

Policy of Samruk-Energy JSC in the field of Green Financing

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1. Purpose and scope

1.1. This Policy of Samruk-Energy JSC in the field of green financing (hereinafter referred to as the Policy) defines the principles in the field of green financing in order to ensure transparency of the processes of attracting investments through green financing instruments, such as green bonds and green loans.

1.2. This Policy applies to all structural divisions, employees and officials of Samruk-Energy JSC (hereinafter referred to as the Company) and its subsidiary companies, which 100% of voting shares (participation interests) belong to the Company on the basis of ownership and/or trust management (hereinafter - SC).

2. Terms and abbreviations

Term abbreviation	Definition
verification	audit of compliance of the Company's policy in the field of green bonds with the principles of green bonds, conducted in accordance with the established procedure by audit companies and/or companies recognized by verifiers of the Climate Bonds Initiative (an international non-profit organisation focused on investors and working to mobilize the bond market to address climate change issues) (CBI). The Company/SC receives an opinion according to an established set of criteria, usually related to business processes and/or environmental criteria
green financing	financing investments that provide environmental and climate benefits in the broader context of environmentally sustainable development
green bonds	bonds of any type whose proceeds are used exclusively to fully or partially finance, or refinance, new and/or existing eligible green projects
green loan	any type of loan provided solely for the purpose of fully or partially financing or refinancing of new and/or existing eligible green projects
second opinion	assessment of the compliance of the issuer's green bond policy with green bond principles, prepared by consultants with expertise in the specific industry in which the issuer's project is to be implemented
Company	Samruk-Energy Joint Stock Company
assessment / rating of green bonds	an indicator expressed in the form of an opinion or summary by qualified third parties, such as rating agencies, describing the level of compliance of the issuer's green bonds, their issue structure, their key features with the benchmarks in accordance with the established scoring/rating methodology
eligible projects/assets	projects/assets that are eligible for green financing terms and conditions
certification	the process of verifying that a green bond or a related green bond policy or use of proceeds by qualified, accredited third parties meet recognized external green standards or labels once verification has been received
The Fund	Sovereign Wealth Fund Samruk-Kazyna Joint Stock Company
SDG	sustainable development goals, as contained in the United Nations

	General Assembly Declaration dated 25 September 2015, which are integrated and indivisible and balance the three dimensions of sustainable development: economic, social and environmental
Issuer	a person that issues emission securities
GBP	Green Bonds Principles - a system of high-level market standards and guidelines recommended by the International Capital Market Association that promotes the integrity and uniformity of the green bond market by establishing transparency, disclosure and reporting standards for use by market participants and designed to encourage the provision of information necessary to increase investment in green projects
GLP	Green Loan Principles - a system of recommended Loan Market Association, Asia Pacific Loan Market Association and Loan Syndications & Trading Association market standards and high-level guidelines for use by all participants in the green lending market, keeping loan products flexible and maintaining the integrity of the green lending market as it evolves.

3. Prerequisites for the adoption of the Policy in the context of the goals of Samruk-Energy JSC in the field of sustainable development

3.1. The Company adheres to systematic and continuous adherence to the principles of sustainable development and effective interaction with all stakeholders, and meets the requirements of standards in the field of sustainable development, as well as ensuring long-term business sustainability and improving key performance indicators.

3.2. The Company adheres to the "triple bottom line" concept in its activities and takes into account not only financial indicators, but also social and environmental aspects, on which it subsequently reports.

3.3. One of the Company's priorities is broad application of sustainable development aspects through implementation of best practices in production, environmental initiatives, occupational safety and social sphere to ensure sustainable economic growth in the regions of the Company's presence, while maintaining an optimal balance between the interests of stakeholders and strategic objectives of the Company.

3.4. The Company's sustainable development principles are implemented in the context of three levels:

1) **Strategic integration** - sustainable development principles are embedded in the Strategy (mission, values and strategic goals);

2) **Operational integration** - all corporate decisions are made by the Company's management based on the criteria of compliance with the principles and objectives in the field of sustainable development;

3) **Cultural integration** - implemented as part of training, posting articles on the Company's corporate portal.

3.5. All information on the Company's principles, programmes, reports and new projects in the social, economic and environmental areas is posted on the corporate website of the Company/SC in the section "sustainable development" as it appears.

3.6. To ensure clarity and transparency of its activities for all stakeholders, the Company annually publishes sustainability reporting in accordance with international reporting standards GRI as part of the Company's integrated annual report.

3.7. The Company is strongly committed to sustainable development and has adopted certain policies and documents that directly or indirectly regulate sustainability activities such as:

- The Company's Development strategy;

- Policy of the corporate management system of the Company Group (in the field of quality management, health and safety, environmental protection, energy efficiency, information security, anti-corruption and anti-fraud);

- Investment policy of the Company;
- Sustainability Guidelines;
- Integrated Annual Reports.

3.8. The Company implements a comprehensive programme of environmental protection measures covering such aspects as

- protection of atmospheric air;
- greenhouse gas reductions;
- reclamation of ash dumps;
- waste management;
- protection and rational use of water resources;
- implementation of management systems and the best safe technologies;
- research, survey and other works;
- environmental education and advocacy.

3.9. In order to prevent environmental pollution, the Company allocates necessary resources related to environmental impact (see Table 1).

Table 1: Total environmental protection expenditures, by type

Type of costs	Amount, thousand tenge		
	2018	2019	2020
Expenses related to waste management and treatment of emissions, discharges, as well as liquidation of environmental damage	6 556 645	4 242 256	5 604 706
Expenditures on environmental impact prevention and environmental management system	72 616	373 908	2867

4. Principles of green financing

4.1. General provisions

4.1.1. In accordance with this Policy in the field of green financing, the Company adheres to the GBP and GLP principles.

4.1.2. The Company is committed to the following key principles of GBP and GLP:

- 1) use of proceeds;
- 2) project appraisal and selection process;
- 3) revenue management;
- 4) reporting.

4.1.3. During implementing this Policy, the Company shall make every effort to contribute to the maintenance and achievement of the SDGs.

4.1.4. Subsidiaries of the Company may also use green financing instruments in accordance with this Policy.

4.1.5. Within the framework of the Policy, the Company may issue green bonds and attract green loans in accordance with the requirements of the legislation of the Republic of Kazakhstan,

this Policy, the Charter and other internal regulatory documents of the Fund and the Company.

4.2. Use of proceeds

4.2.1. Proceeds from the issuance of green bonds or green loans raised will be used exclusively to finance or refinance, in part or in full, eligible projects/assets that contribute to environmental goals such as: renewable energy, energy efficiency, pollution prevention and control, sustainable natural resource management and land use, clean transport, green buildings.

4.2.2. Eligible projects/assets may include, but are not limited to, bonds and loans for projects/assets that meet the eligibility criteria under **Appendix 1** (column IV "Thresholds").

4.2.3. An additional second party opinion may also be provided for projects/assets that meet the eligibility criteria but are not included in the eligible categories as per **Appendix 1**. Additional categories and eligibility criteria may be described in the green bond programme/prospectus/listing documentation or loan documentation.

4.2.4. Proceeds from the issuance of green bonds or green loans raised will not knowingly be used to finance any business whose current principal industry or principal activity has been assessed by the Company/SC as one of the following:

1) contribute to the involvement/threatened involvement of the Company/SC in bankruptcy, liquidation, rehabilitation procedures;

2) have tax arrears, arrears on mandatory pension contributions, mandatory professional pension contributions and social contributions to the budget. Absence of indebtedness is confirmed by information on absence (existence) of taxpayer's indebtedness on taxes, obligatory pension contributions, obligatory professional pension contributions and social deductions according to the legislation of the Republic of Kazakhstan;

3) implementation of projects related to activities prohibited by the legislation of the Republic of Kazakhstan.

4.3. Project appraisal and selection process

4.3.1. All projects to be financed through the issuance of green bonds or raised green loans shall comply with Section 4 of this Policy.

4.3.2. For the purpose of evaluation and selection of projects eligible for financing or refinancing through green bonds or green loans, a Working Group on Green Financing (hereinafter referred to as the Working Group) shall be created in the Company/SC by the order of the chief executive officer of the Company/SC, which shall consist of representatives of the following structural divisions whose functional responsibilities include organisation of work on:

- treasury and corporate finance;
- corporate governance and sustainable development;
- project portfolio management (depending on the project);
- optimisation project management (depending on the project);
- management of capital construction and repairs (depending on the project);
- the energy transition;
- investment analysis (depending on the project);
- production assets in generation, fuel, renewable energy and distribution (depending on the project);
- production efficiency (depending on the project);
- strategic planning and economic analysis;
- Occupational health and safety and environmental protection.

4.3.3. If necessary, employees of other structural subdivisions and external experts (non-permanent members) may also be included in the Working Group by agreement, in accordance with the legislation of the Republic of Kazakhstan.

4.3.4. The structural unit responsible for the organisation of activities, functioning of the Working Group and coordination of relations between members of the Working Group and structural units of the Company/SC shall be the structural unit whose functional duties include the organisation of work on treasury and corporate finance.

4.3.5. The main functions of the Working Group are:

- evaluating and selecting projects and submitting recommendations to the relevant bodies of the Company/SC for final approval;
- quarterly monitoring of the aggregate amount of assets in the Green Bond and Green Loan asset portfolios of the Company/SC;
- control over compliance with the requirements of this Policy.

4.3.6. In addition to the evaluation and selection of green projects according to the criteria under Appendix 1, these projects also undergo other internal evaluation and selection procedures established in the Company/SC.

4.3.7. The Company/SC may have a single portfolio of eligible assets within green bond issues or green loans raised.

4.4. Revenue management

4.4.1. Proceeds from the issuance of green bonds or raised green loans are recorded in the management accounts of the Company/SC in order to separately account for and control the use of green financing proceeds. All eligible assets are reported in a separate portfolio as “Green Bonds” and “Green Loans” of the Company/SC. The Company/SC's “Green Bonds” and “Green Loans” asset portfolio is dynamic with repayment of eligible assets and addition of new eligible assets.

4.4.2. The Working Group monitors the total amount of assets in the Company's/SC's “Green Bonds” and “Green Loans” asset portfolio on a quarterly basis, to make sure that it equals or exceeds the combined proceeds of green bonds and green credits raised.

4.4.3. If for any reason the total amount in the “Green Bonds” and “Green Loans” asset portfolio is less than the total amount of outstanding green bonds issued or green loans raised by the Company/SC, the Company/SC shall retain the unallocated amount in accordance with the Instructions for Allocation and Accounting of Temporary Free Cash of the Company until the amount is transferred to the “Green Bonds” and “Green Loans”.

4.4.4. The Company/SC has the right to engage external auditors to confirm the reliability of revenue recognition and reliability of cash flow as part of the revenue management process at the stages of the annual financial statements.

4.5. Reporting

4.5.1. The Company/SC provides and maintains publicly available annual updated reports on green bonds issued and green loans raised from the time of issuance or raising until full repayment and in the event of any material changes. These reports are published on the Company's/ SC's corporate website and may include, but are not limited to the following reports:

1) Allocation report:

- net proceeds received from each green bond of the Company/SC or each loan raised,
- the aggregate amounts allocated to each of the Eligible Categories (as set forth in Appendix 1),
- balance of unallocated revenue at the end of the reporting period;

2) Impact Reporting.

4.5.2. Where feasible, the Company/SC will provide further information and examples of eligible projects/assets, financed or refinanced through green bonds and/or green loans, including quantitative performance indicators, as described in **Appendix 2**. Disclosure of information related

to Use of Proceeds, Impact Reporting, and projects financed or refinanced will be made subject to Company/SC's confidentiality obligations and the availability of information.

5. External Review

5.1. For the purpose of this Policy, the Company/SC reserves the right to provide any of the following types of external review:

- 1) the opinion of the other party;
- 2) verification;
- 3) certification;
- 4) rating/green score.

5.2. The first annual report on the use and management of proceeds will be reviewed and signed by an independent auditor to confirm the green status of the bond. This may take the form of a letter signed by the independent auditor and may also include a statement from the financial auditor regarding the use of proceeds. Subsequent annual reports on the use and management of proceeds may be reviewed by the independent auditor at the discretion of the Company/SC.

5.3. External reviews and annual reports on green bonds issued/green loans raised are published on the corporate website of the Company/SC from the date of issue/raising and until the maturity date of the green bonds/green loans.

6. Regulatory References

№	Name of the document
1	Environmental Code of the Republic of Kazakhstan
2	Charter of Samruk-Energy JSC
3	Development strategy of Samruk-Energy JSC
4	Policy of corporate management system of Samruk-Energy JSC group of companies
5	Investment policy of Samruk-Energy JSC
6	Management in the field of sustainable development of Samruk-Energy JSC
7	Green Bonds Principles, International Capital Market Association
8	Green Loan Principles, Loan Market Association, Asia Pacific Loan Market Association and Loan Syndications & Trading Association

Appendix 1. Eligible projects/assets
(mandatory)

#	Eligible categories	Subcategories	Description	Thresholds	Compliance with the UN SDGs
1	2	3	4	5	6
1	Renewable energy	<ul style="list-style-type: none"> a) Wind b) Solar c) Hydro-power d) Geothermal e) Bioenergy 	Energy production and transmission, production facilities and supporting infrastructure, renewable energy storage systems	<ul style="list-style-type: none"> a-b) No restrictions are foreseen c) Dams-free hydro power plants and small hydro power plants up to 10 MW - without restrictions, hydro power plants of higher capacity - with an environmental statement and greenhouse gas emissions not exceeding 100 grams of CO₂e/kWh d) No restrictions are foreseen e) A minimum waste fraction of 50% or 300 grams CO₂e / kWh. And for installations over 50 MW - compliance with BREF* requirements for waste management, material use, SO₂, NO_x and CO emissions 	<ul style="list-style-type: none"> SDG 7: Low-cost and clean energy SDG 9. industrialisation, innovation, infrastructure SDG 11. Sustainable cities and human settlements SDG 13. Addressing climate change
2	Energy efficiency	<ul style="list-style-type: none"> a) Modernisation (reduction of baseline energy consumption) in industrial facilities b) Energy-saving lighting or equipment for non-industrial facilities c) Energy-efficient products d) Energy saving services e) Energy-efficient buildings 	Installation of more efficient equipment, reduction of heat losses, modernisation of transmission lines or construction of new distribution systems, smart grids, district heating modernisation, production, purchase and application of more energy efficient products, energy saving services, energy audits, energy management	<ul style="list-style-type: none"> a) 20% reduction in energy consumption b) 45% reduction in energy costs c) the highest energy efficiency labelling class d) Compliance with ISO 50001 Energy Management Systems or international standards e) LEED, EDGE, BREEAM, DGNB compliance 	<ul style="list-style-type: none"> SDG 7: Low-cost and clean energy SDG 9. industrialisation, innovation, infrastructure SDG 11. Sustainable cities and human settlements SDG 12. Responsible consumption and production SDG 13. Addressing climate change
3	Energy with low pollution	<ul style="list-style-type: none"> a) Production of electricity and heat from gas b) Modernisation and repair of gas pipelines c) Waste-to-energy d) Liquefied gas (LPG) 	Installations for heat and power generation using natural gas (natural gas-fired power plant, distributed natural gas-fired plant, CHP, natural gas furnaces), use of exhaust gases (secondary energy resources) of the production cycle (e.g. ferro-gases, coke oven gases, etc.), Coal bed methane (CBM), coal mine methane (CMM), shale gas, liquefied gas (LPG), liquefied natural gas (LNG), compressed natural gas (CNG), dimethyl ether (DME); Gas pipeline modernisation and repair; Plants or other installations to convert waste into electrical or thermal energy	<ul style="list-style-type: none"> a) 300 grams CO₂e/kWh; and for installations over 50 MW - BREF compliance in terms of waste management, material use, NO_x and CO emissions to air and emissions to water resources. b) Reduced transport losses. c) BREF compliance for SO₂, NO, NO₂, CO and dust emissions. d) 300 grams CO₂e / kWh. 	<ul style="list-style-type: none"> SDG 7: Low-cost and clean energy SDG 9. industrialisation, innovation, infrastructure SDG 11. Sustainable cities and human settlements SDG 13. Addressing climate change
4	Pollution prevention and control	<ul style="list-style-type: none"> a) Air treatment b) Clean heating appliances for households and SMBs c) Carbon sequestration and storage d) Reduction of soil pollution e) Soil remediation 	Waste water treatment plants, air recirculation equipment, filters, production, purchase and installation of clean heaters, carbon capture and storage plants, soil remediation equipment and technology, phytoremediation	<ul style="list-style-type: none"> (a) Compliance with the BREF (b) Reduction of greenhouse gas emissions by 20 per cent (c) BREF compliance with regard to waste management and use of materials 	<ul style="list-style-type: none"> SDG 3: Good health and wellbeing SDG 7: Inexpensive and clean energy SDG 11. Sustainable cities and human settlements SDG 12. responsible consumption and production

#	Eligible categories	Subcategories	Description	Thresholds	Compliance with the UN SDGs
1	2	3	4	5	6
					SDG 15. conserving terrestrial ecosystems
5	Sustainable water and waste management	(a) Water conservation, storage and distribution (b) Water early warning and response systems (c) Water treatment facilities (d) Wastewater treatment for reuse (e) Recycling of secondary raw materials (f) Industrial waste treatment (g) Wastewater treatment	Production, acquisition and installation of water saving, storage and distribution technologies and systems; technology and equipment for drinking water treatment; groundwater reservoirs for snowmelt or flood collection and river level regulation, industrial water saving technologies and measuring equipment; early warning systems for droughts, floods or dam failures; monitoring and measuring water quality or quantity; smart networks for water monitoring; wastewater treatment equipment; wastewater treatment plants; reuse and recycling of secondary raw materials; equipment for collection, sorting, recovery, reuse, recycling and disposal of industrial and hazardous waste; wastewater collection, storage, treatment and disposal networks; wastewater treatment plants; sludge treatment plants	(a) Reduction of natural water consumption by at least 40 per cent for sanitation, 30 per cent for irrigation and 70 per cent for industrial and technical purposes (b) Automated and smart systems (c) Drinking water - meeting sanitary requirements (d) Intended use (e) At least 80 per cent (f) Compliance with BREF in relation to waste and by-products management, hazardous industrial waste (g) Compliance with Kazakhstan requirements and regulations	SDG 3: Good health and well-being SDG 6: Clean water and sanitation SDG 11. Sustainable cities and human settlements SDG 12: Responsible consumption and production SDG 14. Marine ecosystem conservation SDG 15. conserving terrestrial ecosystems
6	Clean transport	(a) Low-carbon vehicles (b) Clean transport infrastructure	Production or purchase of low-carbon vehicles, including electric cars, hydrogen, hybrid vehicles, batteries for them, charging stations	(a) <90 grams CO ₂ e/km b)	SDG 7: Low-cost and clean energy SDG 9. industrialisation, innovation, infrastructure SDG 11. Sustainable cities and human settlements
7	Green buildings	(a) Construction (b) Construction materials (c) Infrastructure	Use of high-efficiency architectural designs, energy-efficient equipment, construction methods that reduce the energy consumption of the building, water-saving fixtures, use of building material that minimises the number of components, green areas	a), b), c) Compliance with LEED, EDGE, BREEAM, DGNB	SDG 9: Industrialisation, innovation and infrastructure SDG 11. Sustainable cities and human settlements SDG 12. responsible consumption and production

Appendix 2.
Impact measurement
(mandatory)

#	Eligible categories	Potential quantitative performance indicators
1	Renewable energy	Total installed capacity (MW) Reduction of GHG emissions (tCO ₂ E) <i>Additionally:</i> - <i>Number of people given access to clean energy</i> - <i>Reduced water use</i>
2	Energy efficiency	Expected energy savings per year (MWh) Reduction of GHG emissions (tCO ₂ E) <i>Additionally:</i> <i>Reduced water use</i>
3	Pollution prevention, sustainable water and waste management	Reduction of fine particulate matter (PM 2.5) Reduction of GHG emissions (tCO ₂ E) <i>Additionally:</i> - <i>Reduced water use/water loss</i> - <i>Volume of waste recycled/eliminated</i>
4	Clean transport	Reduction of fine particulate matter (PM 2.5) Reduction of GHG emissions (tCO ₂ E)
5	Green buildings	Number of facilities complying with local green building regulations, if applicable, or with internationally recognised green building certificates such as LEED, EDGE, BREEAM, energy certificates such as US Energy Star, and energy labelling schemes such as EU energy performance certificates <i>Additionally:</i> - <i>Reduced water use</i> - <i>Reduced number of machines involved</i>