

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).

The three Solar Power Plants of Omicron Erciş, Omicron Engil 208 and PSI Engil 207 located in Van each with an installed capacity of 9.95 MWe, with a total installed capacity of 29.85 MWe are a part of these facilities. The plants will be located in Edremit, to the southeast of Lake Van. Omicron Erciş is 750m from the shore and Omicron Engil 208 is directly to its east (Figure 1). PSI Engil 207 is located 1km further inland to the south-east. The Company won the relevant TEIAS tenders to operate these solar power plants.



Figure 1: A satellite view of the three sites in Van; Omicron Erciş (in green), Omicron Engil 208 (in yellow) and PSI Engil 207 (in pink).

2 Environmental and social benefits, impacts and mitigation measures

2.1 Environmental and social assessment

There is no requirement to prepare an EIA for any of the Akfen Solar Power Projects located in Van according to national legislation, a PIR was prepared for each of the sites, and all the sites received a permission to proceed without a further EIA study. 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 50GWh of electricity will be generated in the first year of operation of the Van solar power plants, resulting in greenhouse gas emissions avoidance of 33,198 tonnes of CO₂ annually.

It is estimated that a total of 1,116m³/year of water will be consumed each year for panel cleaning in all three sites. Water discharge from the panels is likely to evaporate or be absorbed into the soil after falling from the panels.

2.3 Land acquisition

The Van Solar Power Plant sites will be located on a total of 604,881m² of pasturelands. The state granted the rights of use of the Omicron Engil 208 land to the Company in August 2016. The procedures for obtaining the rights to use the pasturelands for Omicron Erciş and PSI Engil 207 are ongoing.

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 Omicron Erciş Solar Power Plant site borders the Dönemeç Delta Wetlands, a Naturally Important Wetland area, directly to the south and west and part of the site. 6,000m² of the site is located within the designated area, as shown in Figure 2. However, the pasture is elevated land not forming part of the marsh habitat and the development of the solar power plant on

this area is not considered to be a significant impact. The 6,000m² overlap will not be developed by the project sponsor and be left as it is. Further biodiversity monitoring studies will be conducted by the sponsor to identify, minimize and mitigate biodiversity impacts of the project.



Figure 2: Satellite view showing the overlap of the Omicron Erciş site with the Dönemeç Delta Wetlands

2.6 Visual impact

The sites of all three Solar Power Plants have higher elevation than the surrounding settlements and the Edremit - Van highway. Therefore, the visibility will be low from these locations. The visual impact and possible visibility of Omicron Erciş and Omicron Engil 208 from the nearest residential buildings 350 m to the south and west is shown in Figure 2.



Figure 3: View of Omicron Erciş and Omicron Engil 208 Solar Power Plants from the nearest houses in the south-west

2.7 Consistency with policy, law and other plans

All three projects are consistent with the national policy towards promotion of renewable energy sources, legal requirements and other plans for the area of influence. They fulfil the main strategic goal of reducing carbon emissions from electricity production.

2.8 Cumulative and induced impacts

Akfen Renewables has committed to undertaking 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 proposed projects 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 all three Solar Power Plants in Van as well as 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 all three Van 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 all three Solar Power Plant sites in Van 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.