GREEN DEVELOPMENT POLICY

1. A NEED AND JUSTIFICATION FOR THE TRANSITION TO GREEN DEVELOPMENT

1.1. Global Perspective

Climate change, rapid economic and population growth, the sharp increase in consumption and services, and resource depletion are the greatest global challenges that pose a risk for the earth’s subsistence. Based on an estimation of the ecological footprint, two Earth’s will be required by 2030 as current consumption and production patterns are continued.

Thus, all countries and every citizen must substantially change their lifestyle and production and consumption patterns, and shift to an environmentally friendly, "green" lifestyle. These global challenges were discussed at the United Nations Conference on Sustainable Development, which took place in 2012. The conference recommended that countries adopt an inclusive green economy as a vehicle for sustainable development and poverty reduction. Furthermore, United Nations Agencies identified green economy, green production and green growth concepts, which are aimed at the creation of economies that have low carbon emissions, use natural resources efficiently, and reduce environmental pollution and degradation. Commitments were made to the opening of new effective ways of participation in global economic cooperation.

1.2. Development opportunities and challenges for Mongolia

Mongolia has an opportunity to establish the foundations for green development using its comparatively well preserved nature of prevailing land, its rich cultural traditions and customs, geographical location, rich natural resources and its ability to adapt to nature and the environment. On the other hand, the foundation of green development has been created, as Mongolia is at the starting point of an economic boom backed by natural resources, a young population with 47.2% between the ages of 15-40, and an open democratic government which has a strong commitment to sustainable development.

However, Mongolia is facing numerous challenges, including poverty, un-equal income distribution, a natural resource-based economic structure, the inefficient and wasteful consumption of energy and other resources, obsolete technology and techniques and a vulnerability to climate change.

Thus, Mongolia needs to change the current “Grow first and Clean-it up later” approach in order to improve the quality of living conditions for its people by building inclusive economic growth, and by increasing productivity based on the development of environmentally friendly, effective non-waste production.
1.2. Green development concept

1.2.1. Green development terms and definitions

The terms used in this document shall be construed as follows:

“Green development” refers to a pattern of development that reduces poverty through an inclusive economy in which resources are used efficiently and without waste, supports ecosystem services, lowers greenhouse gas emissions and waste;

“Green economy” is one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities;

“Green growth” means economic growth with reduced greenhouse gas emissions that ensures environmental sustainability, supports social inclusiveness and participation;

“Green industry” is an industrial process that utilizes energy and resources efficiently, with reduced greenhouse gas emissions and without harm or risks to humans and the environment;

“Green job” refers to employment that contributes to reduced consumption of energy, raw materials and water, and the reduction of greenhouse gas emissions and waste, ecosystem preservation and restoration, and the improvement of environmental protection and environmental quality by adapting to climate change;

“Green city” means a city or urban settlement that ensures comfortable living conditions and development opportunities through the use of smart infrastructure services such as energy, heating, water supply, communication, public transportation and adequate waste management;

“Green building” means a building structure which constitutes a comfortable living and working environment through the utilization of building materials that do not cause negative impacts on human health and the environment, with energy efficient heating solutions, low emissions, and technology for rain water collection and sewage treatment system;

“Green procurement” means purchasing goods and services that are designed or designated toward ensuring the efficient use of energy and natural resources, the sustainability of ecosystem services, climate change adaptation and the creation of a green living environment;

“Green investment” means the financing of and investing in projects and activities which use technology that reduces energy, water and raw material consumption, while keeping the value of ecosystem services;

“Green tax” means a tax that aims toward reducing production, services, imports and consumption with negative environmental impacts;

“Ecosystem services” refers to benefits obtained from the ecosystem, which includes provisioning food, raw materials and resources, regulating the climate and impacts of rapid environmental degradation, and sustaining human life and physical and spiritual well-being;
“Payment for ecosystem services” means a payment scheme regulating transactions between beneficiaries of the ecosystem services and the contributors who maintain the sustainability of the ecosystem services;

1.2.2. Green Development Concept of Mongolia

The green development concept in Mongolia:

Supports the global commitment to change current development trends, and transition to a socially inclusive, low green house gas and reduced waste development model, by changing and conserving natural resources and ecosystem value, along with increasing human well-being and reducing poverty.

Based on the Sustainable Development Concept of Mongolia,

Recognizing the need for a change in current socio-economic development trends and patterns,

The green development concept transforms Mongolia into a development model that ensures the improved well-being and prosperity of Mongolian citizens by safeguarding the sustainability of ecosystem services, increasing the effective consumption of natural resources and ensuring economic growth that is inclusive and environmentally sound.

The transition to green development growth model will be ensured by using mechanisms such as valuing the benefits of and the rational use of natural resources, increasing productivity, green investment and green procurement, by the expansion of works and services directed at enhancing conservation of ecosystem balance and restoration, engraining environmentally friendly production and services, and promoting a green lifestyle.

Key indicators for determining the transition towards green development will include the improved efficiency of natural resource utilization, the level of recycling, green employment and the proportion of green procurement, and the reduction of the ecological footprint of energy, water, greenhouse gas emissions, and goods and services per unit of production and services.

1.2.3. Guiding Principles

The following principles will be followed for ensuring green development:

- Efficient, effective and rationale use of resources;
- Sectorial policies and planning shall be consistent with green development concepts;
- Promotion of clean and advanced technologies;
- Ensure citizen’s participation in the creation of green economic growth;
- Engrain environmentally friendly attitudes, habits and competencies;
- Transparency, accountability and liability.

2. POLICY, PURPOSE AND OBJECTIVES

2.1. Purpose

The purpose of the Green Development Policy is to ensure that Mongolia evolves as a developed nation that has built conditions for environmental sustainability, so that it will be inherited by future generations who will gain benefits from it in the long-run through participatory and inclusive economic growth based on the green development concept.

2.2. Strategic objectives

The following strategic objectives will be achieved to ensure green development:

Strategic objective #1: Promote a sustainable consumption and production pattern with efficient use of natural resources, low greenhouse gas emissions, and reduced waste generation;

Strategic objective #2: Sustain ecosystem’s carrying capacity by enhancing environmental protection and restoration activities, and reducing environmental pollution and degradation;

Strategic objective #3: Increase investment in natural capital, human development and clean technology by introducing financing, tax, lending and other incentives for supporting a green economy;

Strategic objective #4: Engrain a green lifestyle by reducing poverty and promoting green jobs;

Strategic objective #5: Encourage education, science, and technology to serve as the catalyst for green development, and develop cultural values and livelihoods that are in harmony with nature;

Strategic objective #6: Develop and implement a population settlement plan in accordance with climate change, while considering the availability of natural resources and the resilience of regions.

3. MEASURES DESIGNED FOR THE IMPLEMENTATION OF THE STRATEGIC OBJECTIVES

3.1. Strategic objective #1 will be achieved through the implementation of the following measures:

3.1.1. Reduce greenhouse gas emissions in the energy sector by 20 percent by 2030, through increased energy efficiency, and by ensuring that the share of renewable energy used in total energy production is at 20 percent by 2020, and at 30 percent by 2030. This will be achieved by renewing energy production and other industrial
technologies, by reducing excessive consumption and transmission losses, and by the optimization of pricing policies.

3.1.2. Reduce building heat losses by 20 percent by 2020, and by 40 percent by 2030, through the introduction of green solutions such as energy efficient and advanced technologies and standards, green building rating systems, energy audits, and the introduction of an incentives mechanism.

3.1.3. Introduce environmental standards and norms consistent with international standards, and increase the results and quality of environmental assessments while promoting competitiveness and increased productivity.

3.1.4. Increase the processing of raw materials such as leather, wool and cashmere to 60 percent by 2020, and to 80 percent by 2030, through the promotion of sustainable agriculture development, and the development of industrial processing cluster that is export-oriented and based on green technology.

3.1.5. Improve supply of domestic demand for wheat, potatoes and vegetables through reduced land degradation due to crop production, and improved soil fertility, by introducing agro techniques for soil maintenance and efficient advanced technology for irrigation and establish forest zones.

3.1.6. Improve agricultural product supply chains and networks, and provide support for the introduction of environmentally friendly storage and packaging technologies for agricultural products.

3.1.7. Develop eco-tourism products and services that meet environmental and sanitation requirements.

3.1.8. Promote resource efficient and low waste technologies for the mineral resources sector.

3.1.9. Prevent the negative impacts on human health and the environment arising from mining activities by engraining transparent and responsible mining practices, by improving the effectiveness of introducing offset mechanisms and by improving environmental protection, and restoration activities.

3.1.10. Prevent pollution through the use of international standards for conventional and un-conventional oil deposit exploration and mining, and through frequent monitoring and evaluation.

3.1.11. Creation of a Sovereign Wealth Fund using mining sector income, and utilize for ensuring long-term sustainable development.

3.1.12. Develop an environmentally sound infrastructure and transportation network with no adverse impacts on nature, human health and biodiversity.

3.2. Strategic objective #2 will be achieved through the implementation of the following measures:

3.2.1. Conserve pristine nature and maintain ecosystem sustainability by protecting at least 60 percent of fresh water reserve sand stream formation areas,
expanding protected areas to 25 percent by 2020 and 30 percent by 2030, and creating sustainable financing mechanisms for protection.

3.2.2. Promote the archetype of green development areas by limiting mining and industrial activities in national parks, and natural and cultural heritage sites, by developing eco-tourism and traditional livestock husbandry.

3.2.3. Strengthen the national capacity to adapt to climate change and reduce the negative impacts of climate change.

3.2.4 Reduce the loss of biodiversity by creating a gene fund, which will supply sufficient resources to maintain biodiversity and preserve the habitat.

3.2.5 Create conditions for sharing the benefits from the use of genetic resources through the creation of an adequate legal environment for the use, evaluation and registering of information on genetic resources and traditional knowledge related to genetic resources use.

3.2.6 Limit the import and trade of genetically modified organisms by strengthening the capacity to assess the risks associated with genetically modified organisms, and prevent the impact of genetically modified organisms on human health and the environment.

3.2.7 Enhance forest absorption of greenhouse gasses by intensifying reforestation efforts and expanding forest areas to 9 percent of the country’s territory by 2030.

3.2.8 Create sustainable financing systems through the introduction of community-based natural resource management in the protection and sustainable use of forests, non-timber resources, flora and fauna.

3.2.9 Provide at least 90 percent of the population with access to safe drinking water, and provide 60 percent of the population with access to improved sanitation facilities by increasing water supply and sewerage system capacity and productivity.

3.2.10 Promote the introduction of technologies for the recycling, reuse and retreatment of wastewater up to permissible standard level, by limiting the use of ground water for industrial purposes.

3.2.11 Promote experimentation and research activities for ground water resources expansion and restoration, and promote projects for surface water accumulation and utilization, and initiatives for using rain water harvesting.

3.2.12 Reduce the impact of desertification, land degradation and drought, by creating conditions to minimize and reduce the human impact on the environment in periods of rapid economic growth and climate change.

3.2.13 Promote efforts aimed at reclaiming at least 70 percent of degraded, polluted and abandoned land from industrial activities, and reusing it for different economic purposes.
3.2.14. Improve mechanisms for increased investment returns and regulatory mechanisms for optimal utilization of natural resources.

3.3 **Strategic objective #3 will be achieved through the implementation of the following measures:**

3.3.1 Increase investment to increase efficiency of resource utilization and productivity, and reduce greenhouse gas emissions per unit of production by allocating two percent of GDP annually for green development.

3.3.2. Create economic incentives to increase productivity of natural resource use and support, and engrain environmentally friendly consumption and production habits.

3.3.3. Increase investments for nature conservation and natural resource rehabilitation by 20 percent by disseminating the benefits of and valuing and supporting ecosystem services such as capacity of forest water containment, carbon absorption, floodplain water collection and treatment, and environmental protection and restoration.

3.3.4. Establish a green taxation system to reduce the production and import of goods and services which are harmful to the environment.

3.3.5. Promote the trade of low carbon and energy efficient technologies by reflecting the green development principles in international trade agreements and contracts.

3.3.6. Increase the purchasing of environmentally sound, effective, and resource efficient goods, works and services up to 20% of total public procurement.

3.3.7. Enhance the corporate social responsibility of economic entities and organizations, and create an environmentally sound and sustainable financing system in the banking system.

3.3.8. Estimate the share of environmental contributions in socio-economic development by incorporating green development indicators into the National Accounting Systems.

3.4. **Strategic objective #4 will be achieved through implementation of the following measures:**

3.4.1. Create employment opportunities with secured incomes for at least 80% of the available workforce, by increasing permanent jobs through public-private partnerships.
3.4.2 Enhance labor productivity through the creation of a competitive and professional workforce, obtaining internationally qualified educations available in the home country.

3.4.3 Strengthen an emerging middle class by promoting investment towards expanding the social protection floor and promoting multiple income sources of livelihood.

3.4.4 Involve citizens in vocational training programs, provide job placement services, and offer a sufficient salary for women taking care of children, and provide them suitable compensation for their work.

3.4.5. Ensure equal access to social services necessary for healthy living and for ensuring food safety, by improved supply and availability of food for production.

3.4.6. Strengthen individual’s ability to overcome the adverse impacts of climate change by implementing programs and projects to improve the livelihood of individuals dependent on the environment and natural resources.

3.4.7. Create and promote incentives, like payment for ecosystem services for herders who take the initiative to contribute towards preventing pasture degradation and damage by breeding livestock in accordance with pasture capacity, and by maintaining water sources and springs.

3.5. Strategic objective #5 will be achieved through the implementation of the following measures:

3.5.1. Engrain a resource efficient and effective consumption culture, environmentally friendly lifestyle, and traditional customs of protecting the environment through sustainable development education.

3.5.2. Establish best practices for efficient production and consumption of products by promoting the introduction of environmental management standards “MNS ISO14000” in economic entities.

3.5.3. Assess risks to the environment and places of historical or cultural significance before implementing mining and major development projects, and ensure preventive measures are taken to preserve important sites.

3.5.4. Encourage the development of clean technology and innovation to support green development by increasing the share of GDP expenditure for science and technology research and experimentation by two percent by 2020, and by three percent by 2030, and use it as the catalysts for green development.

3.5.5. Increase manufacturing of green products with specified quality and exclusivity by expanding cooperation between scientific organizations and industries to apply, convey and transfer throughout industries innovations, biotechnology and nano technology.
3.6. Strategic objective #6 will be achieved through the implementation of the following measures:

3.6.1. Offer comfortable living and working environments for the locals by developing self-sufficient “green” and “smart” cities and villages that are compatible with the carrying capacity of the environment and climate change trends, in order to prevent a heavily concentrated population.

3.6.2. Reduce air, water, and soil pollution by implementing an improved plan for urban land use, construction zoning and infrastructure provisioning, and through the creation of a legal environment for accountability for its implementation.

3.6.3. Increase the share of green space in the urban area by 15% by 2020, and by 30% by 2030 through the re-development of Ulaanbaatar and other urban settlement areas.

3.6.4. Reduce solid waste in landfills by 20% by 2020, and by 40% by 2030, by improving proper reduced waste management by promoting efficient technology, providing knowledge and ensuring healthy habits and lifestyles, and through increased waste recycling and processing, and promoting the production of value added products.

3.6.5. Develop an environmentally sound, adequate, and safe public transportation service, and create a comfortable environment for passengers.

3.6.6. Enhance space available for pedestrians and cyclists through improved planning and organization of pedestrians’ carriageways, green areas, bicycle lanes and parking.

3.7. Policy implementation phases
The Green Development Policy will be implemented in two phases:

First Phase: Lay the foundation for green development, 2014-2020

Second Phase: Transformation to green development, 2021-2030

4. RESULTS OF POLICY IMPLEMENTATION

4.1. Implementation mechanisms, monitoring and evaluation

4.1.1. The government of Mongolia will adopt the Mid-term Green Development Action Plan.

4.1.2. Green development policies will be incorporated in the Government Action Program, sector policy documents and public investment programs.

4.1.3. Political parties and coalitions shall reflect ways of implementation of the green development concepts in their election platforms at all levels and construct programs for implementation.
4.1.4. Incentives shall be provided to citizens, the private sector and civil society to encourage their participation in the policy implementation, and to expand cooperation and partnerships between them.

4.1.5. The government shall undertake an annual evaluation on the implementation of the Green Development Policy and present for hearing to the Parliament.

4.1.6. The results of the implementation of the Green Development Policy shall be assessed based on appropriate methodology and modeling.

4.2. Criteria and expected results

The following criteria and indicators shall be used to measure the results of Green Development Policy Implementation. The indicator’s quantitative data of 2013 will serve as the baseline.

<table>
<thead>
<tr>
<th>Criteria/Indicators</th>
<th>2020</th>
<th>2030</th>
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<tbody>
<tr>
<td>Share of renewable energy in total installed capacity of energy production - 4</td>
<td>20%</td>
<td>30%</td>
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<tr>
<td>Reduction of building heat loss</td>
<td>20%</td>
<td>40%</td>
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<tr>
<td>Share of waste recycling - 104, 105</td>
<td>20%</td>
<td>40%</td>
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<td>Share of expenditures for green development in total GDP-77</td>
<td>2%</td>
<td>3%</td>
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<tr>
<td>Share of expenditures for science and technology research in total GDP-99</td>
<td>2%</td>
<td>3%</td>
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<tr>
<td>Share of green procurement in total government procurement -83</td>
<td>20%</td>
<td>30%</td>
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<td>Share of protected areas -40</td>
<td>25%</td>
<td>30%</td>
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<tr>
<td>Increased investments in environmental protection and restoration - 74</td>
<td>20%</td>
<td>30%</td>
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<tr>
<td>Share of forest area-51, 50</td>
<td>8.5%</td>
<td>9.0%</td>
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<tr>
<td>Percentage of population that has access to safe drinking water-58</td>
<td>80%</td>
<td>90%</td>
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<tr>
<td>Percentage of population connected to improved sanitation facilities-61</td>
<td>40%</td>
<td>60%</td>
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<td>---------------------------------------------------------------</td>
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<tr>
<td>Poverty level - 89</td>
<td>24%</td>
<td>15%</td>
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<tr>
<td>Percentage of greenery spaces in Ulaanbaatar and other settlement areas-103</td>
<td>15%</td>
<td>30%</td>
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<tr>
<td>Share of the agriculture and manufacturing sector in total GDP-11</td>
<td>28%</td>
<td>30%</td>
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Expected results

First phase: Lay the foundation for green development, 2014-2020

The first phase will establish green development models and norms in all economic and social sectors that are based on country circumstances, and a legal framework will be created to ensure green development progress, and infrastructure and redevelopment efforts that are aimed at enhancing long-term sustainable development of the economy will be actively mobilized.

A knowledge-based economy will mature by implementing Mongolia's sustainable development goals and regionally competitive production and service sectors will be developed, greenhouse gas emissions per unit of production will be reduced through the use of clean technologies for renewable energy production and environmentally friendly, highly efficient green infrastructure, by introducing green investment and financing mechanisms.

Second phase: Transformation to green development, 2021-2030

A socially equitable, inclusive and highly efficient green economy system is established where environmental sustainability has persisted, benefits from ecosystem services are accepted rationally, and adaptations to climate change are customized. The transition to a green economy will be recognized as high technology and innovative production prevail in the economic structure, and the green economy will be established.