



# Uluborlu Solar Power Plant Project

Non-Technical Summary

PREPARED FOR



Kavram Enerji Yatırım Üretim ve  
Ticaret A.Ş.

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## Non-Technical Summary

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## ACRONYMS AND ABBREVIATIONS

Acronyms	Description
Client	Kavram Enerji Yatırım Üretim ve Ticaret A.Ş. a subsidiary of Fiba Yenilenebilir Enerji Holding A.Ş.
E&S	Environmental and Social
EBRD	European Bank for Reconstruction and Development
EIA	Environmental Impact Assessment
EPC	Engineering, Procurement and Construction
ERM	Environmental Resource Management
ESAP	Environmental and Social Action Plan
ESIA	Environmental and Social Impact Assessment
ESP	Environmental and Social Policy
HS	Health and Safety
LALRP	Land Acquisition and Livelihood Restoration Plan
PAP	Project Affected Person
PRs	Performance Requirements
RAP	Resettlement Action Plan
SCMS	Supply Chain Management System
SEP	Stakeholder Engagement Plan
SIA	Social Impact Assessment
SLIP	Supplementary Information Package
SPP	Solar Power Plant
WPP	Wind Power Plant

## 1. INTRODUCTION

### 1.1 ABOUT ULUBORLU SPP PROJECT

Kavram Enerji Yatırım Üretim ve Ticaret A.Ş. (referred to as "Kavram" or "the Client") is planning to build and operate the Uluborlu Solar Power Plant (SPP) in Isparta Province, Türkiye. Kavram is a subsidiary of Fiba Yenilenebilir Enerji Holding A.Ş. ("Fiba"). The solar power plant will supplement the existing Uluborlu Wind Power Plant (WPP).

The total installed capacity of the Uluborlu SPP will be 54.9 megawatts (MWm) or 54.9 megawatts electric (MWe). The engineering, procurement, and construction (EPC) work will be conducted by Tegnatia Enerji Üretim San. ve Tic. A.Ş. The main suppliers of solar panels for the Project will be Alfa Solar Enerji ve Sanayi Ticaret A.Ş.

### 1.2 ABOUT FIBA

Fiba was established by Fiba Holding in 2007 to operate in the field of renewable energy development, production and trade and continues its activities in this field with more than 500 employees and subsidiaries. Fiba currently has 14 wind power plants and 5 solar power plants with a capacity of 581 MW in operation.

### 1.3 WHAT IS THIS DOCUMENT?

This document is the Non-Technical Summary (NTS) for the Uluborlu Solar Power Plant (SPP) of Kavram. The NTS consolidates and summarizes the key findings from the already conducted Environmental and Social Impact Assessment studies for the Projects in a non-technical language. Additionally, this document also consolidates information on the mitigation measures proposed by Kavram for the management of the Project environmental and social issues.

### 1.4 STANDARDS APPLIED BY THE PROJECT

Kavram commits to follow the applicable laws and regulations of Turkish Legislation during the Project lifetime. These laws include (but are not limited to) the Environment Law, Occupational Health and Safety Law, Labor Law and their issued regulations. The Project plans to get financing through the European Bank for Reconstruction and Development (EBRD). Therefore, the Project will comply with the applicable EBRD Environmental and Social Performance Requirements (PR) which are more stringent than national legislation and standards.

## 2. PROJECT DESCRIPTION

### 2.1 THE PURPOSE OF THE PROJECT

Solar energy is a crucial source of clean energy production and plays an important role in reducing global warming. With Türkiye's growing energy demand, the significance of using clean, independent, and infinite renewable energy sources has increased. Türkiye's solar potential is highly valuable, and the use of solar energy has been on the rise since 2013.

The Uluborlu SPP Project aims to establish a solar power plant in Isparta, providing sustainable and cost-effective clean energy, thereby contributing to both regional and national benefits.

The main permits and approvals applicable to the Project are given below.

**TABLE 2-1 PROJECT PERMITTING STATUS**

Topic	Permit	Status
General	License Applications for the Project	Obtained
Land Use	Public Interest Decision	Obtained
	Approval of Expropriation Plan	Obtained
	Expropriation Process	Ongoing
	Permit for the use of Forest Area (access roads)	Ongoing
Construction	EIA Approval	Obtained
	Permits and approvals for roads, water bodies, energy supply lines, utilization of municipal infrastructure etc.	Ongoing
	Construction Permit	Ongoing
Operation	License Application	To be Obtained
	Temporary Operating Certificate and Environmental Permit	To be Obtained

### 2.2 PROJECT LOCATION AND LAYOUT

A general overview of the Uluborlu Solar Power Project location within Türkiye is presented in Figure 2-1. The Project lies within the Isparta Province, Uluborlu and Gönen District, İleydağı and Güneykent Village and is expected to have an installed capacity of 54.9 MWm / 54.9 MWe. Together with the existing Uluborlu Wind Power Plant Project, which the Project will complement, the combined capacity is estimated to be 116.19 MWm / 60 MWe.

3 different solar power plant areas (GES), as shown in Figure 2-2, will be built for the Project. The Project area will use existing roads to access the Project site. Additionally, within the Project area 3 new internal access roads will be constructed. Within the scope of the Project, no overhead energy transmission lines are planned. Along the new internal access roads underground transmission lines will be built. The main Project components and their most important details are specified in Table 2-2 below.

TABLE 2-2 KEY PROJECT COMPONENTS

Component	Detail(s)
Solar Power Plant Areas (GES)	3 solar power plant areas (GES 1-3) are planned to be installed.
New Internal Access Roads	3 new internal access roads are planned for the Project: <ul style="list-style-type: none"> <li>• 400m (between GES3 and T27)</li> <li>• 800m (between GES1 and GES2)</li> <li>• 1,200m (between GES1 and main road)</li> </ul>
Underground Transmission Lines	The installation of 3 new underground transmission lines is planned for the Project. These lines will be built along the new internal access roads: <ul style="list-style-type: none"> <li>• 400m (between GES3 and T27)</li> <li>• 800m (between GES1 and GES2)</li> <li>• 1,200m (between GES1 and main road)</li> </ul>

The closest buildings to the Project belong to İleydağı and Güneykent Village. For İleydağı closest buildings lie 120m west of the access road between GES1 and the main road and 478m south of GES1. The closest building belonging to Güneykent is located 2,625m west from GES3 (see Figure 2-3).



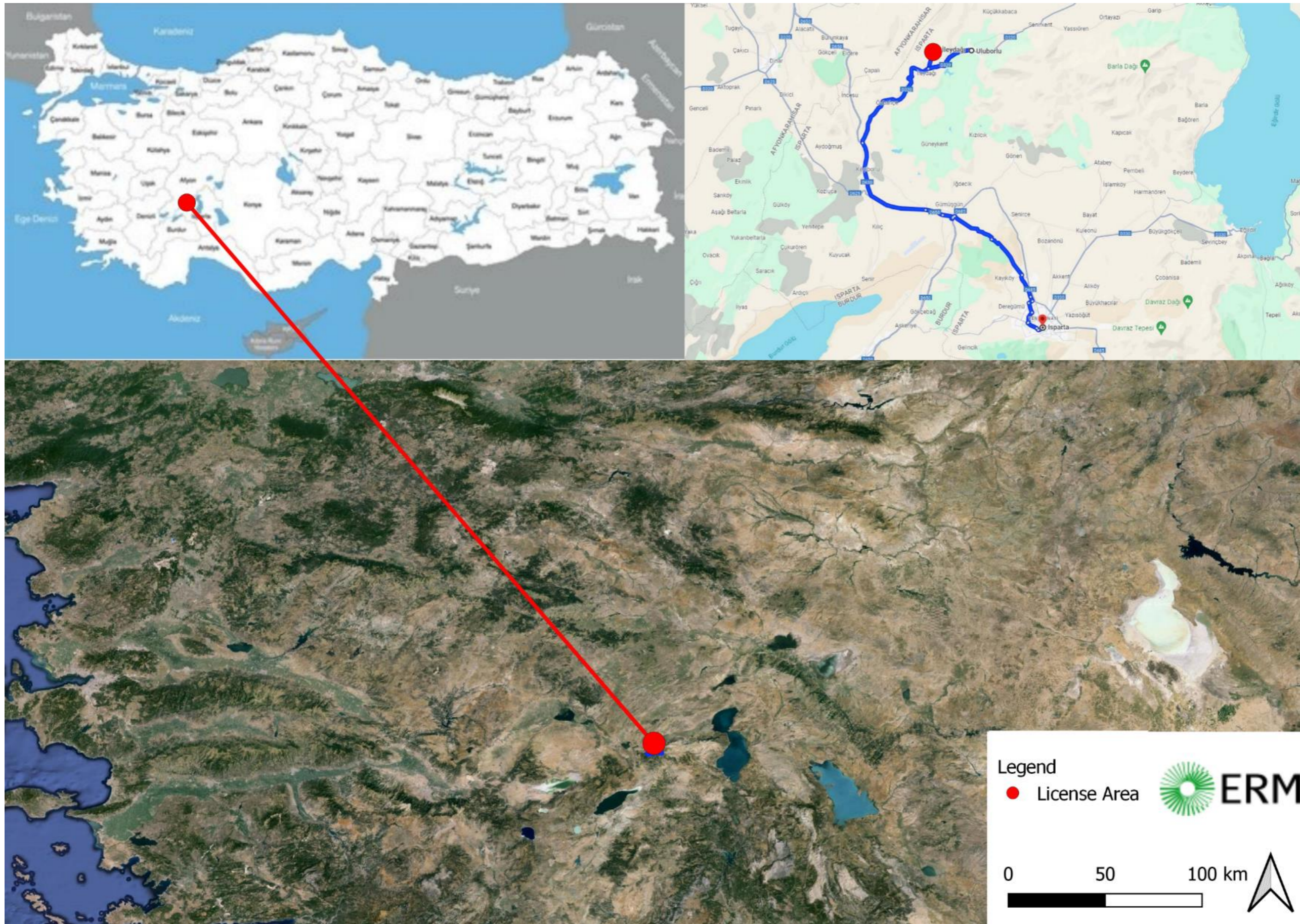


FIGURE 2-1 PROJECT LOCATION MAP

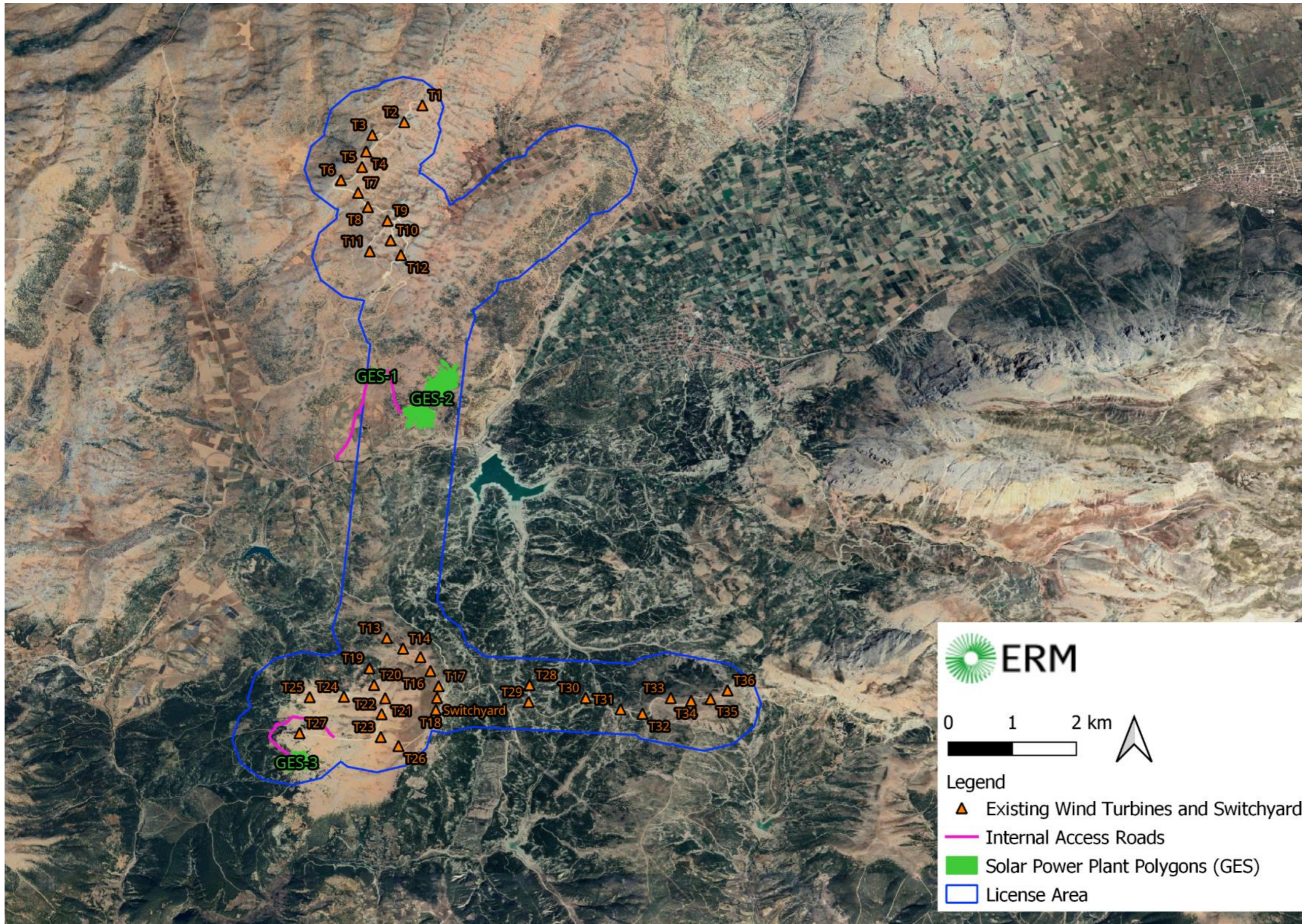


FIGURE 2-2 PROJECT LAYOUT

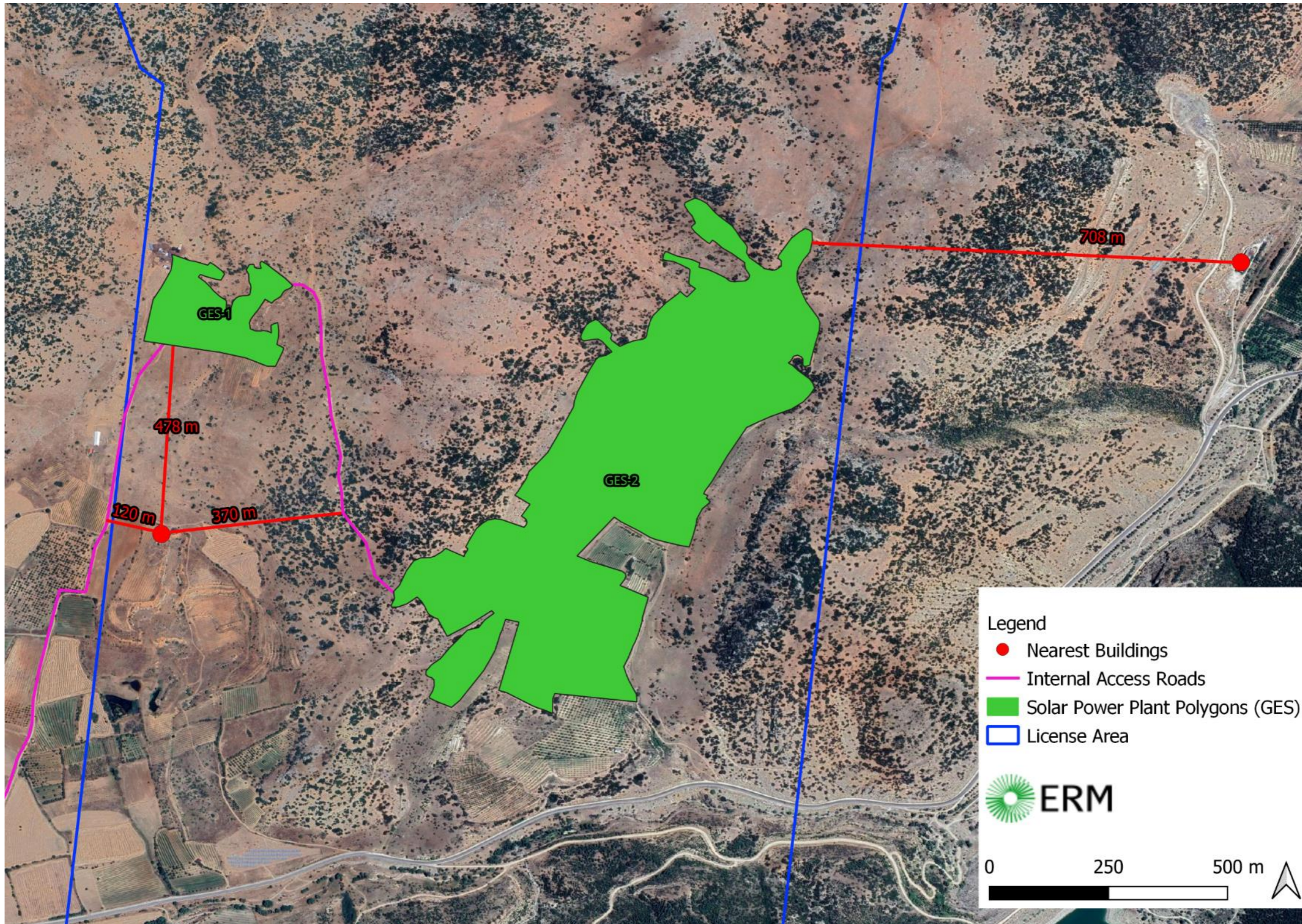


FIGURE 2-3 CLOSEST SETTLEMENTS TO GES 1 AND GES2

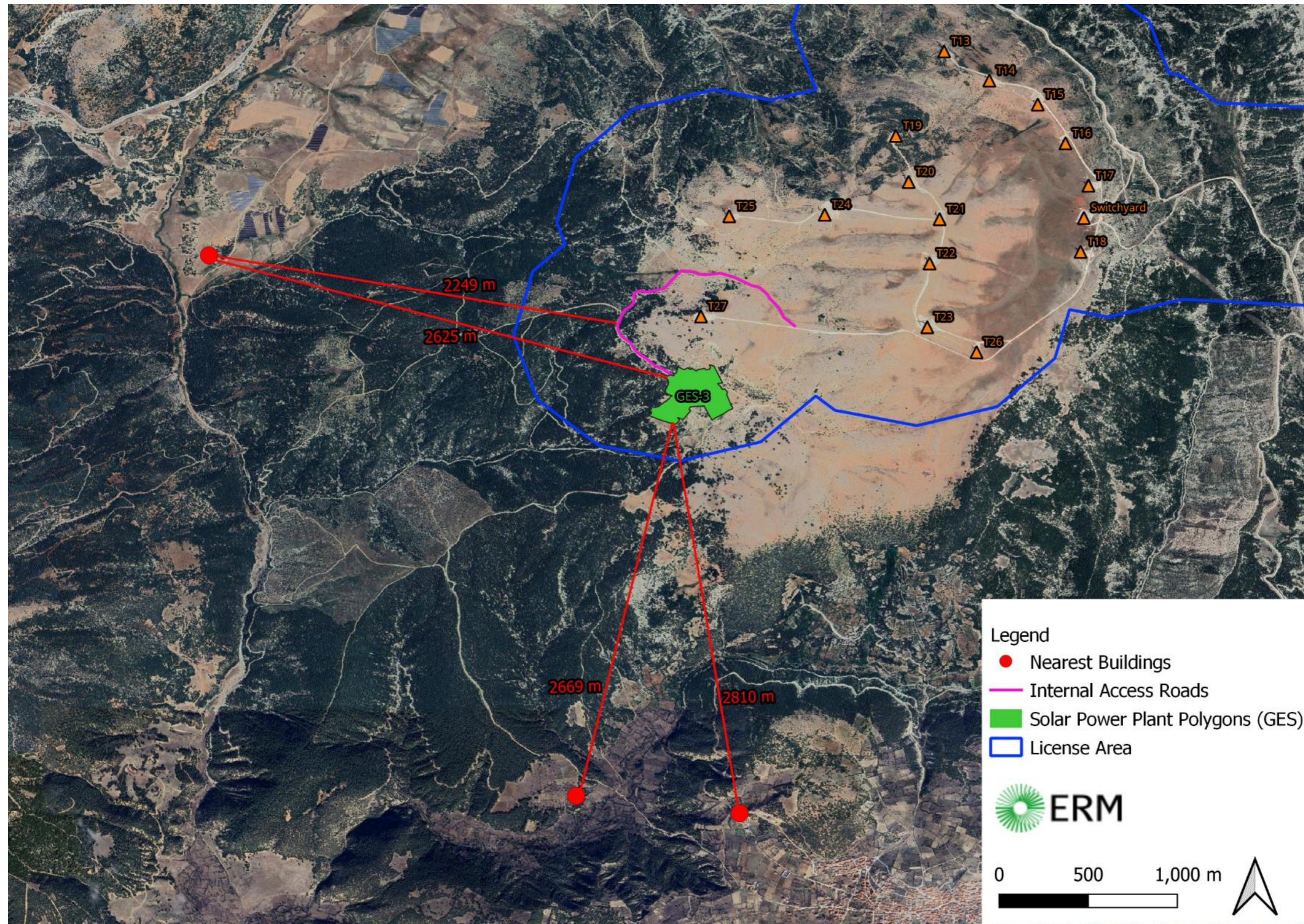


FIGURE 2-4 CLOSEST SETTLEMENTS TO GES3

## 2.3 PROJECT PARTIES

The key Project parties are presented in Table 2-3 below.

**TABLE 2-3 KEY PROJECT PARTIES**

Role	Entity
Project Owner	Fiba Yenilenebilir Enerji Holding A.Ş.
Special Purpose Vehicle (SPV)	Kavram Enerji Yatırım Üretim ve Ticaret A.Ş. a subsidiary of Fiba Yenilenebilir Enerji Holding A.Ş.
Engineering, Procurement, and Construction (EPC Contractor)	Tegnatia Enerji Üretim San. ve Tic. A.Ş.
Primary Panel Supplier	Alfa Solar Enerji ve Sanayi Ticaret A.Ş.

## 2.4 PERSONNEL PLAN FOR THE PROJECT

There will not be construction camp and accommodation during the construction phase. During the construction phase, the total number of personnel planned to be employed is 30 workers. A shuttle service will be provided for transporting workers to and from the project site.

During the operation, no additional workers hired. The workers currently working for the wind farm will also be responsible for the SPP Project.

## 3. MANAGEMENT OF ENVIRONMENTAL AND SOCIAL ISSUES

For the management of environmental and social issues, following mitigation measures will be implemented in the construction and operation phases of the Project (see Table 3-1 and Table 3-2).

**TABLE 3-1 SUMMARY OF CONSTRUCTION MITIGATION MEASURES FOR THE PROJECT**

Component	Potential Impact	Mitigation Measures
<b>Air Quality</b>	<ul style="list-style-type: none"> <li>PM10-PM2.5 resulted from construction activities and transportation.</li> <li>SO<sub>2</sub>, NO<sub>x</sub>, resulted from construction activities and transportation.</li> </ul>	<ul style="list-style-type: none"> <li>Periodic maintenance of construction equipment.</li> <li>Dust suppression by street-sprinkler.</li> <li>Implementation of relevant Management Plan/Procedures (Traffic Management Plan, Training, etc.).</li> </ul>
<b>Noise</b>	<ul style="list-style-type: none"> <li>Resulted from construction activities, construction of roads and transportation.</li> </ul>	<ul style="list-style-type: none"> <li>Periodic maintenance of construction equipment.</li> <li>Implementation of relevant Management Plan/Procedures (Traffic Management Plan, Training, etc.).</li> </ul>
<b>Water usage</b>	<ul style="list-style-type: none"> <li>The water to be used in construction and operation phase will be supplied by tankers from the nearest settlement.</li> </ul>	<ul style="list-style-type: none"> <li>Necessary permits to be obtained to supply water.</li> </ul>

<b>Wastewater</b>	<ul style="list-style-type: none"> <li>Domestic wastewater will be formed in the project due to worker's water usage.</li> </ul>	<ul style="list-style-type: none"> <li>Septic tank will be used to collect the wastewaters. Wastewater that accumulates in the septic tank will be collected by the municipality.</li> </ul>
<b>Biodiversity</b>	<ul style="list-style-type: none"> <li>Impacts on flora and fauna components by land disturbance.</li> <li>Dust and noise impacts (given above).</li> </ul>	<ul style="list-style-type: none"> <li>The general mitigation measures (such as, land minimization of land disturbance where possible, etc.) are defined in the EIA Report.</li> <li>Additional flora studies have been conducted to revise the existing studies.</li> </ul>
<b>Cultural Heritage</b>	<ul style="list-style-type: none"> <li>No tangible and intangible cultural heritage assets have been identified.</li> </ul>	<ul style="list-style-type: none"> <li>Implementation of Chance Find Procedure.</li> </ul>
<b>Social - Economical and Land Use</b>	<ul style="list-style-type: none"> <li>Positive impacts are expected both for local procurement and local employment.</li> <li>Impacts on livelihood resources may be resulted by construction activities.</li> </ul>	<ul style="list-style-type: none"> <li>Prioritizing the local procurement and employment</li> <li>Implementation of relevant Management Plan/Procedures (Land Acquisition Plan).</li> </ul>
<b>Community Health and Safety</b>	<ul style="list-style-type: none"> <li>Increased traffic load and potential risks.</li> <li>Unauthorized site access.</li> <li>Potential communication problems of community members with workers.</li> <li>Dust and noise impacts (given above).</li> </ul>	<ul style="list-style-type: none"> <li>Implementation of relevant Management Plan/Procedures (Community H&amp;S Management Plan, Traffic Management Plan, Training, etc.).</li> <li>Implementation of Grievance Mechanism Procedure.</li> </ul>
<b>Occupational Health &amp; Safety</b>	<ul style="list-style-type: none"> <li>Occupational health and safety risks will mainly include activities of working at height and lifting operations.</li> </ul>	<ul style="list-style-type: none"> <li>Implementation of Occupational H&amp;S Policy/Plan/Procedures/Instructions, Emergency Response Plan, Traffic Management Plan.</li> <li>Training and supervision.</li> <li>Emergency drills.</li> <li>Accident/Incident Reporting and investigations.</li> <li>Suggestion/Complaints reporting.</li> <li>Regular site inspections.</li> </ul>

TABLE 3-2 SUMMARY OF OPERATION MITIGATION MEASURES FOR THE PROJECT

<b>Component</b>	<b>Potential Impact</b>	<b>Mitigation Measures</b>
<b>Noise</b>	<ul style="list-style-type: none"> <li>The operational noise impacts are expected to be insignificant during operation.</li> </ul>	<ul style="list-style-type: none"> <li>Not Applicable.</li> </ul>
<b>Biodiversity</b>	<ul style="list-style-type: none"> <li>Impacts on fauna (Birds and bats).</li> </ul>	<ul style="list-style-type: none"> <li>The general mitigation measures (such as, land minimization of land disturbance where possible, etc.) are defined in the Supplementary Lender's Information Package (SLIP).</li> </ul>

<b>Cultural Heritage</b>	<ul style="list-style-type: none"> <li>■ No tangible or intangible cultural heritage assets have been identified</li> </ul>	<ul style="list-style-type: none"> <li>■ Implementation of Chance Find Procedure.</li> </ul>
<b>Social - Economical and Land Use</b>	<ul style="list-style-type: none"> <li>■ Positive impacts are expected both for local procurement.</li> </ul>	<ul style="list-style-type: none"> <li>■ Prioritizing the local procurement.</li> </ul>
<b>Community Health and Safety</b>	<ul style="list-style-type: none"> <li>■ Unauthorized access to solar panels.</li> </ul>	<ul style="list-style-type: none"> <li>■ Fencing of solar panel areas.</li> <li>■ Regular maintenance of the solar panels.</li> </ul>
<b>Occupational Health &amp; Safety</b>	<ul style="list-style-type: none"> <li>■ During operation the impacts will likely be limited to the maintenance of the solar panels.</li> </ul>	<ul style="list-style-type: none"> <li>■ Implementation of Occupational H&amp;S Policy/Plan/Procedures/Instructions, Emergency Response Plan, Traffic Management Plan</li> <li>■ Training and supervision.</li> <li>■ Emergency drills.</li> <li>■ Accident/Incident Reporting and investigations.</li> <li>■ Suggestion/Complaints reporting.</li> <li>■ Regular site inspections.</li> </ul>

## 4. STAKEHOLDER ENGAGEMENT

A Stakeholder Engagement Plan (SEP) has been developed for both the construction and operational phases of the Project, in accordance with EBRD PR10. The SEP outlines target groups and specifies the engagement activities required for each.

Kavram aims to build sustainable relationships with stakeholders throughout the Project's duration and will continue to engage them through various activities as detailed in the SEP. Kavram will provide transparent and timely information to affected communities and other stakeholders. The communication methods will vary depending on the Project phase, the issue at hand, and the type of stakeholder. These methods include, but are not limited to, the following:

- Workshops and seminars
- Consultations with key informants
- Focus groups
- Round tables
- Discussions as part of conducting surveys or census studies
- Consultations using electronic media
- Awareness campaigns and outreach
- Internal/external grievance mechanism

Initial engagement was conducted through the form of meetings and interviews. Kavram authorities or consultants for Kavram have gone to the affected communities to consult with the local stakeholders. These methods will continue during the construction and operational period. Construction and Operational managers of the Uluborlu SPP Project will maintain regular dialogue with the local Mukhtars of the affected settlements.

## 5. WHERE TO GET MORE INFORMATION?

Kavram has the intention to effectively work with the public by properly informing them about Kavram's general and Project-specific intentions, activities, and desired outcomes. Any comments, suggestions, questions, or complaints about the Project from the public and affected stakeholders is appreciated by Kavram.

For more information the general website of Fiba can be accessed online at [fibaenerji.com](http://fibaenerji.com). Users can communicate with Fiba/Kavram online, in person, or over the phone with the following contact information:

Kısıklı Cd. Sarkuysan Ak İş Mrk. No:4 A Blok K:2 Altunizade – Üsküdar / İstanbul / Türkiye;  
Telephone: +902165545400; e-mail: [fibayenilenebilirenerji@fibaenerji.com](mailto:fibayenilenebilirenerji@fibaenerji.com)





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