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).

Konya Yaysun and MT Doğal Solar Power Plants are two of the Project facilities. The sites for the Yaysun and MT Doğal Solar Power Plants are located in the Zengen district of Konya (Figure 1). The two sites are within 1.3km of each other, and the plants will have an installed power of 9.98MW each, with a total combined installed power of 19.96MW. A 36.5km long energy transmission line operating at 154kV will connect Yaysun and MT Doğal to the Ereğli Transformer Centre. The line will be designed and built by the Company according to the technical and environmental standards prescribed by TEIAS. The ownership will be delivered to TEIAS to operate and maintain the line as a part of the national grid.

Figure 1: A satellite view of the sites for the Yaysun and MT Doğal Solar Power Plants in Konya (green) and the transmission line (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 either Yaysun and MT Doğal Solar Power Plants 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.

A separate EIA was required for the 36.5km energy transmission line connecting the plants to the national grid in accordance with national legislation, and an Environmental Impact Assessment Report was prepared accordingly.

2.2 Resource efficiency and pollution prevention and control

According to the initial estimates by the Company, approximately 38.9GWh of electricity will be generated per year at the Konya Yaysun and MT Doğal Solar Power Plants in the first year of operation. This will result in greenhouse gas emissions avoidance of 25,804 tonnes of CO_2 equivalent annually.

During construction, it is estimated that 5m^3/day of water will be required for dust suppression at both Solar Power Plants. During operation, panel cleaning will be undertaken twice a year, requiring approximately 250m^3/year of water. The Company will ensure that any excessive water consumption is addressed within a water management plan.

2.3 Land acquisition

The sites for the Yaysun and the MT Doğal Solar Power Plants involved the acquisition of 376,545m^2 of land. The title deeds were obtained in 2017. This agreement was made on a willing buyer-willing seller basis.

2.4 Cultural heritage

A procedure will be put in place to manage archaeological assets that are found during construction works. The nearest identified cultural asset is 1km away from the transmission line of the Yaysun Solar Power Plant, however no significant impacts are expected.

2.5 Biodiversity

The sites for the Solar Power Plants are not located in a sensitive ecological area. Akgöl-Ereğli Marshes Nature Protection Site is located approximately 22km to the southwest of the sites. The Yaysun and MT Doğal sites are 2km north of the Ereğli Plain Key Biodiversity Area and Important Bird Area.

28km of the 36.5km energy transmission line would pass through the area. The southern part of the transmission line would also be located approximately 10km from the Akgül–Ereğli Reeds Environment Protection Area.

The energy transmission line design includes the use of bird warning spheres attached at intervals along powerline conductors with the intention of making overhead lines more visible to birds to avoid collision.

The Company has further committed to undertaking additional surveys to ensure that impacts on migratory bird species will be avoided and, if necessary, it will provide habitat compensation. It has also committed to undertaking an assessment which considers the potential for bird strikes once the transmission line is constructed.

2.6 Visual impact

The Yaysun and MT Doğal Solar Power Plants will not be highly visible from the nearest settlement due to the flat nature of the area. The Yaysun Power Plant will be visible from the Adana - Aksaray Highway, but as the highway is 700m away and the land is relatively flat, the impact would be low. Views of the Yaysun and MT Doğal Solar Power Plants sites from the nearest settlements are provided in Figure 2 and Figure 3.

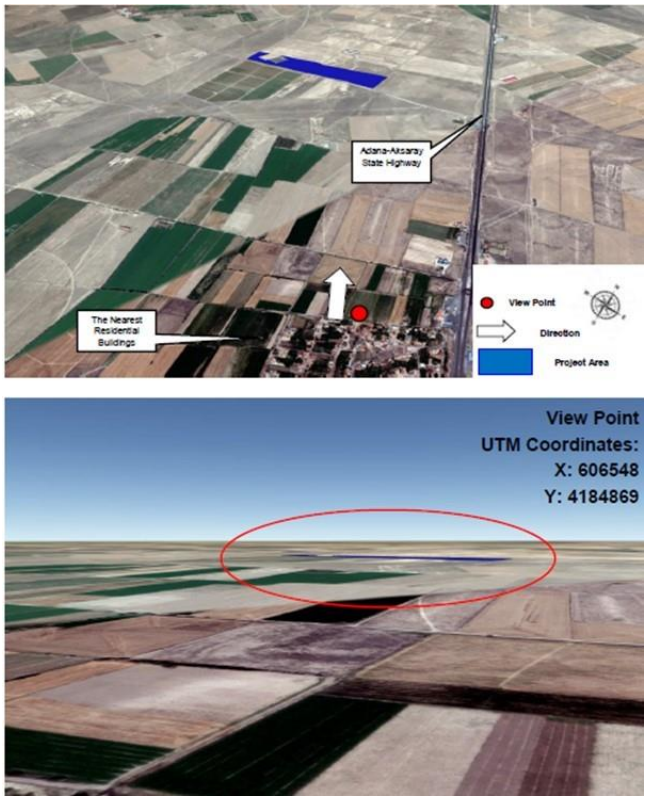

Figure 2: The view of the Yaysun Solar Power Plant site from the nearest settlement to the east

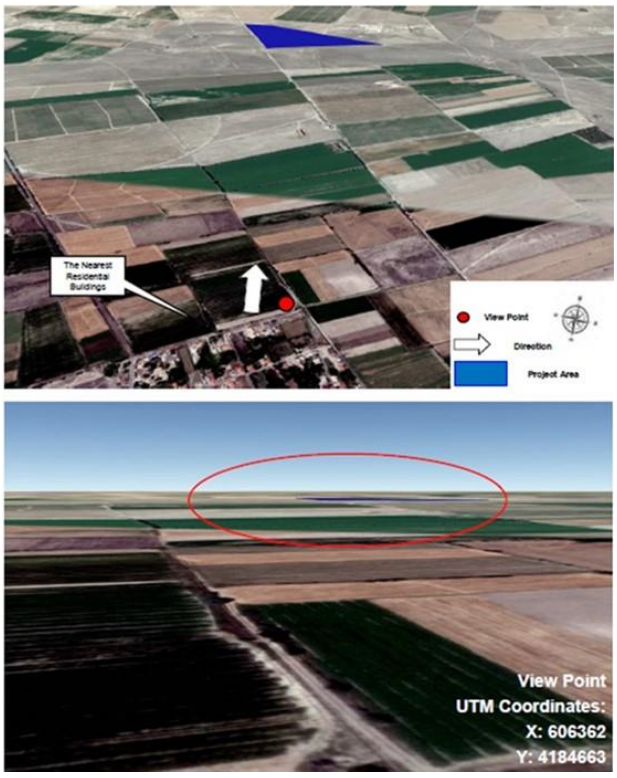

Figure 3: The view of the MT Doğal Solar Power Plant site from the nearest settlement to the east

2.7 Consistency with policy, law and other plans

Both the Yaysun and MT Doğal projects and their auxiliary facilities are consistent with the national policy towards promotion of renewable energy sources, legal requirements and other plans for the area of influence. The projects fulfil the main strategic goal of reducing carbon emissions from electricity production.

2.8 Cumulative and induced impacts

The cumulative assessments for the two Konya Solar Power Plant sites found no significant affects as there were no other solar projects within 5km of each site. However, 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 Yaysun and MT Doğal Solar Power

Plants 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 both the Yaysun and MT Doğal Solar Power Plants 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 Yaysun and MT Doğal 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.