

BURNOYE PHOTOVOLTAIC SOLAR POWER PLANT PHASE 1

NON-TECHNICAL SUMMARY

1 PROJECT DESCRIPTION

The European Bank for Reconstruction and Development (“EBRD” or the “Bank”) is considering providing financing to Burnoye Solar-1 LLP - a daughter of SAMRUK Kazyna United Green (the Company) for the construction and operation of a 50 MW Solar photovoltaic power plant Burnoye-1 (SPP1) in the Zhambyl Region, South Kazakhstan. The Project aims to provide renewable electrical energy for the region whose development is hindered by energy deficit. The Project is category B as environmental and social impacts from the project are expected to be site-specific or short term.

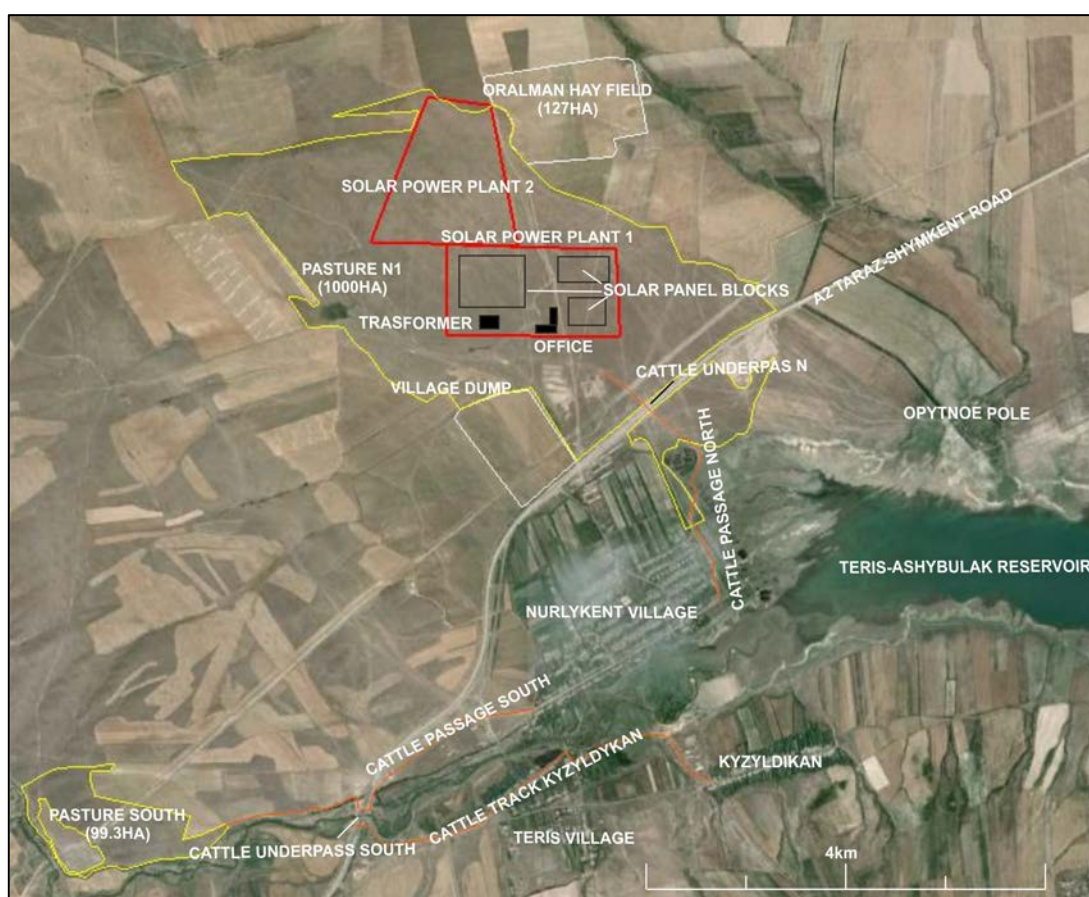


Figure 1 Showing Burnoye-1 and Burnoye-2 areas (red and yellow contours) and the main objects of the assessment.

Project development and planning started in 2013. The investors reviewed a number of locations in Kazakhstan and this location was chosen due to proximity and access to infrastructure and the desire of local authorities to have this type of investment in their region. This state of the art facility could serve as a catalyst for other investors and result in increase in local tax revenues.

The power plant will be located on the pasture land of south inclined foothills of Karatau Mountain Range in the Teris River catchment area 2.7km north from the nearest settlement Nurlykent. The 150ha site will be surrounded by a 2.0 m high metal mesh fence with 5.2 km total perimeter. The plant will have 3 separate blocks of 192 photovoltaic solar panels fixed at 30°, 32 pairs of DC/AC converters and a 10/220kV transformer to connect to the passing by 220kV line with a 890 m long overhead line. Nine kilometers of

10kV cables will be laid in highly fractured schist rock that is buried under thin layer of top soil and salty clay. Two 100m³ water reservoirs will store water for panel washing that is planned to be conducted on average 1 (one) time during warm period from April to September.



Photo 1 Sunlight photos knock off electrons in photovoltaic panels that create electric current.

The construction started in August 2014 and is planned to be completed by July 2015. One shift of 150-300 workers is involved in the construction. The operation will be manned with 20 workers half of which will be unskilled labor (mostly locals).



Photo 2 Relative position of the solar panels (left) and Nurlykent village (right).

In perspective the second phase of the plant will be erected just north of the first phase and will have the same parameters as the first plant but will use the same step-up substation.

The solar energy production method is 100% environmentally friendly; no air, water or soil pollution emissions are emitted during the electrical energy production. No fossil fuels are combusted during the power plant operation. It is also among the most efficient renewable energy production method.

2 BACKGROUND

2.1 Legal aspects and compliance with relevant environmental and social laws

The Company and the contractors environmental performance is controlled by the regional Natural Resource Management Office. Under Kazakh regulations a solar part is classed as a category 4 hazard and therefore under the jurisdiction of the regional Natural Resource Management Office. Health and safety issues are controlled by the regional emergency department and the Consumer Rights Protection Department. The regional department of the Ministry of Labor and Social Security controls adherence to the worker rights and working conditions. These bodies are entitled to review all current and historic HSE documentation that has to be retained for 5 years.

The Company undertook a local EIA (OVOS) procedure in 2014 for the detailed design of Phase I of the Project which has been approved by the required local competent authorities and the construction permit was obtained from the regional Natural Resource Management Office. The Company is at the planning and

approval stage of the second Phase development of an additional 50 MW facility. OVOS is being reviewed by the relevant authorities.

The company will develop an environmental and social management system, policy as well as grievance handling mechanism for this project.

3 SOCIAL BENEFITS, IMPACTS AND IMPACTS MITIGATION MEASURES

3.1 Economic Displacement

The project might result in 15 to 30% reduction of near village pastures. Overgrazing the reduced pasture may lead to reduction of milk and meat yield, thus potentially reducing the incomes of families dependent on the trade of milk and meat. There may be an additional risk for families owning one cow that they may not have enough milk for their own use and would have to find a new source of income to buy milk. Most of such families are led by women.

These risks and impacts need further definition through census, consultation, mitigation measures and monitoring. It is not known whether the land taken can be compensated with the similar land near the village but the grass mowed from the plant area can be handed to residents. To address this issue, a livelihood restoration plan will be developed, implemented and its effectiveness monitored.

3.2 Water Resources

The closest rivers Kishkene Baktyand and Ulken Bakty are 1.5km and 2.5km northeast of the site. Teris-Aschibulak reservoir is 4km southeast from the site. Springs that flow from the rocket base mountain run 125m south of the site and offload to Tikhiy channel at Nurlykent village. This water is used for cattle drinking at the pasture.

Shallow unconfined groundwater in highly fractured schist rock is potable quality and abundant. It is used by Nurlykent residents for vegetable patches and cattle watering and is not protected from surface contamination by thin silty clay layer. The project will use water from Nurlykent public well that taps deeper confined aquifer with sufficient reserves for all users.

3.3 Landscape and Visual Impacts

Visual impact will not be significant. The 1.6m high black panels arranged into 3 blocks will be viewed as one large object which colour contrasts with the surrounding fields. Drivers that come along the main road from Shymkent end will be the main observers of the panels but only for several seconds from a hill on the approach to Nurlykent. Some of this view is obstructed by the road tree line. The drivers transit the area without placing much aesthetic value to this part of the landscape as they focus on the opposite view towards Teris-Aschybulak Reservoir.

Nurlykent village residents focus is inside the village and towards Teris River. They do not see the panels from the village do not use the area near panels and do not place high aesthetic value on it. A family that lives in Kayrat Farm observes the panels on the way to the main road from a truck for several minutes. The viewpoints present southwest and north of the panels are not visited and have no cultural or religious value. The panels area also has other artificial objects like high voltage line.

3.4 Local Traffic, Road Safety, Noise and Vibration

The local traffic is not intensive. The SPP construction and operation will not make any notable effect to the local or transit traffic and road safety because the main road is crossed via the U-turns engineered with respect to safety. While some traffic will be occasionally observed during construction, during operation water tank trucks will do only 3 hulls a month.

Ambient noise and vibration is low despite presence of the A2 road 1.5km from the site. The site noise and vibration will be generated by the construction equipment and machinery but it will not reach the residential area 2.7km south of the site. There will be no noise during operation.

To minimise the impact further, the Contractor shall prepare traffic management plan.

3.5 Impacts On Businesses And Employment

During the SPP construction period 70 local workers from Nurlykent village benefited from employment. To maintain the power plant operation up to half of SPP operators might be hired from among the nearby villages and Taraz residents to work under the supervision of qualified workers. This will bring the benefit in the form of income from letting local houses for workers accommodation.

3.6 Impacts to Existing Infrastructure and Public Services

The village infrastructure and communal buildings fell apart and was sold by the authorities for construction material. Use of the local infrastructure by the workers will be very limited and the impact will be insignificant.

3.7 Contractor Management

The contractors will provide safe and healthy working and living environment for workers. Out of 150 to 280 shift workers that come from different regions of Kazakhstan, 70 will rent 12 houses in Nurlykent. Conditions in some of these houses do not comply with the minimum requirements and thus will be improved.

Contractors' health and safety environmental and social performance will be controlled through various plans and procedures and regular audits.

3.8 Labour Issues and Standards

The regional department of the Ministry of Labor and Social Security controls adherence to the worker rights and working conditions. These bodies are entitled to review all current and historic HSE documentation that has to be retained for 5 years.

Child labour will not be tolerated by Company or its contractor. The Company will look at how to encourage a widely divert work force in operating the plan, with a focus on local inhabitants from the Nurlykent village, and will include a gender inclusive policy.

3.9 Occupational Health and Safety Issues

The Company will develop health and safety policy and site specific plan and conduct regular HS audits. Personal protection equipment will be provided for the workers. No explosives will be used in the project.

3.10 Disruption, Health and Safety during Construction

The workers that rent houses in Nurlykent have potential to disrupt traditional pattern of living. To limit any adverse impacts, construction workers and site staff will be provided appropriate facilities and adhere to the worker code of behaviour. The cultural background of the workers and the residents will be the same.

3.11 Consistency with Policy, Law and Other Plans

The project is consistent with the State policy towards promotion of renewable energy sources, legal requirements and other plans for the area of influence. It fulfils the main strategic plan to eliminate regional deficit in energy to allow its further development.

3.12 Cumulative and Induced Impacts

The second phase of the plant will take another 150ha in the middle of Nurlykent village pasture. This may lead to overgrazing on the remaining 700ha of the pasture although the Company plans to hand cut grass from the fenced areas to the cattle owners of the village thus making all pasture grass available. The handing instrument will be discussed and decided at the planned public meeting.

There will be no induced impacts. The plant appearance is not expected to start up further development in the area that could negatively or positively affect the local population or environment.

3.13 Social Management Plans, Mitigation Measures and Compensatory Measures

Stakeholders will have an access to updated information on the project and grievance mechanism. Stakeholder engagement plan, Livelihood restoration plan, Grievance mechanism will be maintained for the project duration. The plans effectiveness will be monitored.

Families whose livelihood will be severely affected by the reduction of near village pasture will be considered vulnerable. During each decision making process that could affect Nurlykent village, the appointed Community Liaison Officer will ensure that the vulnerable groups are considered and consulted first and are interviewed at least once a year.

The Company will develop a Corporate Social Responsibility Program aimed at helping the local community. This will be managed by the community Liaison Officer and include priority targets for instance provisions of some equipment for children's development, some maintenance to the local school or another public institution or public utilities, giving to Nurlykent residents mowing cuts from the fenced areas or assisting to develop a program of diversification of the residents income. The Company will also look at annual sponsorship of one sport event or one National holiday. The degree of support will depends on the financial standing of the Company but it should be noted that being registered locally the Company will contribute significantly to local taxations.

3.14 Cultural Heritage, Impacts and Management Measures

No objects of cultural or archaeological significance are located in or close to the power plant area.

4 IMPACTS MONITORING

4.1 Process for Monitoring the Identified Impacts

Construction will be monitored through weekly checking adherence to the named above plans and mechanisms. During operation monitoring will be conducted monthly. Annual reports on environmental and social performance will reflect the plans implementation progress. The reports will be checked against the legislative and the EBRD performance requirements. Monitoring will be carried out throughout the life of the project.

4.2 Ongoing Solicitation of Further Comments

The Stakeholder Engagement Plan provides a mechanism for the consideration and response to further comments. It describes the Company approach to interacting with the stakeholders, including the general public, and the disclosure of relevant information with respect to Company's operations and the project.

Comments or grievance will be registered by the community liaison officer (CLO) in the grievance database. The CLO will be controlling the grievance handling process. The stakeholders can submit it in a box on the information boards, call or write a letter or an email. The EBRD website will also act as a platform to receive further comments.

4.3 Process for Addressing Any Issues Arising

The appointed Community Liaison Officer will ensure that the grievance mechanism is available to all stakeholders, involves an appropriate level of management and addresses concerns promptly, using an understandable and transparent process that provides feedback to those concerned without any retribution.

Further information can be obtained from the Community Liaison Officer Mr. Pavel Komarivtsev, tel.: +7701 950 57 45, e-mail: pk@skug.kz. Grievances and suggestions can be left in the mailboxes located in the rural area council on the information board, mail or electronically via e-mail. This mechanism does not limit the public's rights to use the conventional routes to place grievances and the available legal system.