1 Project description

Akfen Renewables (the "Company") is currently developing a portfolio of (PV) power plants located in the provinces of Konya, Amasya, Tokat, Van and Malatya provinces in Turkey. This is known as the Akfen Solar Power Project, or the "Project".Akfen will develop, construct and manage the project through its various contractors.

The Project aims to provide renewable electrical energy for the national grid, which will be available for all consumers and will support Turkey's goal of reducing carbon emissions from the national generation of electricity. When completed, the plants will have a total combined capacity of approximately 85 MW comprising 70 MW of licensed solar assets and 15 MW of license-exempt solar assets.

The Project has been determined to be category B by the lenders as environmental and social impacts from the Project are expected to be site-specific or short term according to the EBRD's Environmental and Social Policy (2014) and the IFC's Policy on Environmental and Social Sustainability (2012).

Tokat Solar Power Plant is one of the project facilities, a 4.95 MW photovoltaic power plant near Kuşoturağı Village in Turhal district of Tokat. This Solar Power Plant is made up of two plants, a 1.98MW plant 1.2km to the east of the village, and a 2.97MW plant 2.2km to the west (Figure 1). These are connected to the grid by a 3.3km transmission line near Kuşoturağı village.

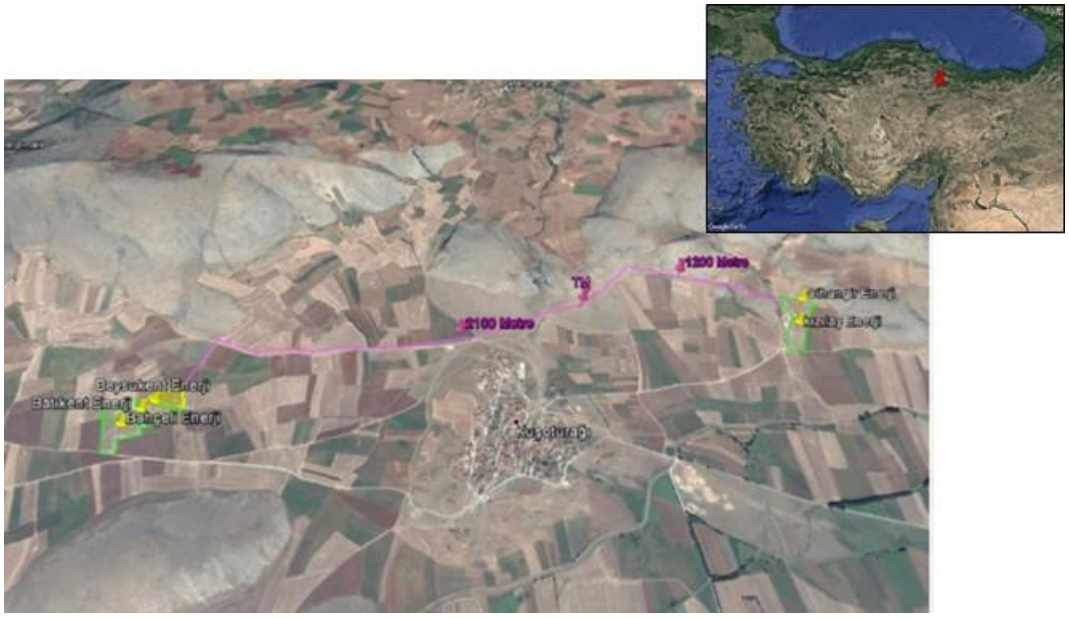

Figure 1: A satellite view of the Tokat Solar Power Plant sites near Kuşoturağı village (in green) and the transmission line (in purple)

2 Environmental and social benefits, impacts and mitigation measures

2.1 Environmental and social assessment

There was no requirement to prepare an EIA for the Tokat Solar Power Plant according to national legislation. However, the Company has undertaken additional studies including social impact assessment, cumulative impact assessment, biodiversity and ecosystem assessment studies and visual impact assessment studies in order to meet the lenders' environmental and social criteria.

2.2 Resource efficiency and pollution prevention and control

Tokat Solar Power Plant is fully compliant with national laws regarding resource efficiency and pollution prevention and control. According to the initial estimates by the Company, approximately 8GWh of electricity is expected to be generated in the first year of operation. This is expected to result in greenhouse gas emissions avoidance of 5,430 tonnes of CO_2 equivalent annually.

It is estimated that the Tokat site will consume approximately 66m3 of water for panel cleaning per year.

2.3 Land acquisition

The Tokat Solar Power Plant involved the acquisition of 98,866m2 of land. This land was previously owned by another solar energy company and the acquisition, on a willing buyer-willing seller basis, was completed in 2017. The purchasing process was based on identifying low quality land, contacting owners to confirm their interest and negotiating a price for the purchase of the land.

2.4 Cultural heritage

A procedure was put in place to manage archaeological assets that are found during construction works. Previous studies have indicated there are no known cultural heritage assets in the site area.

2.5 Biodiversity

The site is not located in a sensitive ecological area. Kaz Gölü Wildlife Development Area is located approximately 7km to the east of the site and Ballıca Cave Nature Park is 22km to the southeast. Both of these protected areas are too far away to be affected.

2.6 Visual impact

The two Tokat Solar Power Plants are visible from neighbouring villages of Kuşoturağı and Ataköyü. Kuşoturağı Village is at a higher elevation than both the plants and looks down upon the western plant. The visibility of the eastern plant from Kuşoturağı Village is less due to the lie of the land. The site is also visible from Ataköyü Village, but as the village is 2km away and at a lower elevation, the visibility is quite low. Overall, the Tokat Solar Power Plant is considered to have a low visual impact. Views of the plant from Kuşoturağı Village are shown in Figure 2.

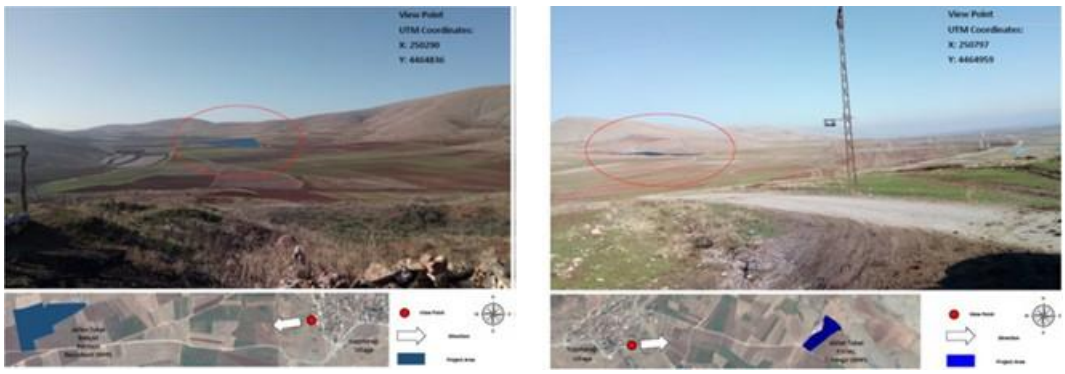

Figure 2: Views of Tokat SPP from Kuşoturağı Village (Left: west of the village; Right: east of the village)

2.7 Consistency with policy, law and other plans

The project is consistent with the national policy towards promotion of renewable energy sources, legal requirements and other plans for the area of influence. It fulfils the main strategic goal of reducing carbon emissions from electricity production.

2.8 Cumulative and induced impacts

Akfen Renewables has committed to undertaking further cumulative assessments for all Project sites which will include any development in the local area which could have a cumulative impact on social and environmental factors.

2.9 Environmental and social management

The Company is committed to operating the Project in accordance with national law, good international practice and the EBRD's environmental and social policies. At a corporate level, the Company operates an Environmental Management System that is certified to international standards.

An environmental and social action plan, known as an ESAP, has been prepared for the Project. This details the actions that the Company will take to prevent, reduce and offset environmental impacts and risks.

3 Impact monitoring

3.1 Process for monitoring the identified impacts

Compliance with the ESAP will be monitored with quarterly inspections during construction phase and annual inspections during operation phase. Annual reports on environmental and social performance will also be prepared. The reports will be checked against legislative requirements and those of the lenders. The monitoring will continue for the first two years of operation of the power plant.

3.2 Stakeholder engagement and grievances

A Stakeholder Engagement Plan has been prepared for the Project. This provides a mechanism for the consideration and response to further comments received regarding the Tokat Solar Power Plant and the other plants forming the Project. It describes the Company's approach to interacting with stakeholders, including the general public, and the disclosure of relevant information with respect to Company's operations and the Project. It is available at the company's website at www.akfenren.com.tr. Stakeholders are provided with access to up-to-date information on the Tokat Solar Power Plant and the related grievance mechanism. Stakeholder engagement will be maintained for the duration of the Project. The effectiveness will be monitored and the Stakeholder Engagement Plan updated as needed.

Akfen also has established a Corporate Social Responsibility plan that requires an activity to be performed at each project site every year. This activity will take the form of a meeting with local stakeholders, during which the company will try to identify opportunities to contribute to the welfare and development of the local communities.

It will be possible to submit comments or grievance in person at the Tokat Solar Power Plant sites during construction and operation. Comments can also be submitted using the Akfen Renewables website (http://akfenren.com.tr/kurumsal-sorumluluk/sikayet-ve-oneriler-1). Alternatively, the Company's Community Liaison Officer, Mr. Burak SOLMAZ, can be contacted using the following details:

- Phone: 0 530 954 18 87
- Fax: 0312 441 68 14
- E-mail: bsolmaz@akfen.com.tr

The websites of the EBRD and the IFC will also act as a platform to receive comments.

3.3 Process for addressing any issues arising

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

Further information can be obtained from http://akfenren.com.tr/varliklarimiz/ges-projeleri.

This mechanism does not limit the public's rights to use conventional routes to place grievances and the available legal system.