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## SECOND PARTY OPINION

ON THE COMPLIANCE OF **TECHNOGROUPESSERVICE LLP**'s  
GREEN BOND FRAMEWORK AND RELATED GREEN BOND ISSUANCE  
WITH THE GREEN BOND PRINCIPLES OF THE INTERNATIONAL  
CAPITAL MARKET ASSOCIATION

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15<sup>th</sup> of November, 2023

## EXECUTIVE SUMMARY

### Opinion on the compliance / non-compliance of the Issuer's Green Bond Framework with the Green Bond Principles.



We believe that the Green Bond Framework of TECHNOGROUPESSERVICE LLP (hereinafter referred to as TGS) and related green Bond issuance complies with the Green Bond Principles of the International Capital Market Association <sup>1</sup>.

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### Opinion on assigning a degree of alignment with the Green Bond Principles ranging from "Excellent" (High) to "Poor" (Low)



In accordance with the results of the assessment, as well as in accordance with the Grading Scale for the Level of Alignment with the Green Bond Principles, we assigned the degree of compliance "Excellent" to TGS' Green Bond Framework and related first Green Bond Issue. TGS demonstrates an excellent level of proceeds management and allocation, eligible project selection, of quality of proceeds administration, as well as of reporting and disclosure on ongoing green projects.

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<sup>1</sup> The Principles are formulated by the International Capital Market Association (hereinafter referred to as ICMA)

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# 1. METHODOLOGY OF THE AIFC GREEN FINANCE CENTRE LTD. ON PREPARATION OF AN EXTERNAL REVIEW

To assess the compliance of companies' green finance frameworks and related business processes with the Green Bond Principles, the AIFC Green Finance Centre Ltd. (hereinafter referred to as "the GFC") applies a number of approved methodologies as part of its external review activities.

Specifically, GFC employs its Methodology for the preparation of an External Review (Second Party Opinion) for compliance of Green Bond and other sustainability debt issues, including the Issuer's Green Bond Framework, with the Green Bond Principles (hereinafter referred to as GBP, or Principles), Social Bond Principles ((hereinafter referred to as SBP, or Principles) and Sustainability Bond Guidelines (hereinafter referred to as SBG, or Guidelines). The Principles are formulated by the International Capital Market Association (ICMA).

The preparation of an External Review in the form of a Second Party Opinion includes the study of the Issuer's relevant documentation, regulatory documents, reports and presentations, if any, as well as other publicly available information that may provide a description, details on and confirmation of the compliance of processes involved in the implementation of the Company's policies for the Green Bond and environmental, social and sustainability issues in general. The information used for these purposes is obtained through direct interaction with the Issuer and/or from any open sources that GFC considers reliable.

In an External Review GFC expresses its opinion according to criteria-based assessments in the following order:

1. Opinion on the compliance/non-compliance of the Issuer's Green Bond Framework with the GBP.

*Minimum threshold levels for all assessment criteria need to be met all at once in order for us to confirm that the Issuer's Green Bond Framework is in line with the GBP.*

2. Opinion on assigning a degree of alignment with GBP ranging from "Excellent" (High) to "Poor" (Low).

*Here, the assessment is carried out by calculating a weighted criterial grade depending on the significance of criteria. This opinion serves as additional information, and is aimed at establishing a degree of alignment with GBP. According to this methodology, any degree of alignment other than "Poor" (Low) should be considered consistent with the GBP.*

In preparing the External Review, four criteria are assessed:

1. Use of Proceeds;
2. Process of Project Evaluation and Selection;
3. Management of Proceeds;
4. Reporting and Disclosure.

Each criterion is graded on a scale of "1" to "5". For each criterion, there is a number of indicators (subfactors). Each indicator (subfactor) that is assessed as fulfilled is assigned either a "1" score, a "0.5" score, or a "0.25" score, depending on the criterion scoring scale. The final score for each criterion is calculated as a sum of scores assigned to the indicators (subfactors). The tables for criterion scoring, as well as the tables matching a sum of scores to a grade are provided in the Methodology for each criterion.

For a positive opinion to be provided regarding the compliance of the Issuer's Green Bond Framework with the GBP, this methodology establishes a grade threshold for each assessed criterion at “3” at the least. If these requirements are met, in our opinion, the Issuer's Green Bond Framework will comply with the GBP. If these conditions are not met, we shall conclude that the Issuer's Green Bond Framework does not comply with the GBP and issue a respective opinion.

To express an opinion on the degree of alignment with GBP ranging from “Excellent” (High) to “Poor” (Low), the following algorithm for calculating criteria grades shall be used. A weighted criterial grade is calculated by multiplying a criterion grade by its weight (significance). We established that the significance of each criterion corresponds to the following weight in the overall grade:

<i>Criterion</i>	<i>Weight (significance) in the cumulative assessment:</i>
<i>Use of Proceeds</i>	45%
<i>Process of Project Evaluation and Selection</i>	20%
<i>Management of Proceeds</i>	15%
<i>Reporting and Disclosure</i>	20%

The assessment of Green Bond frameworks and related Green Bond issuances in terms of their level of alignment with GBP can vary from "Excellent" (High) to "Poor" (Low). If minimum grade conditions are not met for the criteria, the grade is set as “Poor” (Low).

#### Grading scale for the level of alignment with GBP in accordance with the Methodology

<i>Threshold Grade</i>	<i>Degree</i>	<i>Definition</i>
High >4.5	Excellent	Proceeds from the issuance of Green Bond are most likely to be used for the implementation of Green projects. The Green Bond issuer demonstrates an excellent level of proceeds management and allocation, eligible project selection, of quality of proceeds administration, as well as of reporting and disclosure on ongoing projects of environmental and/or social significance
Average 3,5-4,5	Good	Proceeds from the issuance of Green Bond are very likely to be used for the implementation of Green projects. The Green Bond issuer demonstrates a good level of proceeds management and allocation, eligible project selection, of quality of proceeds administration, as well as of reporting and disclosure on ongoing projects of environmental and/or social significance
Satisfactory 3-3,5	Satisfactory	The likelihood that proceeds from the issuance of Green Bond will be directed to the implementation of Green projects is at an average level. The Green Bond issuer demonstrates a satisfactory level of proceeds management and allocation, eligible project selection, of quality of proceeds administration, as well as of reporting and disclosure on ongoing projects of environmental and/or social significance.

<p>Low  &lt;3</p>	<p>Poor</p>	<p>The likelihood that proceeds from the issuance of Green Bond will be directed to the implementation of Green projects is at a low level. The Green Bond issuer demonstrates a poor level of proceeds management and allocation, eligible project selection, of quality of proceeds administration, as well as of reporting and disclosure on ongoing projects of environmental and/or social significance.</p>
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The prepared External Review is submitted to the Issuer, after which it is to be publicly disclosed. Public disclosure is carried out through the publication of the External Review on the website of the AIFC Green Finance Centre Ltd. - <https://gfc.aifc.kz/>, and can also be communicated through a press release via news services and/or relevant web sources.

## 2. BRIEF DESCRIPTION OF THE GREEN BOND FRAMEWORK AND OTHER STRATEGIC DOCUMENTS OF THE COMPANY

### BUSINESS AND SUSTAINABILITY STRATEGY OVERVIEW

TechnoGroupService LLP (hereinafter TGS) is one of the leaders in the design, construction and operation of solar power plants in Kazakhstan and Central Asia. The company focuses on the development and construction of projects in the field of renewable energy.

TGS is the first commercial company in the country to inculcate renewable energy sources (RES) as the main source of electricity generation in the energy grid. The company operates and works with a number of RES – solar, wind, and hydro, and provides solutions and services that cover the entire life cycle of renewable energy projects – starting with design and selection of suitable site, through obtaining permits for land use and environmental impact assessments, to construction and integration into the energy grid, as well as a follow-up maintenance. TGS is the only large-scale contractor for the construction of solar power plants and additionally operates its own production facility, where certain components for the installation of photovoltaic modules are produced.

TGS started its activity in 2018, with the installation and operation of 100-meters wind measuring masts for wind power plants developers, including international clients. More than a dozen masts have since been successfully installed in all regions of Kazakhstan. Soon after, TGS started operations as an Engineering, procurement, and construction (EPC) company with the construction and operation of solar power plants (SPPs): 10 MW Kengir SPP, 50 MW Balkhash SPP. TGS also developed its own 1,2 MW SPP in Zhezkazgan city. In addition to the main activity, TGS is developing IT-services (“InTech-Forecast”) for green power plants to provide power generation forecast in the conditions of existing imbalances in the electricity generation market. Another solution developed by TGS is the digital platform – Green Light, which aims at promoting green energy consumption by both the population and the legal entities and enables the introduction of a Green Energy option into the electricity bill.

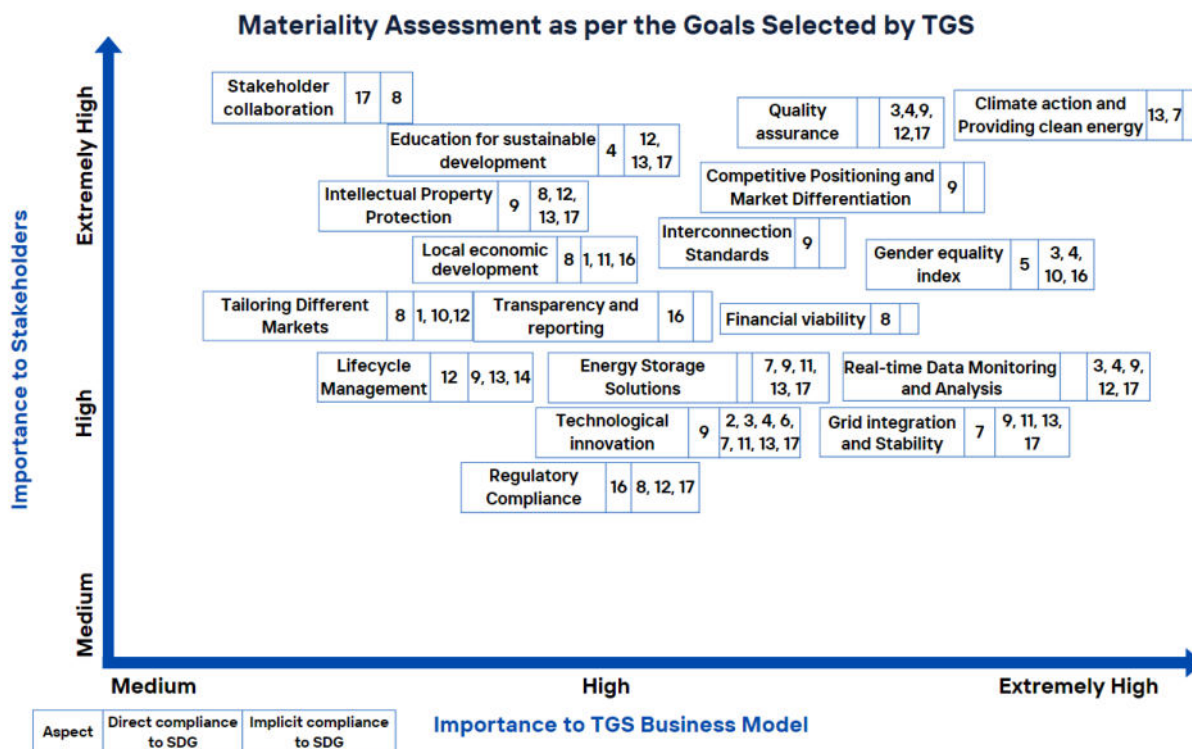
As a next step, TGS is set to explore new business opportunities in the green energy generation field such as the development of wind power plant (WPP) projects and hydrogen production and storage facilities.

In 2021 TGS was nominated and awarded the “Altyn Sapa” (Gold quality) prize in the national competition in the category "Best Company Providing Services". TGS is the first company to win this nomination in the field of green projects. Another milestone for TGS is the registration of copyright for

intellectual property – an educational training case for the course “Leadership and Entrepreneurship” at the Graduate School of Business Nazarbayev University (GSB NU). The topic of the case study is "TechnoGroupService LLP: In Search of a Blue Ocean in the Renewable Energy Industry in Kazakhstan" and it is the first case of the renewable energy field in Kazakhstan and Central Asia to be included into the academic materials for students of the full time MBA, Executive MBA, and Master of Engineering Management program.

### Sustainability

In its Green Bond Framework (hereinafter referred to as GBF) adopted on October 18<sup>th</sup>, 2023, TGS asserts its commitment to sustainability at all levels of business. The Company developed a materiality matrix to position its Sustainable Development Goals’ (SDG) commitments in the business model as well as in its relations with stakeholders as seen in the graph below. As a cross-cutting priority for all TGS operations, TGS identifies climate action and providing clean energy, education for sustainable development, technological innovation, gender equality, stakeholder collaboration, and partnerships for the future as key pillars of its business, thus its Environmental Social and Governance (ESG) commitment spans across the SDGs 3, 4, 5, 7, 8, 9, 12, 13, 16, 17.



As shown in the Materiality Matrix, TGS recognizes climate change as one of the biggest risks and challenges to the planet, people, and economy, and undertakes to participate in the global effort needed to achieve a lasting impact on climate goals. In its GBF TGS affirms that, in addition to the international standards, TGS is also taking into account national legislation and environmental provisions. The Republic of Kazakhstan ratified the Paris Agreement in 2016 and set a Nationally Determined Contribution (NDC) for an economy-wide reduction of greenhouse gas (GHG) emissions of 15 percent from the baseline year 1990, which is to be achieved by 2030. In a bid to increase its commitment to global efforts, the country also announced its intention to reach carbon neutrality by 2060 during the UN Climate Ambition Summit in 2020.

TGS is also actively involved in the renewable energy legislation open discussions. TGS has delivered proposals for optimizing Net-consumers regulatory basis and participated in incentives for localizing manufacturing of equipment in Kazakhstan. TGS signed a Memorandum on the development of a wind power project with a capacity of 1 GW in Ulytau region, as well as participation in upcoming auctions for wind and solar farms in Kazakhstan during 2023-2027.

## ABOUT THE COMPANY'S GREEN BOND FRAMEWORK

In the GBF the Company states that, by issuing a Green Bond, it is not only committing to developing green projects and assets, but also committing to being part of the pioneering group using this rather new financial instrument in the Kazakh market to raise funds and develop sustainable projects, both locally in the country and in the region. Being a leader in the renewables' field in Kazakhstan, TGS understands the importance of optimizing its activities to the highest standards and believes that with a successful green Bond issuance, it would be able to support the NDC commitment of Kazakhstan, as well as to set an example for other companies in the country. With these aims in mind, the Company developed and approved the Green Bond Framework to launch a credible Green Bond as per the highest international standards, such as the ICMA GBP, which promote and enable greater transparency, disclosure, and integrity of the issuance process. The GBF is built upon the four key pillars:

- Use of Proceeds,
- Process for Project Selection and Evaluation,
- Management of Proceeds, and
- Reporting.


## USE OF PROCEEDS

The Company declares that 100% of the Green Bond net proceeds will be allocated to finance projects in areas such as renewable energy and energy efficiency that contribute to the Company's environmental and climate goals. Eligible Green Projects that will be considered by TGS include the development and construction of new renewable energy assets, investments in acquisitions or improvement of the processing cycle, and other related and supporting expenditures such as R&D that may relate to more than one category and/or environmental objective.





In this regard, proceeds from the issuance of Green Bond can be used for:

- Financing Eligible Project Categories planned for implementation after the issuance of Green Bond.

Notably, given TGS' organizational structure, the proceeds allocation shall be made directly by TGS or through a dedicated asset holding subsidiary. Aside from the GBP, the UN SDGs are also playing a key role in the consideration of Eligible Green Projects.

Eligible Project Category	Eligibility Criteria	SDG alignment
Renewable energy	<p>A. Design, development, construction, expansion, maintenance, acquisition, and/or operation of renewable energy projects, such as:</p> <ul style="list-style-type: none"> <li>- Installation of solar power plants (development and/or construction) such as centralized and decentralized solar power plants, including concentrated solar power plants (CSP), solar photovoltaic (PV), decentralized solar PV. For example: 3 SPPs with a total capacity 120 MW and electricity generation 200,000 MW/hour</li> <li>- Installation of wind farms (design and development and/or construction) such as wind generators, wind pumps, wind turbines. For example: 50 MW WPP with electricity generation of 165,000 MW/hour</li> </ul>	



	<ul style="list-style-type: none"> <li>- Installation of hydro power plants (design and development) such as small hydroelectric power plants with installations located in one hydroelectric complex, with a total capacity of up to ten megawatts (inclusive) (with no extra threshold criteria), or medium hydroelectric power plants with a total installed capacity of 10 to 100 megawatts (MW), including pumped hydroelectric power plants, meeting the following threshold criterion: Power density (the ratio of the nominal capacity of the facility to the surface area of the reservoir) &gt; 10 W/m<sup>2</sup>. For example: 2MW HPP with electricity generation of 7,500 MW/hour</li> <li>- Development, commissioning, and operation of facilities for equipment manufacturing, particularly factories for the production or assembly of wind, hydro and geothermal turbines, photovoltaic cells and components, solar collectors (so-called dishes or dishes), troughs and components, geothermal pumps. Manufacture of products, key components, equipment and automated technology for the following renewable energy applications: geothermal energy, solar hydropower, concentrated power (CSP), solar photovoltaic (PV), wind energy. For example: WPPs and SPPs with a total capacity of 600 MW</li> <li>- Purchase of equipment and specialty machinery for construction and installation of WPPs</li> </ul> <p>B. Allocation of proceeds to the improvement of the operation and production cycle:</p> <ul style="list-style-type: none"> <li>- Financing extensions of the scope of services related to construction, operations, and maintenance of solar projects and assets</li> <li>- Financing technologies providing greater productivity from solar assets and more effective and less energy-intensive construction or operation of solar energy (renewable) sources</li> <li>- Financing of production equipment for solar panel components manufacturing</li> <li>- Financing of R&amp;D and state-of-art technologies for production of rare metals and high purity materials for solar and wind and energy storage technologies</li> <li>- Financing of R&amp;D and state-of-art technologies for production of green hydrogen</li> </ul>	  
<p style="text-align: center;"><b>Energy Efficiency</b></p>	<p>Allocating proceeds to initiatives, technology, equipment and automation or production cycle to reduce greenhouse gas (GHG) emissions, and/or to increase energy savings, (20% minimum) compared to baseline (pre-project baseline):</p> <ul style="list-style-type: none"> <li>- Energy efficiency improvement of production process of solar panel components</li> <li>- Energy efficiency improvements in existing commercial (including warehouses) buildings</li> <li>- Energy efficiency improvement of production process of charging electric vehicles</li> <li>- Other energy optimization projects</li> </ul>	  

If projects are aligned with Eligible Project Categories but are not included in the categories specified in the table above, if necessary, TGS will obtain an additional Second Party Opinion from the second party, and additional categories and eligibility criteria will be described in the Green Framework, prospectus or any other listing documentation.

In the Use of Proceeds section of the GBF, regarding the production of electricity from Solar PVs, TGS states that it is aware that the EU Taxonomy, which TGS considers an important benchmark for green project criteria, defines a metric and threshold for facilities to operate at life

cycle emissions lower than 100gCO<sub>2</sub>e/kWh, declining to net-0gCO<sub>2</sub>e/kWh by 2050. However, at the time of the GBF adoption, Solar PV is currently derogated from performing a Product Carbon Footprint or GHG lifecycle assessment subject to regular review in accordance with the declining threshold. Thus, at the time of GBF publication, production of electricity from solar PV is deemed to be EU Taxonomy eligible.

## PROCESS FOR PROJECT EVALUATION AND SELECTION

According to the GBF, all potential projects to be financed from Green Bond proceeds must comply with the Use of Proceeds section and have a positive impact on the environment. For the purposes of conducting project evaluation and selection, TGS established a dedicated Green Bond Committee responsible for screening, evaluating, and selecting projects to be financed from Green Bond proceeds in line with eligibility criteria. The Green Bond Committee comprises 3 experts as permanent members: finance, technical and business development, who are permanent members of the Committee. However, to assist the Committee in its responsibilities, TGS has the right to involve other relevant TGS staff and independent experts such as an environmental specialist, risk and compliance specialist on a temporary basis.

Potentially eligible projects shall be proposed by an initiator, who could be anyone from the Committee or from the technical management (technologist, process and production manager, project manager, etc.) stationed at a location where the project is being/to be implemented, based on eligibility criteria established in the GBF and on expected and/ or achieved environmental effects. The Committee, together with the initiator, determines the metrics that best describe the impact to be achieved and decides whether the project should be included in the list of Eligible Green Projects. In the process of selecting Eligible Green Projects, the criterion of no significant adverse effects on the environment must be met. This non-harm principle shall be fulfilled when projects comply with the requirements of national legislation and regulatory requirements of the country where the project is implemented. Where projects require an environmental impact assessment in accordance with national legislation and regulatory requirements, the Company shall undertake to conduct such environmental impact assessment. Accounting for and assessing environmental factors when considering Eligible Green Projects includes making sure the project doesn't include activities that could result in a significant deterioration of the environment, working conditions and social circumstances of the affected population, that are classified as illegal by national legislation, regulations or international conventions and treaties. The Company will follow its ESG risk assessment policies when applying risk assessment procedures. Specifically, TGS has the following policies in place: Environmental Policy, Energy and Emissions Policy and HSE Policy.

In accordance with its Environmental Policy, when performing the Do-No-Significant-Harm risk assessment for projects that have a significant contribution to climate change mitigation, the Company makes sure no significant harm is done to the other environmental objectives.

In terms of ensuring minimum social safeguards, the Company commits to carrying out activities in alignment with the UN Guiding Principles on Business and Human Rights, including the principles and rights set out in the eight fundamental conventions identified in the Declaration of the International Labour Organisation on Fundamental Principles and Rights at Work and the International Bill of Human Right.

The list of Eligible Green Projects may be reviewed periodically with the addition of new projects or the exclusion of projects that no longer meet the specified criteria.

The Committee will report directly to the Board of Directors and meet once per quarter. The Committee is expected to make a decision by means of a majority vote. The Secretary of the Green Bond Committee, whose role is the organization of the Committee's work and operations, will have no voting rights. The Committee's decision will be binding. Any employee or department of the TGS, responsible for the implementation of green projects, may include a point on the Committee's agenda of the day.

Within the mandate of the Committee shall carry out the following tasks:

- Screen and evaluate the Eligible Green Projects as per the criteria set out in Section 3: Use of Proceeds
- Approve projects where there is a high likelihood of positive long-term environmental effects
- Follow market and international standards changes and update the GBF accordingly
- Discuss, research, and where needed seek expert advice in order to determine if a given project is compliant with the GBF
- Keep a clear record of finances – report expenditures related to the selected projects
- Monitor external reviews (Second Party Opinion and Independent Verifier) and external advisor(s)
- Review and approve the annual Green Bond reporting
- Monitor the evolution of the sustainable finance regulation, with a view of potentially updating the Framework to the extent necessary. Such updates would only apply to Green Bond issued after the publication of the updated framework and new Second Party Opinion
- Perform Environmental (Do-No-Significant-Harm) and Social (safeguards) risk assessments.

## MANAGEMENT OF PROCEEDS

As per the GBF, TGS will rely on an internal system to monitor, track, and report the Green Bond proceeds. The Financing Department of TGS together with the Green Bond Committee will manage the net proceeds of the green Bond which are to be credited to a separate/sub-account. Such approach will allow for a greater transparency, easier handling of funds, and the tracking of the respective project allocation at the reporting stage. All proceeds of the Green Bond are expected to be allocated to Eligible Green Projects in due time, and TGS will make the best efforts to allocate Green Bond proceeds within 24 months from the issuance. In the cases where unallocated net proceeds are used for temporary placement, the proceeds shall be deposited in or invested in liquid financial instruments or, where otherwise invested, this will be clearly communicated to investors with any relevant Environmental, Social and Governance aspects of the investment disclosed. Additionally, following a key recommendation of the ICMA GBP, the company will commission an external auditor to verify the internal tracking system and allocation of Green Bond proceeds as a supplementary step to the internal management of funds mechanism.

## REPORTING

Following the principle of transparency and keeping information readily available, TGS will regularly publish reports – Allocation Report and Impact Report – to provide more details on the use of Green Bond proceeds, project selection, development, and implementation, expected and/or achieved impacts, etc. The reports are to be published on the Company's website (<https://tgs-energy.kz>) on a yearly basis, commencing the reporting one year after the green Bond issuance, and it is expected that both reports are to be published as long as there are any outstanding green Bond proceeds.

### Allocation Reporting

As a first step in the reporting process, TGS will publish a yearly Allocation Report, which will provide a clear record of the Green Bond proceeds and their allocation to Eligible Green Projects. The report will provide an overview of the projects to which funds have been allocated, the amount of proceeds allocated to each project individually as well as the cumulative Bond proceeds allocated to the different project categories, as defined in the present GBF. Any detailed quantitative reporting and project descriptions are to be made in consideration of confidentiality agreements and competitive considerations, and in case where such detailed reporting is limited, as per the GBP recommendation a more generic overview of the information will be provided (e.g. percentage allocated to specific project category). Additionally, the report will include details about the share of

the temporary placement of funds, if any, and regarding the balance of any remaining unallocated proceeds.

### Impact Reporting

As part of the reporting process, an Environmental Impact Report will also be prepared and published on a yearly basis from the moment of Bond issue until full repayment and in case of any significant changes, with the first one published one year after issuance. The report will be yet another step into the company's effort to keep a transparent and clear communication stream with stakeholders and investors. The aim of the environmental impact reporting process will be to provide more information about the expected and/or achieved environmental impacts occurring as direct or indirect result of the projects to which proceeds from the Green Bond have been allocated. As recommended by the GBP, TGS will use qualitative performance indicators and, where feasible, quantitative performance measures. As part of the commitment to be aligned with the latest international standards and guidelines, when selecting impact reporting indicators, TGS will take into consideration the Harmonised Framework for Impact Reporting, published in June 2023, as well as the Global Reporting Initiative standards and indicators. The data obtained during the reporting period, any baseline data, and the methodology used will also be detailed in the report.

KPI	Unit	Global Reporting Initiative Category
Renewable energy capacity (solar, wind) installed; Capacity of energy storage facility	MW MWh	GRI Standard 302
Renewable energy (solar, wind) expected to be produced	MWh	GRI Standard 302
Capacity of manufactured solar and wind equipment	MW	GRI Standard 302
GHG emissions reduced as a direct result of reduction initiatives, in metric tons of CO <sub>2</sub> equivalent	Metric tons of CO <sub>2</sub> e avoided	GRI Standard 305-5

## EXTERNAL REVIEW

TGS will subject its GBF to an official Second Party Opinion assessment process. TGS will engage an experienced external reviewer who will assess the validity and alignment of the Framework with the GBP of ICMA. Once obtained the Second Party Opinion together with the Green Bond Framework will be made publicly available and published on the company's website.

## 3. EVALUATION OF THE COMPANY'S GREEN BOND FRAMEWORK

In this section, we describe the assessment of the GBF and other relevant documents of the Company for compliance with the GBP in accordance with the Methodology for preparing an external assessment of the AIFC Green Finance Centre Ltd. The information used for these purposes was obtained by means of direct interaction with the Issuer.

### GENERAL ASSESSMENT AND DETERMINATION OF THE DEGREE OF COMPLIANCE

The Issuer confirmed that the proceeds from the Green Bond will be used for financing eligible Green Projects. The categories of eligible Green Projects correspond to the GBP and contribute to environmental objectives. The project evaluation and selection process and the management of proceeds also correspond to the core components of the GBP. Reporting and disclosure of information on the use of proceeds and on the expected impact of the projects implemented or to be

implemented will be provided on an annual basis and are to be published on the official website of the Company for public access.

1. **Opinion on the compliance / non-compliance of the Issuer’s Green Bond Framework with the Green Bond Principles.** We believe that TGS’ Green Bond Framework and related green Bond issuance complies with the Green Bond Principles of the International Capital Market Association.
2. **Opinion on assigning a degree of alignment with the Green Bond Principles ranging from “Excellent” (High) to “Poor” (Low).** In accordance with the results of the assessment, as well as in accordance with the Grading Scale for the Level of Alignment with the Green Bond Principles, we assigned the degree of compliance “Excellent” to TGS’ Green Bond Framework and related first Green Bond Issue. TGS demonstrates an excellent level of proceeds management and allocation, eligible project selection, of quality of proceeds administration, as well as of reporting and disclosure on ongoing green projects.

### Grading Scale for the Level of Alignment with the GBP

<i>Threshold Grade</i>	<i>Degree</i>	<i>Definition</i>
High =5	Excellent	Proceeds from the issuance of Green Bond are most likely to be used for the implementation of Green projects. The Green Bond issuer demonstrates an excellent level of proceeds management and allocation, eligible project selection, of quality of proceeds administration, as well as of reporting and disclosure on ongoing projects of environmental and/or social significance

### EVALUATION OF THE CRITERION – USE OF PROCEEDS

The Company’s GBF determines that Green Bond proceeds will be exclusively used for financing eligible Green Projects, which contribute to environmental objectives. Eligible Green Project categories as shown above are consistent with the GBP.

The indicator listed below reflects our assessment of the criterion “Use of Proceeds”.

<i>Indicator</i>	<i>Characteristic of the indicator (permissible, mandatory indicator, not recommended)*</i>	<i>Grade</i>
1. 100% of proceeds are allocated to implementing and financing/refinancing of Green Projects that bring environmental benefits and are evaluated by the Issuer for compliance with the eligible project categories in line with the GBP with regard to their qualitative and/or quantitative characteristics	Permissible	5
<b>Weighted Criterial Grade</b>		<b>2,25</b>

The Eligible Projects Categories specified in the GBF correspond to the projects categories set forth in the ICMA GBP, specifically, the following:

- **Renewable energy** (including production, transmission, equipment and products);

- **Energy efficiency** (for example, energy efficiency in new and renovated buildings, energy storage, district heating, smart grids, equipment and products).

The categories of eligible projects established in the GBF are also aligned with the priority UN Sustainable Development Goals to which they contribute.

The Company plans to allocate the proceeds from the first green Bond to be issued under the GBF to a project for the construction of a 50 MW solar power plant (SPP) “Kun-Bulagy” in the Toru-Aigyr aiyl okmotu (rural area) of the Issyk-Kul district of the Issyk-Kul region (Kyrgyzstan), which is also considered in this assessment for its compliance with both the project eligibility criteria provided for in GBF per se, the requirements and recommendations of ICMA GBP, and with the EU taxonomy for sustainable activities.

## ABOUT THE PROJECT EXPECTED TO BE FINANCED AS PART OF THE USE OF PROCEEDS FROM THE FIRST GREEN BOND

**Project:** Construction of a 50 MW solar power plant (SPP) “Kun-Bulagy” in the Toru-Aigyr aiyl okmotu (rural area) of the Issyk-Kul district of the Issyk-Kul region (Kyrgyzstan)

### Purpose and description of the Project:

The project's objective is to construct a 50 MW (SPP) solar power plant in the Issyk-Kul region of the Kyrgyz Republic and ensure the delivery of electricity to the grid. The implementation of this project will significantly reduce the electricity shortage in the Kyrgyz Republic and reduce the fluxes of power and electricity from the South to the North of the Kyrgyz energy grid. The project is being implemented within the framework of a partnership between the Republic of Kazakhstan and the Kyrgyz Republic. The representative of the Kyrgyz Republic and the holder of the project is the Limited Liability Company “Kun Bulagy”. The main consumer of electricity in accordance with the legislation of the Kyrgyz Republic is the quasi-state company OJSC National Electric Grid of Kyrgyzstan (as reorganized).

It is expected that the plant will consist of monocrystalline bifacial photovoltaic modules with a power of 560-580W mounted on supporting metal structures, decentral string inverters, complete transformer substations and a power transformer with a capacity of 63 MVA.

According to the initial data, the Kun Bulagy SPP capacity of 50 MW can potentially be expanded to 300 MW.

### Project Summary:

- ✓ Timeframe for operational commissioning: 4th quarter 2024
- ✓ Term of operation: over 25 years;

✓ Expected Output for 50 MW SPP: approx. 84 983MWh/year

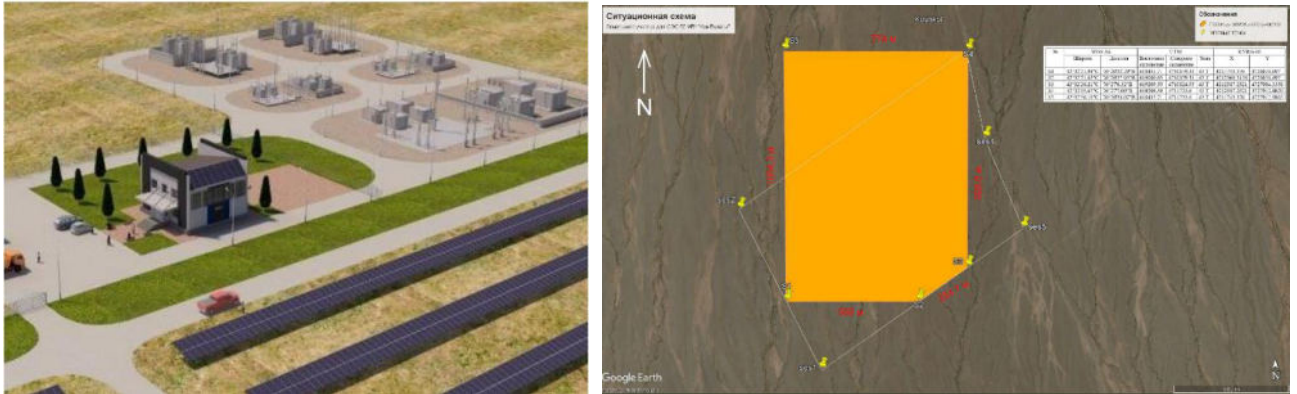


Figure 1. Design and location of the plant

**Environmental impact of the project** – annual avoided greenhouse gas emissions of **10 538 tCO2/year**.

The main environmental benefit of the project will be the reduction of Kyrgyzstan's contribution to climate change. SPPs, as low-carbon alternatives to thermal power plants, make it possible to avoid (prevent) huge amounts of GHG emissions into the atmosphere. Currently, the production and supply of energy in Kyrgyzstan is carried out by 27 power plants, with a total installed capacity of 3950 MW, incl. 26 hydroelectric power plants (3088 MW) and two thermal power plants (862 MW).

Given the forecast electricity generation by the SPP of 84 983 MWh/year and based on the national Combined Margin Grid Emission Factor of 172 g CO2/kWh or 0.172 tCO2/ MWh (for Kyrgyzstan<sup>2</sup>, the annual greenhouse gas (GHG) emissions avoided can be expected to be 84 983MWh x 0.172 tCO2/MWh = 14 617 tCO2.

Also, according to the Intergovernmental Panel on Climate Change (IPCC), the average life cycle CO2 equivalent emissions for Solar PV utilities are 0.048 tCO2 equivalent/MWh, therefore, with this adjustment, annual avoided emissions are expected to be GHG emissions will be 84 983MWh x (0.172-0.048 tCO2)/MWh = **10 538 tCO2**

**Conclusion on the Project «Construction of a 50 MW solar power plant (SPP) “Kun-Bulagy” in the Toru-Aigyr aйл okmotu (rural area) of the Issyk-Kul district of the Issyk-Kul region (Kyrgyzstan)».** The project under consideration falls under the ICMA Green Bond Principles category for Renewable Energy (including electricity generation). Meanwhile, the project meets the Company's own solar energy project criteria set out in the GBF and the EU Taxonomy criteria (for assessment of the project's alignment with EU Taxonomy for Sustainable Activities see [Annex 1](#)). From the perspective of compliance with the internationally recognized benchmark - the Climate Bond Initiative Taxonomy - the project in question can also be classified as green (Photovoltaic generation facilities (onshore)). Preliminary project assessment does not detect any significant environmental risks associated with the project, and any limited potential risks (noise, mechanical loads on soils, waste) are expected to be duly managed, avoided and mitigated.

**Environmental Impact Assessment (EIA) findings<sup>3</sup>:** According to the environmental impact assessment (EIA), the SPP project is expected to have a short-term impact for the duration of the

<sup>2</sup> According to the IFI Dataset of Default Grid Factors table, version 3.2 (used by IFIs as a basis for accounting for greenhouse gas emissions), Combined Margin Grid Emission Factor for Kyrgyzstan in relation to wind and solar energy projects is set at 172 gCO2/kWh, while the Operating marginal GHG emission factor of the power system for Kyrgyzstan is set at 217 gCO2/kWh (including for use in accounting for greenhouse gas emissions according to the PCAF methodology)

<sup>3</sup> EIA for this project has been prepared and approved by TGS and is undergoing clearance with the State Environmental Examination in accordance with the legislation of the Kyrgyz Republic. This examination includes both environmental examination and examination of project documentation

construction and installation works. The project will have minor impacts on all environmental components which are, however, difficult to determine due to the insignificance of the changes. On the territory of the construction site there are no protected natural areas that have special environmental, scientific, cultural, aesthetic, recreational and health value. Wastewater (grey and brownwater) will be treated at the Balykchy municipal wastewater treatment plant. No other sources of environmental pollution have been identified as significant.

Thus, all environmental impacts during construction and operation of the facility, considered in EIA, subject to the implementation of environmental preventive and mitigating measures specified and subject to work schedule adherence, are acceptable and do not entail significant changes in the environmental situation in adjacent territories.



## EVALUATION OF THE CRITERION – PROCESS FOR PROJECT EVALUATION AND SELECTION

The strategy, policies and objectives of the Issuer correspond to the GBP and allow assessing the decision-making process in the Company.

The Company established a Green Bond Committee (on October 18th, 2023, along with the respective regulations on the Committee activities) responsible for Green Projects evaluation and selection process, that includes finance, technical and strategy specialists as a core team, and other departments, where needed. The selection process for Eligible Projects under the GBF shall comply with the criterion of no significant adverse environmental effects.

The indicators listed below reflect our assessment of the criterion “Process for Project Evaluation and Selection”.

Indicators of the “Process for Project Evaluation and Selection” criterion are listed below:

<i>Indicator (Subfactor)</i>	<i>Score</i>
1. Disclosure by the Issuer of information in the context of its goals, policies, strategies and processes related to sustainable development in environmental aspects, including goals to achieve improvements in the ecological environment, as well as the issuer’s participation in various activities and initiatives that indicate commitment to the principles of sustainable development and improvements in the ecological environment.	1
2. Disclosure by the issuer of the goals of issuing green Bond/projects with directions and indicators of environmental effect.	1
3. The issuer has an internal document defining criteria for the selection of green projects and the procedure of their assessment, selection and coordination with the issuer’s governing bodies.	1
4. Disclosure of complementary information on processes by which the issuer identifies and manages perceived environmental risks associated with the relevant project(s)	1 <sup>4</sup>
5. Disclosure of clear qualification criteria used in determining the compliance of projects with the green projects categories and their selection, including exclusion criteria	1
6. The issuer has quality certificates for ongoing green projects or conclusions from leading international or independent Kazakhstani verifiers confirming the compliance of projects with the required environmental standards, including conclusions on compliance with the current regulatory requirements for infrastructure facilities prepared within the framework of the project documentation. The leading verifiers are those who have certificates and licenses to conduct expertise or proven experience in assessing environmental projects	0
7. The Issuer has created a special subdivision, which, among other things, controls the selection and implementation of projects. The division's employees generally understand the tasks assigned to them, while some of them have experience in supporting green projects and / or projects in the field of sustainable development	0,5
8. Engaging an independent qualified party to make a decision on the selection of projects corresponding to the green project categories	0,5

<sup>4</sup> The Issuer's commitment to consider environmental risks during project selection and relevant approaches are included in the GBF. This score also factors in the preliminary assessment of a specific project (50MW SPP) expected to be financed from the first green Bond issue, taking into account the incompleteness of the work on preparing the Environmental Impact Assessment (EIA, or screening) for the project (as of October 9, 2023). EIA for this project will be carried out as part of the design and estimate work with further examination, in accordance with the legislation of the Kyrgyz Republic.

9.The issuer has a policy for determining environmental risks either in the project documentation or in the policy for determining environmental risks, which discloses qualification criteria for determining environmental risks associated with the implementation of projects	0,5
<b>Sum of scores</b>	<b>6,5</b>
<b>Final Grade for Criterion</b>	<b>5</b>
<b>Weighted Criterial Grade</b>	<b>1</b>

## EVALUATION OF THE CRITERION – MANAGEMENT OF PROCEEDS

Proceeds from the green Bond shall be credited by the Company to a separate account for separate accounting and control of proceeds accounting. Control over the balance of tracked proceeds from the green Bond shall also be carried out. Green Bond proceeds that are not allocated to eligible projects will be deposited in or invested in liquid financial instruments or, where otherwise invested, this will be clearly communicated to investors with any relevant Environmental, Social and Governance aspects of the investment disclosed.

The indicators listed below reflect our assessment of the criterion “Management of Proceeds”.

Indicators of the “Management of Proceeds” criterion are listed below:

<i>Indicator (Subfactor)</i>	<i>Score</i>
1.The net proceeds from the issuance of Green Bond are credited to a sub-account or moved to a different portfolio or otherwise tracked by the issuer in an appropriate manner	1
2.The separate accounting method for the Green Bond proceeds is clearly defined in the Issuer’s documentation	0,5
3.The issuer, while the Green Bond are outstanding, monitors the sub-account on an ongoing basis, and there is a procedure in place for excluding projects that become unfit from the portfolio	1
4.The issuer informs investors about the intended types of instruments for temporary placement of unused Green Bond proceeds	1
5.Clear rules in place for investing temporarily unused Green Bond proceeds taking into account ESG-factors	0 <sup>5</sup>
6.Engaging an auditor or another third party to check the method for internal tracking of the intended use of Green Bond proceeds	0,5
<b>Sum of scores</b>	<b>4</b>
<b>Final Grade for Criterion</b>	<b>5</b>
<b>Weighted Criterial Grade</b>	<b>0,75</b>

## EVALUATION OF THE CRITERION – REPORTING

The Company intends to make available to the public and maintain annual updated reports on the issued green Bond from the date of issue until full repayment and in the event of any material changes on the allocation of proceeds to green projects and environmental impact. These reports will be published on the official website of the Company.

<sup>5</sup> No specific rules established for ESG investments (i.e. incorporation of ESG considerations), however the GBF describes the possible uses for unallocated proceeds

The indicators listed below feed into our assessment of the “Reporting” criterion.

**Indicators of the “Reporting” criterion are listed below:**

Indicator (Subfactor)	Score
1. The issuer provides a detailed report (with a list of projects) and disclosures after issuance in relation to the use of proceeds from the placement of Green Bond*	1
2. Reporting includes the disclosure of information on the nature of investments and the expected environmental impact	1
3. The disclosed reports are to be issued at least once a year, and there is also a procedure for monitoring data accuracy	1
4. The issuer discloses information on the projects to which funds have been allocated, with a detailed breakdown by area (category), as well as on the environmental and implementation progress of individual projects	0,5
5. Methodologies in effect (or their drafts) and assumptions used to calculate environmental performance indicators are available	0 <sup>6</sup>
6. The Issuer undertakes to engage independent qualified parties to evaluate its reporting on the implementation of the Green Bond/ Social Bond and Sustainable Development Bond Policy	0,5
<b>Sum of scores</b>	<b>4</b>
<b>Final Grade for Criterion</b>	<b>5</b>
<b>Weighted Criterial Grade</b>	<b>1</b>

\*\* Where confidentiality agreements, competitive considerations, or a large number of underlying projects limit the amount of detail that can be made available, the information may be presented by the Issuer in generic terms or on an aggregated portfolio basis

## TOTAL WEIGHTED CRITERIAL GRADE

Criterion	Weighted grade:
Use of Proceeds	2,25
Process of Project Evaluation and Selection	1
Management of Proceeds	0,75
Reporting and Disclosure	1
<b>TOTAL Weighted Criterial Grade</b>	<b>5</b>

## DISCLAIMERS AND LIMITATIONS

An External Review (Second Party Opinion) reflects our opinion on the expected results from the issuance of Green Bond and on the compliance of the Issuer’s Green Bond Framework with the GBP. There is a likelihood of an inaccuracy in the final conclusion due to unforeseen changes in the economic environment and the financial market.

<sup>6</sup> No specific methodologies established, however the GBF provides the list of project impact indicators with reference to the ICMA Harmonised Framework for Impact Reporting, published in June 2023, as well as the Global Reporting Initiative standards

An External Review is an independent assessment carried out based on the information provided by the Issuer in line with the GFC's methodology, it does not disclose the Issuer's confidential information and is not an indication for any investment decisions.

We do not assume any responsibility for the use and implementation of an External Review in making investment decisions.

An External Review may be updated after publication, with the reasons for such an update disclosed.

Chairman of the Management Board  
AIFC Green Finance Centre Ltd



NURSULTAN SERIKBAY

15.11.2023

**ANNEX 1. INDEPENDENT ASSESSMENT CONCLUSION ON THE ALIGNMENT OF «CONSTRUCTION OF A 50 MW SOLAR POWER PLANT (SPP) “KUN-BULAGY” (KYRGYZSTAN) PROJECT WITH THE EU TAXONOMY FOR SUSTAINABLE ACTIVITIES**

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# INDEPENDENT ASSESSMENT CONCLUSION

## ON THE ALIGNMENT OF «CONSTRUCTION OF A 50 MW SOLAR POWER PLANT (SPP) “KUN-BULAGY” (KYRGYZSTAN) PROJECT WITH THE EU TAXONOMY FOR SUSTAINABLE ACTIVITIES

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15<sup>th</sup> November, 2023

### SUMMARY

Opinion on the compliance/non-compliance of the applicant's project with the EU taxonomy for sustainable activities criteria for the categories of “green” projects for the purposes of green financing.



We are of the opinion that the applicant's project to be implemented by a potential Green Bond Issuer<sup>7</sup> complies with the categories of recognized international green finance principles, is provisionally aligned with the EU taxonomy for sustainable activities criteria, including the quantitative and qualitative technical criteria set therein and is accordingly determined as environmentally sustainable for green finance purposes.

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### Basis for assessment

This assessment has been carried out on the basis of a request from **TECHNOGROUPSERVICE LLP** to conduct an external/independent assessment of a project for the purpose of raising green financing, and to provide a conclusion regarding the project's alignment with the criteria of EU taxonomy for sustainable activities.

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<sup>7</sup> Hereinafter, Issuer/Borrower can also refer to the owner or initiator of a project

## METHODOLOGY FOR PREPARING AN INDEPENDENT ASSESSMENT OF GREEN PROJECTS

The AIFC Green Finance Centre Ltd (hereinafter - GFC) methodology for preparing an independent assessment of green projects is intended for conducting an independent assessment of projects to be implemented / being implemented by potential / actual Borrowers / Issuers for compliance with the categories of international principles of green financing<sup>8</sup> (for various green financial instruments) or other classifications/taxonomies, taking into account any specified quantitative thresholds, and, accordingly, to establish the project as green or environmentally sustainable for the purposes of green finance.

GFC evaluates projects irrespective of their life cycle stage, i.e. both planned and in operation. An expert opinion issued is valid for 12 (twelve) months, provided that the Borrower / Issuer continues to operate in accordance with the obligations undertaken with regard to green financing.

In regards to provision of quality control of work performed within the framework of professional activities for external reviews, GFC is guided by internal documents of organizations, concerning professional conduct, and the provisions of international standards, including, but not limited to, the principles of the International Standard ISAE 3000 for assurance engagements other than audits or reviews of historical financial information<sup>9</sup>, the provisions of the International Standard for Quality Control 1 (ISQC 1)<sup>10</sup>, in terms of ethical requirements, quality control and management responsibility for the results of external reviews.

Preparing an independent assessment of green projects shall include reviewing the relevant documentation, the Borrower / Issuer's regulatory documents, reports and presentations, if any, as well as other publicly available information that can provide a description, detailing and confirmation of the compliance of the financed projects with the requirements and criteria established in this methodology. The information used for these purposes shall be obtained through direct interaction with the Borrower / Issuer and / or from any public sources that GFC deems reliable.

Preparation of the independent assessment is carried out in several stages that can be outlined as follows:

1. Obtaining input information from the potential Issuer.
2. Criteria-based assessment and preparation of the draft independent assessment.
2. Clarifications with the Issuer regarding the draft independent assessment, if necessary.
3. Presentation of the independent assessment to the Issuer and, once agreed on by the former, its publication on GFC's website.

Consideration and assessment of environmental factors when reviewing the green project shall consist of the following steps:

- reviewing the project for any types of activities, that could result in a significant deterioration of the living environment, social conditions of work and life of the population may occur;
- classification of the project in accordance with the categories of recognized international principles of green finance or *international and other national classifications*, given the quantitative threshold values set forth therein. In this particular assessment, the project is to be classified in accordance with the EU Taxonomy for Sustainable Activities;
- reviewing the project for positive environmental effects according to the established criteria for compliance with the requirements of green projects.

## GENERAL INFORMATION ABOUT THE PROJECT

**Project:** Construction of a 50 MW solar power plant (SPP) “Kun-Bulagy” in the Toru-Aigyr aiyl okmotu (rural area) of the Issyk-Kul district of the Issyk-Kul region (Kyrgyzstan)

<sup>8</sup> International green finance principles may include, but are not limited to, the International Capital Market Association's (ICMA) Green Bond Principles (GBP), the Loan Market Association/LSTA/APLMA's Green Loan Principles (GLP), and other industry standards, principles, guidelines and project impact reporting formats, as well as taxonomies prepared by ICMA, CBI, EU working groups and other organizations and market associations

<sup>9</sup> International Standard on Assurance Engagements 3000 (Revised): Assurance Engagements Other Than Audits Or Reviews Of Historical Financial Information. This statement of adherence to the principles of the IFAC standard has not been verified

<sup>10</sup> International Standard on Quality Control 1: Quality control for firms that perform audits and reviews of financial statements, and other assurance and related services engagements. This statement of adherence to the principles of the IFAC standard has not been verified

## Purpose and description of the Project:

The project's objective is to construct a 50 MW (SPP) solar power plant in the Issyk-Kul region of the Kyrgyz Republic and ensure the delivery of electricity to the grid. The implementation of this project will significantly reduce the electricity shortage in the Kyrgyz Republic and reduce the fluxes of power and electricity from the South to the North of the Kyrgyz energy grid. The project is being implemented within the framework of a partnership between the Republic of Kazakhstan and the Kyrgyz Republic. The representative of the Kyrgyz Republic and the holder of the project is the Limited Liability Company "Kun Bulagy". The main consumer of electricity in accordance with the legislation of the Kyrgyz Republic is the quasi-state company OJSC National Electric Grid of Kyrgyzstan (as reorganized).

It is expected that the plant will consist of monocrystalline bifacial photovoltaic modules with a power of 560-580WW mounted on supporting metal structures, decentral string inverters, complete transformer substations and a power transformer with a capacity of 63 MVA.

According to the initial data, the Kun Bulagy SPP capacity of 50 MW can potentially be expanded to 300 MW.

## Project Summary:

- ✓ Timeframe for operational commissioning: 4th quarter 2024
- ✓ Term of operation: over 25 years;
- ✓ Expected Output for 50 MW SPP: approx. 84 983 MWh/year

## CRITERIA-BASED EVALUATION AGAINST ENVIRONMENTAL CONSIDERATIONS

As mentioned above, the GFC has considered and assessed environmental factors as part of green project evaluation using the following algorithm (steps):

### 1. Screening the project for any types of activities listed in Methodology, that could result in a significant deterioration of the living environment, or social conditions for work and life of the population

The project does not include any activities deemed illegal under host country laws or regulations or international conventions and agreements, or subject to international phase outs or bans, including:

- a) production or trade in products containing PCBs<sup>11</sup>;
- b) production or trade in pharmaceutical products, pesticides/herbicides, or other dangerous substances subject to international phase outs or bans<sup>12</sup>;
- c) production or trade in ozone depleting substances subject to international phase out<sup>13</sup>;
- d) trade in wildlife or plants or wildlife or plant products regulated under CITES<sup>14</sup>;
- e) transboundary trade in wastes prohibited by international laws<sup>15</sup>.
- f) production, use or trade in unbonded asbestos fibers and asbestos-containing products<sup>16</sup>;

<sup>11</sup> PCBs: Polychlorinated biphenyls are a group of highly toxic chemicals. PCBs are likely to be found in oil-filled electrical transformers, capacitors and switchgear dating from 1950-1985.

<sup>12</sup> Reference documents are EU Regulation (EEC) No 2455/92 Concerning the Export and Import of Certain Dangerous Chemicals, as amended; UN Consolidated List of Products whose Consumption and/or Sale have been Banned, Withdrawn, Severely Restricted or not Approved by Governments; Convention the Prior Informed Consent Procedures for Certain Hazardous Chemicals and Pesticides in International Trade (Rotterdam Convention); Stockholm Convention on Persistent Organic Pollutants; WHO Classification of Pesticides by Hazard

<sup>13</sup> Ozone depleting substances: Chemical compounds which react with and deplete stratospheric ozone, resulting in widely publicised 'ozone holes'. The Montreal Protocol lists such substances and their target reduction and phase out dates.

<sup>14</sup> CITES: Convention on International Trade in Endangered Species of Wild Fauna and Flora. A list of CITES listed species is available at [www.cites.org/eng/app/index.shtml](http://www.cites.org/eng/app/index.shtml)

<sup>15</sup> Reference documents are Regulation (EC) No.1013/2006 of 14 June 2006 on shipments of waste; Decision C (2001) 107/Final of the OECD Council concerning the revision of Decision C(92)39/Final on the control of transboundary movements of wastes destined for recovery operations; Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal of 22 March 1989.

<sup>16</sup> This does not apply to the use or trade in bonded asbestos cement sheeting where the asbestos content is less than 20% .



- g) activities prohibited by host country legislation or international conventions relating to the protection of biodiversity resources or cultural heritage<sup>17</sup>;
- h) drift net fishing in the marine environment using nets in excess of 2.5 km in length;
- i) shipment of oil or other hazardous substances in tankers that do not comply with IMO requirements<sup>18</sup>;
- g) trade in goods without the required export or import licenses or other evidence of authorization of carriage issued by the corresponding export/import or, whenever necessary, transit countries.

**Conclusion for Step 1:** The project in question does not include any types of activities listed in clause 1.4 of Methodolg that could result in a significant deterioration of the living environment, or social conditions for work and life of the population.

**2. Classification of the project in accordance with (a) the categories of recognized international principles of green finance or (b) international and other national classifications, given the quantitative threshold values set forth therein. In this particular assessment, the project is to be classified in accordance with the EU Taxonomy for Sustainable Activities.**

**a) Classification in line with the categories of recognized international green finance principles.**

The project in consideration corresponds to the project categories set forth in the ICMA GBP, specifically, the following:

- **Renewable energy** (including production, transmission, equipment and products).

The project is also aligned with the priority UN Sustainable Development Goals 7 and 13 (Clean Energy and Climate Action, respectively) to which it contributes.

**b) Classification in accordance with the EU Taxonomy for Sustainable Activities, based on the respective quantitative and qualitative criteria**

The Project *Construction of a 50 MW solar power plant (SPP) “Kun-Bulagy”* meets the description of an activity titled “**Electricity generation using solar photovoltaic technology**” in the EU Taxonomy for Sustainable Activities. However, a project in this category must meet the following criteria to be considered aligned with the EU Taxonomy for Sustainable Activities:

EU Taxonomy of Sustainable Activities (Annex to EU Taxonomy Regulation)	GFC’s comment
4.1. Electricity generation using solar photovoltaic technology	The Activity corresponds to International Standard Industrial Classification of All Economic Activities (ISIC) D1 (3510): Electric power generation, transmission and distribution
<i>Description of the activity</i>	

<sup>17</sup> Relevant international conventions include, without limitation: Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention); Convention on Wetlands of International Importance, especially as Waterfowl Habitat (Ramsar Convention); Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention); World Heritage Convention; Convention on Biological Diversity with protocols thereto.

<sup>18</sup> This includes: tankers which do not have all required MARPOL and SOLAS certificates (including, without limitation, ISM Code compliance), tankers blacklisted by the European Union or banned by the Paris Memorandum of Understanding on Port State control (Paris MOU), and tankers due for phase out under regulations 13G and 13H of Annex I of MARPOL. No single hull tanker over 25 years old should be used

<p>Construction or operation of electricity generation facilities that produce electricity using solar photovoltaic (PV) technology.</p> <p>Where an economic activity is an integral element of the 'Installation, maintenance and repair of renewable energy technologies' as referred to in Section 7.6 of this Annex<sup>19</sup>, the technical screening criteria specified in Section 7.6 apply.</p> <p>The economic activities in this category could be associated with several NACE codes<sup>20</sup>, in particular D35.11 and F42.22 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006</p>		Compliant
<i>Technical screening criteria</i>		
<b>Substantial contribution to climate change mitigation</b>		Compliant. The activity generates electricity using solar PV technology
<b>Do no significant harm ('DNSH')</b>		
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex	See Comments to Appendix A
(3) Sustainable use and protection of water and marine resources	N/A	No significant impact on water and marine resources as per EIA. Related risks covered in mitigation action plan
(4) Transition to a circular economy	The activity assesses availability of and, where feasible, uses equipment and components of high durability and recyclability and that are easy to dismantle and refurbish	<p>In EU, recycling aspects for projects, including solar PV systems, are covered under the Waste from Electrical and Electronic Equipment (WEEE) Directive since July 2012.</p> <p>According to EIA, the following measures will be taken to handle waste:</p> <ul style="list-style-type: none"> <li>- Reclamation work will be carried out on the landfills of extracted rocks;</li> <li>- Maximum possible reuse of waste;</li> <li>- Removal of hazardous waste for further use will only be made through a contractor with the appropriate permission;</li> <li>- An accounting mechanism (journal) to be kept for waste generation, temporary storage and subsequent management processes</li> <li>- All generated solid municipal waste will be</li> </ul>

<sup>19</sup> Section 7.6 "Installation, maintenance and repair of renewable energy technologies" of EU Taxonomy sets out similar criteria

<sup>20</sup> NACE (for the French term "nomenclature statistique des activités économiques dans la Communauté européenne"), is the industry standard classification system used in the European Union. It is the European implementation of the UN classification ISIC, revision 4

		transported to the landfill in the Tor-Aigyr village for disposal. -
(5) Pollution Prevention and control	N/A	No significant pollution impact as per EIA. Related risks covered in mitigation action plan
(6) Protection and restoration of Biodiversity and ecosystems	The activity complies with the criteria set out in Appendix D to this Annex	See Comments to Appendix D
<b>Minimum Social Safeguards</b>		Compliant

• [Appendix A of EU Taxonomy of Sustainable Activities](#)

GENERIC CRITERIA FOR DNSH TO CLIMATE CHANGE ADAPTATION	GFC comment
<ul style="list-style-type: none"> <li>• Where an activity is assessed to be at risk from one or more climate-related hazards (e.g., temperature, wind, water and solid mass hazards), a robust climate risk and vulnerability assessment shall be conducted, through:               <ul style="list-style-type: none"> <li>(a) screening of the activities to identify potential physical climate risks;</li> <li>(b) materiality assessment of the physical risk on the activities;</li> <li>(c) assessment of adaptation solutions to reduce the identified physical climate risk (Commission Delegated Regulation (EU) 2021/2139, Appendix A, para. I).</li> </ul> </li> </ul>	<p>The activity is assessed as NOT to be at material risk from the climate-related hazards relating to temperature, wind, water and solid mass hazards. The physical risk on the activities is assessed as of low materiality.</p> <p>The projects has been run through the rapid climate risk assessment checklist:</p> <ul style="list-style-type: none"> <li>- Is the project climate-reliant – <b>Low level of reliance</b></li> <li>- Is the project climate-vulnerable – <b>Low risk</b></li> <li>- Are communities and local ecosystems vulnerable – <b>Mild risk*</b></li> <li>- Could project impact exacerbate vulnerabilities - <b>No</b></li> </ul>
<ul style="list-style-type: none"> <li>• The climate risk and vulnerability assessment shall be proportionate to the scale of the activity and its expected lifespan, such that:               <ul style="list-style-type: none"> <li>(a) for activities with an expected lifespan of less than 10 years, the assessment shall be performed, at least by using climate projections at the smallest appropriate scale.</li> <li>(b) for all other activities, the assessment shall be performed using the highest available resolution, state-of-the-art climate projections across the existing range of future scenarios (Intergovernmental Panel on Climate Change representative concentration pathways RCP2.6, RCP4.5, RCP6.0 and RCP8.5) consistent with the expected lifetime of the activity, including, at least, 10 to 30 year climate projections scenarios for major investments (Commission Delegated Regulation (EU) 2021/2139, Appendix A, para. I)</li> </ul> </li> </ul>	<p>Given the results of the rapid climate risk assessment above (Project assessed as having low risk of climate vulnerability) an in-depth climate risk and vulnerability assessment using the highest available resolution, state-of-the-art climate projections across the existing range of future scenarios is not necessary</p>

\*The vulnerability of communities and local ecosystems is assessed as mild with reference to the overall climate risks assessment for the Kyrgyz Republic (based on World Banks' Climate Change Knowledge Portal (CCKP), the Coupled Model Intercomparison Project Phase 5 (CMIP5) models). For the Kyrgyz Republic, these models show a trend of consistent warming that varies by emissions scenario. The Kyrgyz Republic faces varied natural hazards and experiences moderately high levels of disaster risk. While the Kyrgyz Republic performs well in the INFORM 2019 Index<sup>27</sup> in terms of the vulnerability of its population, and achieves an average ranking for coping capacity, the nation faces significant risk from floods (including river and flash flooding) as well as landslides and particularly drought. The projections in rainfall are less certain for the Kyrgyz Republic.

- [Appendix D EU Taxonomy of Sustainable Activities](#)

GENERIC CRITERIA FOR DNSH TO PROTECTION AND RESTORATION OF BIODIVERSITY AND ECOSYSTEMS	GFC Comment
<p>An Environmental Impact Assessment (EIA) or screening has been completed in accordance with Directive 2011/92/EU. Where an EIA has been carried out, the required mitigation and compensation measures for protecting the environment are implemented. For sites/operations located in or near biodiversity-sensitive areas (including the Natura 2000 network of protected areas, UNESCO World Heritage sites and Key Biodiversity Areas, as well as other protected areas), an appropriate assessment, where applicable, has been conducted and based on its conclusions the necessary mitigation measures are implemented.</p>	<p>N/A in terms of compliance with EU Directive 2011/92/EU. However, EIA for this project has been prepared and approved by TGS and is undergoing clearance with the State Environmental Examination in accordance with the legislation of the Kyrgyz Republic*. The site of the project is not located in or near biodiversity-sensitive areas.</p>

\* EIA has identified and set forth the mitigation and compensation measures. The Issuer recognises in the Business Plan and the Green Bond Framework that all necessary assessments under EIA will be carried out. Specifically, the Issuer, in its Business Plan and EIA points out that, while this SPP project will cause no damage to the environment, especially less than other types of power plants, the construction and operation work is associated with the following potential environmental and sanitary factors:

- noise;
- mechanical loads on soils;
- emissions of pollutants into the atmosphere;
- disposal of solid waste.

The total volume of emissions of pollutants (dust, carbon monoxide, nitrogen dioxide, sulfur dioxide etc.) to be released into the atmosphere during construction and from construction-related motor vehicles and equipment engines is estimated at 62.5 tons. This impact is expected to be limited to the construction site with insignificant increase in the natural atmospheric background during construction. Temporary residential camp is not required (workers will be accommodated in the Toru-Aigyr village). The likelihood of pollution of the aquatic environment is short-term and is limited to the construction period of 1 year. The coverage area of construction work impacts does not feature watercourses/waterbodies.

As per EIA, the project provides for a reduction in noise and electromagnetic pollution through increased insulation and other measures. Chemical exposure (detergents and transformer oil) shall be reduced by installing a septic tank. Mechanical impacts on soils during construction will be reduced by subsequent reclamation and securing of surfaces to prevent erosion. The small number of production personnel\*\* is also a positive factor from the standpoint of controlling sanitary and environmental damage.

The action plan for mitigating activities specified in EIA includes detailed measures to address the following risks:

- Emission of inorganic dust into atmosphere;
- Emission of combustion products in the ambient air;
- Noise;

- Surface water pollution;
- Impact on groundwater;
- Violation of soil stabilization, destruction and fertile layer contamination;
- Impact on flora;
- Habitat loss, damage and fragmentation;
- Employment and associated adverse risks;
- Environmental pollution from waste;
- Other.

\*\*Note: For the construction period - staff is 119, for the maintenance of SPP - 20 staff.

- **Minimum Social Safeguards as set out in Article 18 of the Taxonomy Regulation**

Minimum safeguards are to be understood as due diligence and remedy procedures implemented by a company that is carrying out an economic activity in order to ensure alignment with the OECD Guidelines for Multinational Enterprises and the UN Guiding Principles on Business and Human Rights. The latter includes the principles and rights set out in eight of the ten fundamental conventions identified in the International Labour Organization (ILO) Declaration of the on Fundamental Principles and Rights at Work ( 5 ) and the International Bill of Human Rights ( 6 ).

As per the draft EIA, the operation of the facility will have a positive influence in social aspects. The SPP construction and operation shall create both temporary and permanent jobs. A personnel policy will be developed that will be agreed with local government, with each employee to be engaged through an individual employment contract.

In potential emergency situations no strong public concern is expected, as there will be no use of toxic chemicals that may result in significant changes in the natural environment, for, chemical reagents are not used in the technological process. Any emergency risks are predicted to be local, i.e. impacting only the territory of the facility's site.

In its GBF, in terms of ensuring minimum social safeguards, the Company commits to carrying out activities in alignment with the UN Guiding Principles on Business and Human Rights, including the principles and rights set out in the eight fundamental conventions identified in the Declaration of the International Labour Organisation on Fundamental Principles and Rights at Work and the International Bill of Human Right.

### Consideration of general environmental and social impacts of solar assets

EIA prepared for the project considers some of the environmental impact concerns that are usually raised with regard to solar assets. These can include inter alia:

- Land use rights and land access: where land is subject to native title or cultural heritage conditions restricting use or where projects cross borders
  - *GFC preliminary comment: project in question is not subject to native title or cultural heritage conditions restricting use). As per EIA, there are no protected natural areas that have special environmental, scientific, cultural, aesthetic, recreational and health value on the construction site.*
- Water requirements: depending on geographical location PV modules require periodic rinsing to remove dust. Solar thermal plants also often require substantial water resources to operate
  - *GFC preliminary comment: project in question will not require substantial water resources to operate. As per EIA, during the construction of the SPP, personnel will be provided with delivered bottled water, and during operation - with water delivered from nearby artesian wells. Domestic wastewater (sewage grey and brown water) generated in the SPP will be discharged into a septic tank and, when filled, will be transported to the treatment facilities of town Balykchy. There is no discharge of wastewater into the environment, therefore, no disturbances in the surface and groundwater are expected neither during construction nor during operation).*
- *Environmental sensitivities: Costly habitat relocation or remediation and additional permitting can be required if sites are located on environmentally sensitive land*

- GFC preliminary comment: project is located near the village of Toru-Aigyr; however, there is, as per EIA, no need for relocations for the project in question)<sup>21</sup>.
- Downstream land impacts: Ensuring the facility does not have an adverse effect on downstream stakeholders during flooding events.
- Visual impacts: PV modules absorb as much light as possible yet reflectance remains. This can have an impact on the ability of birdlife to navigate and can potentially impact pilots when located near airports.

The key evidence base in consideration of environmental impacts of solar assets are described in the Background Paper to eligibility criteria prepared by the Climate Bond Initiative's (hereinafter referred to as CBI) Solar Technical Working Group and are as follows:

### Carbon footprint

The lifecycle emissions of solar plants are low enough to allow solar energy to be designated as a low carbon solution. Lifecycle emissions include all emissions related to the construction, operation (including upstream and downstream fuel emissions) and decommissioning of the power plants.

The table below provides a comparison across different fuel sources. The emissions are quoted in terms of CO<sub>2</sub>-eq (or carbon dioxide equivalent), which normalises the greenhouse effect of other gases released in the process (e.g. methane) to that of CO<sub>2</sub>.

Comparison of normalised lifecycle emissions (g CO<sub>2</sub>-eq / kWh<sub>e</sub>) for power plants using various fuel sources<sup>22</sup>.

Fuel Source	Lifecycle Emissions Intensity (g CO <sub>2</sub> -eq / kWh <sub>e</sub> )
Coal	850-1300
Natural Gas	400-650
Nuclear	10-40
Solar PV	35-100
Solar Thermal	10-35
Solar Thermal / Gas Hybrid	234-345
Wind	10-20
Hydro	7.5-20
Biomass	65-350
Marine	15-25

The CBI's Solar Technical Working Group notes<sup>23</sup> that the carbon footprint of solar PV in general has decreased approximately 50% in the last 10 years due to performance improvements, raw material savings and manufacturing process improvements. The group also note that the lifecycle emissions of solar thermal plants remain relatively low to fossil fuel alternatives, even when the emissions of the fossil fuel hybrid element are factored in, provided the extent of fossil fuel use in the hybrid plant is controlled.

### Energy payback

Energy payback periods are also improving. For solar PV systems, the energy payback period including balance-of-system components, measured in 2004 was between 3-4 years depending on the type of base material used.

A more recent study estimated the period at between 6 months and 1.4 years. The system has a life time of approximately 30 years.

### Water requirements

<sup>21</sup> Re: 50 MW SPP Project is located is 5,2 km off the Kun Bulagy.village, The nearest railway station is in the town of Balykchy (20 km from the construction site). Near the site, at a distance of up to 10 km, there are several railway sidings suitable for unloading equipment arriving in 40-foot containers.

<sup>22</sup> <https://www.climateBond.net/files/files/standards/Solar/Solar%20Criteria%20Background%20Paper.pdf>

<sup>23</sup> <https://www.climateBond.net/files/files/standards/Solar/Solar%20Criteria%20Background%20Paper.pdf>

The withdrawal of water in the lifecycle of solar PV systems, that is water diverted or withdrawn from groundwater or surface water sources, is relatively lower than in other forms of electricity generation. Assuming strong sun locations, water withdrawal use ranges from 0.8 l/kWh to 1.9 l/kWh. Other forms of high carbon energy range from 1.2 l/kWh to 230 l/kWh. In terms of water consumption, that is water permanently withdrawn from sources and no longer available, solar PV consumes 0.1 l/kWh. This compares to ranges of 0.75 l/kWh to 75 l/kWh for high carbon electricity generation.

#### Land use impacts

Ground-based solar plants require land at approximately 2.5 to 3.5 hectares per MW depending on technology and location.

*GFC comment: the project site's area is approx. 80 hectares, which is below the lower benchmark of 125 hectares for a 50 MW SPP.*

**Summary of EIA findings.** EIA for this solar power plant includes studies of threatened species; land disturbance; historical and archaeological studies and visual impact etc. The SPP project is expected to have a short-term impact for the duration of the construction and installation works with minor impacts on all environmental components. On the territory of the construction site there are no protected natural areas that have special environmental, scientific, cultural, aesthetic, recreational and health value. Wastewater will be treated at the Balykchy municipal wastewater treatment plant. No other sources of environmental pollution have been identified as significant. Thus, all environmental impacts during construction and operation of the facility, considered in EIA, subject to the implementation of environmental preventive and mitigating measures specified and subject to work schedule adherence, are acceptable and do not entail significant changes in the environmental situation in adjacent territories.

**Conclusion for Step 2:** The GFC classifies the project “Construction of a 50 MW solar power plant (SPP) “Kun-Bulagy” as compliant with the category “Electricity generation using solar photovoltaic technology” of the EU Taxonomy for Sustainable Activities, including related technical screening criteria. Given the focus of the solar project assessments on establishing low-carbon eligibility criteria for solar assets, combined with the social safeguards, as well as existing industry initiatives in environmental impact areas, the necessity to adopt and comply with specific criteria in relation to environmental impacts for solar assets is limited.

### 3. Reviewing the project for positive environmental effects according to the criteria established in the Methodology for compliance with the requirements of green projects

GFC conducted this step of the project assessment in the following order:

- a) It has been established that there is a significant contribution to a positive environmental impact by at least one criterion shown in Table 1 below, reflecting the main purpose of the project:

**Table 1: Project Evaluation Criteria for Positive Environmental Effects**

No	Criterion	Sub-criterion	Compliance with international standards/taxonomies	Source of data (project documentation, GNI, etc.) used to evaluate the project	Score
1.	CLIMATE CHANGE MITIGATION	Energy efficiency		N/A	0
		Volume of commissioned capacity of RES facilities and generated electricity	Project “Construction of a 50 MW solar power plant (SPP) “Kun-Bulagy” is provisionally compliant with the category “Electricity generation using solar photovoltaic	Business Plan, project documentation, EIA	0.3

			technology of the EU Taxonomy for Sustainable Activities, including related technical screening criteria		
		Number of people provided with access to electricity generated by RES facilities		EIA	0
		Reduction of greenhouse gas emissions	<b>10 538.3 tCO2 avoided GHG emissions annually</b>	Business Plan, project documentation	1
2.	CONSERVATION OF RESOURCES (RESOURCE CONSERVATION)	Water conservation and non-standard water use		EIA	0
		Recycling and use of "tailings" related mining by-products		EIA	0
		Recycling and use of solid waste, waste gases and wastewater		EIA	0
		Recycling use of renewable resources		EIA	0
		Recycling and use of biomass	N/A		0
3.	TRANSITION TO A CIRCULAR ECONOMY, WASTE MANAGEMENT	Ensuring minimization of waste impact on environmental components	Provisionally compliant with the category "Electricity generation using solar photovoltaic technology of the EU Taxonomy for Sustainable Activities. Measures on waste minimization are provided for in EIA action plan	Business Plan, project documentation, EIA	0,3
		Reducing the negative impact of waste on the environment		EIA	0
		Reducing the amount of waste produced at all stages of the project		EIA	0
		Keeping of inventory of production and consumption wastes and ways of their formation in order to achieve the above points		EIA	0
4.	ENVIRONMENTAL PROTECTION AND CLIMATE CHANGE ADAPTATION	Prevention, reduction, and comprehensive control of pollution, including the formation of emissions, discharge, waste, and other negative impacts caused by the operation of economic activities		EIA	0



		Reducing the negative impact of activities on the life and health of citizens		EIA	0
		Increasing the general level of environmental protection from anthropogenic impacts			
		Ensuring safe economic activity for the life and health of citizens		EIA	0
		Rational use of primary and secondary resources in accordance with the principles of "pollution prevention" and "polluter pays"			
5.	ECOLOGICAL PROTECTION AND ADAPTATION TO THE EFFECTS OF CLIMATE CHANGE	Natural ecological protection and development of tourist resources with protective environmental aspects	N/A		0
		Sustainable agriculture and fisheries	N/A		0
		Sustainable forestry	N/A		0
		Prevention of emergency situations	N/A		0
		Natural disaster management	N/A	EIA	0
<b>TOTAL SCORE</b>					<b>1,6</b>

The main purpose of the project in terms of positive environmental effects is aimed at Mitigating the consequences of climate change, which is determined as the main criterion. By this criterion, the project has an environmental impact of annual avoided greenhouse gas emissions at **10 538tCO<sub>2</sub>/year**.

Thus, the main environmental benefit of the project will be the reduction of Kyrgyzstan's contribution to climate change. As mentioned above, SPPs, as low-carbon alternatives to thermal power plants, make it possible to avoid (prevent) considerable amounts of GHG emissions into the atmosphere. Currently, the production and supply of energy in Kyrgyzstan is carried out by 27 power plants, with a total installed capacity of 3950 MW, incl. 26 hydroelectric power plants (3088 MW) and two thermal power plants (862 MW).

Given the forecast electricity generation by the SPP of 84 983 MWh/year and based on the national Combined Margin Grid Emission Factor of 172 g CO<sub>2</sub>/kWh or 0.172 tCO<sub>2</sub>/MWh (for Kyrgyzstan<sup>24</sup>, the annual greenhouse gas (GHG) emissions avoided can be expected to be 84 983MWh x 0.172 tCO<sub>2</sub>/MWh = 14 617 tCO<sub>2</sub>.

Also, according to the Intergovernmental Panel on Climate Change (IPCC), the average life cycle CO<sub>2</sub> equivalent emissions for Solar PV utilities are 0.048 tCO<sub>2</sub> equivalent/MWh, therefore, with this adjustment, annual avoided emissions are expected to be GHG emissions will be 84 983MWh x (0.172-0.048 tCO<sub>2</sub>)/MWh = **10 538 tCO<sub>2</sub>**.

- b) For the criterion (CLIMATE CHANGE MITIGATION), the project is assigned the **score of 1,3**, that is, the threshold minimum level (equal to 1) for a criterion reflecting the main purpose of the project has been met. For other criteria ("secondary" criteria that do not reflect the main purpose of the project), the score of 0.3 (if there is a positive environmental effect) or 0 points (if there is a neutral and insignificant environmental effect) is assigned.
- c) Thus, it is established that, according to the criterion reflecting the main purpose of the project, the green project criteria (if any) are met in accordance with the selected taxonomy

<sup>24</sup> According to the IFI Dataset of Default Grid Factors table, version 3.2 (used by IFIs as a basis for accounting for greenhouse gas emissions), Combined Margin Grid Emission Factor for Kyrgyzstan in relation to wind and solar energy projects is set at 172 gCO<sub>2</sub>/kWh, while the Operating marginal GHG emission factor of the power system for Kyrgyzstan is set at 217 gCO<sub>2</sub>/kWh (including for use in accounting for greenhouse gas emissions according to the PCAF methodology)

(EU Taxonomy). For the remaining criteria specified in Table 1 above, at least a neutral environmental effect has been achieved. A neutral environmental effect according to the secondary criterion means the absence of a negative or limited environmental effect – i.e. of negative environmental impact risks as per EIA or of realized risk.

**Conclusion for Step 3:** The total score (equal to 1.6) exceeding the threshold minimum level is interpreted by the GFC as a good level of positive environmental impact and of compliance with the categories of recognized international green finance principles and taxonomies (EU Taxonomy for Sustainable Activities in this case), taking into account the relevant quantitative technical criteria specified therein.

## CONCLUSION BASED ON INDEPENDENT ASSESSMENT FINDINGS



We are of the opinion that the applicant's project to be implemented by a potential Green Bond Issuer complies with the categories of recognized international green finance principles, is aligned in all significant aspects<sup>25</sup> with the EU taxonomy for sustainable activities criteria, including the quantitative and qualitative technical criteria set therein and is, accordingly, determined as environmentally sustainable for green finance purposes.

Chairman of the Management Board

AIFC Green Finance Centre Ltd



NURSULTAN SERIKBAY

15.11.2023

## DISCLAIMERS AND LIMITATIONS

An independent assessment reflects our opinion on the compliance of the planned / ongoing projects under review with the categories of green projects for the purposes of green financing, including by way of green loan/green Bond issuance. There is a likelihood of an inaccuracy in the final conclusion due to unforeseen changes in the economic environment and the financial market.

GFC's assessment is independent and carried out based on the information provided by the Borrower/Issuer in line with GFC methodology. It does not disclose the Borrower/Issuer's confidential information and is not an indication for any investment decisions.

An Independent Assessment may be updated after publication, with the reasons for such an update disclosed.

<sup>25</sup> To the extent of applicability of the EU regulations given the data availability in the local regulatory context

## ABOUT AIFC GREEN FINANCE CENTRE LTD

AIFC Green Finance Centre Ltd. is a legal entity incorporated in the AIFC jurisdiction since Dec 2019. Shareholders of GFC are AIFC Authority (95%) and Eurasian Development Bank (5%). Ultimate shareholder of AIFC Authority is the National Bank of Kazakhstan, with the Ministry of Finance of Kazakhstan responsible for trust management.

AIFC Green Finance Centre (GFC) has been working on the development of green finance market in Kazakhstan since 2016, starting with the Concept of green financial system for Kazakhstan (adopted by AIFC Authority in 2017) and a Strategy of AIFC regional leadership in green finance until 2025 (adopted in 2018), which reflects the main stages of institutional development of green finance in Astana International Financial Centre (AIFC) and Kazakhstan.

GFC's activities have been focused on 3 main directions:

- providing external review services to issuers of sustainable finance;
- setting the legal and regulatory landscape for the sustainable finance market both at AIFC and Kazakh jurisdiction;
- supporting the regional initiatives to uplift development in Central Asia.

GFC holds a licence issued by AIFC Regulator (AFSA) to provide consulting services (described as advisory services in the area of green finance and green economy (No. AFSA-A-LA-2019-0060) <https://publicreg.myafsa.com/details/191240900122/>.

66% green Bond and loans in the Republic of Kazakhstan have been externally reviewed by GFC. It's the only company in Central Asia accredited by the Climate Bond Initiative and recognised by the International Capital Market Association (ICMA) in its External Review mapping.

GFC provided nearly 20 external review services in the form of a second party opinion to issuers of green and social Bond, as well as green loans (<https://gfc.aifc.kz/en/second-party-opinion>). Among major clients of GFC are large SOEs (Samruk Energy, Damu Fund), banks (Halyk Bank, DBK), financial institutions (MFO OnlineKazFinance) and non-financial corporations.

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