ 29.9 mn for two years with an annual interest of 3 percent for increasing the agriculture production.<sup>39</sup>
- Seabuckthorn production is subject to value-added tax exemption.<sup>40</sup>

*More about this IOA, please visit SDG Investor Platform*









# HEALTH CARE

# 2.

Mongolia has one of the highest mortality rates in the Western Pacific due to high prevalence of non-communicable diseases (NCDs), which account for 85.9 percent of all deaths in Mongolia. The highest rate of cancer deaths for men and women combined was in Mongolia at 175.9 people per 100,000.

Regarding health care sector, the Vision-2050 aims to encourage citizens to practice healthy habits and an active lifestyle, and to develop a quality, accessible and effective health care system.

**IOAs in this sector include:**

- Production and delivery of traditional medicine and supplements
- Digital health care service providers



# IOA 7: PRODUCTION AND DELIVERY OF TRADITIONAL MEDICINE AND SUPPLEMENTS

Direct  
SDGs:



Indirect  
SDGs:



## BUSINESS MODEL:

Invest in B2C/B2B models engaged in the manufacturing and distributing traditional or herbal medicines and supplements.

## IMPACT THESIS:

Sustainably produce traditional medicine and supplements using local herbs or forest berries that are native to Mongolia to contribute to the overall well-being of the people.

**IMPACT CLASSIFICATION:** Benefit Stakeholders (B)

## MARKET ENVIRONMENT:

**Investment opportunities introduction:** The medicine imports increased from US\$ 90 million in 2020 to US\$ 146 million US\$ in 2021,<sup>41</sup> implying the market opportunity to invest in domestic medicine and pharmaceutical manufacturing.

**Gender inequalities and marginalization issues:** The Health Insurance Fund (HIF) covers medicines prescribed to inpatients or people who are hospitalized in public and private hospitals. However, this does not apply to outpatients, where only a few medicines are fully subsidized by the state and distributed free of charge directly to registered patients. Also, middle-and low-income families in Mongolia spend 70 percent–96 percent of their healthcare expenses on medicines alone<sup>42</sup>.

**Key bottlenecks introduction:** There is no single medicine authority organization in Mongolia which leads to highly fragmented regulation over the sector and brings down the growth of the medicine sector.<sup>43</sup>

## ECONOMIC PROFILE:

**Expected Financing Model:** Commercial financing (at market standard)

**Market Size:** US\$ 100 million – US\$ 1 billion

**Return Profile:** 15-20% in IRR

**Investment Timeframe:** Medium Term (5-10 years to generate return)

## RISK PROFILE:

**Market risk:** As of 2021, There are 42 pharmaceutical manufacturers in Mongolia which makes the sector highly competitive.<sup>44</sup>

## USERS/BENEFICIARIES:

**People:** People who prefer traditional medicines or people with long-lasting illnesses would benefit from domestically produced traditional medicines and supplements.

As desertification is getting worse in Mongolia and overhunting of some medicinal plants, raw materials for traditional medicine are getting scarce, which could affect the production and supply.<sup>45</sup>

Mongolia imports most of its pharmaceuticals products and these chemical based products put massive pressure on the local traditional medicine producers for competition.

Not only is R&D for medicines time-consuming and capital intensive, but obtaining approvals is also difficult.

**Impact risk:** Improper use (i.e. wrong dosage or overuse) of traditional medicines may lead to adverse side-effects on health.

Overusing raw materials to meet the growing demand for herbal medicines may lead to the extinction of some herbs and plants.

**Gender & Marginalization:** Affordable traditional medicines would reduce the burden of out-of-pocket medicinal costs for the financially vulnerable population.

**Planet:** Producing medicines sustainably, using natural herbs which are inexhaustible resources, would be beneficial to the environment.

#### ACTORS IN THE IOA SPACE:

**Corporates:** Monos Pharma LLC, Monos Foods JSC, Life Balance LLC, Oditan LLC, MANBA DATSAN Mongolian Traditional Medicine Training Center, Mong-Em LLC

**Government:** The Ministry of Health, The Human Medicines Council, General Agency of Specialized Inspection, National Center for Public Health

**Multilaterals:** World Health Organization (WHO), United Nations Children’s Fund (UNICEF), Asian Development Bank (ADB), European Bank of Reconstruction and Development (EBRD)

**Non-profit:** Mongolian United Medicines Association

#### ENABLING ENVIRONMENT:

- In the Vision-2050, clause 2.2.3 states that the production of traditional medicine will be combined with modern technology and made into “brands” for exporting. Clause 2.2.4 states that a Unified Drug Regulatory organization will be established.
- The Mongolian Agency for Standardization and Metrology (MASM) issued a General requirement for traditional medicine (MNS 5585:2006) for the preparation, production, inspection, receiving, analysis, packaging, labeling, storage, and transportation of traditional medicine.
- The Mongolian Agency for Standardization and Metrology issued general requirements (MNS 5524-3: 2015) for granting a special license for the production of traditional medicines, and the registration of traditional medicines in the state register.
- R&D costs incurred for traditional medicines and supplements are subject to VAT exemptions.<sup>46</sup>

*More about this IOA, please visit SDG Investor Platform*

<sup>4</sup> Key negative externalities and unintended impacts that may result from investments in the IOA.

# IOA 8: DIGITAL HEALTH CARE SERVICE PROVIDERS

Direct  
SDGs:



Indirect  
SDGs:



## BUSINESS MODEL:

Invest in B2B/B2C online platforms and applications that offer digital healthcare services and preventive healthcare information

## IMPACT THESIS:

Provision of digital health services through an integrated system, ensuring last mile reach for quality healthcare delivery.

**IMPACT CLASSIFICATION:** C - Contribute to Solutions

## MARKET ENVIRONMENT:

**Investment opportunities introduction:** Many Mongolians travel abroad to avail medical services<sup>47</sup> and incurred ~US\$ 44 mn on health-related travel costs in 2020, as per Bank of Mongolia data. Thus, increased healthcare delivery services through digital medical platforms would contribute to reduction of health-related travel costs abroad.

**Gender inequalities and marginalization issues:** Urban poor and rural people lack access to essential social services including quality healthcare due to poverty and spatial remoteness. Inadequate reproductive healthcare access to information and services leads to high adolescent birth rate, abortion rate, and incidence of syphilis<sup>48</sup>.

**Key bottlenecks introduction:** Low density and scattered population across regions in Mongolia makes it challenging to deliver health services to rural and remote areas.<sup>49</sup>

## ECONOMIC PROFILE:

**Expected Financing Model:** Blended financing (risk sharing and public support)

**Market Size:** < US\$ 50 million

**Return Profile:** > 25 percent in ROI

**Investment Timeframe:** Short Term (less than 5 years to generate return)

## RISK PROFILE:

**Market risk:** As per consultation meetings with the experts in the sector, the user readiness level is low. The target audience comprises a population of within 15-49 years of age, making up 51 percent of the population.

## USERS/BENEFICIARIES:

**People:** People who use telemedicine and digital healthcare services would benefit from digital healthcare services. At the same time, doctors who provide their services through digital healthcare platforms, would benefit by having an access to broader market.

However, only 1 percent of the target users install and use the application.

More than one million people from low-income households and rural herders access the internet only through a mobile connection which might not be fast enough to access digital healthcare services.<sup>50</sup>

**Impact risks:** Delivery of inadequate primary and secondary healthcare services to the general public due to an inefficient healthcare system if digital healthcare is not implemented properly.

Cyber crimes could target digital healthcare service users.

**Gender & Marginalization:** Women who lacked preventive healthcare services would have improved access to these services

**Planet:** Reduced greenhouse gas emission in relation less transportation time to healthcare facilities.

#### ACTORS IN THE IOA SPACE:

**Corporates:** Eclinic LLC (ICT Group), Clinica, Mend, Emch app, Teledoc.mn platform, Intermed Hospital Investors: And Global, ICT Group

**Government:** The Ministry of Health, The Ministry of Digital Development and Communications, National Center for Public Health

**Multilaterals:** World Health Organization (WHO), United Nations Population Fund (UNFPA), United Nations Children's Fund (UNICEF), WorldBank, Asian Development Bank (ADB).

**Non-profit:** Association of Private Healthcare Institutions of Mongolia

#### ENABLING ENVIRONMENT:

- In the Vision-2050, clause 2.2.28 states the investment towards medical technology, and 2.2.39: the access of healthcare services to people living in remote areas with electronic health systems and clause 9.1.16 states that telemedicine will be introduced in remote districts and satellite cities.
- Order No. 330 of the Minister of Health (2013): Regulation on Telemedicine National Network states that quality telemedicine services should be equally provided to anyone based on their needs, considering data privacy and safety.
- Law on Medical Services and Aid regulates relations related to the organization, management, financing and supervision of medical care and services provided to the population.
- Healthcare services, including digital healthcare and telemedicine, are subject to VAT exemption.<sup>51</sup>

*More about this IOA, please visit SDG Investor Platform*







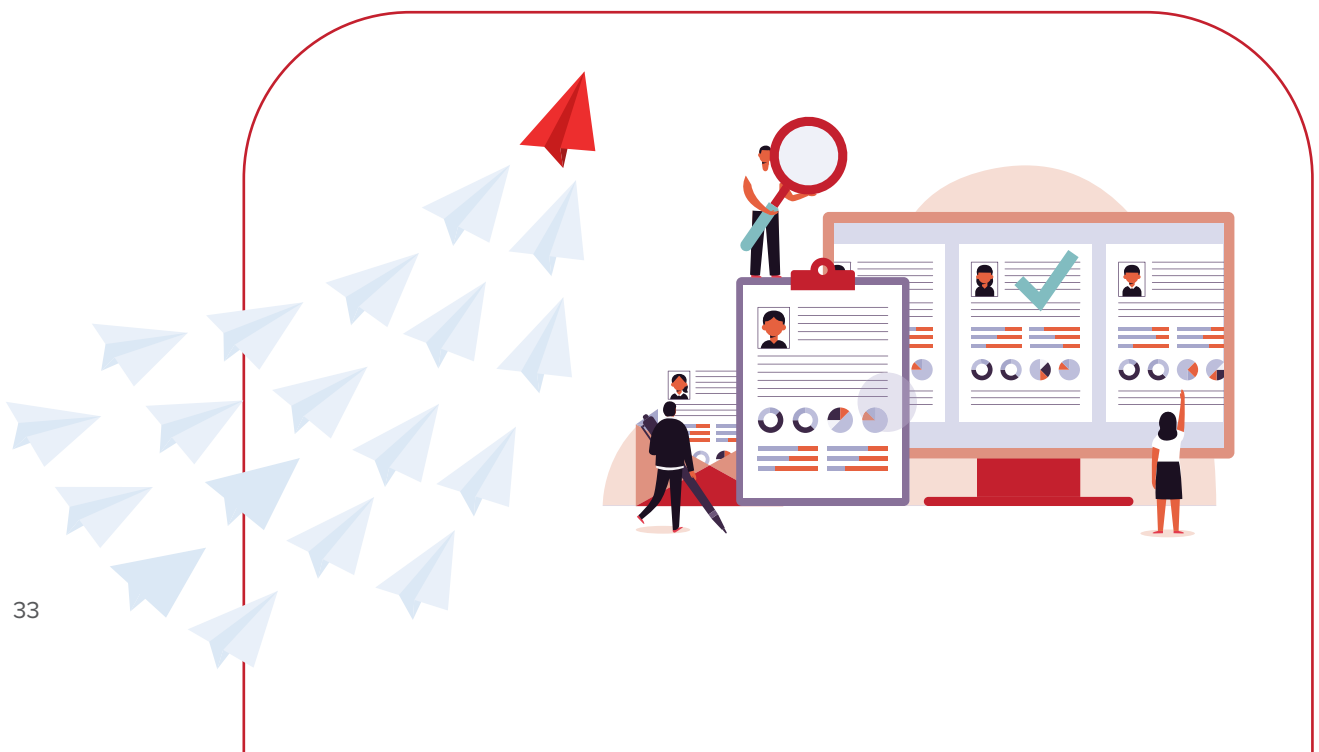
# 3.

## SERVICES

International development organizations frequently emphasize the significance of promoting a productive private sector that extends beyond mining. The Mongolian government has acknowledged the service industry, specifically the tourism sector, as a crucial national priority in its efforts to diversify the economy and generate employment opportunities. However, despite efforts to promote skills education, the supply of skills in the labor market does not match the needs of the industry, leading to a rise in youth unemployment, especially among women. Developing a skilled workforce is essential for economic diversification and sustainable growth.

### IOAs in this sector include:

- Hybrid upskilling education platform
- Sustainable and cultural tourism



## IOA 9: HYBRID UPSKILLING EDUCATION PLATFORM

Direct  
SDGs:



Indirect  
SDGs:



### BUSINESS MODEL:

Invest in B2B, B2C Hybrid upskilling education platform to meet evolving labor market needs and provide life-long learning opportunities.

### IMPACT THESIS:

Provide quality education via digital platforms for early- and mid-career professionals and youth to enhance employability and fill labor market skill gaps.

**IMPACT CLASSIFICATION:** Benefit Stakeholders (B)

### MARKET ENVIRONMENT:

**Investment opportunities introduction:** To address soaring youth employment, bridging the gap between the education sector and the labor market is crucial. A hybrid upskilling education platform can be pivotal in addressing this challenge by providing opportunities for lifelong learning and meeting the evolving needs of the labor market. With the government's support for the digital transition and digital literacy, there is a significant opportunity to increase the existing user base of 400,000 individuals, and ensure they can benefit from the available content.

Globally, the online education industry is expected to experience significant growth, with an estimated Compound Annual Growth Rate (CAGR) of 9.37 percent between 2023 and 2027. This growth rate is expected to be even higher in developing countries, highlighting the potential for digital upskilling platforms to impact workforce development and education in Mongolia significantly.

**Gender inequalities and marginalization issues:** Mongolia has high rates of education participation and near gender equity, although it has a pronounced 'reverse' gender trend in higher education. Tertiary education enrollment is 76 percent for women and 53 percent for men. This, however, does not translate into labor market trends. Women earn less and young women are less likely to be employed (53.4 percent female vs. 68.3 percent male) and take longer to gain employment than young men.<sup>52</sup>

While internet usage has increased to 66 percent since 2010, the rural population and marginalized people still lack access to the internet and digital devices.<sup>53</sup> Highest-paying STEM jobs, particularly in the ICT sector, are dominated by men. Women are more likely to be in the lowest-paying social sector due to traditional gender norms.

**Key bottlenecks introduction:** While 80 percent of Mongolians have smart devices, 54 percent lack the digital skills to benefit from improved accessibility. It may hinder the acceleration of education technology implementation.

**ECONOMIC PROFILE:**

**Expected Financing Model:** Concessional financing (more generous than market standard)

To accelerate market penetration and ensure inclusivity, the platform needs to be more affordable. Therefore, concessional funding would be suitable.

**Market Size:** US\$ 50 million

**Return Profile:** 15-20 percent in ROI

**Investment Timeframe:** Short Term (Less than 5 years to generate return)

**RISK PROFILE:**

**Market risk:** The platform needs to provide new and relevant content to meet user demand consistently. However, creating such content can be time-consuming and expensive, resulting in financial burdens such as research and development costs and hiring expenses.

Moreover, although internet penetration in Mongolia is high, access to smart devices that can sustain high-quality video content is limited, making it difficult to scale the business. The transition to delivering content in open-source LTE is also capital-intensive.

To efficiently scale up, this IOA requires partnerships with large organizations and businesses interested in upskilling their employees and improving digital literacy for the public.

**Impact risks:** Increasing inequality due to the unequal distribution of resources can hamper the regional progress of such models, resulting in the concentration of operations in more developed areas.

Without proper quality control measures, students may not receive the standardized high-quality education they need to succeed.

**USERS/BENEFICIARIES:**

**People:** Students, employees, and the general public benefit from becoming more resilient toward changing labor market demands and are less likely to be unemployed due to skill mismatches. Upskilling also results in an increase in income level with new skills and knowledge.

**Gender & Marginalization:** Occupational gender segregation is a contributing factor to the significant wage disparity between men and women. For instance, men make up 73 percent of graduates in information technology, women make up 85.5 percent of graduates in teaching and 83.6 percent in medical science - fields that typically offer lower salaries. As a result, women often earn much less than their male counterparts.

**Planet:** A study suggests that online education can significantly reduce energy consumption and carbon emissions due to the reduced burden on transportation services.

**ACTORS IN THE IOA SPACE:**

**Corporates:** TomYo EdTech LLC, MeLearn LLC;

**Investors:** AND Global, ICT Group

**Government:**

The Ministry of Education and Science, The Ministry of Digital Development and Communications, The Ministry of Labour and Social Protection

**Multilaterals:** United Nations Children's Fund, International Labor Organization, Save the Children, Asia Development Bank, German Development Agency

**Non-Profit:** All for Education NGO, Mongolian Education Alliance

## ENABLING ENVIRONMENT:

- The education sector mid-term development plan focuses on education quality and digital transition. Any usage of digital technology is encouraged throughout education.
- Mongolia's 5-Year Development Guideline 2021-2025 plans to create opportunities to support lifelong learning for citizens of all ages by developing an e-learning platform, e-training programs, e-content and e-lessons.
- Mongolia does not have significant entry or exit barriers for businesses. The economy is highly open to foreign trade and investment, except for the investment by foreign government owned legal entities under the Investment Law.
- Financial incentives: Certified training and educational organizations are exempt from VAT. While there are no particular stipulations on online education or platforms, these platforms can get certified since they have full-time content creators/teachers.

More about this IOA, please visit [SDG Investor Platform](#)

## IOA 10: SUSTAINABLE AND CULTURAL TOURISM

Direct  
SDGs:



Indirect  
SDGs:



## BUSINESS MODEL:

Invest in sustainable and cultural tourism, including the construction and operation of infrastructure and services that are environmentally friendly and that rely on local value chains

## IMPACT THESIS:

Improve job opportunities for rural communities (herder families) in regions with high tourism potential, reduce the environmental damage caused by conventional tourism and conserve wilderness and heritage values.

**IMPACT CLASSIFICATION:** A - Act to Avoid Harm

## MARKET ENVIRONMENT:

**Investment opportunities introduction:** Mongolia has a small but emerging tourism sector and developing Mongolia's tourism sector is a high national priority to diversify the economy and create jobs. As of 2019, tourism accounted for 7.2 percent of Mongolia's GDP, generating US\$ 989.2 million, 7.6 percent of total employment, and 88,500 jobs. As of 2019, tourism accounted for 7.2 percent of Mongolia's GDP, generating US\$ 989.2 million, 7.6 percent of total employment, and 88,500 jobs. However, tourism sector was hit hard by COVID-19 during 2020-2021 resulting in a decline in international tourists by 90-95 percent. Most tourism sites are underfunded by the government budget and located in remote regions with high poverty levels. Tour camp development around the protected areas is increasing rapidly. However, tourism sites are becoming polluted due to inadequate infrastructure, transport and sanitation, and communities receive few benefits.

The State Policy on Tourism Development, the National Program on Tourism Development (2016–2030) and the Government Action Plan aim to implement the “Sustainable Tourism Development Project” in 7 aimags and develop cultural tourism sites in Chingis Khan’s birth place and other historic destinations.

**Gender inequalities and marginalization issues:** Nomadic herders make their living by herding horses, camels, goats, cattle and sheep for milk, cashmere, meat and other livestock products. Thus, maintaining a steady income is challenging since the region is prone to severe climate, i.e. freezing winters and extremely dry summers.

**Key bottlenecks introduction:** Loss of control over solid waste and sanitation, inconsistent standards at tour camps, unregulated access and camping and weak capacities for managing tourism growth.

### ECONOMIC PROFILE:

**Expected Financing Model:** Blended financing (risk sharing and public support)

**Market Size:** > US\$ 1 billion

**Return Profile:** >25 percent in ROI

**Investment Timeframe:** Short Term (less than 5 years to generate return)

### RISK PROFILE:

**Market risk:** Sustainable and cultural tourism relies on international tourists, who struggle with the limited number of domestic and international flights, high airfare costs during the peak season and visa requirements. Mongolia ranked 114 out of 136 countries regarding visa openness in 2018<sup>55</sup>.

**Impact risks:** Some communities may need to be more experienced with the best practices for environmental management and sustainable and cultural tourism, thus undermining the effectiveness of the IOA. Furthermore, external private tourism operators may not involve local communities in the tourism business, limiting the scale of the IOA.

### USERS/BENEFICIARIES:

**People:** Local and foreign tourists and the population living in IOA located regions will benefit from less polluted tourism sites. The local community will benefit from job creation and increased income.

**Gender and marginalization:** Poverty reduction and inclusive development in rural areas. Tourism can empower women in multiple ways, particularly through the provision of jobs and through income-generating opportunities in small and larger scale tourism and hospitality related enterprises.

**Planet:** The environment will benefit from sustainable tourism practices; biodiversity and wildlife enjoys greater protection resulting from economic value generation.

### ACTORS IN THE IOA SPACE:

**Corporates:** Tourism companies: Nomadic Expeditions LLC, Nomads LLC, Nomadic Journeys LLC, Nomadic ways LLC, Nomadic Planet LLC, Nomad Holiday LLC, Discover Mongolia Travel LLC;

**Government:** The Ministry of Environment and Tourism, Governor of aimags



**Multilaterals:** Asian Development Bank, United Nations Development Program, World Bank, Japan International Cooperation Agency, European Bank for Reconstruction and Development

**Non-Profit:** Tourism Council of Mongolian National Chamber of Commerce and Industry, The Nature Conservancy, Association of Tourism of Mongolia, Sustainable Tourism Development Center, Mongolian Tourist Guides Association

### ENABLING ENVIRONMENT:

- The National Program on Tourism Development, 2016–2025, outlines a phased approach prioritizing investments in visitor facilities, transport, sanitation infrastructure, and community-based products and services.
- The Mongolian Government has declared 2023 and 2024 as “Years to Visit Mongolia” to promote the country’s pandemic-hit tourism sector. Within this framework, the country aims to receive up to 1 million tourists annually in Mongolia. An online platform named ‘mongoliatravelguide’ is being developed to promote Mongolia abroad.
- The Strategic Plan for Recovering Tourism Sector: Inbound Tourism 2022-2024, approved by the Ministry of Environment and Tourism, includes a strategic plan to recover the tourism sector after COVID-19. Under this plan, the Ministry will implement several number of activities including promoting the tourism sector to international tourists, exempting tourism companies operating in rural areas from licensing requirements until 2024, providing waivers in terms of employees’ social insurance payments and taxation until 2024, granting soft loans, and providing green and safe tourism certifications, etc.
- Also, the Government has submitted the Revised Law on Tourism to the Parliament which includes the exemption of tourists from VAT, facilitation of visa granting process and liberalization of air transportation to cancel the restriction of air flights to Mongolia.
- Several commercial banks are offering soft loan services for herder households to reduce environmental pollution and promote environmentally friendly consumption of citizens. This program’s loan rate is at 3-8 percent per year to promote tourism products.

*More about this IOA, please visit SDG Investor Platform*



# 4.

## INFRASTRUCTURE

TCData 360 reveals that Mongolia performs poorly in terms of its quality of infrastructure as it ranked 130 out of 160 countries in 2018, indicating a need to address infrastructure development, including housing, waste management, and water treatment along with the rapid urbanization<sup>56</sup>. The Vision-2050, Five Year Development Plan, Government's Action Plan and New Recovery Policy determine infrastructure development as one of the top priorities. With the newly approved Law on Public Private Partnerships of 2022, the Government of Mongolia places a high priority on the use of public-private partnerships to undertake large-scale infrastructure projects.

**IOAs in this sector include:**

- Affordable and energy efficient housing
- Energy efficient insulation/construction materials



# IOA 11: AFFORDABLE AND ENERGYEFFICIENT HOUSING DEVELOPMENT

Direct  
SDGs:



Indirect  
SDGs:



## BUSINESS MODEL:

Invest in B2B/B2C models engaged in building affordable homes for the population in ger areas (peri-urban informal settlements) with a focus on sustainability.

## IMPACT THESIS:

Improve the quality of life of the peri-urban informal settlement (ger district) population, particularly vulnerable groups such as women and children by offering affordable and energy efficient homes

**IMPACT CLASSIFICATION:** C – Contribute to solutions

## MARKET ENVIRONMENT:

**Investment opportunities introduction:** Ulaanbaatar, planned for half million people, is home to 1.5 million people today. As the urban infrastructure is overloaded, over half of the households live in ger districts (peri-urban informal settlements) with limited access to electricity, water, sanitation and heat. It makes the city a pollution hub, and exposes it to a public health crisis<sup>57</sup>.

**Gender inequalities and marginalization issues:** Ulaanbaatar’s population living in ger district are highly vulnerable to climate change and hotspots of greenhouse emissions and air pollution. Most of Mongolian women need land ownership rights, which hinders them from obtaining bank loans. In comparison, 60 percent of men and 33 percent of women own their homes, with 55 percent of men and 27 percent of women having officially registered their ownership rights. There are 1.5 times more men than women in the urban areas and three times more men in the rural areas who have home ownership certificates<sup>57</sup>.

**Key bottleneck introduction:** It includes (i) limited access to long term and low cost financing for the developer, (ii) constrained access to long term and low cost financing for the buyer, and (iii) inadequate supply of affordable housing.

## ECONOMIC PROFILE:

**Expected Financing Model:** Blended financing (risk sharing and public support)

**Market Size:** US\$ 1 billion

**Return Profile:** 15-20 percent in ROA

**Investment Timeframe:** Long Term (more than 10 years to generate return)

### RISK PROFILE:

**Market risks:** As most building materials were imported Due to COVID-19, the construction industry has struggled with surges in raw materials prices and delays in the supply of building materials. Further, the feasibility of the project will depend highly on the associated cost of land and the construction location, especially in urban areas.

**Impact risks:** Without accessible financing schemes/ loans that are serviceable, especially by low income households, the model will remain fragmented, unable to address the affordable housing market gap.

### USERS/BENEFICIARIES:

**People:** The population living in ger district will benefit from affordable quality housing and improved quality of life

**Gender & Marginalization:** Women and children in ger districts obtain housing options suited to their possibilities and needs, and can live in safe and secure environments.

**Planet:** The environment will benefit from reduced soil degradation and CO2 emissions.

### ACTORS IN THE IOA SPACE:

**Corporates:** XacBank, Trade and Development Bank, Khan Bank, Golomt Bank, State Bank, Construction companies - Hybrid House LLC, Passive Housing Development” LLC, Grand Avgush House LLC, Erel House LLC, ISO House LLC, Buiman Kharsh LLC

**Government:** Ministry of Construction and Urban Development, Ministry of Environment and Tourism, the Municipality of Ulaanbaatar, the Housing Corporation the Capital City, the Land Agency

**Multilaterals:** Asian Development Bank, International Finance Corporation, United Nations Development Programme, Green Climate Fund, The Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH - GIZ, Global Green Growth Institute, European Bank for Reconstruction and Development

**Non-Profit:** Mongolian National Construction Association (MNCA), Mongolian Sustainable Finance Association (MSFA/ToC)

### ENABLING ENVIRONMENT:

- The Vision-2050 includes objective “Affordable housing that aims at improving the conditions of ger district by increasing access to and provision of affordable and quality green housing that conforms to the purchasing power of the population”.
- The Action Plan 2020-2024 of the Government of Mongolia states that the government will aim to provide 150,000 households with formal housing through public-private partnerships and promote concessional financing for low-income households to increase the affordability of the formal housing.



- Several subsidized and concessional green loan programs are offered by commercial banks and sponsored by international and government organizations. Also, banks are piloting and exploring new green building mortgages and business loans, while non-banks are starting to test micro-mortgages.
- Also, citizens and entities who introduce environmentally friendly technology and practices are entitled to receive incentives, including subsidized loans and tax exemptions.

More about this IOA, please visit [SDG Investor Platform](#)

## IOA 12: ENERGY EFFICIENT CONSTRUCTION, INSULATION MATERIAL

Direct  
SDGs:



Indirect  
SDGs:



### BUSINESS MODEL:

Invest in B2C/B2B businesses producing low-carbon and energy efficient insulation material

### IMPACT THESIS:

Improvement in energy efficiency to ensure good health and well-being of all communities, particularly vulnerable groups such as women, children and populations residing in the informal settlements

**IMPACT CLASSIFICATION:** Act to avoid harms (A)

### MARKET ENVIRONMENT:

**Investment opportunities introduction:** Ulaanbaatar is one of the coldest and most polluted capitals in the world. The per-capita use of heating fuel is exceptionally high and the housing insulation levels are poor in the city. As the dwellings in the informal settlements lose 3-5 time more heat, the residents use coal-burning stoves for heating which results in air pollution posing a significant health risk<sup>59</sup>.

**Gender inequalities and marginalization issues:** The number of residents living in the ger district (peri-urban informal settlements) are increasing yearly due to internal migration, thereby increasing air pollution. Due to air pollution, children and pregnant women's health risks have almost reached a crisis level in Ulaanbaatar. On the coldest days of the year that record 40 degrees below zero, daily average pollution levels reach 27 times the level WHO recommends as safe. Miscarriages are 3.6 times more likely to happen during coal burning months. One in 10 deaths is attributable to air pollution, 80 percent of which is caused in the peri-urban informal settlements (ger districts) where the air pollution is highest.

**Key bottleneck introduction:** Consumers have low interest in energy savings which lead to low demand in energy efficient homes due to subsidized heat and electricity tariffs. .

## ECONOMIC PROFILE:

**Expected Financing Model:** Blended financing (risk sharing and public support)

**Market Size:** US\$ 100 million – US\$ 1 billion  
**Return Profile:** 10-15 percent in ROA  
**Investment Timeframe:** Short Term (less than 5 years to generate return)

## RISK PROFILE:

**Market risks:** Margins generated may be less attractive for commercial financing investors as subsidized energy tariff remains a persistent barrier that provides a significant disincentive to households that look for more energy-efficient solutions. As most customers who reside in ger districts/peri-urban informal settlements are not financially capable of insulating their homes using low-carbon and sustainable building materials, a subsidized loan may be required to increase the scope and viability of this IOA.

**Impact risks:** In the absence of accessible financing schemes/loans that are serviceable, especially by low income households, the model will remain fragmented, unable to address the issue.

## USERS/BENEFICIARIES:

**People:** Ger district (peri-urban informal settlement) households benefit from improved insulation that brings down indoor and outdoor PM production due to lower heating demand

**Gender & Marginalization:** Ger area households will benefit from warmer/less heat demanded homes and reduced exposure to air pollution, particularly in households with children and pregnant women. The overall health of people after insulation will be improved, which reduces care work for women and opens up the opportunity for women to be engaged in productive employment which will increase the income of the household.

**Planet:** The environment will benefit from reduced carbon dioxide and greenhouse gas emissions

## ACTORS IN THE IOA SPACE:

**Corporates:** Khan Bank, Xacbank, Mongol Basalt JSC, Ecowool LLC, Rostorg LLC, Unu Mongol Ger LLC, Orgil Jim LLC,

**Government:** Ministry of Construction and Urban Development, Ministry of Environment and Tourism, Ministry of Energy, the Municipality of Ulaanbaatar, Energy Regulatory Committee

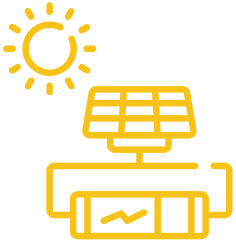
**Multilaterals:** Switch Asia Program of the European Union, Asian Development Bank, International Financial Corporation, Green Climate Fund, Global Green Growth Initiative

**Non-profit organizations:** Mongolian Civil Engineers Association (MACE); Building Material Manufacturer Association, Building Energy Efficiency Center, GERES NGO, People in Need NGO, German Agency for International Cooperation /GIZ/, Czech Republic Development Cooperation, French Development Agency

### ENABLING ENVIRONMENT:

- Mongolia's NDC target aims at reducing an equivalent of 830,000 tons of carbon dioxide in the construction sector. These include: 599,000 tons of CO<sub>2</sub>-equivalent due to the use of improved fuels; -231,000 tons of CO<sub>2</sub>-equivalent due to the insulation of prefabricated apartments.
- Commercial banks and financial institutions offer concessional loans for households to improve energy efficiency by insulating low-carbon and sustainable building materials.
- The Law on Corporate Income Tax provides for exemption concerning the sales of imported equipment and machinery which is environmentally friendly and reduces environmental pollution and wastes.





# RENEWABLE RESOURCES & ALTERNATIVE ENERGY

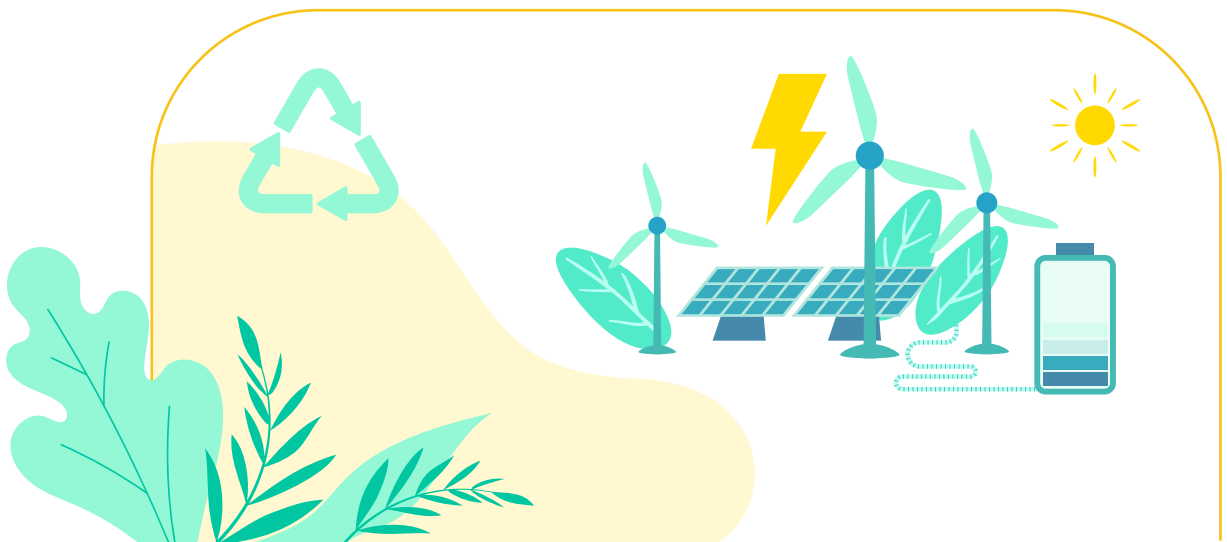
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The energy sector is heavily dependent on coal, generating 2/3 of Mongolia's total greenhouse gas emission. This has caused severe air pollution in the country as well as serious health problems. Mongolia produced 90 percent of its entire power generation from coal-fired combined heat and power plants while importing 19 percent of its total electricity consumption. Although progress has been made in SDG 7 for Mongolia, many rural settlements still have limited access to electricity. The majority of provincial centers still have limited access to heating services, and use outdated and inefficient firing stoves. Mongolia has very high greenhouse gas per capita emissions nearly 2.7 times greater than the global average.

According to the Vision-2050, Mongolia will aim to produce its 30 percent of the energy from renewable resources by 2030. New Recovery Policy states that new energy sources and transmission and distribution networks shall be established, their existing capacity shall be enhanced and the reliability of energy production and supply shall be improved.

#### **IOAs in this sector include:**

- Solar photovoltaic (PV) distribution and decentralized electricity generation





# IOA 13: SOLAR PHOTOVOLTAIC (PV) DISTRIBUTION AND DECENTRALIZED ELECTRICITY GENERATION

Direct  
SDGs:



Indirect  
SDGs:



## BUSINESS MODEL:

Invest in B2B/B2C businesses that distribute and install rooftop solar photovoltaic panels for households and businesses

## IMPACT THESIS:

Providing clean and reliable energy solutions to people, contributing to energy security and renewable energy share, and allowing people to have cost-saving options for their electricity usage.

**IMPACT CLASSIFICATION:** C – Contribute to solutions

## MARKET ENVIRONMENT:

**Investment opportunities introduction:** With average annual sunny days of 270 - 300 days, Mongolia has the potential to generate 1500 gigawatts of solar energy which would provide 15 percent of global electricity demand,<sup>60</sup> implying huge potential for rooftop mounted solar PV panels for households and commercial properties.

**Key bottlenecks introduction:** Incentive mechanisms and policies mostly target large scale energy projects, while support is required for small-scale renewable energy projects. Solar PV panels could be expensive for financially vulnerable households due to high interest rates in the country.

**Gender inequalities and marginalization issues:** About 20 percent of the population in the Central Energy System is categorized poor or extreme poor and is more vulnerable to power outages than other segments of the population<sup>61</sup>. Women are more concerned with power outages because they impact women directly in their primary role for daily household care activities by increasing the household care workload, particularly for cooking, boiling water, and washing clothes<sup>62</sup>.

**ECONOMIC PROFILE:** C - Contribute to Solutions

**Market Size:** As of 2020, roughly 165,000 households (18.4 percent) lack access to power grid system in Mongolia.<sup>63</sup>

**Return Profile:** 15 – 20 percent in IRR

**Investment Timeframe:** Short Term (less than 5 years to generate return)

## RISK PROFILE:

**Market risks:** As of 2020, the median wage in Mongolia was US\$ 322.<sup>64</sup> Thus, the price of solar PV panels may not be affordable for most households and this section would require additional financial

## USERS/BENEFICIARIES:

**People:** Peri-urban population without access to electricity or those willing to transition to clean energy and reduce their energy costs.



support to invest in this area.

The country's abundant raw coal resources and existing energy co-generation facilities, along with subsidized energy tariff maintain energy production costs at lower levels than their actual market costs.

As the Bank of Mongolia raised policy interest rates to tackle economic instability, this led to a surge in lending rates for loans with very short tenures, thereby discouraging investment in renewable energy projects.<sup>65</sup>

**Impact risks:** As solar energy is only produced during the day-time in areas with adequate sunlight, users would have to rely on non-renewable energy sources in the absence of adequate energy storage systems. Some people may need to comprehend the environmental benefits of solar energy and opt for cheaper energy solutions.

It would be impossible to use solar energy in areas that lack adequate sunlight.

Without affordable home solar power systems, last-mile households that already lack electricity access will continue to struggle.

#### USERS/BENEFICIARIES:

**People:** The population living in ger areas will benefit from affordable quality housing and improved quality of life

**Gender and Marginalization:** Financially vulnerable households living in a peri-urban area of Ulaanbaatar will indirectly benefit from improved overall health with reduced air pollution.

**Planet:** Reduction in GHG emissions through the use of renewable energy sources.

#### ACTORS IN THE IOA SPACE:

**Corporates:** Corporates: Sopoko LLC, Malchin Group, Global Group, Narnii Buman Gerel LLC

**Investors:** Solar Power international LLC, XacBank, Green Climate Fund.

**Government:** The Ministry of Energy, the Energy Regulatory Commission, the National Renewable Energy Center.

**Multilaterals:** United Nations Development Program, United Nations Environment Program, Global Green Growth Institute, European Bank for Reconstruction and Development, Green Climate Fund, Asian Development Bank, World Bank, International Renewable Energy Agency, GIZ

**Non-Profit:** Mongolian Renewables industries Association (MRIA)

#### ENABLING ENVIRONMENT:

- In the Vision-2050, clause 4.2.37 states that Mongolia will aim to increase the installed capacity of renewable resources to 30 percent. Clause 4.2.38 states that advanced technology of renewable energy will be used for local supply. Clause 6.4.7 states that Mongolia will develop renewable energy sources to meet the goals of the NDC of Mongolia.
- Mongolia's nationally determined contribution to the UN Framework Convention on Climate change states that the target is to mitigate its GHG emissions by 22.7 percent by 2030,<sup>66</sup> to which increased use of solar energy systems contributes positively.

- EBRD and GCF provided a financial package of US\$ 25 mn to XacBank of Mongolia to promote green loans with an annual interest rate of 3 percent for individuals and businesses adopting climate change mitigation.<sup>67</sup>
- As per the Personal Income Tax Law, the purchase of environmentally friendly equipment for household use and private apartments that are built or purchased for residential purposes for the first time are tax-exempt.

*More about this IOA, please visit [SDG Investor Platform](#)*



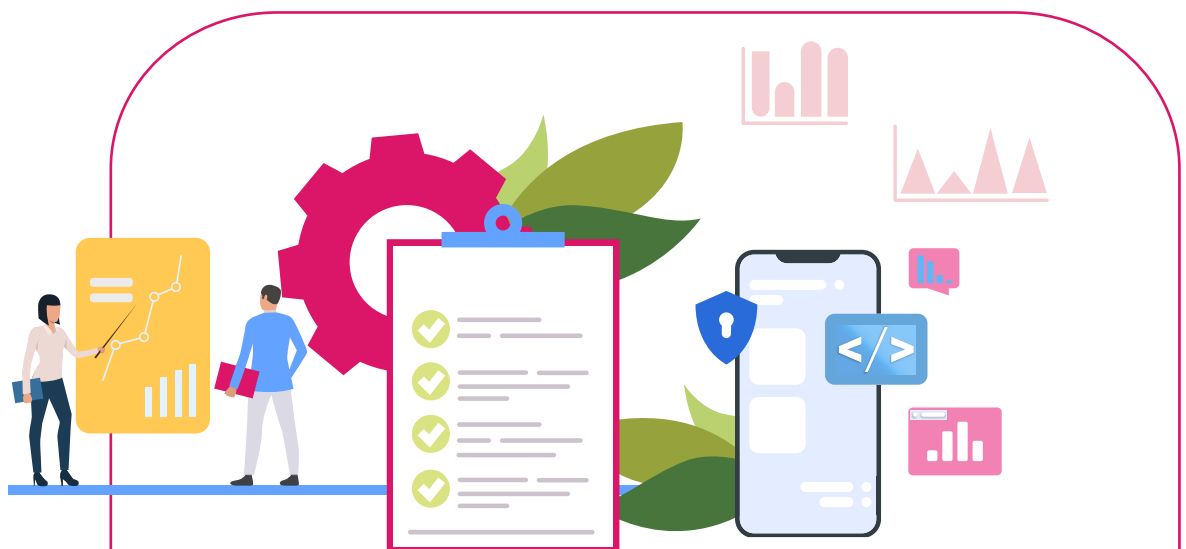


# 6.

# FINANCIALS

Mongolia's finance sector, despite substantial achievement in household access to financial services, remains fragile and underdeveloped. About 94 percent of the financial sector's financing comes from banks, followed by nonbank financial institutions (NFBIs) with a share of about 5.5 percent. Access to financial services for rural households is often only available through non-banking financial institutions (NBFIs), such as savings and credit cooperatives.

The Vision-2050 states that establishing a smart financial system is one of the main objectives, and aims to achieve this by developing a multi-pillar and inclusive financial system connected to international financial markets. Specifically, the country aims to develop flexible, digital-based, multi-faceted financial services that stimulate the economy during 2021-2030.



# IOA14 AFFORDABLE AND ACCESSIBLE MICROFINANCE

Direct  
SDGs:



Indirect  
SDGs:



## BUSINESS MODEL:

Invest in B2C and B2B financing companies affordable and accessible personal and business loans (small-size, low interest rates and collateral-free) through fintech solutions to serve the needs of the underserved population and MSMEs.

## IMPACT THESIS:

Provision of affordable and accessible financing solutions to improve capital flow to individuals and businesses (MSMEs), focusing on women owned or rural enterprises.

**IMPACT CLASSIFICATION:** C – Contribute to solutions

## MARKET ENVIRONMENT:

While Mongolia ranks higher in financial inclusiveness in terms of bank account ownership as 98 percent of the total population owns a bank account<sup>68</sup>, access to finance remains a critical constraint for enterprises, especially for micro, small and medium enterprises (MSMEs) and rural population. About 80 percent of the loans are extended to borrowers in Ulaanbaatar, and 90 percent of MSMEs do not have adequate access to finance<sup>69</sup>. Access to financial services for rural households is often only available through non-banking financial institutions (NBFIs), such as savings and credit cooperatives. However, 94 percent of the finance sector's financing comes from banks, followed by NBFIs with a share of about 5.5 percent. Thus, credit from microfinance institutions is not significant compared to similar economies<sup>70</sup>.

**Gender inequalities and marginalization issues:** Moreover, due to the low internet penetration rate, especially in rural areas, the adoption of technology based financial solutions is restricted. The credit gap in Mongolia was estimated in 2014 to be US\$ 5 billion; women-owned SMEs are estimated to make up 25 percent of that gap<sup>71</sup>.

**Key bottleneck introduction:** Challenges in digital banking relate to limited mobile and internet penetration, insufficient institutional and technical capacity, and users' reluctance to use mobile payment services because of security concerns.

## ECONOMIC PROFILE:

**Expected Financing Model:** Concessional financing (more generous than market standard)

<b>Market Size:</b>	US\$ 1 billion
<b>Return profile:</b>	>25 percent of Gross profit margin
<b>Investment Timeframe:</b>	Short Term (Less than 5 years to generate return)

**RISK PROFILE:**

**Market risks:** Competition has intensified in fintech based financial institutions in the last two years with the emergence of many new players. By Q2-2022, the number of fintech based financial institutions was ~33<sup>72</sup>. Further, even when financial services are accessible, a low income makes financial services unaffordable. ~60 percent households earns <US\$ 470 per month, implying low disposable income for servicing costs of financial services<sup>73</sup>.

**Impact risks:** Financial literacy, limited internet connectivity and digital literacy might limit the efficacy of services offered.

Also, if the borrowers' potential to repay microcredit and monitoring of investment plans are not carefully considered, borrowers' financial burden may get aggravated, thereby, increasing the default risk that can affect the sustainability of a micro-credit operation.

**USERS/BENEFICIARIES:**

**People:** Easy access to affordable financial solutions benefit consumers by increasing their purchasing power and offering an improved quality of life.

**Gender & Marginalization:** Providing easy access to finance for women can help empower them by uplifting their economic and social status

**Planet:** With the development of fintech, businesses can leverage technology, thereby reducing carbon footprint and protecting the environment from degradation.

**ACTORS IN THE IOA SPACE:**

**Corporates:** LendMN NBFI JSC, Invescore NBFI JSC, Numur Credit NBFI LLC, Sendly NBFI JSC; Investor: Rhinos Asset Management of Korea

**Government:** Ministry of Finance, The Bank of Mongolia, Ministry of Digital Development and Communication, Financial Regulatory Commission,

**Multilaterals:** European Bank for Reconstruction and Development, International Finance Corporation, Asian Development Bank

**Non-Profit:** Mongolian Fintech Association, Mongolian Sustainable Finance Association,

**ENABLING ENVIRONMENT:**

- National Program on Improving Financial Inclusiveness includes objectives to develop microlending institutions, improve the financial literacy of the population and promote new technologies in the financial industry. This policy is well aligned with the the Law on electronic signature, the Government's Digital Nation Policy Document and E-Mongolia Initiative that aim to accelerate the development of technology industry.

*More about this IOA, please visit SDG Investor Platform*




# WHITE SPACES



Besides identifying 14 attractive IOAs, this SDG Investor Map has also defined white spaces or IOAs that have high potential to create at-market returns and deep impact, but still face policy or market induced challenges that hinder investments.

If these white spaces and IOA promotion measures are taken into consideration, more private investments can be channeled to further support sustainable development in Mongolia.

These white spaces include:

WHITE SPACE #1		
INDUSTRIAL WASTE AND CIRCULAR ECONOMY		
<p><b>POTENTIAL BUSINESS MODEL:</b> Potential business model is recycling hubs or community-based recycling centers in 21 provinces of Mongolia and districts of the capital city, Ulaanbaatar. Community-based recycling centers can effectively sort and press all recyclables with efficient and stabilized operation. Also, there is a existing business case for exporting wastes to China.</p>		<p><b>SDGs:</b></p>  
<p><b>POTENTIAL IMPACT THESIS:</b> Investing in the installation of circular recycling facilities for industrial and extractive sector waste has the potential to improve the living environment, mitigate health risks, reduce greenhouse gas emissions, and create new business and job opportunities.</p>		
<p><b>MARKET NEEDS AND OPPORTUNITIES:</b> Mining-based economic activities are a major source of land, soil, water and air quality degradation and waste generation. The country needs efficient waste management and recycling systems with the support of the circular economy.</p> <p>In Mongolia, especially in the capital city, inefficient waste management is posing challenge to the goal of sustainable cities and communities.</p>	<p><b>MARKET CHALLENGES:</b> Mongolia's waste management infrastructure is inadequate, with many areas lacking proper waste collection and disposal facilities. Particularly, waste collection is often irregular and inefficient, leading to accumulation of waste in public areas.</p> <p>Lack of funding is another limitation as the government's investment in waste management is limited, and private sector investment is also low.</p>	<p><b>WHY IS THIS A WHITE SPACE?</b> Ensuring access for all to adequate, safe and affordable basic services by 2030, as defined by SDG 11, requires investing in adequate infrastructure and waste management.</p> <p>Market is underdeveloped along the whole supply chain and legal environment. For instance, Regulation on Waste Management (2002) lacks specific guidance on waste reduction and recycling.</p>

## WHITE SPACES

<p>Three recycling centers exist near the Ulaan Chuluut landfill area, which the government deisgnated.</p> <p>The first recycling center processes plastic bags and creates plastic polls. The operation is very primitive and unsophisticated. The second center recycles window frames and produces pipes for sewer systems. This center operates 24 hours a day. The last recycling center recycles various plastics including bottles and containers of hazardous products. They create raw materials for plastic production as well as trash bags.</p>	<p>There are few recycling facilities in Mongolia, which leads to a large amount of recyclable waste being disposed of in landfills.</p>	<p>Landfill Regulation (2009) also needs to be strengthened to ensure that landfills are properly sited, designed, and managed to minimize environmental and health impacts.</p> <p>Financial incentives and subsidies are needed, particularly blended financing mechanism is applicable in this IOA.</p>
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### POLICY & REGULATORY ENVIRONMENT:

The Vision-2050, the Five-Year Development Plan, the Government’s Action Plan and New Recovery Policy determine infrastructure development as one of the top priorities. Particularly, Vision-2050’s objective 6.4

“Low emission, productive and inclusive green development” aims to develop a waste-free economy to save natural resources.<sup>75</sup>

Mongolia National Waste Management Improvement Strategy and Action Plan 2021-2030<sup>76</sup> has mission to save natural resources through economic recycling of waste resources and prevent and reduce negative impacts of waste on public health, the environment and climate change. The strategy target intends to cut final waste disposal by 30 percent by 2030.

Waste is one of the key sectors for climate mitigation targets in NDC. Relevant measures in NDC include reducing the waste volume for landfill through the improved waste treatment and recycling process.<sup>77</sup>

## WHITE SPACE #2

### WASTEWATER TREATMENT FACILITY




**POTENTIAL BUSINESS MODEL:** Establish and install wastewater treatment facilities in large communities and industrial factories

**POTENTIAL IMPACT THESIS:** Investment in the construction, operation and/or installation of wastewater treatment infrastructure can have significant positive impacts on public health, the environment, the economy, and the fight against climate change while supporting the water security.

#### SDGs:




<p><b>MARKET NEEDS AND OPPORTUNITIES:</b></p> <p>Wastewater can be used within the business itself or between several businesses through ‘industrial symbiosis’. Industrial water consumption is responsible for 22 percent of global water use.</p> <p>Farmers are increasingly looking into non-conventional water resources, mainly wastewater, whether due to its high nutrient content or lack of conventional water resources. If applied safely, wastewater is a valuable source of both water and nutrients, contributing to water and food security and livelihood improvements.<sup>78</sup></p>	<p><b>MARKET CHALLENGES:</b></p> <p>A combination of environmental, social and demographic conditions including rapid urbanisation and old and unreliable infrastructures represents a considerable challenge for developing appropriate wastewater treatment facilities in Mongolia.</p> <p>In particular, Ulaanbaatar city’s declining water supply is exacerbated by high groundwater demand from the city’s combined heat and power plants and an outdated central wastewater treatment plant that is over capacity, resulting in municipal and industrial pollution contaminating downstream wells along the Tuul River.</p>	<p><b>WHY IS THIS A WHITE SPACE?</b></p> <p>Low commercial viability and lack of policy momentum</p> <p>Financial incentives and subsidies are needed</p> <p>Wastewater facilities can be installed within the business or between several businesses as it could not be stand- alone business model</p>
<p><b>POLICY &amp; REGULATORY ENVIRONMENT:</b></p> <p>The Mongolian Parliament approved the revised Law on Water Pollution Fee based on a Polluter Pays model.</p>		

<p><b>WHITE SPACE #3</b></p>	
<p><b>COLD STORAGE</b></p>	
<p><b>POTENTIAL BUSINESS MODEL:</b> Establish and operate cold storage facilities to aggregate and store agri-produce and provide market access for small and medium sized farmers and cooperatives.</p> <p>The cold storage will be supplemented with primary processing of vegetables such as dry brushing and Individual Quick Freezing.</p>	<p><b>SDGs:</b></p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="1050 1451 1174 1572"> <p>2 ZERO HUNGER</p>  </div> <div data-bbox="1190 1451 1315 1572"> <p>3 GOOD HEALTH AND WELL-BEING</p>  </div> </div>
<p><b>POTENTIAL IMPACT THESIS:</b> Investment in the establishment and operation of cold storage facilities for small and medium-sized farmers and cooperatives in Mongolia can help increase income, reduce food waste, improve food quality and security, and stimulate economic development, leading to a more sustainable and resilient agriculture sector.</p>	<div data-bbox="1050 1594 1174 1715"> <p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>  </div>


<p><b>MARKET NEEDS AND OPPORTUNITIES:</b>          Mongolia experiences higher vegetable price volatility due to uneven supply caused by climate restraints and multiple transactions with intermediaries affecting the cost. Import volume of high value vegetables has risen significantly (60 percent-85 percent) within a span of 5 years while the price is falling suggesting the fast growth in market demand and strong competition in pricing and emerging local suppliers.</p> <p>Meanwhile, cold chain services such as storage, transportation, or packaging are underdeveloped leading to spoilage in distribution and processing, and increasing distribution costs for farmers. While some large vegetable producers have built and operate their own storage facilities and supply chain, small and medium farmers sell their products cheaply to intermediaries.</p>	<p><b>MARKET CHALLENGES:</b>          The vegetable market needs to be more mature in supply and demand sides. Local farmers lack knowledge and experience to access market and consumers lack awareness about health and other benefits of locally grown organic produce or lack financial capacity to opt for such products.</p>	<p><b>WHY IS THIS A WHITE SPACE?</b>          Unproven business model and lack of know-how and expertise. While the government and multilaterals understand the importance of cold storage in ensuring food supply, there is a little interest in the private sector.</p>
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**WHITE SPACE #4**

**WASH FACILITY IN RURAL AND REMOTE AREAS**

<p><b>POTENTIAL BUSINESS MODEL:</b> Provide affordable sanitation services, such as public latrines and wash stations, with sewage reutilization.</p>	<p><b>SDGs:</b></p> 
<p><b>POTENTIAL IMPACT THESIS:</b> Increased investments into this space will improve Water, Sanitation and Hygiene (WASH) conditions in rural and remote areas and reduce pollution of the environment, pollution of lakes and rivers due to improper disposal of sewage waste. People will benefit from improved quality of life and reduced health risks due to the lack of sanitation services.</p>	

<p><b>MARKET NEEDS AND OPPORTUNITIES:</b></p> <p>As of 2018, seven in ten poor people lacked access to one of the basic infrastructure services (improved drinking water, sanitation or sustainable heating source). Access to lavatory facilities is particularly limited in rural areas, with only 50 percent having access to a facility that is not communally shared. There are various layers of inequalities in access to drinking water and sanitation services and disparities in access to water and sanitation require legal, policy, institutional and technical solutions from a human rights perspective.</p>	<p><b>MARKET CHALLENGES:</b></p> <p>Small populations of rural soum centers and large distances between rural settlements increase the cost of WASH services and present significant logistical difficulties in sustaining those services.<sup>7</sup></p> <p>Also, one of the major constraints on WASH improvements is the absence of an easily accessible water source or water availability, which makes it difficult to devise affordable WASH schemes.</p>	<p><b>WHY IS THIS A WHITE SPACE?</b></p> <p>The lack of physical, institutional, and financial resources in many rural locations often makes it difficult and costly to raise WASH facilities and services to the required standards</p>
<p><b>POLICY &amp; REGULATORY ENVIRONMENT:</b></p> <p>The WASH facilities and services in schools form part of the country’s water supply and sanitation systems, which are subject to binding and guiding rules. WASH services should meet the standards and regulations set by the Government of Mongolia in every respect.</p>		

<p><b>WHITE SPACE #5</b></p>		
<p><b>WIND FARM</b></p>		
<p><b>POTENTIAL BUSINESS MODEL:</b> Wind farms that provide electricity generated from the wind to the centralized grid system or other grids</p>	<p><b>SDGs:</b></p> 	
<p><b>POTENTIAL IMPACT THESIS:</b> Increased energy supply from renewable and clean energy sources. People without access to electricity would have access to alternative sources.</p>		
<p><b>MARKET NEEDS AND OPPORTUNITIES:</b></p> <p>Mongolia has a huge potential for wind power with a capacity of up to 110GW while the current electricity generation capacity is only around 1GW . In 2020, only 6 percent of the</p>	<p><b>MARKET CHALLENGES:</b></p> <p>Challenges include insufficient power generation that does not meet the growing demand, the low efficiency of current existing coal plants that need rehabilitation, high losses in transmission and</p>	<p><b>WHY IS THIS A WHITE SPACE?</b></p> <p>The energy tariff is highly subsidized by the government which reduces the private sector’s interest in investing in renewable energy business opportunities in Mongolia.</p>





## WHITE SPACES

<p>total energy was generated from the wind while 91 percent is from fossil fuels power generation sources<sup>83</sup>. It is expected that the power demand in the mining sector will increase in the coming years, particularly in the Gobi region. New power generation to supply such load is required to maintain future industrial zones, which could potentially include further wind projects.</p>	<p>distribution networks due to long lines to low-demand centers with low-density populations, and limited grid interconnection among the four grids and other neighboring countries.</p>	<p>According to the ADB, the country needs the regulation reserve, and the system to provide regulation or ancillary service in an efficient manner.</p>
<p><b>POLICY &amp; REGULATORY ENVIRONMENT:</b>            The Vision-2050 indicates Mongolia will aim to produce 30 percent of its total electricity from renewable resources.</p> <p>Law on renewable energy regulates all matters including tariff for renewable energy. The tariff for electricity generated from wind sources is US\$ 0.085 per 1KW.</p>		

### WHITE SPACE #6

#### SOLAR POWER PLANT



<p><b>POTENTIAL BUSINESS MODEL:</b> Solar power plants or farms that provide electricity generated from the solar PVs to the centralized grid system or other grids</p>	<p><b>SDGs:</b></p>  	
<p><b>POTENTIAL IMPACT THESIS:</b> Increased energy supply from renewable and clean energy sources. People without access to electricity would have access to alternative sources.</p>		
<p><b>MARKET NEEDS AND OPPORTUNITIES:</b>            The estimated 250 days of sunshine a year makes Mongolia one of the most potential countries for solar power energy, with a capacity of up to 1500 GW<sup>11</sup>.            In 2020, only 2 percent of the total energy was generated from solar while 91 percent is from fossil fuels power generation sources<sup>85</sup>.            It is expected that the power demand in the mining sector will increase in the coming years,</p>	<p><b>MARKET CHALLENGES:</b>            Challenges include insufficient power generation that does not meet the growing demand, the low efficiency of current existing coal plants that need rehabilitation, high losses in transmission and distribution networks due to long lines to low-demand centers with low-density populations, and limited grid interconnection among the four grids and other neighboring countries.</p>	<p><b>WHY IS THIS A WHITE SPACE?</b>            The energy tariff is highly subsidized by the government which reduces the private sector's interest in investing in renewable energy business opportunities in Mongolia.</p> <p>At the same time, there is a lack of regulation in the sector.</p>

<p>particularly in the Gobi region. New power generation to supply such load is required to maintain future industrial zones, which could potentially include further wind projects.</p>		
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**POLICY & REGULATORY ENVIRONMENT:**  
 The Vision-2050 states Mongolia will aim to produce 30 percent of its total electricity from renewable resources. Law on renewable energy regulates all matters including tariffs for renewable energy. The tariff for electricity generated from wind sources is US\$ 0.085 per 1KW.

**WHITE SPACE #7**

**EV SOLUTIONS FOR DIESEL-FUELED MACHINERY IN THE MINING SECTOR**

<p><b>POTENTIAL BUSINESS MODEL:</b> B2B businesses that import and sell EV machinery to mining companies who are willing to replace their diesel-fueled machinery with cleaner solutions.</p>	<p><b>SDGs:</b></p>  
<p><b>POTENTIAL IMPACT THESIS:</b> Reducing greenhouse gas emission from the mining (extractive) sector which is one of the most polluting sectors in Mongolia.</p>	

<p><b>MARKET NEEDS AND OPPORTUNITIES:</b>              The mining sector is the power of the Mongolian economy where it accounts for 26 percent of the GDP, 75 percent of foreign direct investment, and 90 percent of exports<sup>86</sup>. However, the mining industry is heavily dependent on diesel fuel for its operation and has a high amount of carbon emission. Recently, mining companies in Mongolia are becoming increasingly aware of the environmental impact of mining operations and are willing to adopt green solutions to reduce their carbon footprint and introduce renewable energy solutions.</p>	<p><b>MARKET CHALLENGES:</b>              As climate change issues, drought and desertification are becoming more serious and severe in Mongolia, the local residents where mining is prevalent worry about how mining, which requires enormous amounts of water for processing, could degrade the land even further.</p>	<p><b>WHY IS THIS A WHITE SPACE?</b>              As transitioning from diesel-fueled machinery to EV solutions are very costly, there is not much private sector interest shown so far, i.e., the market is not ready yet.</p>
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**POLICY& REGULATORY ENVIRONMENT:**

The Vision-2050 states that the government aims to reduce the negative environmental impact of the mining sector. Overall, the minerals law regulates the mining sector of Mongolia. The purpose of this law is to regulate the prospecting, exploration and mining of minerals within the territory of Mongolia.

**WHITE SPACE #8**

**EV MANUFACTURING AND DISTRIBUTION**

**POTENTIAL BUSINESS MODEL:** Invest in B2C EV manufacturing and distribution businesses

**POTENTIAL IMPACT THESIS:** Reducing greenhouse gas emission from vehicles in urban areas. People living in urban areas would benefit from less air pollution and toxic chemicals in the air.

**SDGs:**



**MARKET NEEDS AND OPPORTUNITIES:**

Ulaanbaatar, the capital of Mongolia where half of the population lives is one of the most polluted capitals in the world. Besides coal burning, increasing public and private transport contributes to air pollution, as the number of vehicles increased significantly. In Ulaanbaatar, there are 662 thousand vehicles, out of which only 498 are electric vehicles.<sup>87</sup> Each year the number of vehicles is increasing, thus suggesting a huge opportunity for EV increase.

**MARKET CHALLENGES:**

Building the EV infrastructure, i.e., more charging stations would require subsidy and support from the government.

If EVs are charged with electricity provided by coal-fired power plants, it will significantly undermine their intended environmental and health benefits.<sup>88</sup>

**WHY IS THIS A WHITE SPACE?**

The EV manufacturing business model is not proven in Mongolia.

**POLICY& REGULATORY ENVIRONMENT:**

- The Vision-2050 states that Mongolia aims to reduce the GHG emission from vehicles and consequently improve the air quality.
- As Mongolia does not have regulations for electric vehicles, they would be regulated by Law on vehicles. Law on vehicles states that public transportation will be aimed to be fueled by natural gas or electricity.

WHITE SPACE #9

IRRIGATION

**POTENTIAL BUSINESS MODEL:** Manufacture and distribute water and energy efficient irrigation equipment, including main conveyance, distribution network and on-farm infrastructure of precision irrigation techniques, micro-drip irrigation and solar-powered water pumps.

**POTENTIAL IMPACT THESIS:** Manufacturing and distributing water and energy-efficient irrigation equipments can help increase agricultural productivity, conserve water and energy, improve livelihoods, and build climate resilient sustainable farming practices.

SDGs:



**MARKET NEEDS AND OPPORTUNITIES:**

There are limited opportunities to expand planting areas. Poor water supply and lack of appropriate irrigation facilities are indicated as among the principal limiting factors.

According to ADB, Mongolia's irrigation system has low water productivity and lacks resilience to severe droughts and floods. An innovative, energy and water efficient irrigation system is critical for diversifying crops and vegetables.

**MARKET CHALLENGES:**

**Extreme weather conditions:** The number of extremely hot days and flash floods has increased. Even with an efficient irrigation system, the cost of irrigation may increase if the trend continues.

**Agricultural sector supplies and equipments heavily depend on imports from China and Russia.** Therefore, border closures and sanctions pose significant challenges to the sector.

**Lack of Human Resources:** To introduce climate-resilient technologies, it is critical.

**WHY IS THIS A WHITE SPACE?**


Unproven business model and need for know-how and expertise.



The farming sector, especially rural areas needs more capacity and education to explore and introduce new technologies.

While large private agribusinesses such as TESO LLC and Gachuurt LLC, small and medium farmers that supply a significant portion of vegetables and crop lack access to and knowledge of innovative irrigation systems.

**POLICY& REGULATORY ENVIRONMENT:**

- There is no strict regulation on land and water-use and restoration.
- As small and medium-sized farming is largely informal and they do not have a stable income, farmers do not qualify for loans to introduce new technology.

WHITE SPACE #10		
PRIVATE HEALTH INSURANCE		
<p><b>POTENTIAL BUSINESS MODEL:</b> B2C affordable private health insurance for public</p>		<p><b>SDGs:</b></p>  
<p><b>POTENTIAL IMPACT THESIS:</b> Increasing access to affordable health insurance and contributing to the overall well-being of the people.</p>		
<p><b>MARKET NEEDS AND OPPORTUNITIES:</b> Mongolia has one of the highest mortality rates due to non-communicable diseases (NCDs). The highest rate of cancer deaths for men and women combined was in Mongolia at 175.9 people per 100,000. NCDs account for 85.9 percent of all deaths in Mongolia.</p>	<p><b>MARKET CHALLENGES:</b> The delivery of health services is challenged by the country's extremely low population density in a large territory. Due to some factors including remoteness, economic difficulties, internal migration, unemployment and lack of health seeking behavior, there still remain people who are not receiving the health services they need.</p>	<p><b>WHY IS THIS A WHITE SPACE?</b> Affordable private health insurance needs buy-in from the private health sector, as the current private health insurance products are not affordable for the general public.</p>
<p><b>POLICY &amp; REGULATORY ENVIRONMENT:</b></p> <ul style="list-style-type: none"> <li>The Vision-2050 states that the government will enable the sustainability of the insurance market by supporting insurance companies, promoting competition and improving the legal environment.</li> <li>Law on health insurance regulates the private health insurance sector.</li> </ul>		

WHITE SPACE #11		
DETECTION AND PREVENTION HEALTH CENTERS IN RURAL AREAS		
<p><b>POTENTIAL BUSINESS MODEL:</b> B2C early detection and prevention health centers in the rural areas of Mongolia.</p>		<p><b>SDGs:</b></p>  
<p><b>POTENTIAL IMPACT THESIS:</b> Increasing the possibility to detect health issues at the early stage and improving access to health care services for rural and last-mile people</p>		
<p><b>MARKET NEEDS AND OPPORTUNITIES:</b> Mongolia has one of the highest mortality rates due to non-communicable diseases (NCDs).</p>	<p><b>MARKET CHALLENGES:</b> The delivery of health services is challenged by the country's extremely low population density in a large territory.</p>	<p><b>WHY IS THIS A WHITE SPACE?</b> Building early detection and prevention health centers in rural areas</p>



<p>The highest rate of cancer deaths for men and women combined was in Mongolia at 175.9 people per 100,000. NCDs account for 85.9 percent of all deaths in Mongolia.</p>	<p>Due to several factors including remoteness, economic difficulties, internal migration, unemployment and lack of health seeking behavior, there still remain people who are not receiving the health services they need.</p>	<p>would require a high level of subsidy from the state. The business model is not proven in the market.</p>
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**POLICY& REGULATORY ENVIRONMENT:**

- The Vision-2050 states that government will aim to enable the environment to detect any disease at its early stages and provide early detection and prevention tests for each citizen every two years.
- Law on Health regulates all the terms related to health centers.

**WHITE SPACE #12**

**TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET)**

<p><b>POTENTIAL BUSINESS MODEL:</b> Establish or acquire and operate technical and vocational education and training (TVET) and polytechnic centers offering targeted skills required by specialized industries, especially for technicians and associate professionals and specialized sectors. The skills set differ by industry, hence a need for tailor-made-courses in collaboration with employees supplemented by on-the-job training.</p>	<p><b>SDGs:</b></p>  	
<p><b>POTENTIAL IMPACT THESIS:</b> Investment in establishing and operating TVET and polytechnic centers offering targeted skills can help increase employability, productivity, economic growth, and innovation, while also reducing the skills gap and improving social mobility.</p>		
<p><b>MARKET NEEDS AND OPPORTUNITIES:</b> While Mongolia has an impressive rate of literacy and enrollment, studies suggest that the learning outcome needs to be commensurate with years of schooling and the skills the sector is supplying do not match labor market needs. Education provision is concentrated mainly in urban areas and needs to reach the rural population.</p>	<p><b>MARKET CHALLENGES:</b> Absence of cohesive, long-term collaboration and coordination between the public and private sectors to address mismatch between labor market needs and the skills education sector is providing. Lack of promotional and marketing activities to attract students in identified fields that align with job market demands.</p>	<p><b>WHY IS THIS A WHITE SPACE?</b> Unproven business model and lack of know-how.  The technical Education sector is heavily subsidized and some multilaterals in Mongolia have implemented or has been involved in the TVET related efforts, mostly government runs TVETs.</p>

Many businesses/industries mention a need for more human resources as one of the biggest challenges in the running. Meanwhile, the share of youth (15-24 years) in not in education, employment, or training was 19.7 percent in 2020 (more likely to be women). According to statistics released by the education ministry, an estimated 30 percent of higher education graduates were unemployed.

As the labor market evolves rapidly, a lack of accurate forecasting of labour force supply and demand and proper matching and promotion of identified fields can hinder the TVET sector.

While the government is seeking to develop TVETs in rural or semi-rural areas to support local development, most jobs are concentrated in Ulaanbaatar. There could be a mismatch.

Current TVET funding comes from the public fund, foreign worker levy from the private sector; international development assistance from major multilateral organizations and bilateral development agencies and funding from large private sector corporations.

TVET funding system poses a challenges because it limits TVETs autonomy to profit generation and complicate cost-sharing opportunities with the private sector.

Further improvements are needed in training TVET teachers, practice-oriented and industry-related training, and management and quality processes. Industry must also become more involved in the design and implementation of TVET. Currently there are no pre-service training for TVET teachers.

**POLICY& REGULATORY ENVIRONMENT:**

- The Vision-2050 aims to “improve the vocational education and training system to meet the priority development and to provide students with high professional skills”.
- Furthermore, one of the five main objectives of the Education Sector Medium Term Development Plan is effective vocational education and improved cohesion with labor market needs.
- The TVET law of 2009 stipulates that the highest authority for TVET is the National Council on Vocational Education and Training (NCVET) composed of equal numbers of representatives from the public and private sectors.
- The Parliament of Mongolia is currently discussing a new TVET law with recommendations from employers and business chambers.

# CONCLUSION & NEXT STEPS

The SDG Investor Map presents 14 Investment Opportunity Areas (IOAs) that can direct private capital toward achieving sustainable and inclusive economic growth for Mongolia.

These IOAs have been carefully identified through an extensive process involving literature review, as well as consultations with public and private stakeholders. Through rigorous analysis, the initial long list of 43 IOAs was refined and narrowed down to the final selection of 14 investment areas. This meticulous approach ensures that the identified IOAs are not only commercially viable but also has the greatest potential for making significant strides in development.

During the Investor Map development process, the following issues have been identified:

- A number of challenges regarding market readiness, value chain, consumer behavior, regulatory barriers and opportunities need to be tackled to develop the SDG-enabling and commercially viable businesses. Due to these challenges and barriers, many opportunities have been labeled as white spaces even though there is significant potential for private sector participation.
- As sustainability is a newer concept for Mongolian companies, many companies are facing challenges in integrating sustainability into their business as usual practices. Thus, there is a need to create enough support systems to help the private sector to capture trends in sustainability and commit resources to sustainable products and services.
- The Government should expand its support for growing SDG-aligned businesses by reducing regulatory requirements, adopting sustainable policies to incentivize their operation and promoting public-private partnership to accelerate the scale-up and commercialization of innovation.
- An increased number of private stakeholders are willing to collaborate in the developing and implementing the IOAs. Thus, the Government needs to actively engage with private stakeholders to realize their full impact and financial potential.
- Blended financing and innovative financing mechanisms need to be introduced locally to accelerate sustainable business development.

To increase international investor outreach, the full market intelligence of the Mongolia SDG Investor Map will be available on the global SDG Investor Platform and will be continuously updated as investment trends, policy, market dynamics and development needs shift.

As for the next steps, UNDP will seek collaborations and partnerships to act upon the market intelligence from the SDG Investor Map to help flow of capital to the SDGs in Mongolia. Potential follow up activities include:

- To build capacities of the businesses within the Investor Map to develop and integrate ESG & Sustainability standards and frameworks (i.e., SDG Impact Standards, ESG reporting framework).
- To support the design and implementation of green and SDG financing mechanisms which can potentially be funding source for the MSMEs and businesses operating in the Investor Map.
- To establish SDG Impact Accelerator to empower innovative MSMEs and “systems entrepreneurs” in scaling up their businesses aligned with SDGs by a multi-stakeholder platform.
- To work on pipeline development to match SDG focused businesses with investors, private sector facing policy reforms and advocacy, impact education, among others.



## Annex 1. LIST OF ORGANIZATIONS AND EXPERTS CONSULTED

### Governmental entities

- › Ministry of Economy and Development
- › Ministry of Health
- › Ministry of Education and Science
- › Ministry of Environment and Tourism
- › Ministry of Food Agriculture and Light Industry/ SME Agency
- › Ulaanbaatar Governor's Office
- › Ulaanbaatar Development Cooperation

### Business enterprises

- › URECA
- › AND Global
- › International Medical Center
- › Lendmn NBFJ JSC
- › Mongolbasalt JSC
- › Monpellets LLC
- › Monos Group
- › Bars Motors
- › TOMYO EdTech Company
- › MeLearn E-learning platform
- › Everyday Farm LLC
- › Airee LLC
- › Agrolly - Nomads Agritech Innovations LLC
- › Gurun Academy
- › Sopoko LLC
- › Hybrid House LLC
- › Cosmetic Cluster – Urgana LLC and Heelen Made LLC
- › Seabuckthorn Cluster - Uvs Foods LLC

### Business associations and chambers of commerce

- › Mongolian National Chamber of Commerce and Industry
- › Business Council of Mongolia
- › American Chamber of Commerce
- › European-Mongolian Chamber of Commerce and Industry
- › German-Mongolian Business Association
- › Mongolia-Australia Chamber of Commerce
- › Mongolian Sustainable Finance Association

## Commercial banks and Investors

- › Golomt Bank
- › Trade and Development Bank of Mongolia
- › XacBank
- › Khan bank
- › TESO Investment
- › DBM Asset Management
- › Mandal Asset Management
- › Ard Management
- › MCS Investment
- › ICT Group

## IFIs and international organizations

- › Asian Development Bank
- › European Bank for Reconstruction and Development
- › UNICEF
- › UNDP
- › FAO
- › ILO
- › UNIDO

## NGOs

- › All for Education



## Annex 2. Sustainability Accounting Standards Board (SASB) Taxonomy

- **EDUCATION / SKILLS DEVELOPMENT**  
Education Financing, Education Technology, Formal Education
- **CONSUMER GOODS**  
Apparel, Accessories and Footwear, Appliance Manufacturing, Building Products and Furnishing, E-commerce, Household and Personal Products, Retailers and Distributors, Toys, Sporting Goods
- **FOOD AND BEVERAGE**  
Agricultural Products, Alcoholic Beverages, Food Retailers, Beverages, Processed Foods, Restaurants, Tobacco
- **RESOURCE TRANSFORMATION**  
Aerospace and Defense, Chemicals, Containers and Packaging, Electrical Equipment, Industrial Machinery and Goods
- **HEALTHCARE**  
Biotechnology and Pharmaceuticals, Drug Retailers, Healthcare Delivery, Healthcare Distributors, Managed Care, Medical Equipment and Supplies
- **SERVICES**  
Advertising and Marketing, Casino and Gaming, Education, Hotels and Lodging, Leisure Facilities, Media and Entertainment, Professional and Commercial Services
- **FINANCIALS**  
Asset Management and Custody Activities, Commercial Banks, Consumer Finance, Insurance, Investment Banking and Brokerage, Mortgage Finance, Security and Commodity Exchanges
- **INFRASTRUCTURE**  
Electric Utilities and Power Generators, Engineering and Construction Services, Gas Utilities and Distributors, Home Building, Real Estate, Water Management, Water Utilities and Services
- **TECHNOLOGY AND COMMUNICATIONS**  
Electronic Manufacturing Services and Original Design Manufacturing, Hardware, Internet Media and Services, Semiconductors, Software and IT Services, Telecommunication Services
- **RENEWABLE RESOURCES AND ALTERNATIVE ENERGY**  
Biofuels, Forestry Management, Fuel Cells and Industrial Batteries, Pulp and Paper Products, Solar Technology and Project Developers, Wind Technology and Project Developers
- **TRANSPORTATION**  
Air Freight and Logistics, Airlines, Auto Parts, Automobiles, Car Rental and Leasing, Cruise Lines, Marine Transportation, Rail Transportation, Road Transportation

The methodology follows a four-stage process that starts with taking into consideration national development needs and policy priorities that draws from a combination of in-depth desk research and focused in-country public sector stakeholder consultations. Then through an iterative research-intensive process, overlap between development needs and policy priority is identified and validated by those private sector stakeholders to be further refined into specific IOAs taking investment/ financial momentum by priority sectors, sub-sectors, and regions with the highest development needs into consideration.

**Figure 2** Four-stage process to develop SDG Investor Maps



All these steps are backed by data and evidence gathered through research and are provided as a public good to investors and governments in order to facilitate productive and SDG-aligned capital deployment. Gender and marginalization, digitalization, and climate are some of the underpinning themes/lenses of analysis for all IOAs in the Mongolia SDG Investor Map.

In addition, the Map identifies potential investment areas - **white spaces** that serve a strong development need in the national context but have not recorded a strong policy momentum by the government commitments or have not seen significant private sector momentum due to the absence of viable business models, or both. In other words, there are two types of white spaces include:

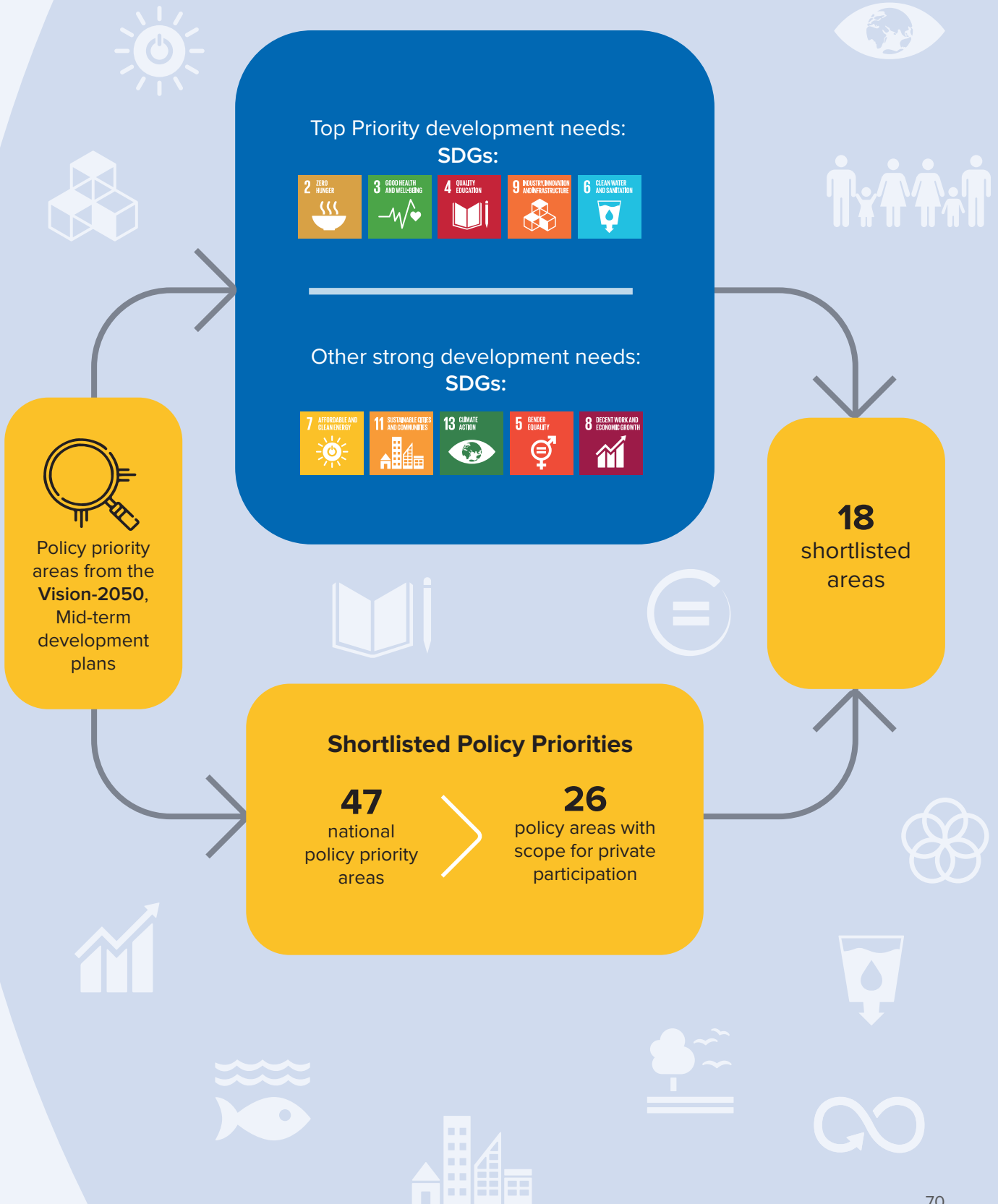
1. **Policy White Space:** Opportunity areas that serve a development need but experience the absence of private sector momentum due to policy and regulatory gaps
2. **Business Model White Space:** Opportunity areas that serve a development need but experience the absence of private sector momentum despite a favorable policy and regulatory momentum.

## Annex 4. Development needs and policy mapping

**Table 1.** List of documents reviewed to define development needs and national priorities

Development assessment reports		Key development policies
1.	Mongolia SDG Mainstreaming Acceleration and Policy Support Report (MAPS), 2018	<ul style="list-style-type: none"> <li>• Long-Term Development Plan 'Vision-2050'</li> <li>• Medium-Term Development Guidelines 2020-2025</li> <li>• Public Investment Program</li> <li>• New Recovery Policy</li> </ul>
2.	Mongolia Voluntary National Review Report (VNR), 2019	
3.	Mongolia's Nationally Determined Contribution (NDC)	
4.	UNDP. Integrated National Financing Framework: Baseline Assessment, 2022	
5.	UNDP. Human Development Report 2020 for Mongolia, 2020	
6.	IFC/World Bank report on Mines and Minds: Leveraging Natural Wealth to Invest in People and Institutions, 2020	
7.	Monitoring COVID-19 Impacts on Households in Mongolia, World Bank, 2021 (COVID-19 report)	
8.	Integrated report on COVID-19 impacts on business, Mongolian National Chamber of Commerce and Industry,, 2020 (COVID report)	
9.	UN Sustainable Development Cooperation Framework for Mongolia, 2022	
10.	UNDP, Mapping the SDGs against Mongolia's 10. National Development Plans and Policies	
11.	UN Common Country Analysis, Mongolia, 2021	

**Figure 3. Policy and SDG alignment - Sector prioritization**



**Table 2.** Shortlisted policy areas and emergent sectors

	Shortlisted Policy Areas from the Vision-2050	Related Sectors (SASB classification)	Emerging sectors
<b>OVER-ARCHING POLICY AREAS</b>	1	Nomadic civilization	n/a
		Human development	Healthcare, Education, Food and Beverage, Infrastructure; Services
	3	Affordable housing	Infrastructure
	4	Financing for supporting the middle class	Financials
	5	Priority economic sectors (responsible mining, heavy industry, light industry, tourism, creative industry)	Infrastructure, Food and Beverage, Transport, Services, RE, Technology and Communications
	6	Labour market	n/a
	7	Regional and local development (Infrastructure, Tourism, Agriculture)	Infrastructure, Services, Food and Beverage
<b>SECTOR SPECIFIC POLICY AREAS</b>	8	Food supply and security	Food and Beverage, Transport
	9	Agriculture and livestock production	Food and Beverage
	10	Access to health services, Healthy lifestyle	Healthcare, Food and Beverage
	11	Combatting non-communicable diseases	Healthcare
	12	Equitable, inclusive and quality education for all	Education
	13	Water resources and management	Infrastructure, Healthcare
	14	Waste management	Infrastructure
	15	Energy supply and efficiency	Infrastructure, Renewable Resources and Energy
	16	Air and environmental pollution	Infrastructure, Healthcare, Renewable Resources and Energy
	17	Technical and vocational education and training	Education
	18	Forestation	Renewable Resources and Energy





**Table 3.** Priority sectors and a longlist of IOAs

Sector	Sub-sector <sup>6</sup>	A draft longlist of Investment opportunity areas
<b>FOOD AND BEVERAGE</b>	<ul style="list-style-type: none"> <li>• Agricultural products</li> <li>• Meat, Poultry &amp; Dairy</li> <li>• Food Retailers &amp; Distributers</li> </ul>	<ul style="list-style-type: none"> <li>• Sustainable cashmere value-chain and traceability</li> <li>• Milk and dairy product processing</li> <li>• Digital platform for farmers</li> <li>• Agriculture food products cluster development</li> <li>• Organic food sales and delivery</li> <li>• Artisan cosmetic products made with agricultural byproducts</li> <li>• Energy efficient winter greenhouse</li> <li>• Cold storage Irrigated crop</li> </ul>
<b>HEALTH CARE</b>	<ul style="list-style-type: none"> <li>• Health care delivery</li> <li>• Managed care &amp; medical insurance</li> <li>• Medical Equipment &amp; Supply</li> <li>• Biotechnology &amp; Pharmaceuticals</li> </ul>	<ul style="list-style-type: none"> <li>• Telemedicine</li> <li>• Low-fee private health insurance products</li> <li>• B2B Medical equipment</li> <li>• Pharmaceutical manufacturing</li> <li>• Low-fee medical centers / hospitals</li> <li>• B2B2C Medical consumables</li> <li>• Traditional medicine manufacturing (products including astragalus, artichoke, etc.)</li> <li>• Detection and prevention centers in rural areas</li> <li>• Air cleaning solutions (filter etc)</li> </ul>
<b>CONSUMER GOODS AND SERVICES</b>	<ul style="list-style-type: none"> <li>• Education Technology</li> <li>• Formal Education</li> <li>• Tourism</li> </ul>	<ul style="list-style-type: none"> <li>• Online learning platform</li> <li>• Technical and Vocational Education for priority sectors of the country</li> <li>• Digital Platform for early- and mid-career professional skill development</li> <li>• Affordable private school and kindergarten</li> <li>• Child day care and development centers</li> </ul>
<b>INFRASTRUCTURE</b>	<ul style="list-style-type: none"> <li>• Engineering &amp; Construction Services</li> <li>• Water Utilities and Services</li> <li>• Waste management</li> </ul>	<ul style="list-style-type: none"> <li>• Energy Efficiency (EE)</li> <li>• Affordable housing development (i.e energy efficient, hybrid)</li> <li>• Ger and house insulation</li> </ul>
<b>RENEWABLE RESOURCES &amp; ALTERNATIVE ENERGY</b>	<ul style="list-style-type: none"> <li>• Solar technology</li> <li>• Wind technology</li> <li>• Biomass</li> <li>• Forestry management</li> </ul>	<ul style="list-style-type: none"> <li>• B2B/B2C Solar panel distribution, Solar retail products manufacturing, solar lights etc.</li> <li>• Wind projects</li> <li>• Biofuel production</li> <li>• Tree planting, after care &amp; irrigation</li> <li>• Off-grid projects in rural areas</li> <li>• Hydro projects</li> <li>• EVs and charging stations</li> <li>• Hydrogen</li> <li>• Battery storage</li> <li>• Access to carbon credits</li> </ul>
<b>FINANCIALS</b>	<ul style="list-style-type: none"> <li>• Retail banking</li> </ul>	<ul style="list-style-type: none"> <li>• Affordable and accessible microfinance</li> <li>• Climate risk insurance for herders and farmers</li> <li>• Digital Finance</li> </ul>

## Annex 5. Mongolia free economic zones

According to the Law on Free Zone, “Free Zone” means a special site within the territory of Mongolia that are deemed to be outside of the customs territory for the purposes of customs area, customs duties and other taxes, adopting special regulatory treatments for a business activity. Special treatments of operation in Free Zones means a special regulation set forth in this Law with regard to tax credits or exemptions from the levy of customs duties or other taxes, or facilitating conditions for entry-exit clearance, registration, customs controls, travel to, and employment in the Free Zones as afforded to business entities or individuals operating in Free Zones, in order to attract investments, introduce new technologies, promote export and develop tourism and services.

The purpose for establishing a Free zone is to increase an economic growth by ways of accelerating regional development, facilitating trade, introducing and adopting new technologies, increasing transits and logistics, developing new industries of trade and services and tourism, attracting investments, promoting exports and imports by individuals and business entities and developing export-oriented production upon creation of favorable regulatory and investment environments in the region.

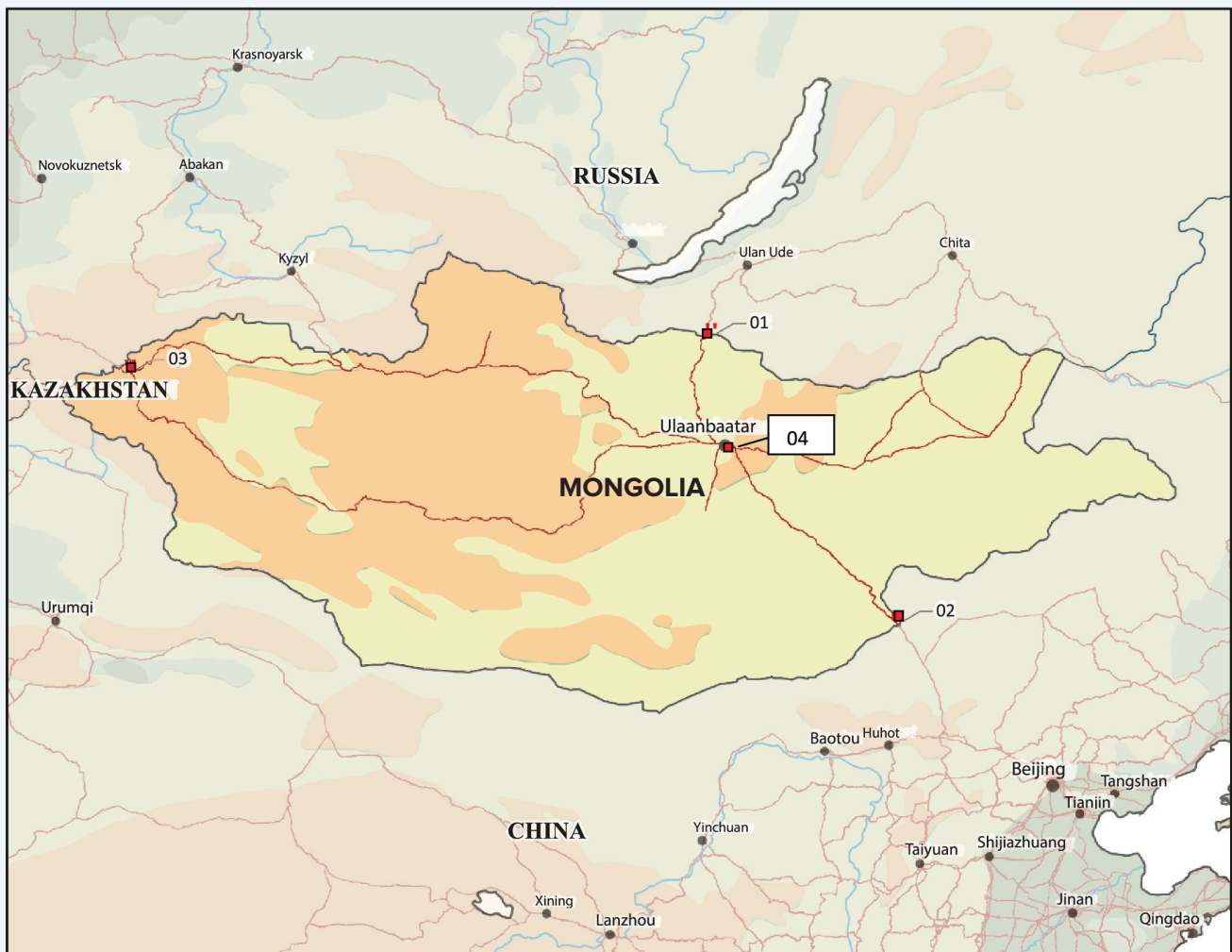
Free zone shall mean part of the territory of Mongolia under special conditions for business and investment and which should be considered to be separate in terms of custom and taxation. Free zone shall be of trading, industrial, agricultural, tourism, economic form. Activities aimed at improving packaging, storage and protection of products and goods without losing their quality, increasing their value and sale transactions shall be carried out in a free trade zone.

<p><b>Number of free zones</b></p>	<p><b>4 Free Economic Zones.</b></p>
<p><b>Main sectors of activity</b></p>	<p>Industrial, commercial, and tourism-service (factories of audio and video equipment, home appliances and electronic goods, production of textiles and clothing, furniture and its details, warehouses, business, exhibition centers, commodity exchange, parceling, bottling, packaging of goods, banking, inancial services, information and communication center).</p>
<p><b>Tax and Incentives</b></p>	<ul style="list-style-type: none"> <li>• Goods imported from overseas into a Free Zone shall be exempt from the levy of import tax, customs duties, VAT and excise tax;</li> <li>• No tax shall be imposed on goods entering a Free Zone, which are previously imported into the customs territory upon payment or import tax, customs duties, VAT and excise tax. Deductions shall be made from other taxes against payment receipts for taxes paid in the customs territory;</li> <li>• No VAT shall be imposed when Mongolian goods are brought into a Free Zone from the customs territory;</li> <li>• Goods purchased by a visitor not exceeding a total value of MNT3.0 million shall be exempt from the customs duties and VAT when entering the customs territory from a Free Zone;No tax shall be imposed on goods exported from a Free Zone to overseas;</li> <li>• No VAT shall be imposed on goods manufactured or sold or services rendered in the territory of a Free Zone by a citizen or legal entity registered in a Free Zone.</li> </ul>

## Land payments

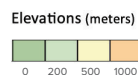
### Land payments and property taxes:

- Individuals and businesses may request a land usage right in FZs through either project bid or auction.
- Businesses operating in trade, tourism and hotel sectors are fully exempted from land usage right payment for the first 5 years from the operation start. This payment is further reduced up to 50% for the following 3 years.
- Businesses operating to improve such infrastructures, as energy and heating source, pipeline network, clean water supply, wastewater sewage, auto road, railway, airport, and basic communication line will be fully exempted from land payment for the first 10 years from the operation start.
- Buildings and facilities built and registered in FZs are fully exempted from the immovable property tax.



## FREE ZONES IN MONGOLIA

- International borders
- Cities
- Free Zones



- 01 - Altanbulag Free zone
- 02 - Zamyn-Uud Free Zone
- 03 - Tsagaan Nuur Free zone
- 04 - Khushig Valley Free Economic zone



## LIST OF OPERATING FREE ZONES

**1 Altanbulag Free Zon**

<b>Location</b>	The Altanbulag free zone is located in the northern part of Mongolia with a planned area of 500 hectares. It is adjacent to Khiagt border port of Russia, 335 km away from the capital city of Ulaanbaatar and 25 km away from Sukhbaatar city of Selenge province. The AFZ is directly accessible by an automobile road from Ulaanbaatar city and Sukhbaatar railway station of Russia-Mongolia-China international railway network. Passenger, freight and container transportation is convenient.
<b>Surface Area</b>	500 hectares
<b>Contact</b>	15141 Ulaanbaatar, Chingeltei District, Sambuu Street 11, Government building XI Tel: (976-51) 261430 E-mail: info@altanbulag.gov.mn Web: http://www.altanbulag.gov.mn

**2 Zamyn-Uud Free zone**

<b>Location</b>	The Zamyn-Uud free zone, established in 2004 is a part of Mongolian-Chinese Zamyn-Uud and Erlian Economic Cooperation Zone and has a land area of 900 hectares in Zamyn-Uud border point town in the southern part of Mongolia, one of the largest transport border cross-point of Mongolia. It is situated in 780 km from Ulaanbaatar, 230 km from Sainshand, the center of Dornogobi province and 8 km from Erlian town of China.
<b>Surface Area</b>	900 hectares
<b>Contact</b>	PO Box 38/147 Ulaanbaatar 211238 Tel: (976-51) 264301 / (976-11) 330294 / 330462 - Fax: (976-11) 318168 E-mail: info@zfz.gov.mn Web: www.zfz.gov.mn Tel: (976-51) 264301 / (976-11) 330294 / 330462 - Fax: (976-11) 318168 E-mail: info@zfz.gov.mn Web: www.zfz.gov.mn

### 3 Tsagaannuur Free zone

<b>Location</b>	As of January 2023, the Tsagaannuur Free Zone has opened for permanent operation. It has 708.4 hectares of land area and is located in the Western region of Bayan-Ulgii province, and at 1.700 km from Ulaanbaatar, 65 km from Bayan-Ulgii city center 25 km from Russian borders entry point. The free zone is also found to be on the Euro-Asian international highway AH-4.
<b>Surface Area</b>	708.4 hectares
<b>Contact</b>	211238 Ulaanbaatar, Chingeltei District, Sambuu Street 11, Government building XI Tel: (976-51) 264026, 324026 E-mail: tsagaannuurftz@yahoo.com Web: tsagaannuur.freezone.gov.mn

### 4 Khushig Valley Free Economic Zone

<b>Location</b>	<p>With an area of 1,000 hectares in the territory of Sergelen soum, Tuv aimag, the Free Economic Zone will be based around the new Chinggis Khaan International Airport.</p> <p>A specialized economic zone will be established for tourism, business, and financial operations through production and services, such as tourism services focusing on nomadic culture, betting games and associated services, cultural and creative industry, trades, and international bank and financing services,</p> <p>A zone will be created for export-oriented production and innovation based on science, advanced technology, and artificial intelligence,</p> <p>Opportunities will be created for the country to become 'Transit Mongolia' by utilizing the geographical advantage of being located between Asia and Europe in facilitating trade and transportation and creating more favorable conditions for investment.</p>
<b>Surface Area</b>	1,000 hectares
<b>Contact</b>	901, 15160-0011, Hangarid Tower, 7/1 Jigjidjav Street, 1 khoroo, Chingeltei District, Ulaanbaatar Tel: (976-51) 267448 E-mail: info@khfez.com Web: www.khfez.com



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