

SAFEGUARDS AND SOCIAL DIMENSIONS

1. The proposed Asian Development Bank (ADB) assistance will comprise a senior loan of up to \$13 million from ADB's ordinary capital resources; and administration of a loan up to \$8 million from the Canadian Climate Fund for the Private Sector in Asia II. Loan proceeds will be used for the construction and operation of a 100-megawatt grid-connected solar photovoltaic (PV) power project in the Navoi region, Uzbekistan.

A. Environmental Safeguards

2. The project is classified category B for environment under the ADB Safeguard Policy Statement (2009) (SPS).

3. To meet SPS requirements for environment category B project, "Nur Navoi Solar" Foreign Enterprise Limited Liability Company (NNS) has engaged an independent expert to prepare the preliminary environmental and social impact assessment (ESIA) report, including a draft environmental and social management plan (ESMP), for the proposed Navoi solar power plant. The final ESIA and ESMP will be completed by NNS prior to construction and as a condition of disbursement. The solar panel arrays will be situated on desert land with limited agricultural potential, except for grazing of small herds of goats and sheep. The solar power plant and/or the surrounding area are not in or near environmentally sensitive areas. The nearest residential community is about 2.6 kilometers from the solar plant, so residents will not experience any health or safety disturbance or inconvenience during construction and operation.

4. Short-term impacts during construction will likely be limited within the project site and will include dust, noise, traffic disturbances because of the frequency of delivery trucks, solid waste generated by construction workers, and health and safety risks. Potential impacts during operation are wastewater, solid waste generation, and glaring effects from the solar panels. These impacts can be effectively managed by implementing good engineering, construction, and housekeeping practices as well as preventive and control measures laid out in the site-specific environmental management plans.

5. Preliminary assessment identified the flora and fauna in the area that will be disturbed and removed during construction. The faunal diversity on site was assessed to be low, but there have been some sightings of the Central Asian tortoise which has been categorized by the International Union for Conservation of Nature as a vulnerable species.¹ However, the likelihood of a tortoise population habituating within the project site is low. Further ecological study to assess presence and prominence particularly of avifauna and tortoise within the project site has been conducted and results will be included in the final report.

6. Water use and water resource studies are being conducted to identify viable water sources to be developed to meet the water requirement of the solar power plant. NNS has taken measures to address potential negative impacts of the project operation on the water supply for local communities and agricultural activities in the area. The preliminary ESIA reported that past attempts at planting arable crops on land allocated for the project had failed due to poor soil quality and lack of water. No potential pollution of water bodies is expected since wastewater

¹ An International Union for Conservation of Nature vulnerable species is a species that is likely to become endangered unless the circumstances that are threatening its survival and reproduction improve. The sighting of Central Asian Tortoise is based on the March 2020 initial ecological survey conducted by the NNS consultant.

from the cleaning of solar panels contains only suspended solids or dust without toxic substances. Water will be left to seep into the natural ground and sanitary waste from employees will be treated using wastewater recycling equipment installed at the operations control center.² Recycled water will be used to irrigate grassland and landscaped areas within the solar power plant.

7. The proposed PV panels will have limited glint or glare because of the use of antireflective coating that will significantly reduce the glare effects upon local communities and aircraft. NNS will develop storage, handling, and disposal procedures for broken or damaged panels. Environmental and occupational health and safety provisions, consistent with ADB's SPS requirements, will be incorporated into the contractor agreements.

8. The annual environmental and social monitoring report, which will include information on the project's environmental and social performance and compliance, is required to be submitted to ADB for review and public disclosure on ADB's website.

B. Social Safeguards

9. The project is classified category B for involuntary resettlement and category C for indigenous peoples. The project ESIA reported no presence of distinct and vulnerable ethnic minority or indigenous peoples groups in the project area. The project will not cause involuntary physical displacement but is expected to produce nonsignificant involuntary economic displacement to one goat farmer using land for grazing, as well as potential grazing access restriction impacts through the likely construction of temporary workers' accommodation beyond the plant site boundary. Due to uncertainty caused by coronavirus disease (COVID-19), NNS cannot confirm if purpose-built worker's accommodation will be required in proximity to the plant site during the construction phase. The solar power plant and switchyard will be constructed on state-owned land leased to the project for a nominal fee. Government acquisition of this land prior to project inception was through a state land optimization process that resulted in two farmers being affected by a reduction in the total land available to them as leasehold for goat and sheep grazing. The former leaseholders surrendered their lease contracts and have no remaining claims on land allocated to the project under national law. One tenant retained half of the land in the former contract, while the other retained only a small portion. According to the ESIA report, the latter tenant is seeking allocation of additional land from local government authorities, as is a subtenant that continues to graze animals in the project area. The ESIA reports that the process of additional land allocation was unresolved by the government at the time of loan appraisal. The project will interconnect with an existing transmission line on its fence boundary. No additional access roads are required as the site is accessible from existing roads. The final ESIA will include a section on resettlement that will act as an abbreviated livelihood restoration planning framework.

10. Economic displacement through loss of public access to grazing opportunities may need to be managed by the project for a subtenant of one of the farm areas prior to construction commencement. While the provision of alternative land is the responsibility of local government authorities, NNS has agreed with lenders in the environmental and social action plan to develop additional livelihood restoration measures for affected people in consultation with the government as required and will report periodically to ADB on its progress. Should it be

² The operations control center monitors the trackers and solar farms. It also provides real-time knowledge related to the operation, performance, status and incidences at the solar farms.

determined that workers' accommodation is required in proximity to the plant site, preparations for its construction will include assessment of any temporary involuntary economic displacement impacts and development of livelihood restoration measures as required.

11. A stakeholder engagement plan has been prepared by NNS for the project. The plan covers community and other stakeholder engagement activity during project design, and will be updated to cover construction and operation. The NNS team will be responsible for implementation of the plan with technical support from the parent company, Abu Dhabi Future Energy Company Private Joint Stock Company - Masdar. The NNS team will implement the plan's grievance redress mechanism, which will ensure that all comments and complaints from people directly affected by the project, including local communities and farmers and their families, are processed and considered appropriately and within set time frames.

C. Other Social Dimensions

12. Once the final ESIA report is complete, as part of the ESMP package, the project will be required to prepare an influx management plan, accommodation plan, hiring procedure, and workers' code of conduct to manage labor-related impacts and risks.