

## 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 ME-SE Solar Power Plant is one of the Project facilities. The site for the ME-SE Solar Power Plant is located near Karatepe Village, in the Sarayönü district of Konya (Figure 1). It will have an installed power of 9.90MW. It will be connected to the grid with a 4.2km transmission line at the transformer centre in Ladik.



Figure 1: A satellite view of the site for ME-SE Solar Power Plant in Konya (green) and the transmission line (purple)

## 2 Environmental and social benefits, impacts and mitigation measures

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### 2.1 Environmental and social assessment

There was no requirement to prepare an EIA for the ME-SE Solar Power Plant according to national legislation, but a PIR. Upon completion of the PIR, the project was given a letter stating that the project did not need an additional EIA. 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

According to the initial estimates by the Company, approximately 17.8GWh of electricity is expected to be generated in the first year of operation. This is expected to result in greenhouse gas emissions avoidance of 11,848 tonnes of CO<sub>2</sub> equivalent annually.

During construction, it is estimated that 5m<sup>3</sup>/day of water will be required for dust suppression at the ME-SE Solar Power Plant. During operation, panel cleaning will be undertaken twice a year, requiring approximately 125m<sup>3</sup>/year of water. The Company will ensure that any excessive water consumption is addressed within a water management plan.

### 2.3 Land acquisition

The site for the ME-SE Solar Power Plant comprises 196,480m<sup>2</sup> of pastureland. Under Pasture Law, all pastures belong to the state, but the rights of use for pasturelands can be given to renewable energy projects. The quality of the land for the site was categorised as poor quality pastureland. The right of use was granted in June 2017. The Company is obliged to pay the cost of the pasture incomes to the government in return for leasing the land. Money from this income would go towards local villages and the improvement of other pasturelands.

### 2.4 Cultural heritage

A procedure will be 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 ME-SE Solar Power Plant site is located inside Sarayönü Key Biodiversity Area. However the important species in the area are not expected to be found in the vicinity of the site due to the level of degradation of the habitat, and due to the presence of a much wider habitat further to the north, away from human settlements. No endangered or vulnerable species have been observed in the nearby area. Further biodiversity monitoring studies will be conducted by the sponsor to identify, minimize and mitigate biodiversity impacts of the project.

## 2.6 Visual impact

The ME-SE Solar Power Plant will be visible from residential properties to the north of Karatepe Village as the site is on a southward slope, facing the village. However, the impact is expected to be low as the site is surrounded by pasturelands and agricultural land and the distance to the nearest settlement and road is relatively high (Figure 2).



Figure 2: A view of ME-SE Solar Power Plant site from the Karatepe Village Road

## 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

The cumulative assessments for the Konya ME-SE Solar Power Plant site found no significant affects as there were no other solar projects within 5km of the 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

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### 3.1 Process for monitoring the identified impacts

Compliance with the ESAP will be monitored with quarterly inspections during the construction phase and annual inspections at 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 ME-SE 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](http://www.akfenren.com.tr). Stakeholders are provided with access to up-to-date information on the ME-SE 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 ME-SE 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](mailto: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.