2025

Alaşehir SPP Sub-Project

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

ALAŞEHIR MUNICIPALITY

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List of Abbreviations

AF	Additional Financing
AFAD	Disaster and Emergency Management Authority
CLO	Community Liaison Officers
E&S	Environment and Social
EHS	Environment Health and Safety
EHSMP	Environment Health Safety Management Plan
EIA	Environmental Impact Assessment
EMRA	Energy Market Regulatory Authority
ESF	Environmental and Social Framework
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESMR	Environmental and Social Monitoring Report
ESP	Environmental and Social Policy
ESS	Environmental and Social Standards
EU	European Union
GIS	Geographic Information System
GM	Grievance Mechanism
GPN	Good Practice Note
İLBANK	Bank of Provinces
IRAP	the Provincial Disaster Risk Reduction Plan
MEP	Ministry of Environment, Urbanization, and Climate Change
MTA	Maden Tetkik ve Arama
NECRRM	Noise Evaluation and Control Regulation
OHS	Occupational Health and Safety
OP	Operation Policy
PIU	Project Implementation Unit
PM	Particulate Matter
PYB	Project Management Unit
SCP	Sustainable Cities Project
SDG	Sustainable Development Goals
SEA	Sexual Exploitation and Abuse
SESA	Strategic Environmental and Social Assessment
SH	Sexual Harassment
SPP	Solar Power Plant
UN	United Nations
USBS	National Water Information System
WB	World Bank

Executive Summary

ILBANK (The Bank of Provinces in Türkiye) and the World Bank (WB) have collaboratively devised the Sustainable Cities Projects, which constitute a series of initiatives (SCP I and II are presently underway). This Environmental and Social Management Framework (ESMF) is specifically crafted for the Additional Financing (AF) of SCP II, intending to establish an augmented support mechanism. This Environmental and Social Management Plan (ESMP) will be prepared as defined in the Environmental and Social Management Framework (ESMF) (İLBANK, 2019).This augmentation is in response to the escalating demand from Municipalities seeking investments in sustainable urban development within the ongoing framework of the Sustainable Cities Program. The overarching goal of this program is to assist municipalities in enhancing urban planning, infrastructure development, capital investment planning, and fortifying municipal financial capacities, including creditworthiness.

All investments implemented through this Project will strictly adhere to both the Environmental Regulations of the Republic of Türkiye and the Safeguard Policies of the World Bank. To ensure compliance, ILBANK will serve as the financial intermediary, overseeing the adherence to WB policies and procedures. Additionally, ILBANK will ensure that all requisite Turkish environmental approvals, licenses, and permits are obtained.

With financial support from the World Bank for renewable energy projects belong to municipalities, a solar power plant project located in Alaşehir, a district within Türkiye's Manisa province, has been initiated by Alaşehir Municipality. This project aims to increase the share of renewable energy sources in the country's energy mix and reduce greenhouse gas emissions and reliance on fossil fuels and to meet the electric energy need of Alaşehir.

The installed capacity of the plant is 3150,4 kWp which is exempted from EIA regulation (Annex 3) and it is expected to generate 5.557.305,6 kWh of electricity annually. The project site is located on Lot 1 and block 101 of İsmetiye neighborhood of Alaşehir District and the land owned by Alaşehir Municipality (Annex 1). The solar panels used in the project are of high quality and have a lifespan of 30 years. The project was designed and constructed by a team of experienced engineers and technicians. The project developer has prepared and ensured the project in compliance with international quality and safety standards.

The project has been financed by the World Bank through a loan agreement with Alaşehir Municipality. The loan has been provided on favorable terms, with a low interest rate and a long repayment period. The loan has been used to finance the construction of the solar power plant, including the procurement of equipment and the construction of the power plant. The solar power plant project is expected to have a significant impact on the local economy and the environment. The project will create job opportunities during the construction phase and the operation phase. The project will also contribute to the development of the local infrastructure, including the construction of the substation and the transmission line. The project will also have a positive impact on the environment by reducing greenhouse gas emissions. The solar power plant will generate clean energy, which will replace the energy generated from fossil fuels. The project will also contribute to the country's efforts to address climate change. The solar power plant project in Manisa, Alaşehir is a significant step towards the development of renewable energy sources in Türkiye. The project in Alaşehir has the potential to serve as a model for similar projects in Türkiye.

The Environmental and Social Management Plan (ESMP) for this solar energy plant project plays a crucial role in the project's execution. The ESMP acts as a comprehensive guide to monitoring, assessing, and mitigating adverse environmental and social impacts throughout the project's lifecycle. This ensures that the project delivers a positive influence on the environment and the community. The ESMP guarantees compliance with local legal regulations and international standards. It ensures that the project operates in accordance with legal requirements.

This project's provision of clean energy aligns with SDG 7, which targets Clean Energy. Additionally, it positively contributes to Good Jobs and Economic Growth (SDG 8). By reducing reliance on fossil fuels

and limiting greenhouse gas emissions, this solar energy plant project supports Türkiye's efforts in combatting climate change. It aligns with Türkiyey's climate action plans and commitments.
In conclusion, the ESMP for this solar energy plant project is a critical document, emphasizing the project's potential for both environmental and societal benefits. It ensures that the necessary steps are taken to monitor and mitigate environmental and social impacts with a focus on the project's unique aspects. Furthermore, it makes a valuable contribution to sustainable development goals and aligns with Türkiye's climate action plans.

1. Sub-Project Description

Within the scope of this report, the SPP sub-project details planned by Alaşehir Municipality was examined to prepare ESMP for the sub-project. Alaşehir district is located in the Manisa province.
This sub-project has been prepared for the establishment of an unlicensed solar power plant project with an installed power of 2640,0 kWe belonging to Alaşehir district of Manisa province. The project implementation capacity is 3150,4 kWp and is exempt from the local environmental impact assessment regulation and all environmental requirements.
According to the connection power given in Table 1, Alaşehir Municipality will establish a solar power plant in İsmetiye Neighborhood, which is approximately 20 km away from Alaşehir District Central settlement, and 3,5 km away from İsmetiye Neighborhood and located to the northwest of the district center (Figure 1).
The 10 meter wide vehicle road to the project area is connected to the project area by leaving the Gülpınar-Kemaliye road route (Annex 2).

Figure 1: Location of Alaşehir District Center and SPP Subproject Area

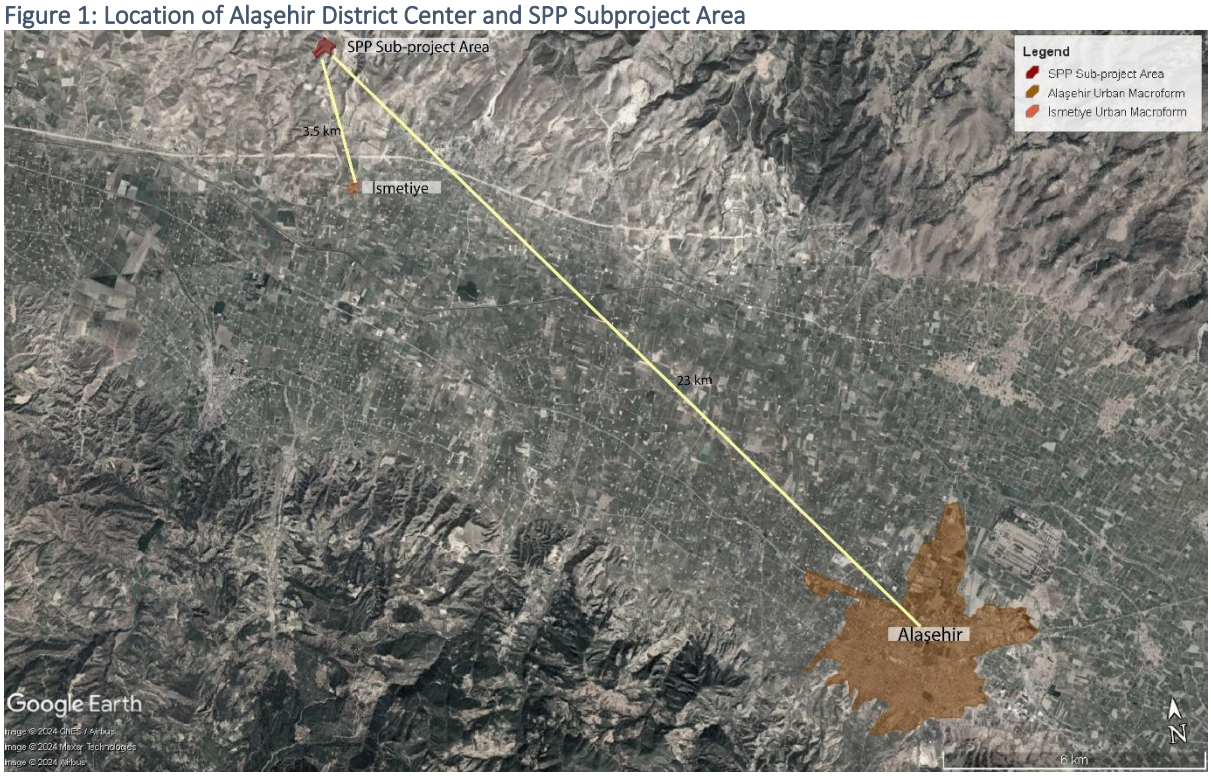


Figure 2: SPP Sub-Project Area

This study is prepared within the scope of 30th clause and Article 1 of the "Regulation on Unlicensed Electricity Generation in the Electricity Market" the electricity consumption of the relevant institutions netting with the electricity generation of the power plants to be made over the electricity unit price determined according to the subscription type of the institutions in the Electricity Tariff published by EMRA.

Planned Solar Power Plant has **3150,4 kWp DC Capacity, 2640,0 kWe AC Capacity**. Equipped with 395 Wp MonoPerc Half-Cut modules with **30° tilt, 25° azimuth angle**.

When the economic life of the plant expires at 30 years, it will be decommissioned.

Table 1: Planned SPP Technical Details

Technical Information	
FV Panel Type	Monocrystalline MONOPERC
FV Panel Power Output	550 Wp
FV Panel Count	5728
Annual Degradation	%0,5
Inverter Power Output	100 kW
Inverter Count	26
Total DC Power	3150,4 kWp
Total AC Power	2640,0 kWe
Estimated Annual Energy Production	5.557.305,6 kWh
Annual Energy Consumption	5.557.305,6 kWh
Production/Consumption	%100

Project Land Use Rights

The project site sole owner is Alaşehir Municipality. The project area is located on lot 1 of block 101 of the İsmetiye neighborhood (Annex 1). The total lot size is 55,964.50 square meters.

The Solar Power Plant (SPP) with an installed capacity of 2,640 kW will be connected to the grid through transformers of appropriate capacity and number. The letter of GDZ Electricity Distribution

Services is given in Annex 6.The electricity generated by the solar panels will be fed into the system via a connection to Pole No. 21 of the Berna Tarım Özel Transmission Line.[1] This line is part of the energy infrastructure located in Gülpınar Neighborhood, Alaşehir District, Manisa Province, as specified in the connection consent granted by AKT Energy Inc.

The necessary consent for grid connection was obtained through a notarized letter of approval issued by AKT Energy Inc. on May 21, 2025, and certified by İzmir 27th Notary Office. The consent covers the use of the energy transmission infrastructure for the benefit of the Alaşehir Municipality's solar power project, and the notarized documents are included in the Annex 7 .

The solar power plant will transfer energy to the TEİAŞ grid via a dedicated substation. The Energy Transmission Line (ETL) crosses one private parcel—101 Block, Parcel 40. A right-of-way consent letter has been obtained from the landowner which is represented in Annex 8. The owner of the parcel was interviewed and the real estate market price of the pole area carrying the ETL for the easement right to be paid to the person was reported. The owner of the parcel stated that he did not want to receive the determined price. However, Alaşehir Municipality keeps this price in the bank account on behalf of the owner.

Table 2: Planned SPP Land Information

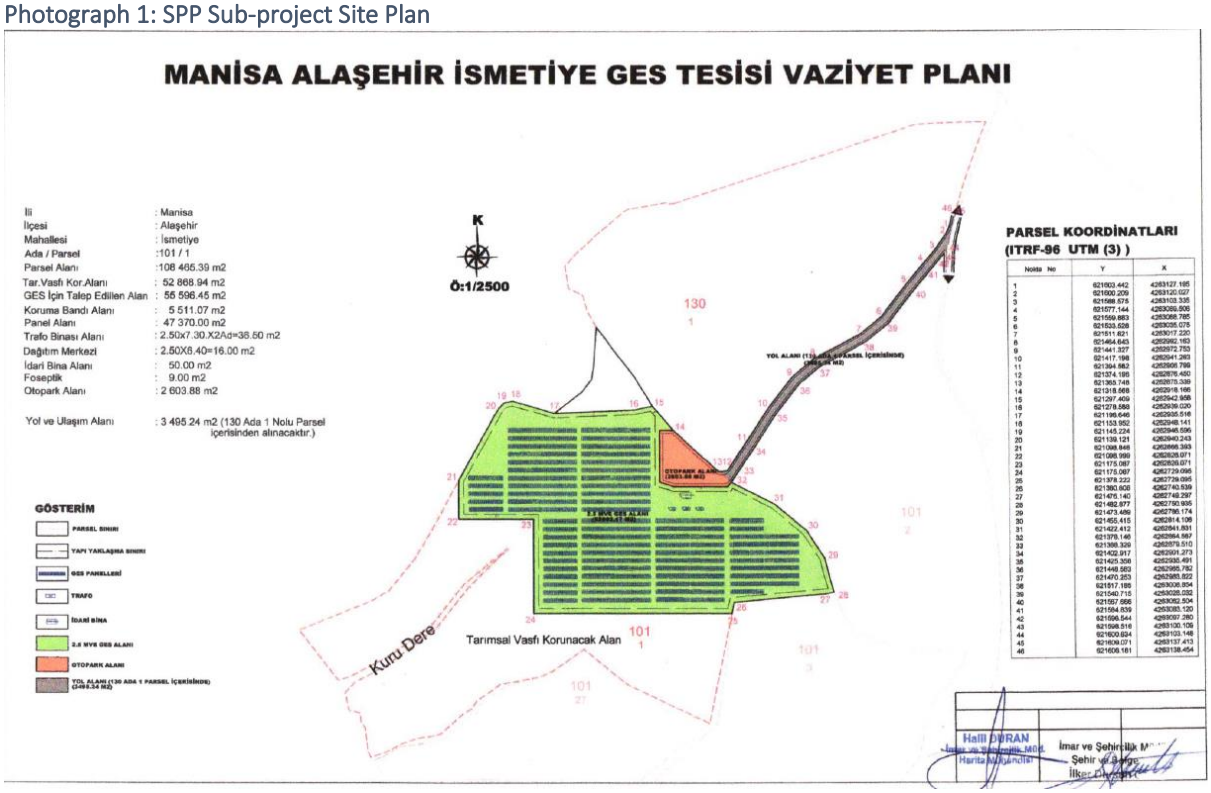
Land Information	
Type	Main Property
Province, District, Nbhd.	Manisa, Alaşehir, İsmetiye
Block, Lot	101/1
Total Area	108.465,39 m^2
Right to Property Use	Alaşehir Municipality
EIA Status	There is no EIA required.

Figure 3: The Energy Transmission Line

Figure 4: The Energy Transmission Line Route Plan

[1] The full transfer of all assets and liabilities of Berna Tarım Products Industry and Trade Inc. to AKT Energy Inc. was carried out through a simplified merger procedure in accordance with Articles 136 and subsequent articles of the Turkish Commercial Code No. 6102. This merger was officially announced in the Turkish Trade Registry Gazette dated March 27, 2025, Issue No. 11033.

Photograph 1: SPP Sub-project Site Plan



Land Acquisition Principles

OP 4.12 (İLBANK, 2019)covers only the direct impacts of land acquisition and restrictions of access to legally designated parks and protected areas. “Direct impact” means any consequence immediately related to the taking of a parcel of land or to restrictions in the use of legally designated parks or protected areas. People directly affected by land acquisition may lose their home, farmland, property, business, or other means of livelihood. In other words, they lose their ownership, occupancy, or use rights, because of land acquisition or restriction of access. The key factor is that the state has taken some or all of the land that people owned, used, or occupied; or, in legally designated parks and protected areas, the state has limited people’s use rights.

The simplest way to minimize resettlement is to design projects that minimize land acquisition, and the number of people affected by loss of land, by physical relocation, or by disruption of income-generating activities. All things being equal, facilities and transportation corridors, for example, are obviously better sited in or through areas with little or no population, to minimize the number of people affected. Of course, a host of economic, technical, and other factors must also be considered, so land acquisition and resettlement are often impossible to avoid altogether.

In this subproject, in line with the recommendations of the World Bank, an area that was unpopulated and owned by the municipality was selected. Therefore, there is no need for land acquisition and resettlement plans.

2. Environmental and Social Screening

The sub-project was prepared by adopting universal human rights and the accompanying concerns were resolved. Following loan approval, Alaşehir Municipality will initiate periodically monitored stakeholder participation processes and complaint procedures, taking into account this concern. The main purpose of the project is to meet the electricity needs of the district by utilizing clean energy, reduce input costs and provide economic contribution to various sectors.

There is no direct and negative impact on any social group from the project, which is located in a non-residential area. With the Solar Power Plant (SPP) project, the electrical energy need will be met within the framework of social justice, without creating an unfair and discriminatory impact on the disadvantaged groups in the environment. Using renewable energy for electricity generation ensures efficient use of municipal resources, positively impacts the entire regional population and promotes inclusion.

During the project preparation phase, no concerns were expressed by women's associations/organizations regarding gender equality. The project is not expected to have a negative impact on gender equality, no restrictions are foreseen on women's abilities and it is ensured that there is no discriminatory impact based on gender. Activities do not pose a risk of degradation or depletion of natural resources in communities dependent on these resources.

The project promotes sustainability by harnessing solar energy, reducing dependence on non-renewable fossil fuels and contributing to a more sustainable energy mix. Solar energy projects with lower environmental impact reduce air and water pollution, reduce carbon emissions and minimize their ecological footprint. Energy resilience and flexibility contribute to reducing volatility in energy prices by providing a stable energy source and contributing to stability in urban and rural areas. Incorporating solar energy into the urban energy mix provides diversity, increases energy security and resilience.

Utilizing renewable solar energy, the project aims to increase economic sustainability by reducing the municipality's electricity expenses. Renewable energy investments strengthen communities, promote employment opportunities, skills development and income diversification. Training activities for stakeholders during the construction and operation phases contribute to long-term sustainability by raising awareness and encouraging environmentally friendly behavior.

The project strengthens accountability through transparent decision-making, active participation, accessible information, responsive complaint mechanisms, regular reporting and open communication. Stakeholders participate in decision-making processes, provide collective input, and regular participation strengthens the sense of ownership and accountability. The project will establish a dedicated grievance mechanism (GM) which will be available through a toll-free hotline, email, and a GM within the municipality. This GM will be monitored regularly, and all grievances will be logged, reviewed, and addressed within a specified timeframe. A strong complaints mechanism addresses concerns and regular reporting and audits keep stakeholders informed. Also, public participation meetings will be held where local residents will be informed about the project and their opinions on the project will be gathered. The participation of the public will be ensured, and they will be informed about how to access grievance mechanisms in case of any issues. Measurable performance indicators increase transparency and accountability by allowing stakeholders to evaluate the project's success against criteria. Involving stakeholders in decision-making processes ensures inclusiveness and a sense of shared responsibility.

All details related to environmental and social screening are given in Annex 14.

3. Legal Framework

National Legal Framework

The WB's environmental and social safeguards policies require that the borrower country is expected to prepare an Environmental and Social Management Framework (ESMF), integrated with the Regulation on Environmental Impact Assessment (henceforth "EIA Regulation") (Official Gazette No. *31907*, July 29, 2022) (T.C. Cumhurbaşkanlığı Mevzuat Bilgi Sistemi, 2022)and WB's Operational Policies (İLBANK, 2019). Although the Turkish EIA Regulation does not entirely meet the requirements of international standards in terms of social impacts, there are some legal arrangements for managing several social impacts. In this respect, the following are identified to be a non-exhaustive list of social legal framework applicable for this project:

- Labor Law (No. 4857), published in the Official Gazette no. 25134 dated 10 June 2003
- Law on Occupational Health and Safety (No. 6331), published in the Official Gazette no. 28339 dated 30 June 2012
- Regulation on Contractors and Sub-contractors, published in the Official Gazette no. 27010 dated 27 September 2008

In terms of involuntary resettlement, the relevant legal arrangements of Türkiye are summarized below:

- Law No. 6203Expropriation Law, published in the Official Gazette no. 18215 dated 8 November 1983

Potential impact of the project on known cultural values in Turkish laws, as listed below:

- Law No. 2863 dated 21.07.1983 on the Protection of Cultural and Natural Assets (revised through the amendment issued on 27.07.2004 dated Official Gazette)
- The Regulation on Researches, Drillings and Excavations in Relation to the Cultural and Natural Assets, which was published in the Official Gazette No. 18485 dated 10.08.1994

Labor and Working Conditions:

- Human Resource Policy (dated January 4, 2013 in the Official Gazette numbered 28518) published by ILBANK
- Eligibility Criteria: The Law on Regulating Public Finance and Debt Management (Law No. 4749) restricts borrowing by any institution/municipality if it has overdue payments to Treasury.

In terms of stakeholder analysis:

- The Law on the Right to Information, Law no. 4982 dated November 25, 2014)
- The Law on the use of the Right to Petition, Law no. 3071 dated November 1, 1984
- The Law on the Protection of Personal, Law no. 6698 dated 24 March, 2016

Moreover, the project is the subject of the 30th clause of the "Regulation on Unlicensed Electricity Generation in the Electricity Market", published by the Energy Market Regulatory Authority no. 30772 on May 12, 2019 and amendment published on Official Gazette No: 31479 dated May 09, 2021, updated on Official Gazette No: 31920 dated August 11,2022, final update on Official Gazette No: 32120 dated March 02,2023. Article 1st Paragraph: " In order to meet the electricity needs of the consumption facilities, not exceeding the contractual power of the relevant consumption facilities in the connection agreement; Within the scope of subparagraph (h) of the first paragraph of Article 5, a production facility based on renewable energy sources may be established. Within the scope of this article, a production facility based on renewable energy sources may be established by public institutions and organizations within the scope of subparagraph (c) of the first paragraph of Article 5." Section 26 of the same regulation. In paragraph 30-(3) under the heading "Applications for consumption needs", referring to the article, it reads: "In the production facilities established within

the scope of this article, transactions are established within the scope of the fourth paragraph of Article 26 for surplus energy supplied to the grid during each billing period.

It is possible to explain offsetting as comparing the energy consumed monthly and the energy produced by the power plant and if there is excess production, selling this excess energy to the grid. The energy supplied to the network is sold at the unit price at which the subscriber receives the electricity, without considering the distribution price, also this sale is subject to tax.

Since the power plant to be established meets a small part of the municipality's consumption, no sales will take place. The municipality will continue to invest in this regard."

According to the regulation that entered into force on 11.08.2022, if the new power plants to be established in 2019 and after having made additional production at a value above the total amount of energy they consumed last year, this additional production will be given to the grid, free of charge. For example, if the consumer consumed 1 MWh of electricity last year and the solar power plant generates more than 1 MWh of excess energy (which means the energy after the consumption of consumer), up to 1 MWh the energy can be sold to the grid and if the produced energy exceeds 2 MWh (1 MWh for consumption and 1 MWh for sale), excess energy will be given to the grid free of charge.

Indirect and direct government incentives for solar power plants include:

- Article 24 of the Regulation on Unlicensed Electricity Generation in the Electricity Market (official newspaper no. 30772 dated May 12, 2019). It is stated that the surplus productions of Solar Power Plant will be purchased for 10 years at the price determined by the supply company by applying within the scope of 5c of the same regulation with the regulation in the article. The regulation's linking this purchase to a certain period is also considered an indirect incentive of the state.
- In addition, the fact that SPP applications based on self-consumption can be obtained in the same regulation is considered as an indirect incentive.

Laws, decrees and related legislations on which SPP installation and the feasibility are based;

- Law:
  - Electricity Market, Law no. 6446 dated 14 March, 2013
  - Environmental Law, Law No: 2872; Date of Ratification: 1983
- Decree:
  - President's Decision, Number of Decision 1044 (10.05.2019/30770)
- Regulation:
  - Regulation on Unlicensed Electricity Generation in the Electricity Market dated 12/5/2019 and numbered 30772 amendment published on Official Gazette No: 31479 dated May 09, 2021, updated on Official Gazette No: 31920 dated August 11,2022, final update on Official Gazette No: 32120 dated March 02,2023

International Legal Framework

The Environmental, Health, and Safety (EHS) Guidelines are technical reference documents of World Bank. When one or more members of the World Bank Group are involved in a project, these EHS Guidelines are applied as required by their respective policies and standards. These General EHS Guidelines are designed to be used together with the relevant Industry Sector EHS Guidelines which provide guidance to users on EHS issues in specific industry sectors. The EHS Guidelines contain the performance levels and measures that are generally considered to be achievable in new facilities by existing technology at reasonable costs. Application of the EHS Guidelines to existing facilities may involve the establishment of site-specific targets, with an appropriate timetable for achieving them. It is mandatory to comply with the EHS Guidelines in the ESMP prepared for this subproject, which is

planned to be realized with World Bank financing. Besides, other mandatory international legal framework listed as:

- Operational Policies of World Bank (OP 4.01)
- 2010 Policy on Access to Information (for stakeholder analysis)
- Good Practice Note (GPN) on Addressing Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH) (for stakeholder analysis)
- European Union Environment Policy
- ILO conventions

4. Baseline Data

Environmental Baseline

Location and Topography

Manisa province is located in the Aegean Region and is geographically located between 27 08' and 29 05' east longitudes and 38 04' and 39 58' north latitudes. It is surrounded by Uşak and Kütahya from the east, İzmir from the west, Balıkesir from the north, Aydın from the south and Denizli from the southeast. Its surface area is 13.810 km2. The elevation varies between 50 meters and 850 meters. The elevation increases as one goes east from the city center.

Alaşehir district is located in the northeast part of the Manisa province, and it is approximately 110 km away from Manisa province. It is surrounded by Salihli and Kula from the north, Sarıgöl from the southeast, and Kiraz district of İzmir from southwest.

According to conncetion power given in Table 1, Alaşehir Municipality will establish a solar power plant in İsmetiye Neighborhood, which is approximately 20 km away from Alaşehir District Central settlement and located to the northwest of the district center.

Figure 5:Geographical location of Manisa Province and Sub-Project Area

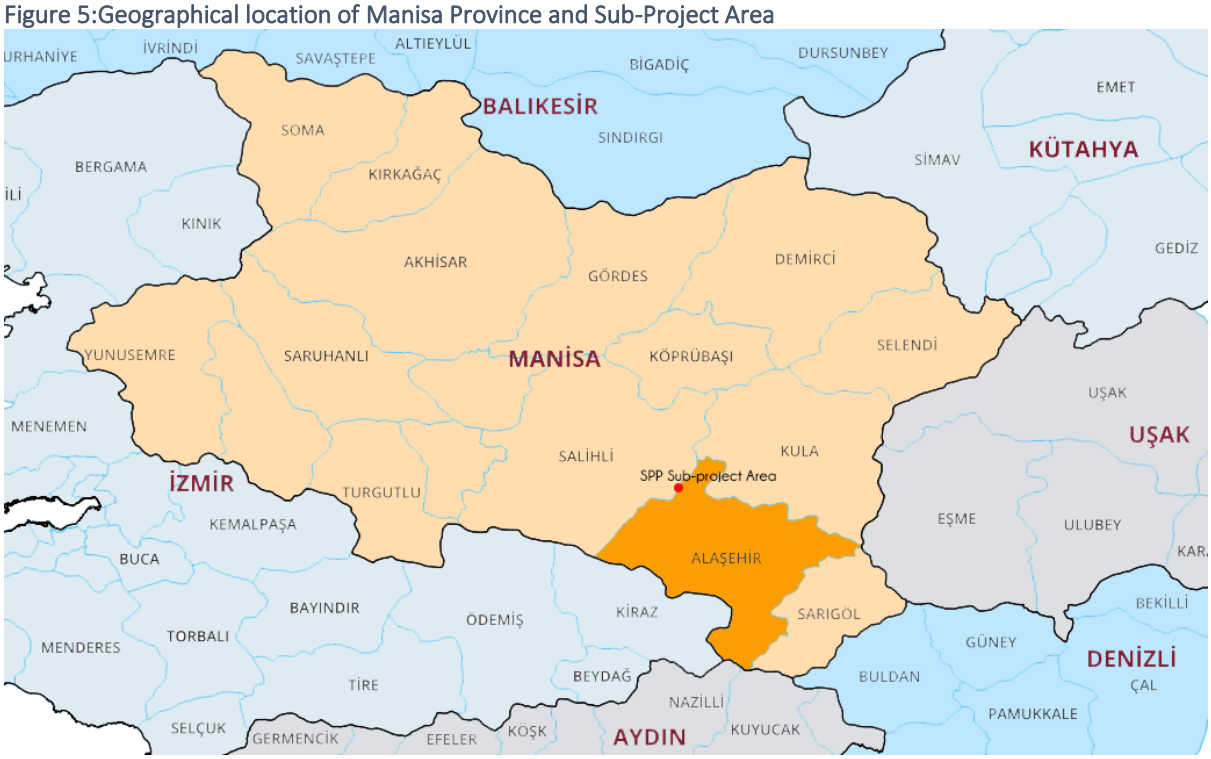


Figure 6: Alaşehir District Topography Map

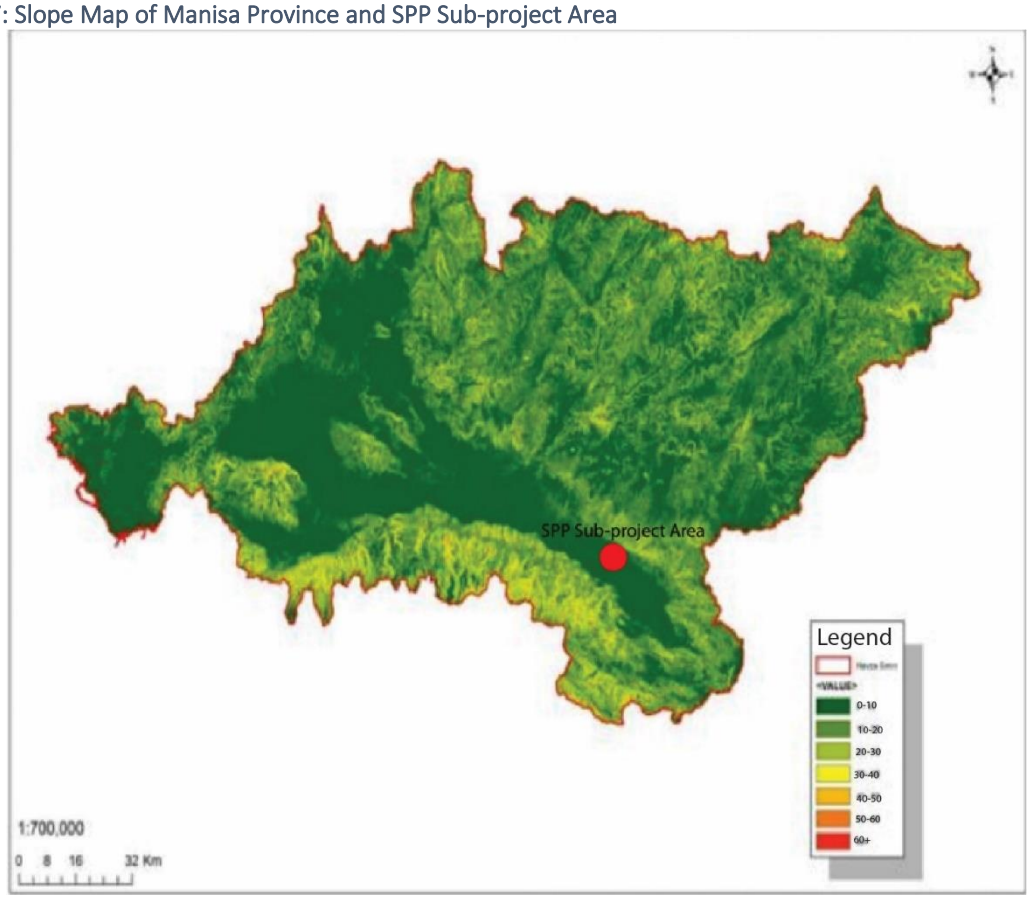
Geography

Most of the provincial territory is located within the Gediz Basin and a small part is located in the Aegean (Bakır Çay) Basin in the northwest. The altitude of the city center is 71 m. The highest point in the center is Spil Mountain 1513 m high, the highest point in the province is Salihli Bozdağlar Kumpınar hill 2O70 m high, and the highest district center is 85O m in Demirci District.

Manisa province covers 73% of the Gediz Basin. In Manisa province, all forms of landforms are encountered. Mountains cover 54% of the provincial area. This is followed by plateaus with 27.8% and plains with 17.9%. The average slope value between the mountains along the Gediz graben is between 0-5% and the average slope values in the northern and southern parts of the province are between 10-20%.

Alaşehir is located in the Aegean Region on three hills in the north-facing direction of Bozdağ Mountains. It is a district of Manisa province with a surface area of 977 km^2. Alaşehir district consists of a graben through which the Alaşehir River flows and the high plateaus and mountains bordering it from the south and north. There are four important geomorphologic units within the geographical area of the district. These geomorphologic units are the Bozdağlar mass in the south, the Uysal Mountains mass in the north, the Alaşehir plain between these two mountain masses, and the rugged Uluderbent stream valley in the southeast.

Figure 7: Slope Map of Manisa Province and SPP Sub-project Area



Climate

Manisa has a Mediterranean climate and the continental climate characteristics of Central Anatolia. While the plains and the valleys surrounding the plains have a continental Mediterranean climate, the high mountainous regions and plateaus and the mountains and plateaus in the north and northeast have the effects of the continental climate of Central Anatolia.

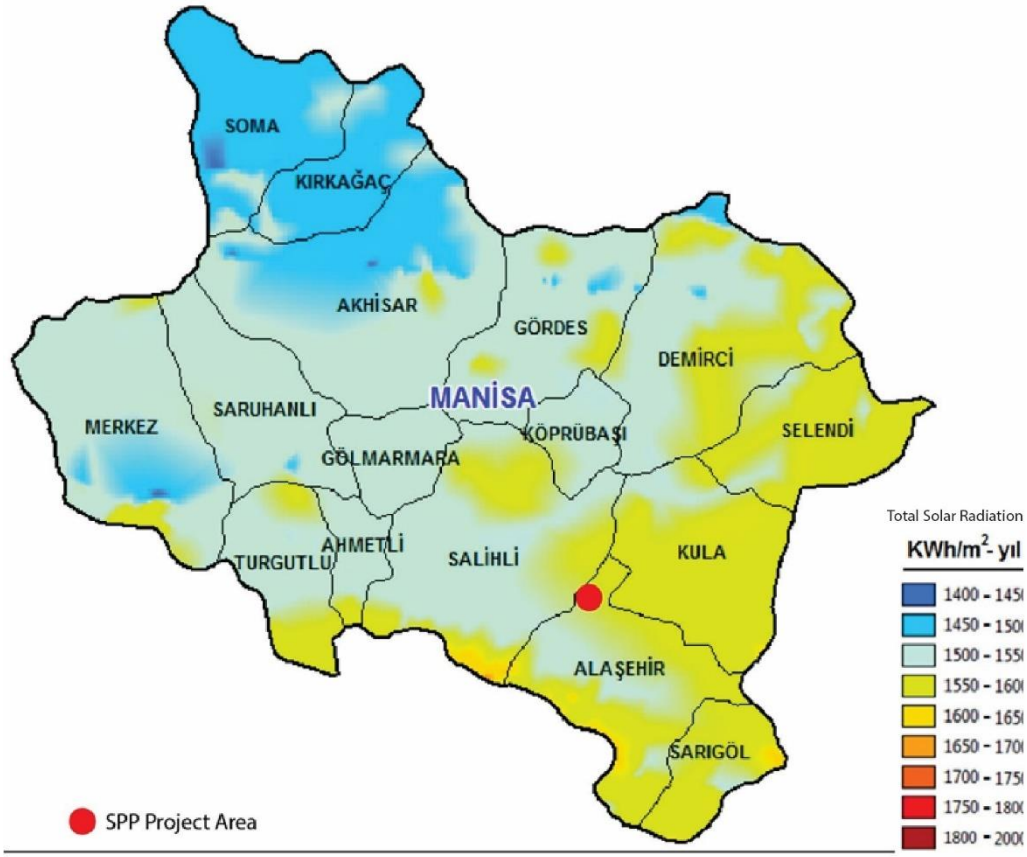
The location of Alaşehir is a transition from Mediterranean to continental climate. In Alaşehir, which generally has a mild climate, the summer months are quite hot and dry. In summer, the temperature in the region reaches up to 40 degrees. The average annual rainfall of the district is 274 mm, the average annual temperature is 16.8 degrees. The highest temperature is 44 degrees, the lowest temperature is -8.8 degrees, and the average relative humidity is 54%.

In Manica province, precipitation is usually seen in the winter months, while summers are hot and dry. The average annual rainfall is 82 days, the most precipitation falls in December and the least precipitation falls in August, and the average rainfall is 408 mm.

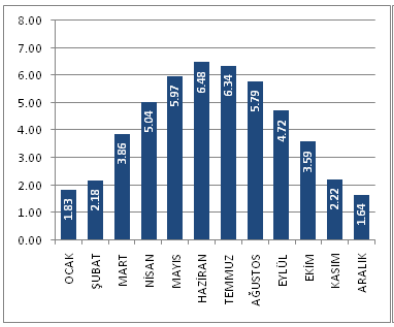
According to the Solar Energy Potential Atlas, Türkiye's average annual total sunshine duration is 2,737 hours, daily total is 7.5 hours, and annual total incoming solar energy is 1,527 kWh/m2/year. It is seen that Alaşehir's average solar radiation throughout the year is in the range of 1550- 1600 KWh/m2/year (Figure 8). Global radiation values are over 6.00 KW/m2/day in June, July, and over 5.00 KWh/m2/day in a total of 5 months from April to the end of August (Graphic 1).

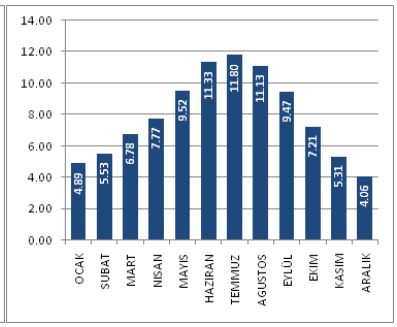
In Alaşehir, the month with the longest sunshine duration (11.80 hours) is July, and the shortest sunshine duration (4.06 hours) is December. Generally, the duration of sunshine is above 7 hours in seven months (from April to October) throughout the year in most seasons. Since the district's sunshine duration is similar to Türkiye average, it turns out that project area in Alaşehir is an important investment area for solar energy.

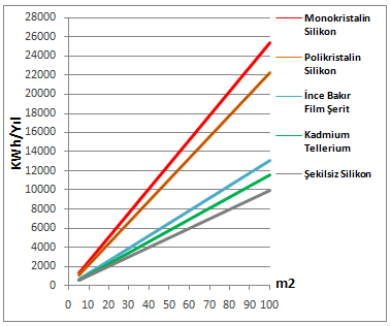
Figure 8: Manisa Province Solar Atlas and Project Area



Graphic 1: a) Alaşehir District Radiation Values b) Alaşehir District sunshine Times c) Alaşehir PV type-Area-Energy That Can Be Produced







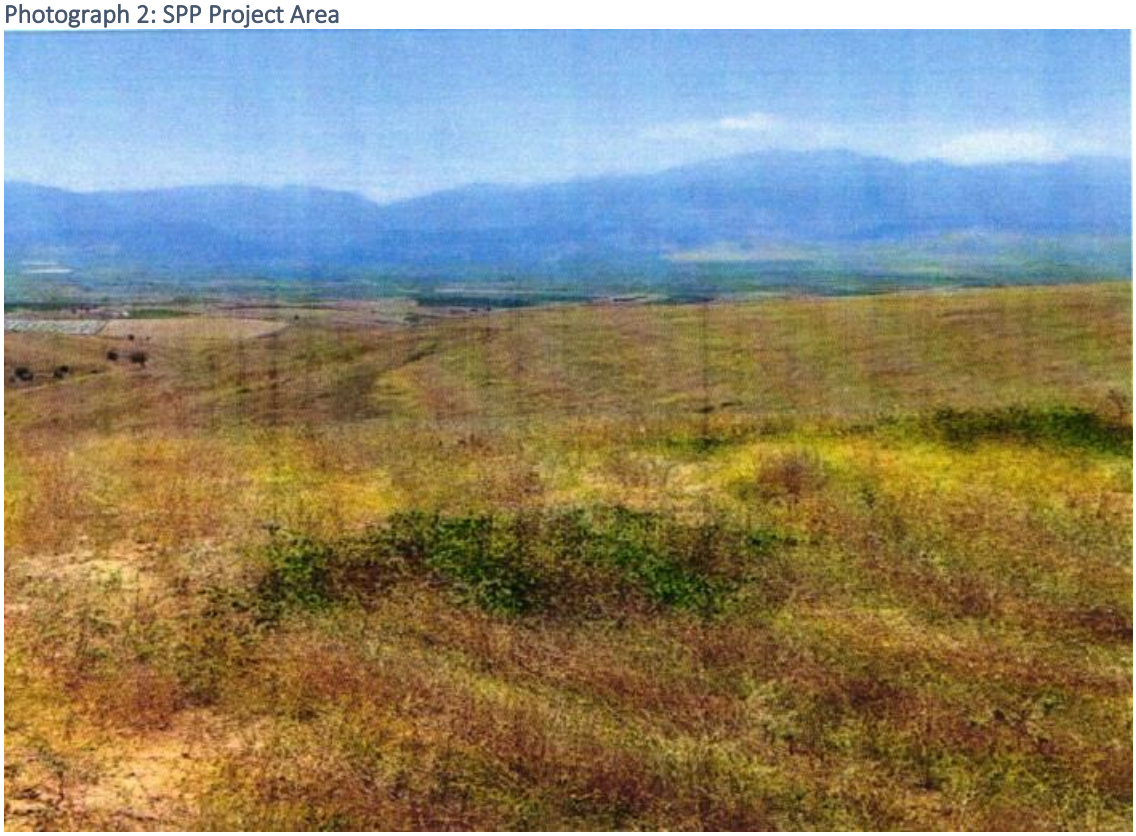
Flora

46% of Manisa province's territory is covered with forests and maquis, there are many tree species, the majority of which are larch. 39.1% of the provincial territory consists of cultivated and planted land, 6.6% of it consists of meadows and pastures, and 8% of it consists of areas unsuitable for agriculture. In recent years, olive grafting, menengiçe pistachio grafting, walnut, chestnut, and pistachio pine cultivation have become widespread to positively affect the natural vegetation in high areas and to provide economic benefits. Spil Mountain is one of the regions that differ in terms of vegetation in Manisa. Around 600 plant species have been identified in the National Park on the mountain. There are around 4.3 million olive trees and nearly 56 thousand hectares of vineyards in Manisa (Manisa Metropolitan Municipality, 2024)

There are 29.285 hectares of forest area in Alaşehir. Other land consists of meadow pastures, vineyard gardens, field crops, and unused areas. The vegetation adapts to the climate. The main products

grown due to the fertile soils of the plain are seedless grapes, cotton, tobacco, cereals, vegetables, and fruits. It is one of the most fertile plains of Türkiye, where all kinds of crops are grown.
To the north of the parcel 101/1, which is the facility area, Salihli-Mevlütlü Cadastral border, there are empty non-agricultural lands and planted agricultural land (newly planted olive garden), olive planted field to the east, empty non-agricultural lands to the south and west, and olive planted field to the east.

Photograph 2: SPP Project Area



Photograph 3: Surrounding of the SPP Project Area

Earthquake Risks

There are important active faults in Manisa. Manisa Fault, located on the Gediz Graben (GG), is 40 km long and passes through Yunusemre and Şehzadeler districts and Turgutlu district in the city center.
Gediz Graben Fault System is 140 km long. Gediz Graben Fault System extends from Manisa to Sarıgöl. The following segment is reported to continue until Denizli, totaling approximately 200 km. The fault system extends along the southern margin of the Gediz graben. It has a dominant normal fault character. Alaşehir earthquake on March 28, 1969, with magnitude M=6.9 and Kütahya-Gediz earthquake on March 28, 1970 with magnitude M:7.2 (AFAD, 2021).
When the seismicity map of Manisa Province, which includes 74,000 earthquakes for the last 30 years covering the period after 1990, is analyzed, it is seen that the majority of the earthquakes are clustered in the first 25 km of the earth's crust and are mainly concentrated in the NW part of the province, especially between Soma and Gölmarmara. Most of the earthquakes of magnitude 5 and above occur on this line (AFAD, 2021)
The SPP Sub-project area is located in the Alaşehir district, İsmetiye Neighborhood. There are active fault lines in the district center and around the project area. Alaşehir district is in the 1st degree earthquake risk area. According to the Türkiye Earthquake Hazard Map, Alaşehir District is located between 0.4-0.5 in terms of seismicity. When the sub-project area is examined based on the "Türkiye Earthquake Hazard Map" that came into effect with the Cabinet's decision dated 22.01.2018 and numbered 2018/11275, it is observed that the largest ground acceleration value is approximately around 0.463 PG (Figure 10).

Figure 9: Faults in Alaşehir and its Region, General Directorate of Mineral Research and Exploration (MTA)

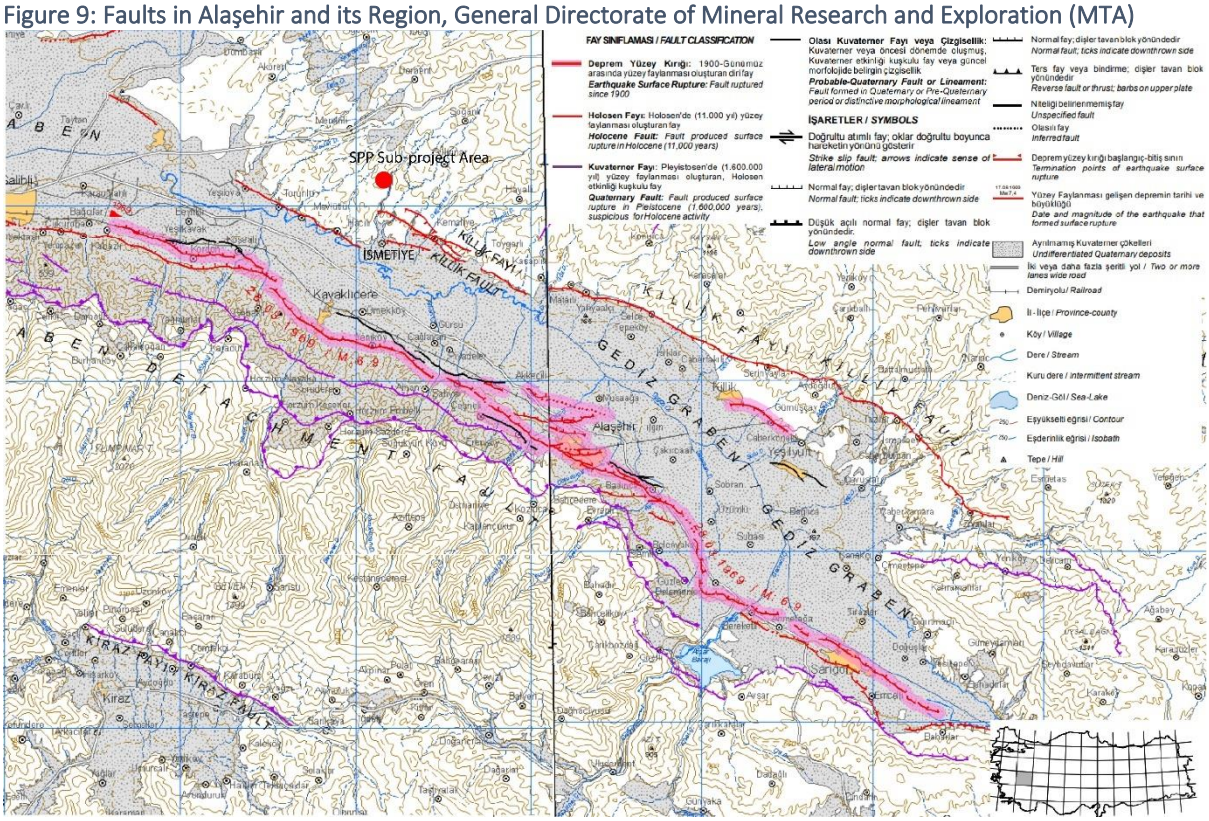
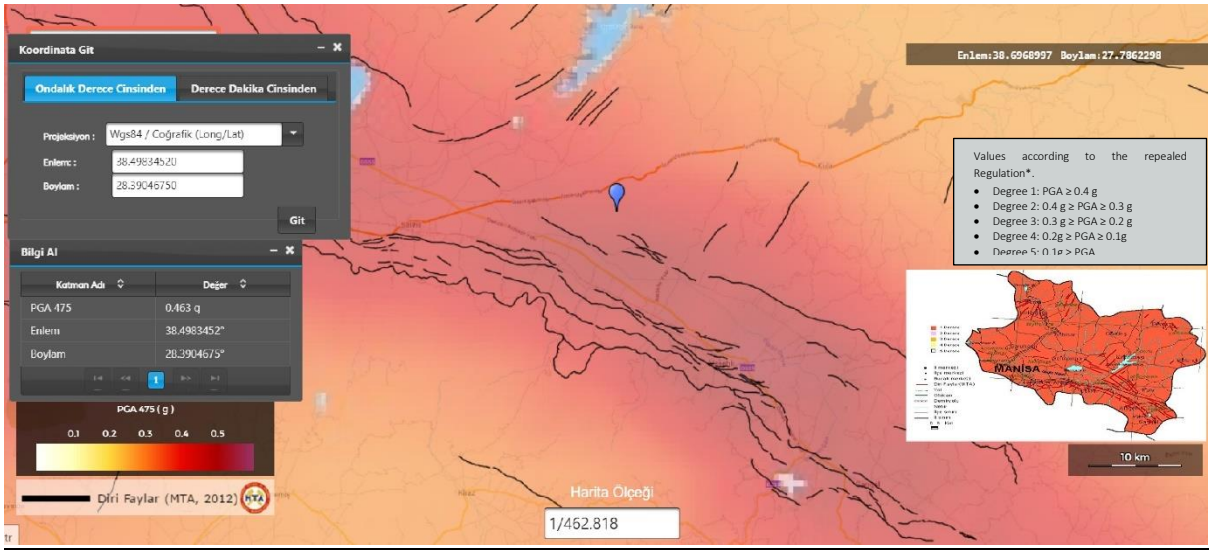


Figure 10:Earthquake Hazard Map of Sub-Project Area and Surroundings, Türkiye Earthquake Hazard Maps Interactive Web Application, 2024, (https://tdth.afad.gov.tr)[2]

[2] Hazard map showing the PGA value created for a 10% probability of exceedance in 50 years (475 years of recurrence)



*Türkiye Earthquake Zones Map, which came into force with the decision of the Council of Ministers dated 18.4.1996 and numbered 96/8109, was abolished on 01.01.2019. The New Türkiye Earthquake Hazard Map and Building Earthquake Regulation was published in the Official Gazette No. 30364 on 18 March 2018 and entered into force on 01.01.2019.

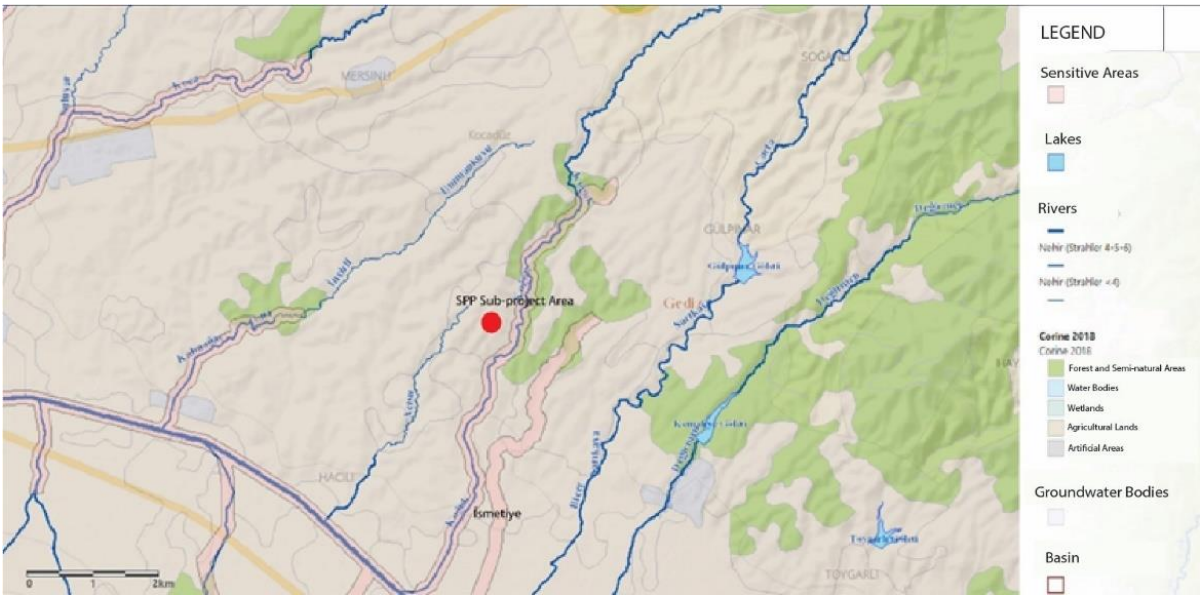
Hydrology and Flood Risks

Manisa is located within the borders of the Gediz Basin and the North Aegean basin. The Gediz Basin is located in the west of Anatolia, between 26°42' - 29°45' east longitude and 38°04' - 39°13' north latitude and constitutes 2.2% of Türkiye's surface area. The Gediz Basin covers an area of 17 145 km2. The circumference of the basin is 1 281 km, and the length of the basin is 250 km. The average annual precipitation of the Gediz Basin is calculated as 555.0 mm.

The district consists of a graben through which the Alaşehir River flows and very high plateaus and mountains bordering it from the south and north. Although Alaşehir Stream has no significant streams flowing from north to south, it has streams flowing from south to north such as Alaşehir Derbendi, Buldan Derbendi, Sarıkızçayı, Zeytin Stream, Avra Stream, Şahyar Stream, Alkan Stream, Kurudere, Değirmendere and Göbekli Stream.

The project area is outside the irrigation basin of SHW. According to Ground Survey Report, there is a dry stream in the project area (Photograph 1). In order to prevent the parcel from being affected by stream flooding, a 6-meter-wide road should be reserved on the parcel side with a hydrologically sufficient strip-like area that can pass the flood flow from both sides of the passing stream. Flood control and protection measures should be taken in the stream bed.

Figure 11:National Water Information System (USBS) Alaşehir Hydrology Analysis Map



Social Baseline

Demography

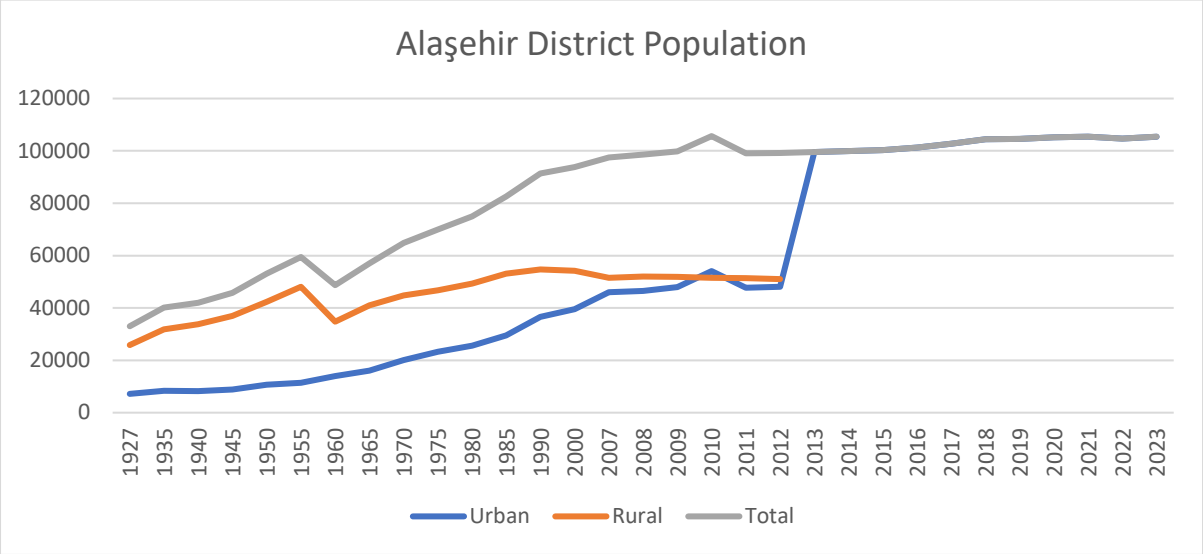
Manisa province has a total of 17 districts. Manisa has a surface area of 13.269 km^2 and 109 people per square kilometer. Manisa population density is 109/km^2. The surface area of Alaşehir district is 977 km^2. The population of the district, which was 33.010 thousand in 1927, increased 3 times in 2000 and reached 93 thousand. The population of the district increased continuously until 1997 and the average annual population growth rate was 2.9%. It is also observed that the population growth in the rural areas almost stopped after 1985.

Since villages became neighborhoods due to the metropolitan law, rural population has not been included in the table since 2013. Alaşehir is the 7th largest district of Manisa province with a population of 105.397 people. There are 87 neighborhoods connected to the district. Ismetiye neighborhood has a population of 240 people in 2023.

Table 3: Alaşehir Population by Years ((TÜİK, 2024))

Year	Urban	Rural	Total	Year	Urban	Rural	Total
1927	7183	25827	33010	**2009**	47942	51909	99851
1935	8375	31788	40163	**2010**	54082	51562	105644
1940	8198	33768	41966	**2011**	47722	51388	99110
1945	8883	36909	45792	**2012**	48147	50998	99145
1950	10719	42333	53062	**2013**	99504		99504
1955	11393	48041	59434	**2014**	99962		99962
1960	13924	34756	48680	**2015**	100254		100254
1965	16012	41001	57013	**2016**	101313		101313
1970	20075	44760	64835	**2017**	102731		102731
1975	23243	46695	69938	**2018**	104507		104507
1980	25611	49332	74943	**2019**	104622		104622
1985	29484	53109	82593	**2020**	105145		105145
1990	36649	54713	91362	**2021**	105380		105380
2000	39590	54170	93760	**2022**	104717		104717
2007	45971	51570	97541	**2023**	105397		105397
2008	46544	51999	98543				

Graphic 2: Alaşehir District Population by Years (TÜİK, 2024)

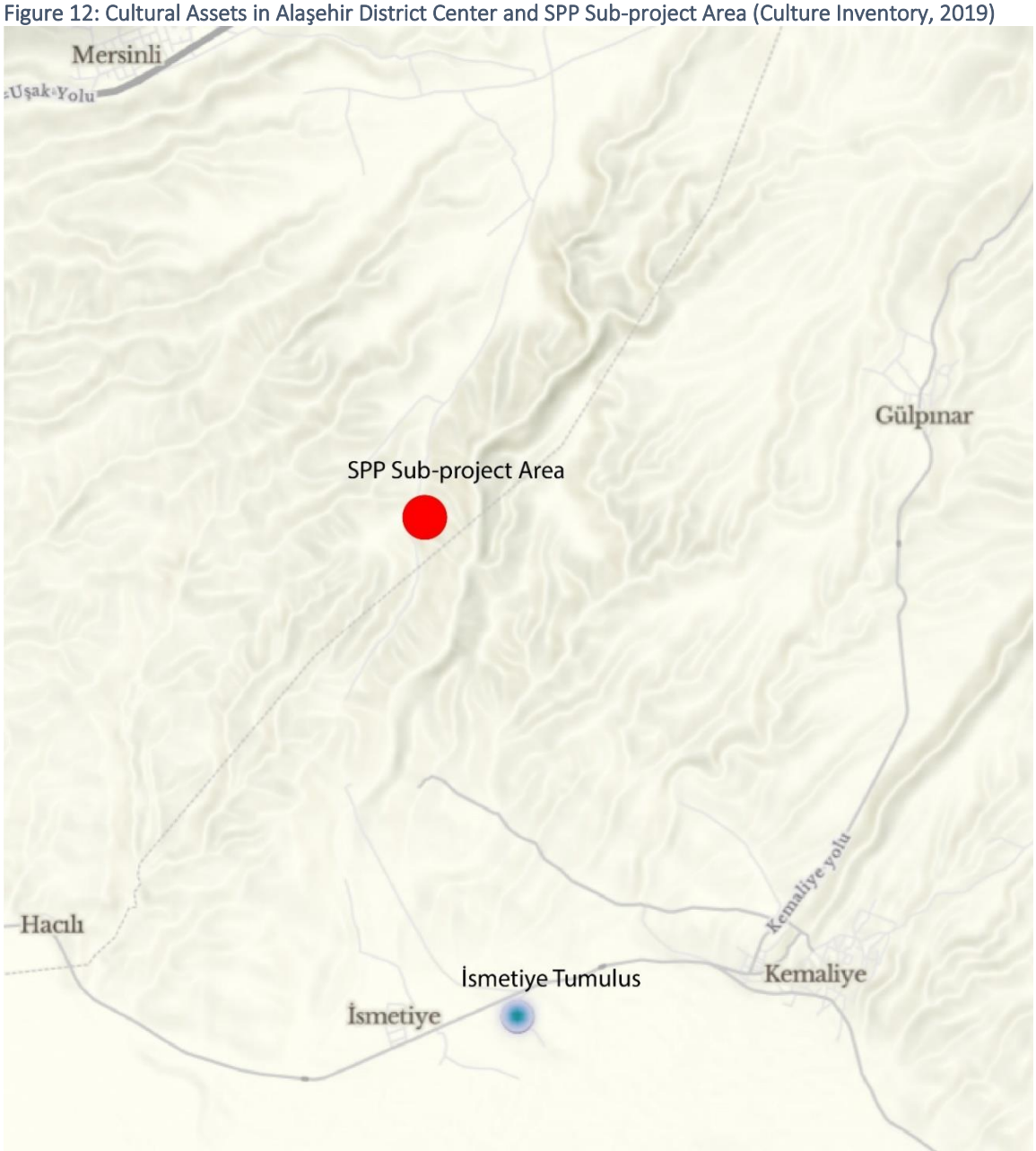


Cultural Heritage

Alaşehir district and its surroundings have been home to important settlements throughout history. Among the historical artifacts that have survived from Alaşehir are the Church of St. John of Philadelfiya (also known as “Philadephia St. Jean Church” for tourism), the remains of the Byzantine city walls, Yıldırım Bayezid Mosque, Sheikh Sinan Mosque and Tomb, Güdük Minare Mosque, Yağhane Mosque, Kadı Sheikh Mosque and Tomb, Rahmanlı Dede (in Tepeköy neighborhood).

In the İsmetiye neighborhood, there is İsmetiye Tumulus which is approximately 3 km away from SPP project area. There are no cultural assets in the SPP sub-project area.

Figure 12: Cultural Assets in Alaşehir District Center and SPP Sub-project Area (Culture Inventory, 2019)



Economic Sectors and Facilities

The economy of the district is based on agriculture, animal husbandry and industry. The main agricultural products grown are grapes, tobacco, cotton, cereals, pears and olives. Cattle and sheep are raised in animal husbandry. There are also 150 grape export companies, 80 grape enterprises, Tariş Grape Integrated Facilities, Suma Factory and Sarıkız Mineral Water Factory.

Alaşehir's economy is entirely based on agriculture and almost half of the agricultural areas are vineyards. Although it varies from year to year, an average of 55-60 tons of seedless raisins and 60000 tons of table sultanas are grown in Alaşehir and its region. In addition to viticulture, cereals, tobacco, fruit growing (chestnuts, walnuts, cherries, pomegranates, apples) and a small number of small cattle breeding and beekeeping play an active role in Alaşehir's economy (Alaşehir Municipality, 2024). Industry does not occupy a large place in Alaşehir economy. The most important industrial sector: Tariş Grape Integrated Grape Facility, which employs 530 people in a total area of 44.250 m2 with a closed area of 23.900 m2. It has a capacity of 65000 tons of raisins. Fresh vegetable and fruit processing centers established during the crop season are a good economic source for Alaşehir. Tile factories and chicken farms are small industrialists. Greenhouse cultivation, which will make a great contribution to the economy of Alaşehir, has become widespread in recent years.

5. Environmental and Social Management Plan

Mitigation Plan for the Land Preparation, Construction and Operation Phases of the Project

Table 4: Mitigation Plan for the Land Preparation, Construction Phase of the Project

Phase Impact and Likelihood (1-5)	**Risk Description**	**Mitigation Measures**	**Responsibility**	**Key Performance Indicators**	**Cost**
Land Preparation Phase I = 4 L = 2	· Risk 1: Stripping of the Vegetative Topsoil Layer and Soil Compaction	· Implement re-vegetation plans using native species. · Application of organic soil conditioners to restore soil fertility. · Adjust construction equipment to minimize soil compaction. · Implement proper construction techniques and compaction control. · Creation of protection zone around the project site	Alaşehir Municipality/PIU Contractor and/or subcontractor Supervision Consultant	Visual observations ESMR Findings	Included in the subproject budget
Land Preparation Phase I = 2 L=2	· Risk 2: The possibility of discovering artifacts or other cultural and historical items of value.	· Discontinuing all works. Contact responsible authorities. Organizing all necessary measures to protect the location. No works to proceed until official notification is received. · Chance Finds Procedures will be prepared prior to construction works.	Alaşehir Municipality/PIU Contractor and/or subcontractor Supervision Consultant Manisa Museum	Visual observations	Included in the subproject budget
Constructional Phase I = 2 L = 2	· Risk 3: Leakage of Contaminants into the Soil and Waste and Chemical Storage	· Develop spill response and cleanup procedures. · Provide spill containment kits at refueling areas. · Implement proper storage practices for waste and chemicals. · Install secondary containment systems. · Develop and implement an emergency response plan outlining the steps to be taken in the event of a leak or spill	Alaşehir Municipality/PIU Contractor and/or subcontractor Supervision Consultant	Visual observations ESMR Findings	Included in the subproject budget
Constructional Phase I = 2 L = 2	Risk 4: Noise Resulting from Temporary Traffic Load Noise Caused by Construction Vehicles and Equipment · Vibration Effects	· Implement traffic management plans to reduce congestion and optimize routes; use noise barriers, if necessary, to reduce noise propagation · Schedule noisy construction activities during the daytime; Equip vehicles and machinery with noise-reduction technologies. · Set vibration limits for construction activities. · Notify and compensate affected property owners for any damage	Alaşehir Municipality/PIU Contractor and/or subcontractor Supervision Consultant	Traffic Grievance Records Visual observations (such as traffic signs and warnings are placed at appropriate locations) ESMR Findings	Included in the subproject budget
Constructional Phase I = 2 L = 2	· Risk 5: Dust and Exhaust Emissions from Soil Excavation, Vehicle Traffic and Equipment	· Implement dust control measures, such as watering construction areas. · Use dust screens or barriers to prevent dust dispersion. · . · Promote the use of eco-friendly construction equipment.	Alaşehir Municipality/PIU Contractor and/or subcontractor Supervision Consultant	Traffic Grievance Records Visual observations (such as traffic	Included in the subproject budget

Phase Impact and Likelihood (1-5)	Risk Description	Mitigation Measures	Responsibility	Key Performance Indicators	Cost
		· Pave or stabilize dirt roads to reduce dust emissions. · Enforce speed limits to minimize dust generation. · Maintain vehicles to reduce emissions. · Use low-emission or electric vehicles whenever possible. · Encourage the adoption of clean fuel options. · Develop an emissions control and reporting program.		signs and warnings are placed at appropriate locations) ESMR Findings	
Constructional Phase I = 2 L = 2	Risk 6: Temporary Blockage of Transportation Roads between Settlements Traffic Vehicles Cause Destruction on Roads and Buildings .	· Plan construction schedules to minimize road closures. · Provide alternative routes for affected communities. · Communicate road closures in advance to residents. · Employ regular road maintenance and repair. · Ensure construction vehicle operators follow road safety guidelines.	Alaşehir Municipality/PIU Contractor and/or subcontractor Supervision Consultant	Traffic Grievance Records Visual observations (such as traffic signs and warnings are placed at appropriate locations) ESMR Findings	Included in the subproject budget
Constructional Phase I = 2 L = 2	Risk 7: Community health and safety during the execution of works	· Fence the subproject area, approach areas, and storage areas to prevent unauthorized access. · Provide clear signage to warn the public of construction activities. · Implement dust control measures to minimize air quality impact.	Alaşehir Municipality/PIU Contractor and/or subcontractor Supervision Consultant	Visual observations ESMR Findings	Included in the subproject budget
Constructional Phase I = 2 L = 2	Risk 8: · Chemical Spills and Leaks · Improper Storage and Disposal of Materials · Inadequate Stormwater Management · Inadequate Hazardous Material Handling	· Establish safe delivery/storage/handling procedures in accordance with material safety data sheets (MSDSs) Immediately contain and clean-up any spilled material.	Alaşehir Municipality/PIU Contractor and/or subcontractor Supervision Consultant	Visual observations ESMR Findings	Included in the subproject budget
Construction Phase I = 4 L=2	· Risk 9: Earthquake Risk	· Parameters suitable for 1st degree earthquake zones should be taken into consideration in construction. · During construction, current earthquake safety standards and regulations must be followed.	Alaşehir Municipality/PIU Contractor and/or subcontractor	Visual observations Records	Included in the subproject budget

Phase Impact and Likelihood (1-5)	Risk Description	Mitigation Measures	Responsibility	Key Performance Indicators	Cost
		· The design of the solar power plant should be made considering the earthquake resistance in accordance with the earthquake risk of the region.	Supervision Consultant		
Construction Phase I = 2 L=2	· Risk 10: Possibility of floods due to excessive rainfall	· In order to prevent soil erosion at the construction site, precautions such as temporary coatings, sedimentation ponds and erosion control barriers should be taken. · A water management plan should be created to regulate water management at the construction site and control flood waters. · Construction materials and equipment should be stored safely, considering the flood risk.	Alaşehir Municipality/PIU Contractor and/or subcontractor	Visual observations ESMR Findings	Included in the subproject budget
Constructional Phase I = 1 L=1	· Risk 11: Reflection and Glare Effect	· Establish criteria or thresholds that, when exceeded, trigger the need for mitigation measures. For example, if glare affects specific areas or receptor points significantly, mitigation measures should be initiated.	Alaşehir Municipality/PIU Contractor and/or subcontractor Supervision Consultant	Visual observations ESMR Findings	Included in the subproject budget
Constructional Phase I = 4 L=1	· Risk 12: Effects on Workforce and OHS	· Shaping early detection mechanisms based on results of monitoring measures, · Legal and regular training, · Utilization of occupational health and safety equipment, · Regular worker health checks, · OHS Site management Plan, · Risk Assessment, · Emergency Plan · Control of working hours and work permits, · Regular safety inspections.	Alaşehir Municipality/PIU Contractor and/or subcontractor Supervision Consultant	Sub-contractor Agreements Grievance Records ESMR Findings	Included in the subproject budget

Table 5: Mitigation Plan for the Operational Phase

Phase **Impact and Likelihood (1-5)**	**Risk Description**	**Mitigation Measures**	**Responsibility**	**Key Performance Indicators**	**Cost**
Operational Phase I = 1 L =1	· Risk 3: Leakage of Contaminants into the Soil and Waste and Chemical Storage	· Wastes generated should only be temporarily stored on site in the temporary storage area that is maintained/equipped with appropriate precautions according to the type of wastes, when needed, and wastes should be transported to licensed disposal facilities with licensed transport vehicles appropriate to the type of waste. Information related to the operations in this context should be recorded and records should be kept.	Alaşehir Municipality/PIU Contractor and/or subcontractor Supervision Consultant	Visual observations ESMR Findings	Included in the subproject budget
Operational Phase I = 1 L =1	· Risk 5: Dust and Exhaust Emissions, Vehicle Traffic and Equipment	· · Vehicles and equipment used during the operation phase will undergo regular maintenance, with maintenance records being kept. · Whenever possible, electric-powered vehicles and equipment will be used instead of those powered by fossil fuels	Alaşehir Municipality/PIU Contractor and/or subcontractor Supervision Consultant	Traffic Grievance Records Visual observations (such as traffic signs and warnings are placed at appropriate locations) ESMR Findings	Included in the subproject budget
Operational Phase I = 1 L =1	Risk 8: · Chemical Spills and Leaks · Improper Storage and Disposal of Materials · Inadequate Hazardous Material Handling · Inadequate handling of waste PV modules	· Wastes generated should only be temporarily stored on site in the temporary storage area that is maintained/equipped with appropriate precautions according to the type of wastes, when needed, and wastes should be transported to licensed disposal facilities with licensed transport vehicles appropriate to the type of waste. Information related to the operations in this context should be recorded and records should be kept. · Develop Disposal of Waste PV Modules Management Plan · Develop Recycling of Project Equipment/Materials Management Plan	Alaşehir Municipality/PIU Contractor and/or subcontractor Supervision Consultant	Visual observations ESMR Findings	Included in the subproject budget
Operational Phase I=1 L=3	· Risk 9: Earthquake Risk	· Backup plans should be created for the devices and systems used in the solar power plant. · Power supplies must be provided for emergencies.	Alaşehir Municipality/PIU Contractor and/or subcontractor Supervision Consultant	Visual observations Records	Included in the subproject budget

Phase Impact and Likelihood (1-5)	Risk Description	Mitigation Measures	Responsibility	Key Performance Indicators	Cost
Operational Phase I=1 L=1	· Risk 10: Possibility of floods due to excessive rainfall	· Flood risk should be reduced by establishing an effective water management and drainage system during the operation phase of the solar power plant. · If necessary, facilities such as regulators for flood control should be constructed in the operation area.	Alaşehir Municipality/PIU Contractor and/or subcontractor	Visual observations ESMR Findings	Included in the subproject budget
Operational Phase I=3 L=3	· Risk 11: Reflection and Glare Effect	· Develop a detailed procedure for monitoring glare and reflection, including responsibilities, schedules, and data collection methods and regularly report the findings and progress of glare and reflection control measures. ·	Alaşehir Municipality/PIU Contractor and/or subcontractor Supervision Consultant	Visual observations ESMR Findings	Included in the subproject budget
Operational Phase I = 3 L=1	· Risk 12: Effects on Workforce and OHS	· For sub-projects that may have labor influx issues, camp sites should be arranged to properly accommodate workers and meet their needs within the camp site. Workers must be provided with relevant trainings as needed. Workers will sign and receive a training on the Code of Conduct. Nearby communities will be consulted regarding the locations of the work camp. · Develop Labor Management Plan	Alaşehir Municipality/PIU Contractor and/or subcontractor Supervision Consultant	Sub-contractor Agreements Grievance Records ESMR Findings	Included in the subproject budget
Operational Phase I = 2 L=2	· Risk 13: Storage of Damaged or End of Lifecycle Panels	· Develop a procedure for temporary storage of damaged or end-of-lifecycle panels on site in secured areas. · - Ensure proper delivery to specified recycling areas.	Alaşehir Municipality/PIU Contractor and/or subcontractor Supervision Consultant	Sub-contractor Agreements Grievance Records ESMR Findings	Included in the subproject budget

Monitoring Plan for the Land Preparation, Construction and Operation Phases of the Project

Table 6:Monitoring Plan for the Land Preparation, Construction Phases of the Project

Phase Impact and Likelihood (1-5)	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
Land Preparation Phase I = 4 L = 2	Risk 1: Stripping of the Vegetative Topsoil Layer and Soil Compaction	· Analysis organic matter content and compaction levels of soil in the project site regularly.	· Soil Organic Matter Content Soil compaction levels	· Sampling and laboratory analysis · Soil compaction tests	· Project site · Areas with construction and traffic intensity	· Before and after topsoil stripping · Periodic checks during and after construction	· Any significant decrease in soil organic matter content · Soil compaction beyond allowable limits
Land Preparation Phase I = 2 L=2	Risk 2: The possibility of discovering artifacts or other cultural and historical items of value.	· Coordinate with relevant regulatory authorities and heritage preservation agencies to ensure compliance with cultural heritage protection regulations	· Chance findings	· Coordination with the Museum affiliated to the Ministry.	· Project Site	· -	· Once a chance finding discovered
Constructional Phase I = 2 L = 2	Risk 3: Leakage of Contaminants into the Soil and Waste and Chemical Storage	· Analysis contaminants and waste in the soil of the project site regularly.	· Presence of oil, lubricants, or fuels in soil. .	· Visual inspection, soil sampling, and soil analysis if necessary. .	· Areas near equipment refueling stations and vehicle storage. · Near waste and chemical storage areas	· Regular checks during refueling and maintenance	· Presence of contaminants
Constructional Phase I = 2 L = 2	Risk 4: Noise Resulting from Temporary Traffic Load Noise Caused by Construction Vehicles and Equipment	· Conduct periodic sound level measurements at key locations in areas with traffic during construction. · Regularly measure noise levels during equipment operation in areas with equipment activities. .	· Noise levels generated by traffic. · Noise levels generated by traffic. · Structural and superficial damage from vibrations	· Sound level measurement · Visual inspections and structural assessments.	· Areas with traffic during construction · Areas with equipment operation. · Buildings near construction areas.	· Periodic measurements during construction. . · Regular structural assessments during construction.	· Noise levels exceeding acceptable limits. · Vibration and noise exceeding allowable levels. · Signs of structural or superficial damage.

Phase Impact and Likelihood (1-5)	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
Constructional Phase I = 2 L = 2	Risk 5: Dust and Exhaust Emissions from Soil Excavation, Vehicle Traffic and Equipment	· Continuous measurement of dust concentration and particulate matter (PM) emissions using air quality monitoring equipment in construction areas with soil excavation. · Periodic air quality measurements along traffic routes in traffic-prone areas within the site. · Periodic emission measurements from the exhaust systems of vehicles and construction equipment in vehicle operation areas.	· Dust concentration and particulate matter (PM) emissions. · Dust concentration and particulate matter (PM) emissions. · Emissions from vehicles and construction equipment.	· Dust concentration measurements using air quality monitoring equipment. · Air quality measurements along traffic routes. · Emission measurements from the exhaust systems	· Construction areas with soil excavation · Traffic-prone areas within the site · Vehicle operation areas	· Continuous monitoring during excavation activities · Periodic measurements during project activities · Periodic emissions testing during construction and operation	· Dust levels exceeding acceptable thresholds. · Emissions exceeding permissible levels
Constructional Phase I = 2 L = 2	Risk 6: Temporary Blockage of Transportation Roads between Settlements Traffic Vehicles Cause Destruction on Roads and Buildings	· Analyzing road blockages, duration, and frequency through real-time assessments of transportation routes. · Analyzing damages to roads and buildings by conducting periodic visual assessments in areas where construction vehicles operate.	· Road blockages, duration, and frequency. · Damage to roads and buildings	· Record road closure incidents and duration. · Visual inspections, documenting damages.	· Vehicle operation areas. · Transportation routes. · Areas where construction vehicles operate.	· Periodic emissions testing during construction and operation. · Real-time monitoring of road conditions. · Periodic visual assessments	· Road closures exceeding acceptable frequency. · Occurrence of damages to roads and buildings beyond permissible levels.
Constructional Phase I = 2 L = 2	Risk 7: Community Health and Safety During Execution of Works	· Regular inspections of fenced areas and signage to ensure they are maintained and effective. · Monitoring of work hours to ensure that activities are conducted outside of high-traffic or operational hours.	· Condition and visibility of fencing and signage. · Compliance with established work hours. · Security of approach and storage areas.	· Visual inspection, regular audits, air quality sampling	· Approach roads, storage areas, and work sites within the project boundary.	· Daily during construction activities. · Weekly (dust monitoring.) · Ad hoc inspections based on complaints or identified risks.	· Breach in fencing or unauthorized access. - Deviation from work hours. - Dust levels exceeding standards.

Phase Impact and Likelihood (1-5)	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
		· Inspection of approach areas and storage areas to verify they are secured and inaccessible to unauthorized personnel. · Periodic checks for dust levels to ensure compliance with air quality standards.	· Dust particle levels in the surrounding environment				
Constructional Phase I = 2 L = 2	Risk 8: · Chemical Spills and Leaks · Improper Storage and Disposal of Materials · Inadequate Stormwater Management · Inadequate Hazardous Material Handling	· Monitor and control chemical levels and respond to incidents	· Chemical concentrations	· Visual inspection and periodic manual testing. .	· Areas where chemicals are stored, handled, or processed . . .	· Regular inspections . .	· Immediate response to any signs of leakage or contamination . . .
Construction Phase I = 4 L=1	Risk 9: Earthquake Risk	· Earthquake activities should be constantly monitored with sensitive earthquake sensors and monitoring systems placed in the project area. · Continuous monitoring systems should be established for solar power panels, support structures, inverters and other structural elements. · Structural strengthening works should be carried out within a certain period in order to minimize the damages that may occur	· Liquefaction rates · Soil classification · earthquake design classes · settlement suitability data	· Ground survey · Structural strengthening .	· Project Site and surrounding areas	Continuous monitoring with real-time updates. Continuous monitoring with real-time or periodic reviews. · Immediate reporting for any incidents and periodic documentation for routine checks	· Alarming system according to the earthquake intensity · Ground movement sensor · Remote sensing technologies, such as energy distribution

Phase Impact and Likelihood (1-5)	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
		under the influence of earthquakes. .					
Construction Phase I = 2 L=2	Risk 10: Possibility of floods due to excessive rainfall	· Follow up weather forecasting services to receive timely and accurate information about potential heavy rainfall.	· Monitor the intensity of rainfall, from the closest meteorological station data measured in millimeters per hour. This parameter helps assess how quickly precipitation is accumulating and if it reaches levels that may lead to flooding.	· Ground-based rain gauges, weather radar, and satellite precipitation estimates can be used. ·	· Project Site and areas where the workforce is most active and where with heavy equipment use	· Regular and ongoing monitoring during periods of intense rainfall events	· Monitor changes in rainfall and water level with scales and indicators from the closest meteorological station data .
Constructional Phase I = 4 L=1	Risk 12 Effects on Workforce and OHS	· To establish an incident reporting system and encourage its use by employees for reporting and documenting workplace incidents, · Regular health assessments according to 6331 Law, its regulation and WB ESP to monitor employees' health conditions and facilitate prompt intervention or preventive measures for emerging health issues, · Periodically identifying factors contributing to workplace stress and conducting workplace stress surveys to eliminate stressors,	· Workforce health and safety indicators, including accident rates, workplace stress levels, and health-related incidents/ near misses, injuries, and safety violations/near misses, fire and environmental incidents/near misses	· Data collection through incident reports, health assessments, safety inspections, accident investigations and surveys	· Project site and areas where the workforce is most active and where with heavy equipment use	· Regular and ongoing monitoring during periods of intense construction and operation activities	· Define thresholds for incident rates and workforce stress levels that warrant corrective action

Phase Impact and Likelihood (1-5)	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
		· Regular inspections by relevant regulatory authorities to identify potential hazards in the construction area and alleviate the physical and mental fatigue of workers during intensive construction periods, · Conducting emergency drills to ensure swift action in case of emergencies, and ensuring that all employees are familiar with evacuation procedures and emergency protocols, · Maintaining effective and transparent communication among employees, employers, and relevant stakeholders, establishing continuous communication channels for reporting any safety concerns or issues, · Monitoring and regulating working and break hours to prevent excessive fatigue, ensuring that employees take regular breaks.					

Table 7: Monitoring Plan for the Operational Phase

Phase Impact and Likelihood (1-5)	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
Operational Phase I = 1 L =1	Risk 3: Leakage of Contaminants into the Soil and Waste and Chemical Storage	· Analysis contaminants and waste in the soil of the project site regularly.	· Presence of oil, lubricants, or fuels in soil. · .	· Visual inspection, soil sampling, and analysis if necessary. ·	· Areas near equipment refueling stations and vehicle storage. · Near waste and chemical storage areas	· Regular checks during refueling and maintenance	· Presence of contaminants
Operational Phase I = 1 L =1	Risk 5: Exhaust Emissions from Soil Excavation, Vehicle Traffic and Equipment	· Regular maintenance checks on vehicle and equipment exhaust systems. · Monitoring of air quality parameters using basic portable devices in critical areas.	· Exhaust emissions levels · PM (Particulate Matter) concentration	· Periodic visual inspections · Maintenance records and periodic exhaust testing	· High-traffic areas within the site ·	· After significant maintenance · Monthly or quarterly	· Visible dust accumulation or emissions beyond acceptable levels · Emissions exceeding permissible levels
Operational Phase I = 1 L =1	Risk 8: · Chemical Spills and Leaks · Improper Storage and Disposal of Materials · Inadequate Stormwater Management Inadequate Hazardous Material Handling	· Regular visual inspections of chemical storage areas · Ensure proper labeling and secure storage of all chemicals. · Monitor stormwater systems for any signs of contamination · Train staff on basic hazardous material handling and emergency response procedures.	· Visible leaks or spills	· Visual inspection · Periodic checks · Soil analysis in case of any contamination incident	· Chemical storage and handling areas · Designated storage areas	· Weekly daily inspection · After heavy rain events	· Immediate response to any signs of leaks or spills · Immediate corrective action if contamination is detected
Operational Phase I=1	Risk 10: Possibility of floods due to excessive rainfall	· Regular visual checks of drainage pathways to	· Surface Water flow · Drainage efficiency	· Weather radar, and satellite precipitation	· Project Site and areas where the workforce is most active and	· Regular and ongoing monitoring	· detect changes in rainfall and water

Phase Impact and Likelihood (1-5)	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
L=1		ensure they are clear of debris. · Ensure basic grading and slope management to avoid water pooling in low-lying areas.		estimates can be used. · Visual inspections .	where with heavy equipment use · Low-lying areas within the project site	during periods of intense rainfall events	level with scales and indicators · Blockages or debris in drainage pathways
Operational Phase I=3 L=3	Risk 11: Reflection and Glare Effect	· Implement visual monitoring protocols to observe and record glare and reflection events. · Use specialized glare measurement tools to provide quantitative data. · Conduct monitoring during different times of the day and under various weather conditions to capture variations.	· The intensity and frequency of glare and reflection from the solar panels and surrounding areas and the times of the day, seasons, or specific weather conditions when glare and reflection effects are most pronounced.	· The intensity and frequency of glare and reflection from the solar panels and surrounding areas and the times of the day, seasons, or specific weather conditions when glare and reflection effects are most pronounced.	· The intensity and frequency of glare and reflection from the solar panels and surrounding areas.	· The intensity and frequency of glare and reflection from the solar panels and surrounding areas.	· Define specific detection limits that indicate the threshold beyond which glare, and reflection effects become significant and may require corrective action.
Operational Phase I = 3 L=1	Risk 12: Effects on Workforce and OHS	· To establish an incident reporting system and encourage its use by employees for reporting and documenting workplace incidents, · Regular health assessments according to 6331 Law, its regulation and WB ESP to monitor employees' health conditions and facilitate prompt intervention or preventive measures for emerging health issues, · Periodically identifying factors contributing to	· Workforce health and safety indicators, including accident rates, workplace stress levels, and health-related incidents/ near misses, injuries, and safety violations/near misses, fire and environmental incidents/near misses	· Data collection through incident reports, health assessments, safety inspections, accident investigations and surveys	· Project site and areas where the workforce is most active and where with heavy equipment use	· Regular and ongoing monitoring during periods of intense construction and operation activities	· Define thresholds for incident rates and workforce stress levels that warrant corrective action

Phase Impact and Likelihood (1-5)	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
		workplace stress and conducting workplace stress surveys to eliminate stressors, · Regular inspections by relevant regulatory authorities to identify potential hazards in the construction area and alleviate the physical and mental fatigue of workers during intensive construction periods, · Conducting emergency drills to ensure swift action in case of emergencies, and ensuring that all employees are familiar with evacuation procedures and emergency protocols, · Maintaining effective and transparent communication among employees, employers, and relevant stakeholders, establishing continuous communication channels for reporting any safety concerns or issues, · Monitoring and regulating working and break hours to prevent excessive fatigue, ensuring that employees take regular breaks.					
Operational Phase	Risk 13: Storage of Damaged or End of Lifecycle Panels	· Analysis of storage conditions and recycling processes regularly.	· Condition of stored panels	· Visual inspection	· Temporary storage areas on site	· Regular checks	· Presence of damaged panels

Phase Impact and Likelihood (1-5)	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
I = 2 L=2							beyond allowable limits

Measures for Institutional Arrangements, Capacity Development, and Training

In the context of the Sub-Project aiming to increase renewable energy production in the Alaşehir district, institutional arrangements for managing environmental and social issues need to be established to ensure its implementation with minimized potential impacts. In the Environmental and Social Management Framework of the World Bank's Sustainable Cities Project-II Additional Financing (World Bank, 2019), ILBANK Project Management Unit (PMU), and the project owner municipalities are identified as key actors. Roles and capacities of actors are defined, and necessary adjustments are made for the effective implementation of sub-projects. For the SPP project to be constructed in the Alaşehir district, the main actors are the World Bank, ILBANK, Alaşehir Municipality, Contractor, Supervision Consultant, and E&S Consultant.

Alaşehir Municipality

Renewable energy projects in Alaşehir Municipality are managed by the Technical Works Directorate with a staff of three, including an environmental engineer, a civil engineer, and a land surveyor. There is currently no unit used as a complaint mechanism in Alaşehir Municipality. According to the ESMP, the Technical Works Directorate, Research Project Directorate, Plan-Project Directorate, Headman Affairs, Human Resources and Training Directorate, and Culture and Social Affairs Directorate teams within the municipality should be involved in a Project Management Unit.

Table 8: Roles and Responsibilities for the Implementation of ESMP

Actor/Stakeholders	Responsibilities
Alaşehir Municipality	ESMP Management, Implementation of mitigation measures, Monitoring of environmental and social impacts, Establishment of Grievance Mechanism, Reporting on ESMP compliance and progress to ILBANK and WB, Coordination with stakeholders for ESMP implementation;
ILBANK	Monitoring and supervising the process of ESMP implementation. Reporting the progress of ESMP implementation to WB on regular periods Ensuring ESMP requirements are integrated into project activities.
Contractor/Subcontractor(s)	Implementation of ESMP measures during construction. Reporting environemtal and social issues to Alaşehir Municipality. Ensuring compliance with ESMP requirements in all activities. Informing Alaşehir Municipality on construction activities (such as road closures and service interruptions). Managing environmental impacts like waste, noise, and pollution. Internal Reporting to Alaşehir Municipality on ESMP Implementation.
Supervision Consultant	Providing guidance on ESMP compliance. Provide necessary information to Alaşehir Municipality Assisting Alaşehir Municipality in managing and mitigating impacts. Monitoring the effectiveness of ESMP measures.
WB	Audit the Alaşehir Municipality's compliance with the provisions set out in the ESMP managed by the Municipality during the construction and operation phase via the Project Progress Reports Visit project sites to conduct its own monitoring at certain intervals or when necessary.

Implementation of ESMP Disclosure

Ensuring the full integration and implementation of this ESMP into all project preparation and planning activities constitutes one of the key responsibilities of Alaşehir Municipality. It will provide a framework for all physical works and participation processes within the scope of the project. It will be an integral part of the matrices prepared for the tender processes related to physical works. The technical requirements, conservation, preservation, and monitoring measures outlined in the ESMP will be strictly adhered to in the tender documents, and it will be explicitly stated that the processes will be subject to review according to this plan.

The ESMP, prepared in accordance with the requirements of the World Bank Safeguard Policies, will be publicly disclosed and will be the responsibility of Alaşehir Municipality. Alaşehir Municipality will publish the final approved ESMP on its website. Additionally, a unit, easily accessible by affected groups such as Muhtar offices and local NGOs as outlined in the Stakeholder Analysis section of this plan report, will be established.

Like all management plans, the ESMP has a dynamic structure. It will be periodically reviewed during the implementation and operation phases of the project, deficiencies, malfunctions, and issues will be reported, and based on these reports, it will be updated and approved when deemed necessary. For each approved updated version of this ESMP, Alaşehir Municipality is responsible for sharing it with the public and providing explanations through communication channels. Thus, the implementation of the ESMP and the actions taken during the implementation process will be transparently shared with the public. The ESMP and Stakeholder Engagement Mechanism must be disclosed to all stakeholders and the public as part of environmental and social impact assessment studies.

Documents necessary for the implementation of the ESMP should also be prepared accordingly, and each system required for the project, such as the Grievance Mechanism, should be explained.

NOTE: Details of ESMP disclosure will be inserted here, upon completion.

Institutional Capacity Building and Training

The Project Owner, Alaşehir Municipality, will conduct a training and awareness program covering the expectations and commitments of the ESMF. The Supervision Consultant, in collaboration with the Project Owner, needs to organize a workshop to identify priority topics for the training. The target audience for the training programs includes employees and contractors responsible for implementing the ESMP. The Project Owner must provide training to employees and subcontractors before the construction phase begins. The training is expected to last at least two days and should be held twice a year. Depending on the level of responsibility for implementing the ESMP, advanced training programs should also be considered.

The code of conduct, including compliance with behavioral rules addressing gender-based violence, sexual harassment, sexual exploitation, and abuse, will be explicitly stated in the personnel's contract terms. The consequences of non-compliance with behavioral rules will be clearly outlined in the contract. Measurement and evaluation should be conducted at the end of the training provided to personnel.

This aims to enhance the competence of the personnel. Based on the review results, adjustments to the training program can be made if necessary, including changes in trainers or repeating the training. The training program/modules will cover a range of topics, including but not limited to:

- Objectives of the ESMF concerning project activities,
- Workshops by ILBANK to familiarize municipalities and their potential consultants with WB safeguard policies,
- Requirements in management plans and monitoring activities to be conducted within this framework,

- Environmental and social data collection, reporting, and monitoring,
- Understanding sensitive environmental and social receptors in the project area and surroundings,
- Raising awareness about potential risks and impacts arising from project activities,
    - Trainings related to management of air emissions, waste management, etc.
    - Routine training on fire safety and first aid
- Complaints redress mechanism developed within the project scope, the officer responsible for the mechanism, and employee rights,
- Risks and measures related to community health and safety, personal protective equipment and information on works and occupational safety.
- Occupational health and safety, first aid, emergency preparedness, and emergency scenarios
- Rules for maintaining behavior and workplace harmony,
- Communication with the local community,
- Training on behavioral rules covering gender-based violence, sexual harassment, sexual exploitation, and abuse,
- Principles of traffic and road safety,
- Waste separation, storage, and training on environmental planning.
- Capacity building activities such as training, workshop, study tours
- ESF Borrower Training roll out program.

Environmental and Social Monitoring Report

The Environmental and Social Monitoring Report serves as a crucial tool for recording performance indicators, parameters, and measurement values at specified intervals to be used in the measurement of safeguards and monitoring measures. It is critical for anticipating potential issues that may arise throughout the project's life cycle and determining mitigation, reduction, and improvement strategies to effectively address these issues. The results will be assessed for compliance with established standards by comparing them with national legislative requirements and the World Bank EHS Guidelines. Visual observations, along with documented significant issues, will be presented in written form. The report should focus on both positive practices and negative findings, with photographic evidence supporting negative observations. For each negative observation, a corrective action should be proposed with a reasonable deadline. Any analysis/sample collection/measurement report should be provided as an annex to the report, along with the relevant assessment and required improvement activities. The findings of the Environmental and Social Monitoring Reports will ensure the dynamic and living nature of this ESMP. Therefore, the ESMP should be reviewed and revised by the Municipality's PIU unit based on these findings.

Long-term monitoring reports are used to objectively evaluate the environmental and social performance of the project and determine its sustainability. This is a vital tool for understanding the long-term impacts of the project, developing strategies for future similar projects, and keeping the ESMP updated over time. Monitoring reports identify issues that can be improved and localized by assessing the project's environmental and social governance. It is expected to be used to develop strategic management to strengthen relationships among stakeholders influenced by the project and minimize its impacts. Additionally, long-term monitoring reports are used to evaluate the project's societal acceptance and reputation. Continuous communication with stakeholders, obtaining feedback, and developing effective response strategies to this feedback are important in this regard. The experience gained will contribute to identifying potential problems in advance and developing emergency intervention strategies.

Documenting and monitoring the environmental and social performance of the project for the World Bank and ILBANK enhances trust in the project and increases the municipality's future financial reliability. Furthermore, monitoring reports contribute to the development of good practice standards in the renewable energy sector, the widespread implementation of similar projects at the district and

even provincial levels, and the localization of relevant standards, thereby contributing to regional development and sustainable development goals.
In addition to all these, it will provide an important baseline for physical spatial planning studies that determine the future of cities. It is expected to generate important data in terms of identifying criteria that can be used in determining suitable areas for renewable energy and integrating them into planning processes. Long-term evaluations obtained through monitoring reports will be crucial for ensuring the sustainability of planning decisions throughout the life cycle of projects, assessing environmental and social changes, and providing opportunities to enhance planning processes.

6. Stakeholder Engagement

This Stakeholder Analysis is based on the relevant Turkish legislation and international regulations by considering the project is exempt from EIA and classified as a Category B Project according to the WB OP 4.01. In conformity, relevant WB OPs (i.e., WB OP 4.01 and WB's 2010 Policy on Access to Information) and EU Directives. In this regard, the relevant national and international policies considered are given below.

Stakeholder Identification and Analysis

The purpose of a stakeholder identification is to determine and prioritize the project stakeholders for consultation that may be affected (either directly or indirectly in positive or negative way) by the project or that have an interest in the project but are not necessarily directly impacted by it.

The following categories of stakeholders have been identified as being affected by or potentially interested in the Alaşehir Municipality Solar Power Project.

- Project affected parties,
- National governmental and non-governmental organizations (NGOs),
- Local governmental organizations and NGOs,
- Residents (potentially PAPs including landowners/users/ renters/ informal users of the lands),
- Local businesses
- Vulnerable groups
- Refugees

In the stakeholder identification process, the dynamics between the stakeholders, the risks, and opportunities of being involved in the project are considered. The basis of stakeholder identification is the level of interest and interaction with the project. Accordingly, stakeholders can be grouped under the following categories.

- Direct Stakeholders
- Indirect Stakeholders
- Other Interested Parties

Within the scope Alaşehir Municipality Solar Power Plant Project of this project, a comprehensive list of the internal and external stakeholders is given in Table 9.

Table 9: **Comprehensive List of the Stakeholder Identified for the Project**

Stakeholder Groups	Level of Interest	Level of Influence
Direct Stakeholders		
Directly Affected Communities		
Residents in the project area of influence	Moderate	Low
Vulnerable individuals/groups in the project area of influence	Low	Low
SuTP living in project areas of Manisa	Low	Low
Formal or informal users of lands allocated to the project	Low	Low
Public Administrations at National Level		
The Ministry of Environment, Urbanization and Climate Change.	Low	Low
Ministry of Energy and Natural Resources	High	High
Turkish Energy Market Regulatory Board	Low	Low
Ministry of Industry and Technology	Low	Low
General Directorate of Energy Affairs	High	High
General Directorate of ILBANK	High	High
Directorate General of Migration Management	Low	Low
Public Administrations/Authorities/Agencies at Provincial Level		
Alaşehir Municipality	High	High
Alaşehir Governate	Medium	Medium

Stakeholder Groups	Level of Interest	Level of Influence
Direct Stakeholders		
Provincial Directorate of Environment, Urbanization and Climate Change	Moderate	High
Mukhtar of İsmetiye Neighborhood	Moderate	High
GDZ Electricity Distribution Company	High	High
Contractors/Sub-contractors and Supervision Consultant Companies	High	High
Indirect Stakeholders		
Indirectly Affected Communities		
Residents outside of the project area of influence	Low	Low
Vulnerable individuals/groups outside of the project area of influence	Low	Low
Public Administrations at National Level		
Ministry of Agriculture and Forestry	Low	Low
Public Administrations/Authorities/Agencies at Provincial Level		
Governorship Alaşehir	Low	Moderate
Provincial Directorate of Disaster and Emergency	Low	Low
Provincial Directorate of Health	Low	Low
T.C. Zafer Development Agency	Low	Low
Turkish Employment Agency (IS-KUR) –Manisa Branch	Low	Moderate
Other Interested Parties		
Chamber of Environmental Engineers	High	High
International Solar Energy Society (GUNDER)	Moderate	Moderate
International Refugee Rights Association	Low	Low
Business enterprises located in the Project area	Moderate	Moderate
Manisa Celal Bayar University	Low	Low

The types and causes of exposures and how the above-mentioned stakeholder groups are affected (positive/negative) are given in Table 10.

Table 10: The Potential Impacts of Project Activities on Social Components

Social Component	Type of Potential Impact (Positive/Negative)	Potential Impact Definition
Emergency Response	Positive	After the increase in the electricity prices in Türkiye, municipalities are having difficulties paying them. After the implementation of this project, it is expected to be offset the energy demand and decrease in carbon footprint.
Local Employment	Positive	Employment opportunities for local engineers and manpower.
Transportation/Traffic	Negative	Safety issues due to increase in traffic, damages on roads, generation of greenhouse gas emissions / noise.
OHS and Community H&S	Negative	Water pollution, air emissions/noise and visual pollution
Tourism	Negative	Aesthetic issues.

As part of the stakeholder identification process, it is also important to identify individuals and groups that may be differentially or disproportionately affected by the Project because of their disadvantaged or vulnerable status. The potential vulnerable/disadvantaged groups can be listed as follows:

- Households with physically and / or mentally disabled family members,
- People with chronic diseases,
- Elderly people over 65 years of age who live alone and in need of care,
- Female-headed households,
- Households where the head of the household is a child,
- Households with low or no income, and
- Refugee households.

Considering the potential vulnerable/disadvantaged groups, the summary of project stakeholder needs is given in Table 11.

Table 11: Potential Vulnerable/Disadvantaged Groups and their needs

Community	Stakeholder group	Key characteristics	Language needs	Preferred notification means (e-mail, phone, radio, letter)	Specific needs (accessibility, large print, childcare, daytime meetings)
İsmetiye Neighborhood	Parents with young children	The number of households affected and which of children - To be Determined (TBD)	Official language	Written information, radio	Childcare for meetings—late afternoon preferred timing
	Refugees	The number of extended families TBD, poverty level	Language alternative	Visit with translator and civil society representative	Graphics, education on process
	Persons with disability	The number of disabled person TBD	Official language and/or sign language	Written information, radio and/or face-to-face with competent person on sign language if possible	Accessibility i.e., providing transportation
	Other groups	The number of person TBD	Official language	Written information, radio Visit at their own places	Graphics, education on process

Stakeholder Engagement Plan

Stakeholder Engagement is a control mechanism that ensures the implementation of key principles during the project. The engagement activities will not be scheduled in a manner due to the small capacity of solar power plant project. To maximize stakeholder engagement, it prevents disruption of local stakeholders' daily work and regulates the timing and number of engagement activities. Accordingly, recording the findings and feedback together in accordance with all engagement activities, sharing them with the responsible parties, and following the process are essential. Also, engagement activities need to be culturally appropriate, provide equal access to relevant stakeholders, and enable their feedback. No stakeholder engagement activities will be scheduled for this project.

Grievance Mechanism

Alaşehir Municipality will establish a Grievance Mechanism (GM) to receive, resolve, and follow the concerns and complaints of the Project affected communities. All grievances will be effectively received, recorded, and responded to within a predetermined timeline and based on their contents. The grievance mechanism has been prepared in accordance with the environmental and social standards of the World Bank (World Bank, 2018). At the earliest convenience, the stakeholders will have access to Alaşehir Municipality PIU and Contractor dedicated CLOs for responses to responses to grievance. Stakeholders will be informed on the Satisfactory responses to the grievances and corrective activities. The GM for the stakeholders will be operated according to the following procedure.

1. Following tools will be used so that all stakeholders can be informed regarding the Project's GM process:

- Web page
- Email address

- Public meetings
- Telephone
- Frequently Asked Questions (Brochure, web page, bulletin, etc.)

2. Grievances can be submitted by the channels outlined below:

- Telephone (Call Center and units) (444 8 653)
- Personal visit to Alaşehir Municipality and Contractor head office/branches
- Grievance boxes (installed at the Alaşehir Municipality Units / Contractor)
- Relevant public administrations (district governorship, municipality, headmen)
- Email (info@alasehir.bel.tr)
- Meetings
- Staff and local communication desk of Alaşehir Municipality / Contractor
- By written petition to Alaşehir Municipality / Contractor
- During site visits and miscellaneous

3. All the submitted grievances are collected at the GM Section of PIU Department.
4. The submitted grievances are recorded in databases by CLOs of PIU and Contractor.
5. PIU and Contractor CLOs or any contact person who received the grievance confirm the grievance reception via phone and/or email within 2 days.
6. The response to the relevant grievance will be drafted by CLOs of PIU / Contractor and approved by Project Managements.
7. After responding to the relevant grievance, necessary revisions will be made on the Grievance Form with respect to the result of GM process which will be communicated with relevant Complainant within 10 working days. The required actions for valid grievances will be taken within 15 working days. If applicant accepts the resolution within 30 days, the submitted grievance is marked as closed. If the applicant does not sign-off Complaint Close-Out Form due to insufficient satisfaction, a meeting will be organized by the PIU management on relevant complaint and if necessary, with the participation of Contractor. The compliant can participate this meeting to submit his/her Project-related concern face to face to the management. The aim of this meeting is to find alternative solutions of which both parties agree with.
8. All the grievances will be monitored by recording them via the monitoring and evaluation system which will be established within the scope of GM.
9. Regarding grievances received by Contractor; the grievances which are within the scope of Contractor responsibility will be handled by itself and reporting to the PIU during monitoring activities. The grievances within the scope of Alaşehir Municipality responsibility will be immediately communicated with PIU by the Contractor and handled by the PIU accordingly. The contractor CLO is responsible for recording and tracking grievances.
10. If the complaint cannot be resolved with the existing process, applicants can always apply to relevant legal institutions. Such institutions can be summarized as follow:

- Civil Courts of First Instance
- Administrative Courts
- Commercial Courts of First Instance
- Labor Courts, and Ombudsman (https://ebasvuru.ombudsman.gov.tr/)

During construction and operational activities, the GM described above shall continue to be driven by stakeholders' views, making this procedure accessible to all affected stakeholders. Requests that require urgent remedy and/or support shall be responded to and given support within the same day. All outstanding grievances/requests shall be recorded within two business days, reviewed, and assessed within ten business days, and concluded not later than 15 business days. Corrective actions shall be taken to resolve the grievance. GM Flow Chart is given in Table 12.

Table 12: Grievance Mechanism Flowchart

Stage of GM	Required Action
Grievance submission	Receiving the grievance by any above-mentioned communication channel. (Following to receive more sensitive grievances i.e., SEA/SH, child abuse or abuse, necessary action will be taken within 48 hours. For such cases at the workplaces, the complaint will be directed by the GM focal point (based in ILBANK headquarter) to relevant legal authorities/service providers such as Ministry of Family and Social Services and Prosecutors Office.)
Grievance registration	Grievance Form and Grievance Register Table are used during registration process. After grievance registration, feedback will be sent to the Complainant for the purpose of confirmation within two (2) days. Anonymous registration will be conducted if a Complainant requests that complaint of whom is handled anonymously.
Grievance assessment	Grievances are assessed within 10 working days with the clarification of the fact that relevant grievance is compliance with admissibility criteria. The Complainant will be informed appropriately in case of invalid grievances.
Responses to the grievances	According to the grievance type, consultation with stakeholders in question can be conducted on site. After grievance assessment, grievance will be responded appropriately via previously mentioned communication channels. Application to ILBANK or Court of First Instance is also available for Complainants if a resolution cannot be figured out for whose grievances.
Grievance closure	As long as alternative agreement is not conducted, grievance of Complainant is closed within fifteen (15) Business Days as of submission date and the Grievance Close Out Form is filled accordingly. In the case of grievances cannot be closed within fifteen (15) Business Days, it is ensured that well documented mitigatory circumstances related to which are reported. Regarding the anonymous grievances, outcome of GM process and associated taken actions should be declared on Alaşehir Municipality website for the purpose of informing relevant Complainants.
In the case of unresolved grievances	ILBANK monitors GM process according to following outline: -Confirmation of grievance submission -Assessment of grievance by the Alaşehir Municipality and information to ILBANK accordingly -Communication of grievance response to Complainant by the Alaşehir Municipality which is monitored by ILBANK (The timeframe for response at this level is thirty (30) days.) -Application to Court of First Instance by Complainants in case of unresolved grievances
Reporting	The grievances will be analyzed quarterly by Alaşehir Municipality PIU considering the frequencies, types, and resolution methods of which. By doing this, for instance, complaints submitted by majority of Contractor/Subcontractor(s) and/or those originated from certain works can be determined in a better way. The outcomes are reported to the PIU management by CLOs

Stage of GM	Required Action
Right to Appeal	If the complaint cannot be resolved with the existing process, applicants can always apply to relevant legal institutions. Such institutions can be summarized as follow: • Civil Courts of First Instance • Administrative Courts • Commercial Courts of First Instance • Labor Courts, and Ombudsman (https://ebasvuru.ombudsman.gov.tr/)

Monitoring and Reporting

Alaşehir Municipality PIU and the Contractor CLO will record all incoming corporate grievance/comment databases.

Alaşehir Municipality PIU will assess the number and nature of grievances/comments (if any) quarterly and their effectiveness to address grievances/comments based on the number and percentage of closed grievances. The monitoring framework is described in Table 13.

Table 13: Grievance Mechanism Monitoring Framework

Parameter	Key Performance Indicator	Phase	Frequency	Responsible Party
Project GM	• Number of grievances/comments received during per consultation • Types of the grievances/comments (community HS, employment, local procurement etc.) • Timeframes for response to each grievance • The number of open or closed grievances • Number of invalid or in progress grievances	Construction	Quarterly	- To be assigned by Alaşehir Municipality PIU and Contractor
		Operation	Semi-annually in the first two years; Annually afterwards	- To be assigned by Alaşehir Municipality PIU and Contractor
Workers' GM	•Number of grievances/comments received by own workers • Number of grievances/comments received by indirect workers • Types of the grievances/comments regarding worker management and working conditions (e.g. Worker rights, OHS, etc.) • Timeframes for response to each grievance • The number of open or closed grievances • Number of invalid or in progress grievances	Construction	Monthly	- To be assigned by Alaşehir Municipality PIU and Contractor
		Operation	Semi-annually in the first two years; Annually afterwards	- To be assigned by Alaşehir Municipality PIU and Contractor
GM	Effectiveness of the GM	Construction	Quarterly	ILBANK

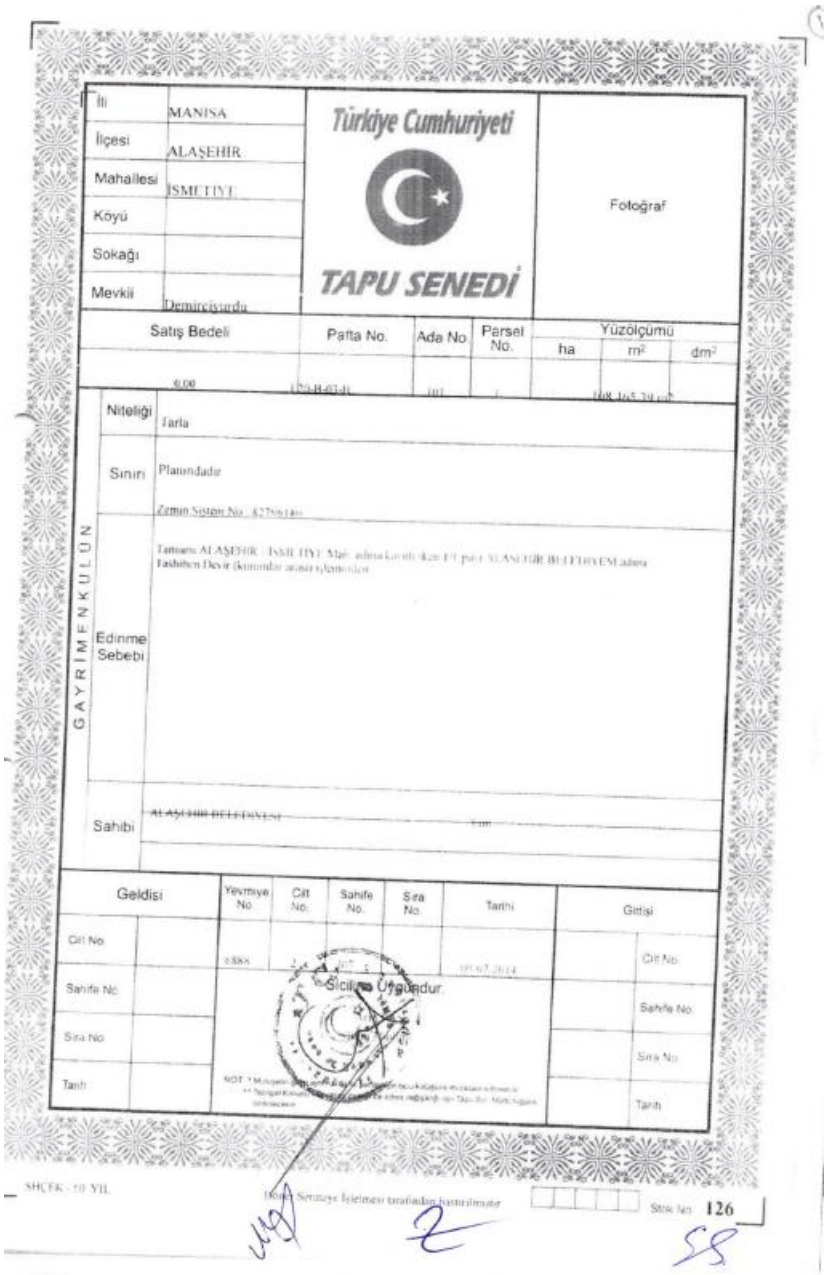
Public Consultation Meeting

The draft version of this ESMP approved by ILBANK and the World Bank was shared with the district residents at a public participation meeting held at the Alaşehir Municipality Meeting Hall on December 16, 2024. The Ardea Project and Consultancy team and the Acting Director of the Machinery Supply, Maintenance, and Repair Department of Alaşehir Municipality working at Alaşehir Municipality presented the project's purpose, expected social, environmental and ecological impacts, measures to prevent or reduce the impacts, monitoring and management measures, the path to be followed for complaints or suggestions, and the method of handling the complaint to the participants.

The Public Participation Meeting was held with the participation of the Alaşehir Municipality team, as well as the district residents. At the end of the presentation, the participants asked questions about the possible negative impacts that may occur during the construction of the project, the cost of the project, and the contributions it will provide to the district. Requests and suggestions were also received from them. It was conveyed to the participants that the construction works will start after the contractor is determined by the project owner and the construction is planned to last approximately 5 months. The minutes of the meeting attended by 21 people are given in Annex 9.

7. Annexes

Annex 1: SPP Project Area Title Deed



İli: MANISA
İlçesi: ALAŞEHİR
Mahallesi: İSMETİYE
Köyü:
Sokağı:
Mevkii: Demirciyurdu

Türkiye Cumhuriyeti

TAPU SENEDİ

Fotoğraf

Satış Bedeli	Pafta No.	Ada No.	Parsel No.	Yüzölçümü ha	m²	dm²
0,00		107				

GAYRİMENKULUN

Niteliği: Tarla
Sınırı: Planındadır
Zemin Sistem No : 8279x1a6
Edinme Sebebi: Tamamı ALAŞEHİR İSMETİYE Mah. adına Kayıtlı 4Cm FT pafta 3 ALAŞEHİR BELEDİYESİ adına Fesihten Devir (komisyon ücreti ödenmiştir)
Sahibi: ALAŞEHİR BELEDİYESİ Eski

Geldisi		Yevmiye No.	Cilt No.	Sahife No.	Sıra No.	Tarihi	Gidisi	
Cilt No.		8885				07.2014		Cilt No.
Sahife No.								Sahife No.
Sıra No.								Sıra No.
Tarih								Tarih

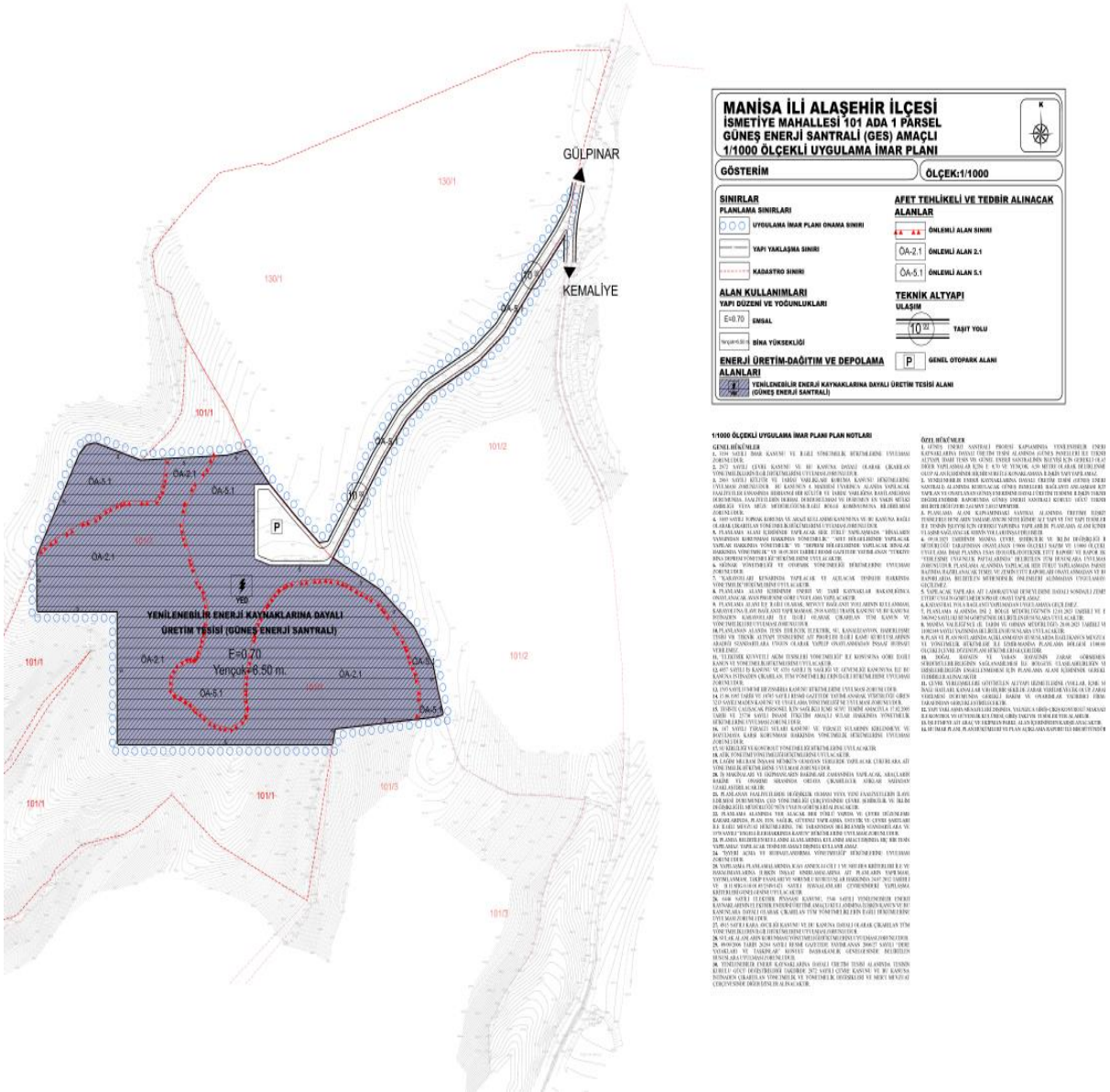
Sicile Uygundur.

NOT: 1 Mülkiyet [illegible]

ŞEKİL - 10 YIL

Stok No: 126

Annex 2: Alaşehir District SPP Area 1/1000 Scale Zoning Plan



Annex 3: Official Decision of Manisa Provincial Directorate of Environment and Urbanization for EIA Exempted

T.C.
ÇEVRE, ŞEHİRCİLİK VE İKLİM DEĞİŞİKLİĞİ BAKANLIĞI
Çevresel Etki Değerlendirmesi, İzin ve Denetim Genel Müdürlüğü

T.C.
MANİSA VALİLİĞİ
ÇEVRE, ŞEHİRCİLİK VE İKLİM DEĞİŞİKLİĞİ İL MÜDÜRLÜĞÜ

Karar Tarihi : 27-09-2022
Karar No : 34629761 220-02 E-2022420

ÇEVRESEL ETKİ DEĞERLENDİRME BELGESİ

25.11.2014 tarih ve 29186 sayılı Resmi Gazete'de yayımlanarak yürürlüğe giren Çevresel Etki Değerlendirmesi Yönetmeliği'nin Ek-II listesinde yer alan **'Güneş Enerji Santrali (2,64 MWe-2,8512 MWm)'** projesi ile ilgili olarak inceleme-değerlendirme yapılmış ve Proje Tanıtım Dosyasında çevresel etkilere karşı alınması öngörülen önlemler yeterli görülmüştür. Ayrıca ÇED Raporu hazırlanmasına gerek bulunmadığı tespit edilmiş olup, söz konusu projeye ÇED Yönetmeliğinin 17. Maddesi gereğince Valiliğimizce **"Çevresel Etki Değerlendirmesi Gerekli Değildir"** kararı verilmiştir.

Melik Melik KARA
Çevre, Şehircilik ve İklim Değişikliği İl Müdürü V.

Proje Sahibi : Alaşehir Belediye Başkanlığı
Proje Yeri : Manisa İli, Alaşehir İlçesi, İsmetiye Mahallesi, 101 Ada, 1 Nolu Parsel
Kapasite : Güneş Enerji Santrali (2,64 MWe / 2,8512 MWm / 6336 adet panel / 108.465,39 m²) Projesi

CamScanner ile tarandı

Annex 4: Ground Survey Report

TARIMSAL ETÜT RAPORU

1.Genel Durum

1.1.Arazinin Yeri ve Alanı

İli	: MANİSA
İlçesi	: ALAŞEHİR
Mahalle	: GÜLPINAR, İSMETİYE
Takip Numarası	: 2022-45-000072
Etüt Tarihi	: 23.01.2023
Uzaklık	: Etüt alanı, İsmetiye Mahallesine yaklaşık 3,5km, Alaşehir'e 23 km Manisa'ya ise 110 km uzaklıktadır.
Baku	: Doğu-Batı
Rakım	: 300 metre
Etüdü Yapılan Alan (m2)	: 108.426,16
Arazinin Konumu	: İlimiz, Alaşehir İlçesi, İsmetiye mahallesinde bulunan ve Güneş Enerjisinden lisanssız Elektrik Enerjisi Üretimi Güç Tesisi(GES)kurulmak istenen etüt alanı İsmetiye Mahallesi, Demirciyurdu mevkiinde, tapunun 101 ada, 1 no'lu parselinde kayıtlı, "Tarla" vasıflı, 10,846539 hektar büyüklüktedir.Etüt alanı halihazırda boş tarım yapılmayan tepelik ve yamaç arazi konumundadır.1/25000 ölçekli haritada gösterilen ve ölçü krokisinde köşe koordinatları verilen (101/207, 208, 367, 368, 369, 370, 371, 372, ,374, 375, 376, 377, 378,379,380,381,382,383,384,385,386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 426, 427, 428, 429, 430, 431, 432, 437, 441 442, 445,16,17,18,19,20,21 ve 22 noktaları) 1 parselin kuzeyinde Salihli Mevlütli Kadastro sınırı boş tarım yapılmayan araziler ve dikili tarım arazisi(yeni fidan dikilmiş zeytin bahçesi) güneyinde, batısında boş tarım yapılmayan araziler, doğusunda zeytin dikili tarla bulunmaktadır.1 parselin ekli harita planı örneğinde de görüldüğü üzere karnıya ait kadastrol yolu bulunmamaktadır.
Ada / Parsel	: Ada/Parsel listesi ektedir.

1.2.Etüdün Amacı

Etüt, İlimiz, Alaşehir İlçesi, Alaşehir Belediye Başkanlığı(İmar ve Şehircilik Müdürlüğü)'nünün 21.12.2022 tarih ve E-90573066-115.99-27701 sayılı yazısında, İlimiz, Alaşehir İlçesi, İsmetiye Mahallesi, Demirciyurdu mevkiinde, tapunun 101 ada, 1 no'lu parselinde kayıtlı, "Tarla" vasıflı, 10,846539 hektar yüzölçümlü parselin mülkiyeti Alaşehir Belediye'ne ait olup, sözkonusu taşınmazın 5,596450 hektarlık kısmı üzerinde "Lisanssız Güneş Enerji Santrali" tesisleri kurulmasını ilişkin 1/5000 ölçekli Nazım İmar Planı ve 1/1000 ölçekli Uygulama İmar Planı yapılması talebinde bulunulduğu belirtilerek, taşınmazın planlı alanlar dışında, yapılacak olan "Lisanssız Güneş Enerji Santrali"ne ait söz konusu imar planı yapılmasındasakınca bulunup, bulunmadığına ilişkin Kurum görüşümüzün sorulması üzerine 23.01.2023 tarihinde etüt yapılmıştır.

2.Arazi Özellikleri

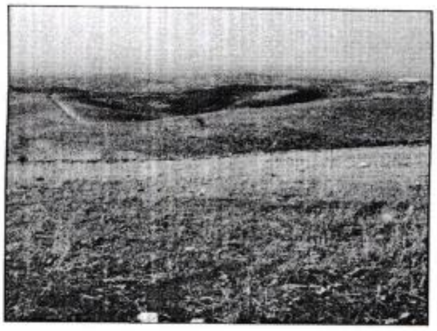
Manisa ve çevresinde temeli paleozoyik yaşlı metaformik kayaçlar oluşturur.Menderes masifi olarak adlandırılan temeldeki kayaçlar, bir çekirdek ve bunun üzerinde bir örtüden oluşmuş iki birim olarak düşünülmüştür. Çekirdek gnayslardan oluşmuştur.Bunlar gözlü gnayslar ve mavi gözlü gnayslarını üzerinde şistlerden oluşmuş kalın bir örtü yer alır.Metaorfizma derecesi çekirdekten dışa doğru azalmaktadır. Metamorfik kayaçların üzerine mesozoyik yaşlı kireçtaşları gelir.Mesozoyik kireçtaşlarının üzerinde uyumsuz olarak neojenin karasal çökelleri ve Kula volkanik kayalarından bazaltlar yer alır.

Etüt alanı, tepelik ve yamaç arazi topoğrafik pozisyonunda olup, dalgalı bir yapı arz etmektedir. Arazinin eğimi %10-18 ile %18-25 arasında değişmektedir. Toprak bünyesi kumlu-killi-kireçli yapıdadır. Toprak derinliği 50 cm. altında olup, ana kaya genel olarak yüzeydedir. Taşlılık da yer yer değişmekle birlikte ortalama % 15-20 civarındadır. Etüt alanı DSİ'nin sulama sahası dışında kalmaktadır.Etüt alanı üzerinde genel olarak tarım yapılmamaktadır. Yörede yaygın olarak tarım yapılan bitkiler, buğday, arpa, bağ ve zeytin olup, burada tarımsal faaliyetleri engelleyen doğal sebepler sığ toprak, şiddetli erozyon, ana kayanın yüzeyde olması ve susuz oluşudur. Bunların ıslahı da ekonomik olmayacaktır. 101 ada, 1 parsel etüt yapılan arazi iklim, topografya, parsel büyüklüğü ve sulanabilirlik durumu dikkate alındığında "Kuru Marjinal Tarım Arazisi(KTA)" sınıfına girmektedir.

Manisa İlinin iklimi Ege iklimine nazaran daha sertir.Yazları sıcak ve kurak, kışları ılık ve yağışlı geçer.En soğuk aylar Ocak ve Şubattır.En çok yağış Aralıkta ayında 83,3mm. Ve en az yağış Ağustos ayında 4,1mm olarak tespit edilmiştir.

Alaşehir İlçesinin yıllık ortalama yağışı 274 mm olup, yıllık ortalama sıcaklığı 16,8°C, en yüksek sıcaklık 44°C, en düşük sıcaklık -8,8 °C, ortalama bağıl nem %54'dir.

3.Arazinin Kullanım Şekli

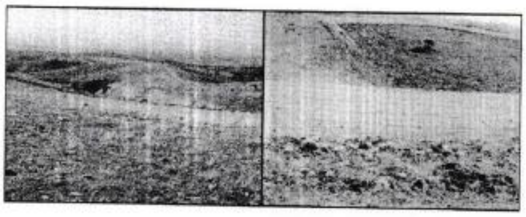


Etüt alanı halihazırda boş tarım yapılmayan tepelik ve yamaç arazi konumundadır. Devlet ve çiftçi sulaması bulunmayan parselin "Kuru Marjinal Tarım Arazisi(KTA) sınıfında olduğu belirlenmiştir. Arazinin çevresinde de benzer tarım arazileri bulunmaktadır.Araziye yol ve tarla yolu ile ulaşılmaktadır. Arazinin doğal durumu ve mevcut kullanım şekli kazı, dolgu ve benzeri fiillerle tahrip edilerek mevcut kullanım şeklinin bozulmadığı görülmüştür. Etüt alanında halihazırda tarım yapılmamaktadır. Yörede yaygın olarak tarımı yapılan bağların ortalama verimleri yaklaşık olarak 650-700 kg/da (çekirdeksiz kuru üzüm), buğdayda bölge ortalama verimi 400.kg/da, arpada 300 kg/da, Bölgede çoğunlukla Edremit olmak üzere Uslu ve Trilye zeytin çeşitleri yetiştirilmektedir. Verimli olduğu yılda yetişkin bir ağaç 25kg/ağaç ürün vermektedir. Etüt alanının tarımsal özelliklerinin çok zayıf olması nedeniyle bölge ortalaması verim düzeyi altında verim alınabileceği kanaatindeyiz.

Söz konusu 1/25000 ölçekli haritada gösterilen ve ölçü krokisinde köşe koordinatları verilen 101 ada, 1 parselde "Güneş Enerji Santrali Tesis(Güneş Panelleri ile Elektrik Üretim Tesisi)"leri amaçlı 1/5000 ölçekli Nazım İmar Planı ve 1/1000 ölçekli Uygulama İmar Planı yapılması ile ilgili olarak; 4342 sayılı Mera Kanunu ile mera sayılan yerler, 3083 Sayılı "Sulama Alanlarında Arazi düzenlenmesine Dair Tarım Reformu Kanunu" 3573 sayılı "Zeytinlerin Islahı ve Yabanilerinin Aşılattırılması ile ek 4086 sayılı Zeytincilik Kanunu" kapsamındaki olan yerlerden değildir.

4.Sonuç ve Öneriler

4.1.Arazinin Yöre İçin Önemi



Etüt alanında ekonomik anlamda tarımsal üretim yapılmadığından Manisa ili ve ilçelerinin artan enerji taleplerini kesintisiz, kaliteli ve güvenilir şekilde karşılayacak ve yörenin ekonomisine olumlu katkı sağlayacak Güneş Enerji Santrali Tesis(Güneş Panelleri ile Elektrik Üretim Tesisi)"leri, kurulması ile enerji yönünden önemi ön plana çıkmaktadır.

4.2. Tarım Dışı Kullanımında Çevre Arazilere ve Tarımsal Üretime Etkisi

)"Güneş Enerji Santrali"nin yapılacağı arazi üzerine tesis edilecek yatırımların inşaat aşamasında veya faaliyeti sırasında, çevresine zarar verilmemesi için gerekli aşağıda belirtilen tedbirleri içeren Toprak Koruma Projesinin hazırlatması, bu projenin Valilikçe onaylanması ve hazırlanan bu projeye uyulması gerekmektedir.

4.3.a-Parselin içerisinden dere geçmekte olup, geçen dere için her iki sahilinde taşkın debisini geçirebilecek ve hidrolik açıdan yeterli şeritvari alan ile şeritvari alan güzergahı boyunca parsel tarafında 6, metre genişliğinde yol şeridi ayrılmalıdır. Tesislerin yapılacağı arazilerin etrafına uygun mesafede koruma bandı bırakılması,

Ayrıca görüş sorulan parselin, dere taşkınlarından etkilenme riski bulunmaktadır. Bu nedenle taşkına karşı gerekli önlemler çevre duvarı, su basman kotu vb. yatırımcı tarafından alınmalıdır. Dere yatağında taşkın kontrol, taşkından koruma tedbirleri alınmadan söz konusu alanda faaliyete başlanmamalıdır. Topoğrafyaya bağlı olarak yüzeysel suların drenajı sağlanmalıdır

4.3.b-Tesislerin yapılacağı arazilerin etrafına tel çit çekilmesi

4.3.c-İnşaat aşamasında, hafriyat malzemesi kaldırılırken etrafındaki tarım alanlarındaki tarım ürünlerine verilecek olan zararların önlenmesi amacıyla, toz oluşumunun hesaplanması ve oluşumunun engellenmesi, malzemenin taşınması sırasında toprak yollarda oluşacak toz miktarının hesaplanması ve önlenmesi için gerekli tedbirlerin alınması,

4.3.d-Çalışacak personel ve konuklama yapacak misafirler tarafından oluşacak olan evsel nitelikli sıvı atıklar için fosseptik ünitesi planlanmasına yönelik, katı atıklar için dönüşümü olacak çöplerin ayrıştırılarak kalan katı atıkların Kanunlara uygun şekilde bertarafına yönelik, toprak koruma projesinin hazırlattırılması gerekmektedir. Ayrıca DSİ 2.Bölge Müdürlüğü'nün bilinmeyen tarih ve E-54495999-622.02-3063942 sayılı görüş yazısında belirtilen hususların uygulması kaydıyla bir sakınca bulunmamaktadır.

4.3. Etüdü Yapılan Arazinin Çevresinde Tarım Dışı Amaçla Kullanılabilecek Alternatif Alanların Olup Olmadığı

Etüt yapılan alan toprak sınıfı olarak tarımsal potansiyelinin çok zayıf olması nedeniyle alternatif alan özelliklerini taşımaktadır.

4.4. Etüdü Yapılanların İlave Değerlendirmeleri

Elektrik Enerjisi Üretim Güç Tesisi(GES)kurulmak istenen toplam 10,846539 hektar büyüklükteki arazinin (101 ada/1 parsel) "Kuru Marjinal Tarım Arazisi" sınıfında olduğu tespit edilmiştir.Etüt alan üzerinde hallihazırda ekonomik anlamda tarımsal üretim yapılmamaktadır.Tarımsal Kullanım Bütünlüğü: Güneş Enerji Santrali (GES) mümcaatlarının değerlendirilmesi MADDE 16- "(8) Güneş enerjisi santralleri, rüzgâr enerjisi santralleri, hidroelektrik enerji santralleri ile jeotermal enerji santralleri özellikleri ve kurulabilecekleri alanlar göz önüne alınarak, bu enerji yatırımları için tarımsal kullanım bütünlüğü şartı aranmayacaktır. Yine doğalgaz ve petrol arama ile enerji iletim hattı ve bu hatta bağlı olarak tesis edilmesi zorunlu (trafo, şalt merkezi, kök, pilon direk yeri, vana, basınç düşürme istasyonu vb.) müştemilatı, su kuyuları ve atıksu arıtma tesisleri için ihtiyaç duyulan alanlar için de alternatif alan araştırması ve tarımsal kullanım bütünlüğü şartı aranmayacaktır. Etüt yapılan alanın konumu, sınıfı ve çevre arazilerle olan ilişkileri dikkate alındığında tarımsal bütünlük içerisinde yer almadığı değerlendirilmiştir. Bu amaçla üzerindirilen alanın sınır olan arazilerin tarım dışı amaçlı kullanım taleplerinde, bu alan, tarımsal kullanım bütünlüğü değerlendirmesi yapılırken, dikkate alınmaz.

Vaziyet planında belirtildiği 101 ada/1 parsel, toplam 10,846539 hektar yüzölçümlü olup, parselin koordinatları belirtilen 5,596450 hektarlık kısmı üzerinde Alaşehir Belediye Başkanlığı tarafından "Toplam Panel Alanı4,737000 hektar(47.370,00m2)", "Koruma Bandı Alanı0,551107hektar(5.511,07m2)","Trafo Binası Alanı2,50x6.40x2adet=36,50m2", "Dağıtım Merkezi2,50x6.40=16.00m2","İdari Bina Alanı50.00m2","Fosseptik)9,00m2" "Otopark Alanı2.603,88m2" dahil olmak üzere 5,596450 hektar(55.964,50m2) büyüklükte alanın kullanılması planlanmaktadır. Toplam 5,286894 hektarlık alan "Tarımsal Nitelği Korunacak" alan olarak ayrılmıştır. 101 ada, 1 parselin hali hazırda yolu bulunmamaktadır. Ancak parselin tarım dışı alana kuru dereye cephesi bulunmaktadır. "Lisanssız Güneş Enerji Santrali (GES)" 55.596,45 m2 büyüklükteki alanı kaplıyacaktır. (101 ada, 1 parselin yolu bulunmadığından imar planı ve projelerinde kadastrol yola kadar yapılacak olan en az 10m'lik taşıt yolu 3.495,24 m2 alan komşu 130 ada 1 parselden planlandığı belirtilmiş olup, yapılan protokol yazıları ekinde gönderilmiştir.

Toplam 10,846539 hektar yüzölçümlü 101 ada, 1 parselin koordinatları belirtilen 5,596450 hektarlık kısmı üzerinde Alaşehir Belediye Başkanlığı tarafından Güneş Enerji Santrali Tesisi(Güneş Panelleri ile Elektrik Üretim Tesisi)"yapılması ile ilgili başvurunun, 09.12.2017 tarih ve 30265 sayılı Tarım Arazilerinin Korunması, Kullanılması ve Planlanmasına dair yönetmeliğin 12.maddesinin (7) bendi gereği(Kamu kurum ve kuruluşları tarafından yapılan imar ve çevre düzeni planlarının yapılması ve değiştirilmesinde tarım arazilerinin tarım dışı amaçlı faaliyetlere ayrılmasına Kurulun uygun görüşü alınarak Bakanlıkça izin verilebilir)hükmü gereği 19.07.2005 tarih ve 25880 sayılı Resmi Gazetede yayımlanarak yürürlüğe giren "5403 sayılı Toprak Koruma ve Arazi Kullanımı Kanunu"nun 13.üncü maddesi gereği İlimiz Toprak Koruma Kurulu'na sunulmak üzere Etüt Raporu hazırlanmıştır.

4.5. Tarımsal Bütünlük Ve Proje Bütünlüğü Bilgileri

Güneş Enerji Santrali (GES) mümcaatlarının değerlendirilmesi MADDE 16- "(8) Güneş enerjisi santralleri, rüzgâr enerjisi santralleri, hidroelektrik enerji santralleri ile jeotermal enerji santralleri özellikleri ve kurulabilecekleri alanlar göz önüne alınarak, bu enerji yatırımları için tarımsal kullanım bütünlüğü şartı aranmayacaktır. Yine doğalgaz ve petrol arama ile enerji iletim hattı ve bu hatta bağlı olarak tesis edilmesi zorunlu (trafo, şalt merkezi, kök, pilon direk yeri, vana, basınç düşürme istasyonu vb.) müştemilatı, su kuyuları ve atıksu arıtma tesisleri için ihtiyaç duyulan alanlar için de alternatif alan araştırması ve tarımsal kullanım bütünlüğü şartı aranmayacaktır. hükmü gereği bütünlük değerlendirmesi yapılmamıştır.

Hazırlayanlar

Zeliha EMİNOĞLU
Ziraat Mühendisi

Ebüne ŞAHİN
Ziraat Mühendisi

Kontrol Eden

.../.../2023
Ahmet BAŞARAN
Şube Müdür/V.

ONAYLAYAN

.../.../2023
Metin ÖZTÜRK
İl Müdürü

Annex 5: Letter of General Directorate of State Hydraulic Work

T.C.
TARIM VE ORMAN BAKANLIĞI
Devlet Su İşleri Genel Müdürlüğü
2. Bölge Müdürlüğü

Sayı : E-54495999-622.02-3063942

Konu : Manisa ili, Alaşehir ilçesi, İsmetiye mahallesi, 101 ada, 1 no.lu taşınmaz "Güneş Enerji Santrali"

DAĞITIM YERLERİNE

İlgi : 21.12.2022 tarihli ve 67741933-27701 sayılı yazınız.

İlgi yazınızda; Manisa ili, Alaşehir ilçesi, İsmetiye mahallesi, 101 ada, 1 no.lu taşınmaz üzerinde "Güneş Enerji Santrali" yapılmak istendiği belirtilerek konuya ilişkin İdaremiz görüşü istenmektedir.

Yapılan inceleme neticesinde;

1. Söz konusu parselin bulunduğu sahada İdaremize ait mevcut ve mutasavver herhangi tarla içi geliştirme projesi ve sulama tesisi bulunmamaktadır. Ayrıca, Kurumumuzca inşa edilmiş gölet ya da barajların su toplama havzalarında yer almamaktadır.

2. Görüş sorulan parselin içerisinden yazımız ekindeki haritada işaretlenen dere geçmektedir.

Parselin içerisinden geçen dere için her iki sahilinde taşkın debisini geçirebilecek ve hidrolik açıdan yeterli şeritvari alan ile şeritvari alan güzergâhı boyunca parsel tarafında 6,00 metre genişliğinde yol şeridi ayrılmalıdır.

Ayrıca "Güneş Enerji Santrali"yapılacak alanın dere yatağına uzak, arazinin üst kotlarında konumlandırılmalıdır.

3. Bahse konu taşınmazın, derenin olası taşkınlardan etkilenme ihtimali bulunmaktadır. Bu nedenle taşkından korunma tedbirleri (çevre duvarı, subasman vb.) arazi sahibince alınmalı ve ilerleyen zaman içerisinde meydana gelebilecek herhangi bir taşkında İdaremizden zarar ziyan bedeli talebinde bulunulmayacağı hususu kabul edilmelidir. Dere yatağında taşkın kontrol tedbirleri alınmadan yapılaşmaya açılmamalıdır.

4. Bahse konu alanda derenin korunmaması, kapatılması, yol olarak kullanılması ve benzeri sebeplerle meydana gelebilecek taşkın olaylarında İdaremiz sorumlu olmayacaktır.

5. Faaliyet kapsamında bu alanda gerçekleştirilmesi planlanan her türlü tesis, nakliye yolu ve benzeri altyapı ile ilgili olarak Bölge Müdürlüğümüzden yazılı görüş alınmalıdır.

6. Faaliyet sonucu sıvı fazda ve katı fazda oluşacak atıkların geçirimsizliği sağlanmış ortamlarda depolanarak ilgili mevzuat çerçevesinde bertaraf edilmesi sağlanmalıdır. Yeraltı ve yerüstü su kaynaklarının fiziksel ve kimyasal yönden etkilenmemesi için gereken tüm tedbirler alınmalıdır.

7. Çevre sorunları göz önünde tutulmalıdır. Çevre Kanunu, Yeraltı Suları Kanunu, Su Kirliliği Kontrolü Yönetmeliği, Atık Yönetimi Yönetmeliği ve ilgili mevzuat hükümlerine uyulması sağlanmalıdır.

Bu belge, güvenli elektronik imza ile imzalanmıştır.
Doğrulama Kodu: 35CC4D0E-072C-4EB9-A89B-F80565996028 Doğrulama Adresi: https://www.turkiye.gov.tr/devlet-su-isleri-ebys

Adres: DEVLET SU İŞLERİ 2. BÖLGE MÜDÜRLÜĞÜ KAZIM DİRİK MAHALLESİ SANAYİ CADDESİ NO:39 35100 BORNOVA/İZMİR
KEP Adresi : dsi.gnlmud@hs01.kep.tr
Bilgi için:Bahar Azra ARLI KAYA
S/S Personeli (Büro)

1/2

İdaremiz görüşü, ilgi yazınız ekinde gönderilen harita ve koordinat bilgilerine göre verilmiştir. Yazımız ekindeki haritada görüş belirttiğimiz 874 no.lu taşınmaza ait alanın değişmesi, kayması halinde İdaremiz görüşü geçerli değildir.

Söz konusu alan ile ilgili Bölge Müdürlüğümüz görüşlerini içeren bilgiler teknik tespit niteliğindedir. Yasal mevzuat uyarınca; istenilen amaçla kullanılması yönünde, karar alma yetkisine sahip, ilgili kamu kurum veya kuruluşun kararı öncesi değerlendirmeler için veri oluşturmayı amaçlamaktadır.

Bilgilerinizi rica, gereğini arz ederim.

Hasan Cenk ÇETİN
Bölge Müdürü a.
Bölge Müdür Yardımcısı

Ek: Harita (1 Adet)

Dağıtım:

Gereği:
Alaşehir Belediye Başkanlığı
(İmar ve Şehircilik Müdürlüğü)

Bilgi:
DSİ 22. ŞUBE MÜDÜRLÜĞÜ

Adres: DEVLET SU İŞLERİ 2. BÖLGE MÜDÜRLÜĞÜ KAZIM DİRİK MAHALLESİ SANAYİ CADDESİ NO:39 35100 BORNOVA/İZMİR
KEP Adresi : dsi.gnlmud@hs01.kep.tr

Bilgi için:Bahar Azra ARLI KAYA
S/S Personeli (Büro)

Annex 6: Letter of GDZ Electricity Distribution Services

Evrak Tarih ve Sayısı: 26/06/2025-204220

BSL3ECZB590

Gdz

Sayı : **PTD-YPM-BGY-**
Konu : ALAŞEHİR BELEDİYE BAŞKANLIĞI (35815) (2640 kW) // Çağrı Mektubu Bağlantı Noktası Değişikliği Hk.

ALAŞEHİR BELEDİYE BAŞKANLIĞI
MAKİNE İKMAL BAKIM VE ONARIM MÜDÜRLÜĞÜ

İlgi : a) 28/11/2022 tarihli ve 70474 sayılı çağrı mektubunuz,
b) 10/06/2025 tarihli ve 114124 sayılı talebiniz,

İlgi b) yazınız ile, Manisa ili Alaşehir ilçesi İsmetiye mahallesi 101 ada 1 parselde kurulması planlanan 2640 kW kurulu gücündeki Güneş Enerjisi Santrali için verilen ilgi a) bağlantı anlaşması çağrı mektubunun 1. Maddesinde belirtilen bağlantı noktasının, yeni tesis edilen ve santral sahanıza daha yakın olan Berna Tarım Özel TR'nin 21 No'lu direğinden irtibatlı olacak şekilde revize edilmesi talep edilmiştir.

Yapılan inceleme neticesinde ilgi b) dilekçe ekinde BERNA TARIM ÜRÜNLERİ SAN. VE TİC. A.Ş.'den / AKT ENERJİ'den muvafakat alındığı görülmüş olup, ilgi a) çağrı mektubunun 1. Maddesi aşağıdaki gibi düzenlenmiştir;

" 1. Kurulması planlanan 2640 kW kurulu gücündeki GES; 154/34,5 kV Alaşehir Havza TM'den çıkan 34,5 kV gerilimli 3x477 MCM kesitli Tariş fiderinden enerjili Kemaliye DM (TR-1)'den çıkan İsmetiye hattının Berna Tarım Özel TR (45-73-M01317Ö) adlı trafoyu besleyen hattın 21 No'lu direğinden alınacak gevşek/sıkı bağ ile beslenecek uygun sayıda ve güçteki trafolar üzerinden sisteme bağlanacaktır. 21 No'lu direkten alınacak irtibattan hemen sonra ayırıcı (seksiyoner) direği tesis edilerek bağlantı sağlanacaktır.

Dağıtım Şebekesi: -

Bağlantı Hattı: 260 metre Havai/Yeraltı YG bağlantı hattı (Ayırıcı direğinden sonra tesis edilecek bağlantı hattı saha koşullarına göre yeraltı ya da havai tesis edilebilecektir)"

Yukarıda belirtilen hususlar ilgi a) çağrı mektubu süresi geçerli olması ve belirtilen diğer koşulların sağlanması kaydı ile ilgili bağlantı anlaşması çağrı mektubu revize edilmiştir.

Bilgilerinize arz ederiz.

e-imzalıdır
Meriç GER
Dağıtım Grubu Planlama ve Teknoloji Direktörü

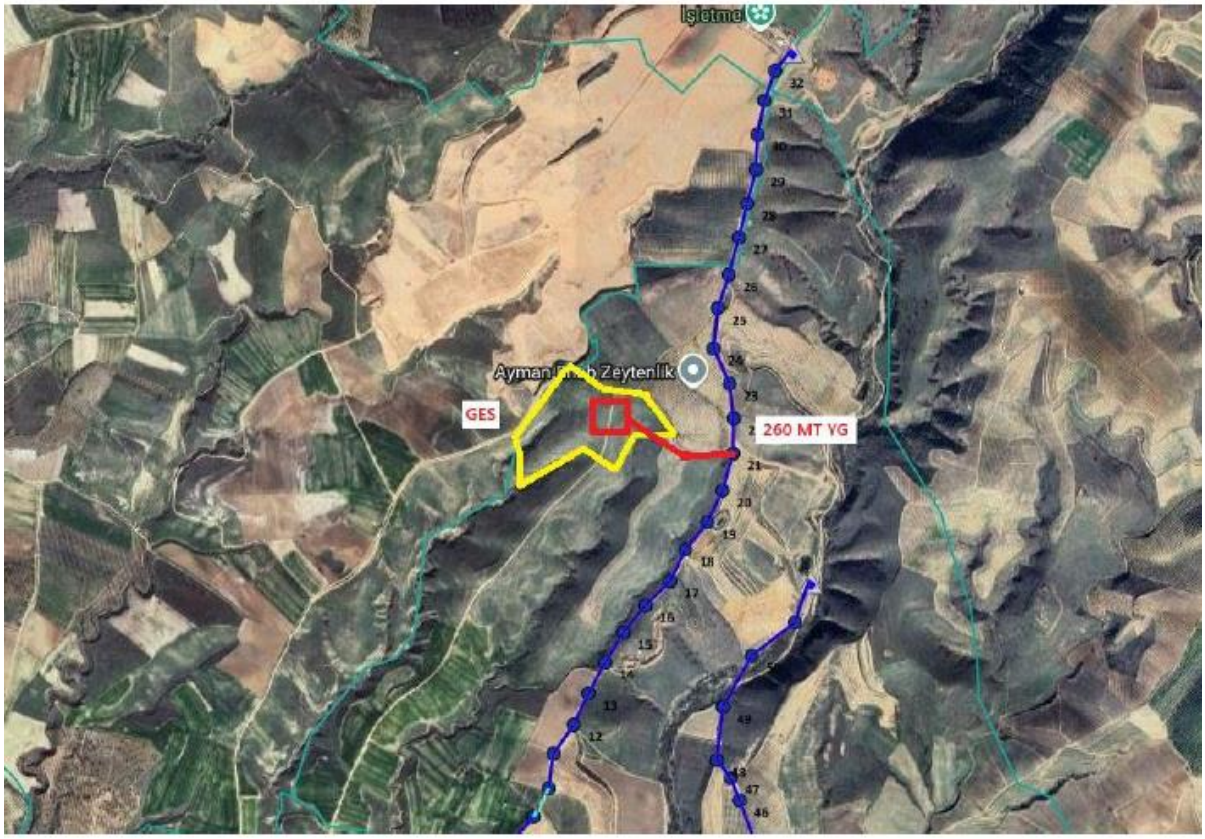
e-imzalıdır
Ekrem YILDIRIM
Bağlantı Talepleri Müdürü(V)

Ekler :Yeni Bağlantıyı Gösterir Kroki

Dağıtım

Gereği :
ALAŞEHİR BELEDİYE BAŞKANLIĞINA

Bilgi :
Alaşehir İşletme Yöneticiliğine
Manisa Bölge Müdürlüğüne
Stratejik Planlama Yöneticiliğine



Annex 7: Connection Consent Letter from Akt Energy Inc. [3]

İZMİR 27. NOTERİ
RAFET HİLMİ FİLİKCİ
İsmet Kaptan Mah. Sezer Doğan Sokak No: 4/B
Tel: 0232 441 18 01 Konak/İZMİR
Konak V.D. T.C. No: 245 962 449 38

№06532

21.05.2025

SOĞUK DAMGA VARDIR

GDZ ELEKTRİK DAĞITIM A.Ş. GENEL MÜDÜRLÜĞÜ'NE

MUVAFAKATNAME

Manisa ili, Alaşehir İlçesi, Gülpınar Mahallesinde bulunan Enerji Nakil Hatlarımızdan, Alaşehir Belediyesi'ne ait GES Enerji Santrali için, branjman alınmasına muvafakat eder, rıza gösteririz.

MUVAFAKAT EDEN

AKT ENERJİ A.Ş.

Akdeniz Mahallesi Gaziosmanpaşa Bulvarı Batı İş Merkezi K:1 D:11 KONAK-İZMİR

KONAK VD. 039 031 6177

AKT ENERJİ A.Ş.
Merkez: Akdeniz Mh. Gaziosmanpaşa Blv. No:10/1 K:1 D:11
Konak / İZMİR Mrkz. Mersis No: 0039 0316 1770 0018
Şube: Süleymanlı OSB. Mh. Hasan Onsözlü Cd. No:15/1
Akhisar / Manisa Sb. Mersis No: 0039 0316 1770 0019
Konak V.D.: 039 031 6177
Tel: 0850 297 54 36 e-mail: info@aktenerji.com.tr

İZMİR 27. NOTERİ
RAFET HİLMİ FİLİKCİ

21 Mayıs 2025

İmzaya Yetkili
Başkatip
NAFİ KARANFİL

[3] Official consent letter given to Alaşehir Municipality by AKT Enerji A.Ş. and approved by İzmir 27th Notary Public.

Türkiye Cumhuriyeti

Tarih: 21/05/2025
Yev.No: (A)

№06532

T.C.
İZMİR 27.
NOTERLİĞİ

İZMİR 27. NOTERİ
RAFET HİLMİ FİLİKCİ

1374.SOK. N:4/B
G.OSMANPAŞA
BULVARI ÇANKAYA
35210 KONAK / İZMİR
Tel:+902324411801
Fax:+902324899882

Dışarıda hazırlanan ve onay için noterliğimize getirilen bu işlem altındaki imzanın **0390316177** vergi numaralı **AKT ENERJİ ANONİM ŞİRKETİ** adına **YETKİLİSİ** olarak hareket eden, gösterdiği T.C. İçişleri Bakanlığı tarafından verilmiş **20/09/2029** geçerlilik tarihli, **A22M15334** seri numaralı, fotoğraflı Türkiye Cumhuriyeti Kimlik Kartına göre , baba adı **YAŞAR** , ana adı **HATİCE** , doğum tarihi **27/12/1978** olan ve halen yukarıdaki adreste bulunduğunu, **okuryazar olduğunu** bildiren **31267386040** T.C. kimlik numaralı **SAFİYE FİLİZ TÜRKAL** isimli kişiye ait olduğunu İşlerinin çokluğu nedeni ile gidilen adresinde huzurumda alındığını, onaylarım. **Yirmibir Mayıs İkibinyirmibeş, Çarşamba günü 21/05/2025**

DAYANAK: **İZMİR 27.** Noterliği'nden **24/07/2023** tarih ve **15299** yevmiye no ile tasdikli imza sirkülerinin incelenmesinden **AKT ENERJİ ANONİM ŞİRKETİ** adına **27/07/2023** tarihinden itibaren **MÜNFERİDEN- ÜÇ YIL SÜRE İLE** temsile **SAFİYE FİLİZ TÜRKAL** isimli kişinin yetkili olduğu görüldü.

İZMİR 27. NOTERİ
RAFET HİLMİ FİLİKCİ
Yerine
İmzaya Yetkili Başkatip
NAFİ KARANFİL

21 Mayıs 2025

A-2 / 1 - 1

FK54 A / S Yazı : 1 / 0 Kod: 7.4.1
NBS 2025052103500273773603456

Türkiye Cumhuriyeti

Tarih: 24/07/2023
Yev.No: (A)

T.C.
İZMİR 27.
NOTERLİĞİ

İZMİR 27. NOTERİ
SALİH ARIK

1374.SOK. N:4/B
G.OSMANPAŞA
BULVARI ÇANKAYA
35210 KONAK / İZMİR
Tel:+902324411801
Fax:+902324899382

No: 15299

SOĞUK DAMGA VARDIR

İMZA SİRKÜLERİ

ÜNVANI	: **AKT ENERJİ ANONİM ŞİRKETİ**
ADRES	: Akdeniz Mah. Gazi Osman Paşa Blv. Batı İş Merkezi No: 10 /1 / 11 Konak / İZMİR
YETKİLİ	: SAFİYE FİLİZ TÜRKAL 31267386040
YETKİNİN KULLANIM ŞEKLİ	: Sirküler metni içerisinde yazılı şekliyle
TEMSİL ŞEKLİ / SÜRESİ	: Sirküler metni içerisinde yazılı şekliyle
TİCARET SİCİL ADI - NO	: İzmir - 197541
VERGİ DAİRESİ - NO	: 035258 - KONAK VERGİ DAİRESİ MÜD. - 0390316177

Yukarıda adresi yazılı AKT ENERJİ ANONİM ŞİRKETİ ünvanlı şirketin **Türkiye Ticaret Sicili Gazetesinin 19.07.2023 tarih ve 10874 sayılı nüshasının 558. sayfasında yayınlanan İzmir 27. Noterliğinden 14.07.2023 tarih ve 14750 yevmiye numarası ile onaylı 12.07.2023 tarih ve 2023/05 nolu yönetim kurulu kararına göre:**
Şirket yönetim kurulu şirket merkezinde toplanarak aşağıdaki kararları almışlardır.
12/07/2023 tarihli 2022 yılı olağan Genel Kurul Toplantısında oy birliği ile alınan 5 nolu karar uyarınca:
27/07/2023 tarihinde görev süresi sona eren yönetim kurulu üyesi 31267386040 T.C. Kimlik numaralı SAFİYE FİLİZ TÜRKAL'ın yönetim kurulu başkanlığı görev süresinin 3(üç) yıl süre ile yeniden görevlendirilmesine.
31267386040 T.C. kimlik nolu SAFİYE FİLİZ TÜRKAL'ın şirketi, şirket ana sözleşmesinde yazılı işlerle ilgili olarak şirketi bilumum resmi ve hususi daireler, idareler, bankalar, hakiki ve hükmi şahıslar, üçüncü şahıslarla yapılacak olan tüm iş ve işlemleri yapmaya, bankalardan para çekip yatırmaya, ahzu kabza, şirketi sözlü veya yazılı, borçlandırıcı veya hak kazandırıcı tüm taahhütname, mukavele, senet vesair evrakları tanzim ve imza etmeye, şirket unvanı altında atacağı MÜNFERİT imzası ile şirketi her sahada tam yetki ile temsil ve ilzama, 3(üç) yıl süre MÜNFERİDEN yetkili kılınmasına.
Şirketi her alanda münferiden temsile yetkili SAFİYE FİLİZ TÜRKAL'a şirketi tek başına temsil etmesi için gerekli olan imza sirkülerinin verilmesine. Alınan kararların ticaret sicilinde tescil ve ilan edilmesine karar verilmiştir. denildiğinden, şirket ünvanı altında kullanacağım aşağıda örnekleri bulunan imzamın onaylanmasını talep ederim.
AKT ENERJİ ANONİM ŞİRKETİ ADINA TEMSİLEN (**Yönetim Kurulu Başkanı**) SAFİYE FİLİZ TÜRKAL

MÜSTENİDATTIR
TEK BAŞINA KULLANILANA

İMZA İMZA İMZA

Bu Onaylama işlem altındaki imzanın **0390316177** vergi numaralı **AKT ENERJİ ANONİM ŞİRKETİ** adına **YETKİLİSİ** olarak hareket eden, gösterdiği T.C. İçişleri Bakanlığı tarafından verilmiş **20/09/2029** geçerlilik tarihli, **A22M15334** seri numaralı, fotoğraflı Türkiye Cumhuriyeti Kimlik Kartına göre , baba adı **YAŞAR** , ana adı **HATİCE** , doğum tarihi **27/12/1978** olan ve halen yukarıdaki adreste bulunduğunu, **okuryazar olduğunu** bildiren **31267386040** T.C. kimlik numaralı **SAFİYE FİLİZ TÜRKAL** isimli kişiye ait olduğunu işlerinin çokluğu nedeni ile gidilen adresinde huzurumda alındığını, onaylarım. **Yirmidört Temmuz İkibinyirmiüç, Pazartesi günü 24/07/2023**

DAYANAK: Türkiye Ticaret Sicili Gazetesinin 19.07.2023 tarih ve 10874 sayılı nüshasının 558. sayfasında yayınlanan İzmir 27. Noterliğinden 14.07.2023 tarih ve 14750 yevmiye numarası ile onaylı 12.07.2023 tarih ve 2023/05 nolu yönetim kurulu kararına istinaden tanzim edilmiştir. NK.79

İZMİR 27. NOTERİ
RAFET HİLMİ FİLİKÇİ

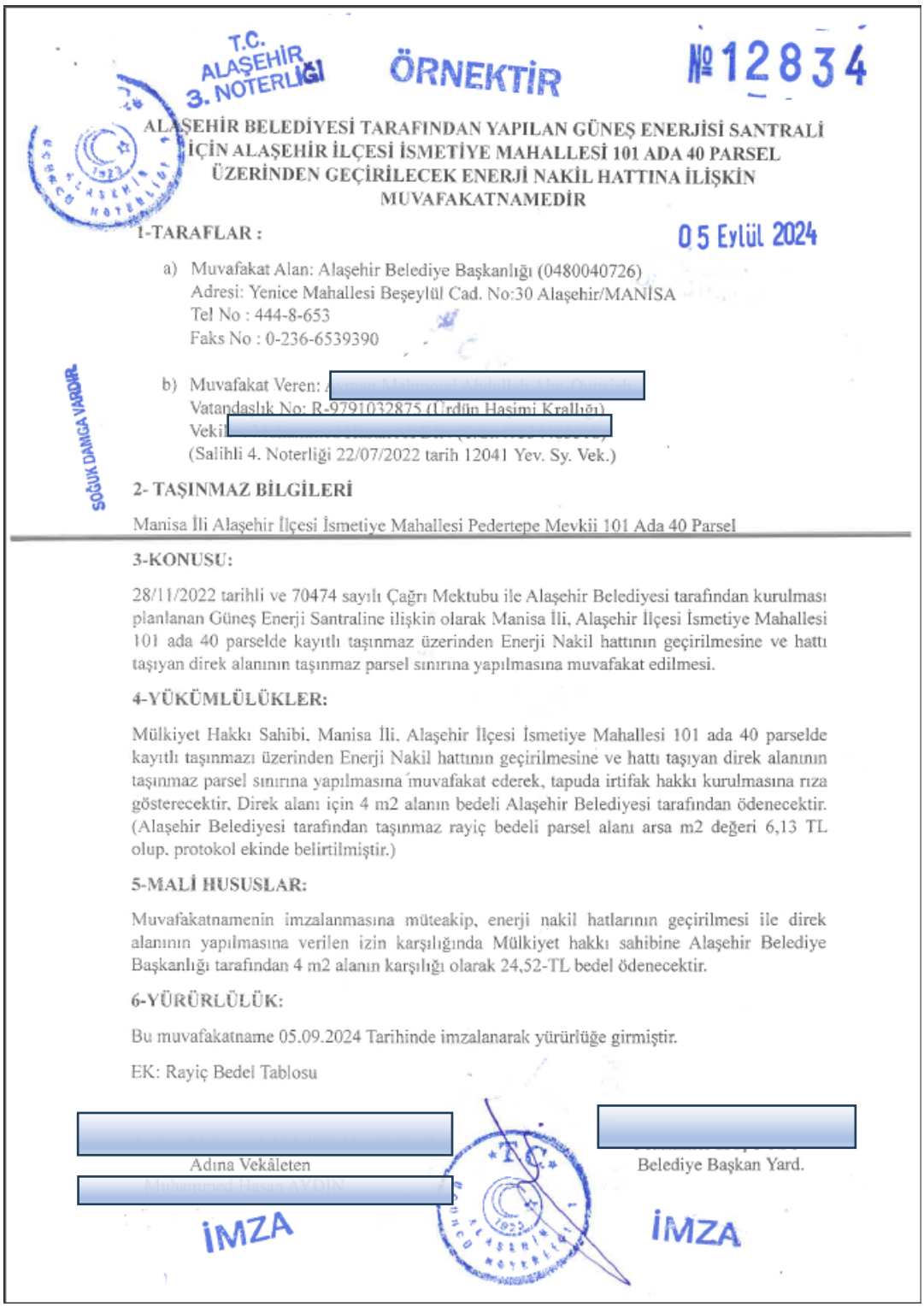
İZMİR 27. NOTERİ
SALİH ARIK
Yerine
İmzaya Yetkili Katip
ERGİN DİNÇ

24 Temmuz 2023

KDV, Harç, Damga Vergisi ve Değerli Kağıt bedeli makbuz karşılığı tahsil edilmiştir.
BA22 A / S Yazı : 3 / 0 Kod: 10.1.4
NBS NO: 202307240350027 - 8704042257

A-1 / 1 - 1

Annex 8:Energy Transmission Line Consent Letter (101 Block 40 Parcel)



T.C.
ALAŞEHİR
3. NOTERLİĞİ

ÖRNEKTİR

№ 12834

ALAŞEHİR BELEDİYESİ TARAFINDAN YAPILAN GÜNEŞ ENERJİSİ SANTRALİ İÇİN ALAŞEHİR İLÇESİ İSMETİYE MAHALLESİ 101 ADA 40 PARSEL ÜZERİNDEN GEÇİRİLECEK ENERJİ NAKİL HATTINA İLİŞKİN MUVAFAKATNAMEDİR

05 Eylül 2024

1-TARAFLAR :

a) Muvafakat Alan: Alaşehir Belediye Başkanlığı (0480040726)
Adresi: Yenice Mahallesi Beşeylül Cad. No:30 Alaşehir/MANİSA
Tel No : 444-8-653
Faks No : 0-236-6539390

b) Muvafakat Veren: [redacted]
Vatandaşlık No: R-9791032875 (Ürdün Haşimi Krallığı)
Vekil [redacted]
(Salihli 4. Noterliği 22/07/2022 tarih 12041 Yev. Sy. Vek.)

SOĞUK DAMGA VARDIR

2- TAŞINMAZ BİLGİLERİ

Manisa İli Alaşehir İlçesi İsmetiye Mahallesi Pedertepe Mevkii 101 Ada 40 Parsel

3-KONUSU:

28/11/2022 tarihli ve 70474 sayılı Çağrı Mektubu ile Alaşehir Belediyesi tarafından kurulması planlanan Güneş Enerji Santraline ilişkin olarak Manisa İli, Alaşehir İlçesi İsmetiye Mahallesi 101 ada 40 parselde kayıtlı taşınmaz üzerinden Enerji Nakil hattının geçirilmesine ve hattı taşıyan direk alanının taşınmaz parsel sınırına yapılmasına muvafakat edilmesi.

4-YÜKÜMLÜLÜKLER:

Mülkiyet Hakkı Sahibi, Manisa İli, Alaşehir İlçesi İsmetiye Mahallesi 101 ada 40 parselde kayıtlı taşınmazı üzerinden Enerji Nakil hattının geçirilmesine ve hattı taşıyan direk alanının taşınmaz parsel sınırına yapılmasına muvafakat ederek, tapuda irtifak hakkı kurulmasına rıza gösterecektir. Direk alanı için 4 m2 alanın bedeli Alaşehir Belediyesi tarafından ödenecektir. (Alaşehir Belediyesi tarafından taşınmaz rayiç bedeli parsel alanı arsa m2 değeri 6,13 TL olup, protokol ekinde belirtilmiştir.)

5-MALİ HUSUSLAR:

Muvafakatnamenin imzalanmasına müteakip, enerji nakil hatlarının geçirilmesi ile direk alanının yapılmasına verilen izin karşılığında Mülkiyet hakkı sahibine Alaşehir Belediye Başkanlığı tarafından 4 m2 alanın karşılığı olarak 24,52-TL bedel ödenecektir.

6-YÜRÜRLÜLÜK:

Bu muvafakatname 05.09.2024 Tarihinde imzalanarak yürürlüğe girmiştir.

EK: Rayiç Bedel Tablosu

[redacted]
Adına Vekâleten
[redacted]
İMZA

[redacted]
Belediye Başkan Yard.
İMZA

Annex 9:Minutes of Public Participation Meeting

This project is co-funded by the European Union, the Republic of Turkey and the World Bank
Bu Proje Avrupa Birliği, Türkiye Cumhuriyeti ve Dünya Bankası tarafından ortaklaşa finanse edilmektedir

SUSTAINABLE CITIES PROJECT-II
Additional Financing

ALAŞEHİR SOLAR POWER PLANT PROJECT

MINUTES of PUBLIC CONSULTATION MEETING

Revision : REV.00
Meeting Date : 16 Dec 2024
Meeting Place: Alaşehir Municipality Meeting Hall

This project is co-funded by the European Union, the Republic of Turkey and the World Bank
Bu Proje Avrupa Birliği, Türkiye Cumhuriyeti ve Dünya Bankası tarafından ortaklaşa finanse edilmektedir

2

1. PUBLIC CONSULTATION MEETING

Alaşehir Solar Power Project which will be financed under SCP-II-AF is one of the sub-projects to support sustainable development.

The Environmental and Social Management Plan (ESMP) has been prepared in accordance with Turkish environmental and social legislation, World Bank Safeguard Policies including Operational Policies (OPs), World Bank General EHS Guidelines and Industrial Sector Guidelines and ILBANK's ESMP. In addition to these studies, a Public Consultation Meeting was held on 16.12.2024 at 02:00 p.m. following the completion of the ESMP. Public Consultation Meeting announcements were published on the official website and in national and local newspapers. In addition, brochures regarding the meeting were hung in the neighborhood mukhtar's offices and on bulletin boards.

1.1. Summary

During the Public Consultation Meeting, information about the project was presented by municipal officials and the consultancy firm. The details are as follows:

The meeting was opened with a speech by an official from the Acting Director of the Machinery Supply, Maintenance, and Repair Department of Alaşehir Municipality, providing general information about the project. Following this, the Ardea Project Consulting Team explained the significance of the Alaşehir Solar Power Plant project, emphasizing that it is a World Bank-financed project under the Sustainable Cities Project II Additional Financing. It was stated that the project is an important step for the municipality in terms of renewable energy and combating climate change. The solar power plant project aims to cover a significant portion of the municipality's energy costs through clean energy. It was also mentioned that the project is planned to be completed within 5 months and will provide social contributions to the district.

In a presentation by the Ardea Project Consulting Team, the project was introduced, and information regarding its Environmental and Social Management Plan (ESMP) was provided. The location of the land where the project will be implemented and other technical details were explained. The suitability of the Alaşehir district for the solar power plant and its solar exposure potential were highlighted. Within the scope of the ESMP, it was noted that the environmental and social risks of the project were assessed, a current situation analysis was conducted, and analyses were carried out regarding the area's geography, climate conditions, solar exposure, vegetation, natural and cultural values, and natural disasters such as floods and earthquakes. It was stated that the project could create future opportunities for local residents and that the use of renewable energy sources is essential in combating climate change. Social advantages were also emphasized, describing the project as a significant step for Alaşehir and an exemplary project for the future.

Lastly, it was highlighted that the grievance mechanism will be given importance during the construction and operational phases of the project.

This project is co-funded by the European Union, the Republic of Türkiye and the World Bank
Bu Proje Avrupa Birliği, Türkiye Cumhuriyeti ve Dünya Bankası tarafından ortaklaşa finanse edilmektedir

1.2. Question & Answer Session

In this sub-section, the opinions, requests, and questions of the participants and the relevant answers received during the Public Consultation Meeting have been presented. The details are as follows:

Question 1: ***Alaşehir Citizen***

What will be the contributions of the project to Alaşehir?

Answer 1: ***Representative from the Consulting Firm (Ardea Project & Consulting)***

The project will significantly reduce Alaşehir Municipality's energy costs, and the savings will be used for other services in the district. At the same time, the use of renewable energy will decrease carbon emissions, supporting an environmentally friendly lifestyle. Economically, the region's energy dependency will decrease while meeting a significant portion of the district's energy needs. Additionally, the project will create social benefits and make Alaşehir a model in renewable energy projects.

Question 2: ***Alaşehir Citizen***

Will the construction of the plant reduce electricity prices in the region?

Answer 2: ***Acting Director of the Machinery Supply, Maintenance, and Repair Department of Alaşehir Municipality***

It will not directly reduce electricity prices. However, since a significant portion of Alaşehir Municipality's energy needs will be met by this plant, the municipality's costs will decrease. These savings will indirectly return to the local community in the form of infrastructure, social services, and other investments. In the long term, the widespread use of renewable energy has the potential to lower energy costs.

Question 3: ***Mukhtar of İsmetiye Neighborhood***

Will there be any environmental damage during the construction of the plant?

Answer 3: ***Representative from the Consulting Firm (Ardea Project & Consulting)***

No, the environmental impacts of the project have been carefully evaluated, and all necessary precautions have been planned. Potential impacts such as dust and noise during construction will be controlled, and operations will comply with relevant regulations. The work will be monitored to ensure no harm is done to the natural structure of the area, and an environmentally sensitive process will be followed.

This project is co-funded by the European Union, the Republic of Turkey and the World Bank
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Question 4: ***Alaşehir Citizen***

Will any excess energy produced by the project be sold to the public?

Answer 4: ***Acting Director of the Machinery Supply, Maintenance, and Repair Department of Alaşehir Municipality***

No, the energy produced will primarily be used to meet the municipality's needs. If there is any surplus energy, it will be transferred to the national energy system in accordance with legal regulations. This will contribute to the country's overall energy supply and provide financial support to the municipality.

1.3 Conclusion

The Public Consultation Meeting lasted approximately 45 minute with 21 people, with the participation of the public, municipality personnel and consultant company officials providing information about the project, and a question and answer session held afterwards. The necessary information was provided to the public about the SPP project, the public's questions were answered, and the next process was explained.

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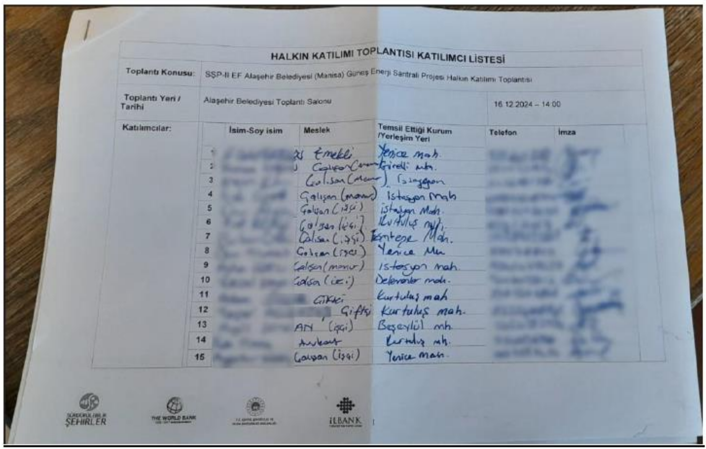
2. PARTICIPANT LIST

Figure 1: Participants Signature List

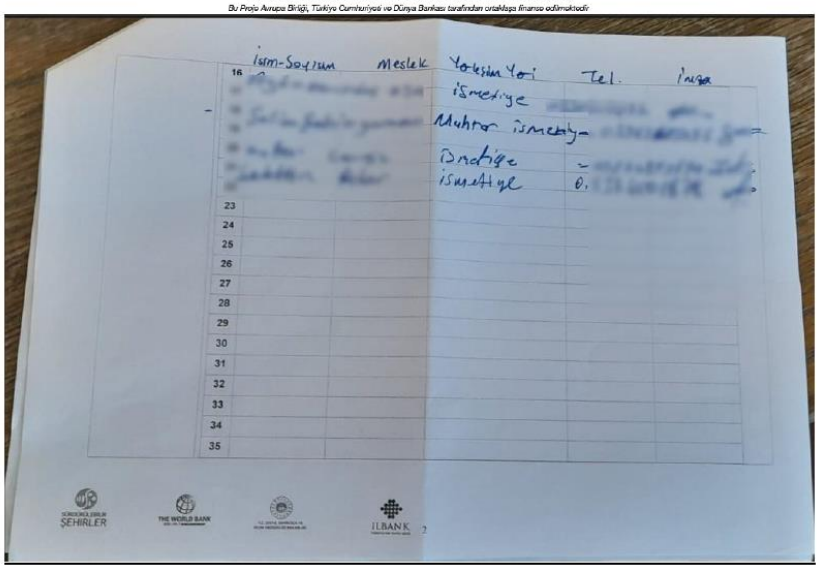


HALKIN KATILIMI TOPLANTISI KATILIMCI LİSTESİ

Toplantı Konusu:	SSP-II EF Alaşehir Belediyesi (Manisa) Güneş Enerji Santrali Projesi Halkın Katılımı Toplantısı
Toplantı Yeri / Tarihi	Alaşehir Belediyesi Toplantı Salonu — 16.12.2024 – 14:00

Katılımcılar:

	İsim-Soy isim	Meslek	Temsil Ettiği Kurum /Yerleşim Yeri	Telefon	İmza
1	[illegible]	Emekli	Yenice mah.	[illegible]	[illegible]
2	[illegible]	Çalışan (memur)	Girelli mh.	[illegible]	[illegible]
3	[illegible]	Çalışan (memur)	İstasyon	[illegible]	[illegible]
4	[illegible]	Çalışan (memur)	İstasyon mah	[illegible]	[illegible]
5	[illegible]	Çalışan (işçi)	İstasyon Mah.	[illegible]	[illegible]
6	[illegible]	Çalışan (işçi)	Kurtuluş mh.	[illegible]	[illegible]
7	[illegible]	Çalışan (işçi)	Esentepe Mah.	[illegible]	[illegible]
8	[illegible]	Çalışan (işçi)	Yenice Mh.	[illegible]	[illegible]
9	[illegible]	Çalışan (memur)	İstasyon mah.	[illegible]	[illegible]
10	[illegible]	Çalışan (işçi)	Delemenler mah.	[illegible]	[illegible]
11	[illegible]	Çiftçi	Kurtuluş mah	[illegible]	[illegible]
12	[illegible]	Çiftçi	Kurtuluş mah.	[illegible]	[illegible]
13	[illegible]	AN (işçi)	Beşeylül mh.	[illegible]	[illegible]
14	[illegible]	Avukat	Kurtuluş mh.	[illegible]	[illegible]
15	[illegible]	Çalışan (işçi)	Yenice mah.	[illegible]	[illegible]



7

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3. ANNEXES

Annex 1: Photos of Public Consultation Meetings

Figure 2: Photos of Meetings-1

8

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9

THE WORLD BANK IBRD • IDA | WORLD BANK GROUP
SÜRDÜRÜLEBİLİR ŞEHİRLER
T.C. ÇEVRE, ŞEHİRCİLİK VE İKLİM DEĞİŞİKLİĞİ BAKANLIĞI
İLBANK

This project is co-funded by the European Union, the Republic of Turkey and the World Bank
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10

THE WORLD BANK IBRD • IDA | WORLD BANK GROUP
SÜRDÜRÜLEBİLİR ŞEHİRLER
T.C. ÇEVRE, ŞEHİRCİLİK VE İKLİM DEĞİŞİKLİĞİ BAKANLIĞI
İLBANK

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Annex 2: Newspaper Advertisements

Figure 3: Cumhuriyet Newspaper Advertisement for Public Consultation Meetings of Alaşehir SPP

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Figure 4: Alaşehir 5 Eylül Newspaper for Advertisement for Public Consultation Meetings of Alaşehir SPP

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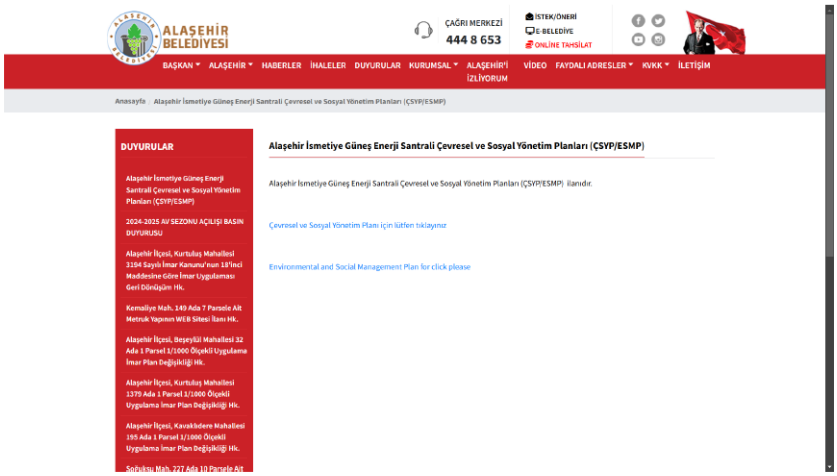
Annex 3: Documents and Announcements regarding ESMP and Public Consultation Meeting Published in the Official Website of Alaşehir Municipality

Figure 5: Public Consultation Meeting Brochure and ESMP Documents Published on the Official Website of Alaşehir Municipality



13

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Annex 4: Alaşehir Municipality Public Consultation Meeting Brochure

14

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Alaşehir GES (Güneş Enerjisi Santrali) Projesi,

Türkiye'deki şehirlerde sürdürülebilir kalkınmayı desteklemek için Sürdürülebilir Şehirler Projesi -II Ek Finansman (SŞP-II-EF) kapsamındaki alt projelerden biridir. ŞSP-II-EF, özellikle sürdürülebilir kentsel gelişime yatırım yapıp, yenilenebilir enerji kaynaklarının gelişmesine, afetlere ve iklim değişikliğinin hafifletilmesine ve risklere karşı şehir direncine ilişkin proje yaklaşımlarını geliştirmeyi amaçlamaktadır. Dünya Bankası (DB) tarafından finanse edilen proje İller Bankası A.Ş. aracılığı ile Alaşehir Belediyesi tarafından yürütülecektir.

Alaşehir GES Projesi ile, ülkenin enerji ihtiyacı karşılanmasında yenilenebilir enerji kaynaklarının payını artırmak, sera gazı emisyonlarını ve fosil yakıtlara olan bağımlılığı azaltmak ve Alaşehir ilçesinin elektrik enerji ihtiyacının karşılanması amaçlanmıştır.

Alaşehir GES Projesi kapsamında, kurulacak santral 30 yıllık kullanım süresi ile inşa edilecektir. Santralin kurulu gücü 3150,4 kWp olup, yılda yaklaşık 5.557 MWh elektrik üretmesi beklenmektedir. Proje ile hizmet verilmesi öngörülen nüfus yaklaşık 53.620 kişidir. Proje, Manisa ili, Alaşehir İlçesi, İsmetiye Mahallesi, 101/1 parseli üzerinde 108.465,39 m^2 alana inşa edilecektir (Bkz: Şekil 1).

2

Projenin beklenen sonuçları aşağıdaki gibidir:

-Proje, Alaşehir ilçesinde Alaşehir Belediyesine ait olan araziye kurulacaktır. Güneş enerjisi santrali, proje sahasından geçen yüksek gerilim enerji iletim hattına bağlanacaktır. Alaşehir Belediyesinin enerji ihtiyacının büyük çoğunluğu proje sayesinde karşılanabilecektir.

- Proje, enerjide fosil yakıtlara olan bağımlılığı azaltacak ve ilçenin ekonomik olarak kalkınmasını sağlayacaktır.

-Proje, Türkiye'nin yenilenebilir enerji kaynakları sektöründe ulusal ve uluslararası kalite standartlarına uyum çabalarına katkı sağlayacaktır.

Projenin inşaatının beş (5) ayda tamamlanması planlanmaktadır.

Projenin işe alım sürecinde yerel halka öncelik verilecektir.

Proje, ulusal mevzuatın yanı sıra Dünya Bankası Koruma Politikaları, yönergeler, standartlar ve en iyi uygulama belgeleri de dahil olmak üzere, uluslararası uygulamalarla uyumlu olacaktır.

3

Proje, inşaat ve işletme aşamasında yerel halk için iş fırsatları yaratacaktır. GES projesinin kurulu güç kapasitesinin 2MW'ın altında olması nedeniyle, inşaat çalışmalarının oldukça kısa bir zaman diliminde tamamlanabilecektir. Yolların kapanmasından mümkün olduğunca kaçınılacak, aksine inşaat faaliyetlerinin aksamaması için bölgedeki uygun olmayan yollar iyileştirilecektir.

Şekil 1. Alaşehir GES Alt Proje Alanı

Beklenen etkilerin yönetimi için bir Çevresel ve Sosyal Yönetim Planı (ÇSYP) hazırlanmıştır.

ÇSYP, Projenin süresi boyunca olası çevresel ve sosyal etki ve risklerin izlenmesi, değerlendirilmesi ve önemli olumsuz çevresel etkiler için etki azaltma önlemleri önermek amacıyla hazırlanmaktadır.

4

15

Annex 10:Consultation Form

	ALAŞEHİR MUNICIPALITY Alaşehir Municipality Solar Power Plant Project
	Consultation Form

Person Filling Out the Form:	Date and Time:
Meeting Agenda:	Consultation Record No:

1.CONSULTATION INFORMATION

Interviewed Institution:	Contact Type
Name and Surname of the Interviewee:	Telephone/Helpline ☐
Telephone:	Face-to-face Interviews ☐
Adress:	Website/E-mail ☐
E-mail:	Other (Explain) ☐

Stakeholder Type

Public Institution ☐	People Affected by the Project ☐	Private Institution ☐	Professional Chamber ☐	NGO ☐
Interest Groups ☐	Industry Associations ☐	Labor Unions ☐	Media ☐	University ☐

2.CONSULTATION DETAILS

Questions about the project:	
Project concerns/feedback:	

Responses to the views expressed above:	
Recording *Name-Surname / Signature*	Complainant *Name-Surname / Signature*

Annex 11:Grievance Form

	ALAŞEHİR MUNICIPALITY Alaşehir Municipality Solar Power Plant Project
	Grievance Form

Person Filling Out the Form:	Date and Time:
Meeting Agenda:	Reference No:

1.INFORMATION ABOUT THE COMPLAINANT

Full Name: If the complainant requests that this grievance be processed anonymously, it will be recorded as anonymous, and the request will be fulfilled.	**How the Grievance Was Received**
Turkish ID Number:	Telephone ☐
Telephone:	Face to face ☐
Address:	Website / E-mail ☐
E-mail:	Other (Explain) ☐

Stakeholder Type

Public Institutions ☐	People Affected by the Project ☐	Private Institution ☐	Chamber of Profession ☐	NGO ☐

Interest Groups ☐	Industry Associations ☐	Labor Union ☐	Media ☐	University ☐

2.DETAIL INFORMATION ABOUT GRIEVANCE	
Grievance Explanation:	
Proposed Solution Method by the Complainant:	
Name-Surname/Signature of the Recording Personnel	**Name-Surname/Signature of the Complainant**

Annex 12:Grievance Closure Form

	ALAŞEHİR MUNICIPALITY Alaşehir Municipality Solar Power Plant Project
	GRIEVANCE CLOSURE FORM
Reference No:	

1.DETERMINATION of CORRECTIVE ACTION	
1	
2	
3	
4	
5	
Responsible Departments	

2.CLOSURE OF THE GRIEVANCE	
This section will be completed and signed by the Complainant in case the complaint specified in the "Grievance Registration Form" is resolved.	

Date:	Name-Surname/ Signature Closure of the Grievance	Name-Surname/Signature of the Complainant
……/……./……		

Annex 13:Roles and Responsibilities of Main Actors of SPP Subproject

	Alaşehir Municipality	ILBANK	WB	Contractor	Supervision Consultant	E&S Consultant
Financial Roles	Requestor	Financial intermediary	Main finance source			
Application Process	Submit Demand Based Applications	Review / analyze the applications in order to provide information to WB Prepare Alaşehir Municipality's subproject documents in accordance with WB requirements,	Concur the final selection of eight participating municipalities.			
Preparation Process	Welcome and apply the relevant laws and regulations that are introduced by WB through ILBANK	Coordinate the selected municipalities to ensure all the relevant rules and regulations will be adopted throughout the project. Organize internal working structure for the investment options. Although the project site is in the low risk category, in case of need, Alaşehir Municipality officials and consultants are guided on WB requirements (documents and procedures) regarding impact factors such as cultural assets, land acquisition and involuntary settlement, natural habitats, forests and	Assist ILBANK in Developing Performance and Monitoring Database system during the preparation phase. Provide technical guide for ILBANK. Implementation and inspection of the ESMP of the subproject and development of recommendations	Ensure compliance with all requirements of the ESMF and management plans. Ensure conformity with project standards and obtaining all relevant permits and licenses	Identify and managing environmental, social, and OHS-related risks	Preparing Environmental and Social Assessment Reports, i.e., ESMF and Resettlement Action Plans (and, if necessary, RAP/LRP), for approval by ILBANK and the World Bank.
Number of Staff	One Social and One Environmental Expert and One OHS Expert	In addition to present team, a support team can be established. Structure of the team and	Assist ILBANK in establishing monitoring team.		Employe competent Environmental, Social, and OHS Experts (at least one	

		qualification of team members will be defined by ILBANK and WB. Individual freelance consultants can be employed.			Social Expert, one Environmental Expert, and one OHS Expert) within the scope of the project	
Project Roles	Preparation of ESMP and Grievance Mechanism	The main responsible for monitoring ESMP and Grievance process Provide written comments to consultants	Overall review of the project development stages		Draft time-bound action plans for the contractor in case of non-compliance	
	Tendering all the project works and consulting services	Supervise and monitor the whole process to ensure the proper application of the WB's environmental and social safeguard policies are applied.	Review of incoming reports to see the Bank standards are in progress. Recommend additional measures to strengthen the management framework and improve implementation performance.			
Disclosure Roles	Disclose ESMP on the official website of municipalitY after approval of ILBANK and WB	Confirm and Disclose the ESMP on ILBANK's official website Disclosure of official approval of environmental and social assessment documents and related procedures for the project in accordance with WB safeguarding requirements, to perform the overall quality assurance function to ensure that EA documents meet WB requirements	Confirm and Disclose the ESMP on WB's official website			

Construction Phase Responsibilities	Prepare tender documents for the construction process.	Obtaining the opinions of affected groups and local environmental/social experts on the environmental and social aspects of the project implementation and organizing field visits with these groups when necessary	Visit project sites from time to time, when necessary, as part of the project	Implement all commitments determined by Alaşehir Municipality.	Guide Alaşehir Municipality officials and consultants in the implementation of World Bank requirements (documents and procedures) in the E&S framework after approval by Alaşehir Municipality	
	Conduct tenders in accordance with public procurement legislation and WB legal requirements.	Coordinating and communicating with WB inspection officers regarding the environmental and social protection measures of the project implementation in organizing field visits.		Supervise the construction and/or rehabilitation works and installation of equipment	Ensure the provision of sufficient capacity to carry out C&S audits effectively in accordance with ESMF requirements when the implementation of mitigating measures by the Contractor is deemed necessary	
	Share the ESMP with the Contractor, guide the Contractor in preparing sub-management plans, and approve these plans.					
	Update the ESMP when necessary and share additional commitments with the Contractor.					
	Coordinate actions and evaluations in case of changes due to engineering/design changes, route/location changes, legislative					

	changes related to environmental and social issues, authorization provision changes, new environmental/social data, construction/operation strategy changes.					
Monitoring Roles	Evaluate performance indicators, environmental reviews, monitoring, inspections, and results related to ESMP applications.	Monitoring the implementation of ESMP and other environmental and social mitigation measures, auditing Alaşehir Municipality's ESMP implementations and documenting performance, recommendations, and other necessary steps within the scope of overall project supervision	Oversee the project in accordance with WB Safeguard Policies and provide technical support and guidance	Monitore construction activities (including subcontractor activities) and taking and implementing measures within the scope of the ESMF	Report environmental audits, monitoring, and inspections related to E&S practices to Alaşehir Municipality.	
	Prepare Environmental and Social Monitoring Reports (ESMRs) every three months, submit them to ILBANK, and inform them.	Inform WB through Environmental and Social Monitoring Reports (ESMRs) to be submitted by Alaşehir Municipality every three months.		Submit Monthly Environmental and Social Monitoring Reports (ESMRs) to the Project Owner Municipality	Monitore and evaluate the performance of services provided by the contractor	
	Monitor contractor activities.	Submit Project Progress Reports to WB every 6 months.			Ensure regular (monthly) reporting of the Contractor's C&S performance to the Municipality and ILBANK	
Training Responsibilities	Provide necessary training on Environmental and Social Management issues to Project Management Unit (ILBANK) and relevant directorates.				Provide necessary environmental and social training to the contractor and subcontractor personnel	
Urgent Action Roles	Ensure compliance with project standards and take			Promptly notifying the Project Owner of	Ensure the tracking and analysis of	

	urgent actions in case of non-compliance.			unexpected situations, such as environmental, social, and occupational issues or accidents, incidents, or time loss, and maintaining an on-site incident log throughout the project lifespan. An incident report, including root cause analysis and corrective actions needed, will be submitted to ILBANK and the World Bank within 30 days.	environmental and social incidents	
	Halt work in any situation threatening the environment, community, and occupational health and safety.				notify ILBANK and the Municipality, exercising the contract authority in case non-compliance persists	
	Analyze and monitor environmental and social accidents/incidents.					
Stakeholder participation Roles	Ensure stakeholder participation, implement the grievance redress mechanism, and ensure continuous information transfer through open communication.	Provide guidance on public participation and announcement requirements when necessary			Provide guidance on public participation and announcement requirements in accordance with World Bank requirements	Taking part in organizing the introduction ESMP to the public and NGOs within the scope of the project and stakeholder engagement events

Annex 14: Environmental and Social Screening Checklist

This checklist is used by the executing agency to review the potential environmental and social safeguard impacts of subprojects and determine whether the subprojects will trigger relevant safeguard policies of the World Bank. It is a tool to screen, classify, and evaluate the project activities during project preparation.

Integrating Basic Principles to Strengthen Social and Environmental Sustainability

1. Determination of Basic Principles to Strengthen Project, Social and Environmental Sustainability
Description of how the project mainstreams a human rights-based approach
There is no settlement on the parcel border of the SPP project and within the project area. During the preparation phase, no human rights concerns related to the project have arisen. A credit application has been submitted for the project, and once the credit application is approved, the implementation process will commence. With the initiation of the project, stakeholder engagement processes and complaint procedures will be initiated. These processes will be subject to a monitoring mechanism. Opinions obtained during this process will be reviewed at specific intervals and resolved. The responsible organization leading the implementation of the project, Alaşehir Municipality, is highly willing to fulfill its obligations. The SPP sub-project is a sustainable and clean energy resource and provides environmental sustainability in the project area and reduces dependence on fossil fuels. One of the fundamental reasons for the solar power plant project is the use of clean energy to meet the district's electric energy needs and Alaşehir Municipality is aiming to get energy sale income from excess energy. Therefore, there is no risk of local governments not fulfilling their responsibilities due to the reduction in energy costs and the potential contributions it will bring to various sectors. In the conducted assessments, it has been observed that there will be no adverse impact on the human rights of the affected population or marginalized groups. Therefore, there will be no unjust or discriminatory effects on disadvantaged groups within the population residing in the vicinity. The utilization of renewable energy to meet the energy requirements will enable the efficient use of municipal resources, generating positive effects for the entire district population. This approach fosters equal distribution of local government resources and services among the entire population, promoting inclusivity. Additionally, there is no identified risk of conflict or violence among the communities and authorities affected by the project.
Description of how the project can improve gender equality and women's empowerment
Women's groups have not raised gender equality concerns regarding the project during the stakeholder engagement process, grievance processes, or public statements. The project is not anticipated to involve or lead to adverse impacts on gender equality and/or the situation of women and girls. The project is not expected to reproduce discrimination against women based on gender, particularly regarding participation in design and implementation or access to opportunities and benefits. There are no foreseen limitations on women's ability to use, develop, and protect natural resources, considering the different roles and positions of women and men in accessing environmental goods and services. There are no activities that could lead to natural resource degradation or depletion in communities that depend on these resources for their livelihoods and well-being. The project is not expected to exacerbate the risks of gender-based violence.
Description of how the project mainstreams sustainability and resilience
By harnessing solar energy, the project reduces dependence on non-renewable fossil fuels, contributing to a more sustainable energy mix and reducing greenhouse gas emissions. Solar power projects typically have a lower environmental impact compared to traditional energy sources. They help mitigate air and water pollution, reduce carbon emissions, and minimize the ecological footprint associated with energy generation. Solar power projects contribute to energy resilience by providing a stable and predictable source of energy. This can be especially important for urban areas, ensuring a more stable energy supply and helping to mitigate the impact of energy price volatility. Incorporating solar power into the urban energy mix contributes to the diversification of energy sources. This diversification enhances energy security, making the urban area less vulnerable to disruptions in the supply chain of any single energy source. This involves using technology to optimize energy production, storage, and distribution, creating more efficient and resilient energy systems. By reducing reliance on fossil fuels, solar power projects contribute to mitigating climate change impacts. By utilizing renewable solar power in electric energy generation, the project aims to reduce the municipality's electricity expenses. This financial benefit enhances the economic sustainability of the local government. Renewable energy investments empower communities by providing them with opportunities for potentially creating jobs, thereby enhancing the social dimension of sustainability. This contributes to economic sustainability by fostering employment opportunities and skill development within the community. It would facilitate income diversification by offering opportunities for local businesses, such as maintenance services, security, and other support functions. With the increasing number of renewable energy implementations, there is the potential to promote the use of clean energy in various sectors. The project has training activities for stakeholders and the responsible. This educational aspect contributes to the long-term sustainability of the region by raising awareness and promoting environmentally conscious behaviors.

Description of how the project strengthens accountability to stakeholders
The project strengthens accountability to stakeholders through transparent decision-making, active engagement, accessible information, responsive grievance mechanisms, regular reporting, clear communication, measurable performance indicators, and inclusive decision-making processes. The project promotes transparency by involving stakeholders in the decision-making process. Through open communication and consultation, stakeholders are informed about project objectives, progress, and potential impacts. This transparency would enhance accountability by ensuring that decisions are made collectively and with the input of relevant stakeholders. The project would facilitate regular stakeholder engagement activities such as meetings, workshops, etc., providing a platform for dialogue between the implementing entities and stakeholders. These activities allow stakeholders to express concerns, provide feedback, and actively participate in shaping project outcomes. Regular engagement fosters a sense of ownership and accountability among stakeholders. In doing so, the project ensures that relevant information is easily accessible to stakeholders. This includes providing updates, reports, and documentation related to the project's environmental, social, and economic aspects. Accessible information empowers stakeholders to make informed decisions and holds project implementers accountable for the project's overall impact. A robust grievance mechanism is established to address concerns raised by stakeholders. This mechanism allows stakeholders to report issues, express grievances, and seek resolution. The responsiveness of the grievance mechanism demonstrates a commitment to accountability by addressing concerns in a timely and effective manner. The project engages in regular reporting and audits, providing stakeholders with detailed insights into project activities and outcomes. Regular reporting ensures accountability by keeping stakeholders informed about the project's adherence to sustainability goals, financial management, and overall performance. The project defines and conveys measurable performance indicators, allowing stakeholders to assess the project's success against predetermined benchmarks. This transparency in performance evaluation enhances accountability by providing stakeholders with objective criteria to gauge the project's impact. Involving stakeholders in decision-making processes ensures inclusivity and accountability. By considering diverse perspectives, the project strengthens its commitment to meeting the needs and expectations of all stakeholders, fostering a sense of shared responsibility.

Identifying and Managing Social and Environmental Risks

	2. The Potential Social and Environmental Risks?	3. The level of significance of the potential social and environmental risks?			6. Description of the assessment and management measures for each risk rated Moderate, Substantial or High
Risk Topic	**Risk Description (broken down by event, cause, impact)**	**Impact and Likelihood (1-5)**	**Significance (Low, Moderate Substantial, High)**	**Comments (optional)**	**Description of assessment and management measures for risks rated as Moderate, Substantial or High**
Land and Soil	Risk 1: Stripping of the Vegetative Topsoil Layer and Soil Compaction	Land Preparation Phase I = 4 L = 2	**Moderate**		During the land preparation phase of project, there may be a risk of soil quality deterioration, which can affect vegetation and the ecosystem, leading to decreased efficiency. There is no agricultural activity on the project land, and it is classified as dry marginal agricultural land. Limited agricultural activities are carried out in the immediate vicinity of the project site. Therefore, soil loss in this area carries a risk of deteriorating the quality of the land.
Cultural Heritage	Risk 2: The possibility of discovering artifacts or other cultural and historical items of value.	Land Preparation Phase I = 2 L=2	**Low**	If excavation sites are encountered in the sub project area, a rapid response plan should be prepared and experts should be called to manage the excavations, and project plans should be revised if necessary and additional measures should	The subproject area is not located within the archaeological, historical and urban protected area. If any artifacts are discovered in the subproject area, the land preparation or construction activities will be stopped immediately, and the Museum Directorate must be notified.

				be taken to protect the excavation areas.	
Land and Soil	Risk 3: Leakage of Contaminants into the Soil and Waste and Chemical Storage	Constructional Phase I = 2 L = 2	**Low**		Leakage of pollutants into the soil of the subproject area or waste and chemical storage is possible during the construction phase. The distance of the area where solar panels will be installed within the project area to the nearest residential unit in İsmetiye Neighborhood is approximately 3.5 km. The construction phase will last less than a year, and as long as the mitigation and monitoring measures specified in this ESP are implemented, this risk will be eliminated.

		Operational Phase I = 1 L =1	**Low**		During the operation phase, there are no activities that will cause pollutants to enter the area.
Noise Pollution	Risk 4: Noise Resulting from Temporary Traffic Load Noise Caused by Construction Vehicles and Equipment Blasting, Stone, and Rock Removal Vibration Effects	Constructional Phase I = 2 L = 2	**Low**		During construction, the road near the area will be actively used (Photograph 1). There are no residential units near the project area. Transportation to the project area will be provided by field road. For the subproject area in Alaşehir, it is possible that impacts that will harm human health and the environment will be low during the construction phase due to its distance from settlements. However, the construction period is quite short due to the characteristics of SPP. Measures have been developed for the short construction process. By implementing the measures, the impacts will be minimized.
		Operational Phase I = 0 L =0	**Low**		The construction work is expected to be completed in a very short time. The potential impact of this risk was assessed as extremely low, given that it would not cause long-term noise pollution.
Air Pollution	Risk 5: Dust and Exhaust Emissions from Soil Excavation, Vehicle Traffic and Equipment	Constructional Phase I = 2 L = 2	**Low**		During the construction phase, temporary exhaust and dust emissions are likely to occur due to activities such as soil excavation, leveling works, vehicle traffic and equipment use. Since the power plant installation is expected to be completed quickly, it is evaluated that the impact level will be low.
		Operational Phase I = 1 L =1	**Low**		After the completion of the construction phase of the power plant and its commissioning, no activities that will cause air pollution are foreseen.

Traffic Congestion & Surrounding Residents	Risk 6: Temporary Blockage of Transportation Roads between Settlements Traffic Vehicles Cause Destruction on Roads and Buildings	Constructional Phase I = 2 L = 2	**Low**		Traffic load will increase during the construction phase. Due to the increasing traffic load, especially with the use of heavy tonnage vehicles, road surface improvements become mandatory during the construction phase.
		Operational Phase I = 0 L =0	**Low**		Heavy tonnage vehicles will not be used during the operation phase.
Community Health and Safety	Risk 7: Community health and safety during the execution of works	Constructional Phase I= 2 L= 2	**Low**		SPP sub-project area is located far away from the residential area. So, the execution of construction works poses potential risks to community health and safety due to noise, dust, traffic disruptions, and accidental spills or emissions will be quite low.
		Operational Phase I = 0 L =0	**Low**		There is no risk to community health and safety during the operational phase.
Pollution in Groundwater	Risk 8: Chemical Spills and Leaks Improper Storage and Disposal of Materials	Constructional Phase I = 2 L = 2	**Low**		To mitigate the risk of groundwater pollution during the construction of solar power plants, it is essential to implement best practices in environmental management. This includes proper storage and handling of materials, implementation of erosion control measures, appropriate stormwater management, and adherence to regulatory guidelines for environmental protection. Environmental impact assessments and monitoring during the construction phase are also crucial to identify and address potential sources of pollution promptly.

		Operational Phase I = 1 L =1	**Low**		There is no risk about chemical spills and leaks, improper storage and disposal of materials during the operation phase.
Natural Disaster	Risk 9: Earthquake Risk.	Construction Phase I = 4 L=2	**Moderate**		Manisa is located in the active fault line region and 1st-degree earthquake zone, and Alaşehir district is located 1st-degree earthquake zone. There are active fault lines in the district (Figure 9). For this reason, the construction must be carried out in accordance with the earthquake risk, taking into account active faults, and the relevant regulations must be complied with. The SPP Sub-project area's is located 1st degree zone, it is seismicity is between 0.4-0.5 (Figure 10). However, there is no active fault line within the SPP sub-project area.
		Operational Phase I=1 L=3	**Low**		Equipment must be well secured in a safe position.
Natural Disaster	Risk 10: Possibility of floods due to excessive rainfall	Construction Phase I = 2 L=2	**Low**		Alaşehir district is not located flood risk area. When the SPP Sub-project area is examined, flood sensitivity of the project area is low degree. There is a dry stream in the project area. In order to prevent the parcel from being affected by stream flooding, a 6-meter-wide road should be reserved on the parcel side with a hydrologically sufficient strip-like area that can pass the flood flow from both sides of the passing stream. Flood control measures should be taken in stream bed. Care should be taken to ensure that the stream is not covered, not used as a road and that the panels are located at the upper elevation of the land away from the stream bed.

		Operational Phase I=1 L=1	**Low**		Since mitigation measures will be implemented against flood risk during the construction phase, the flood risk will be reduced during the operation period.
Reflection and Glare Effect	Risk 11: Reflection and Glare Effect	Constructional Phase I = 1 L=1	**Low**	Reflection and glare effect are an effect created by solar power plants (SPP). This effect occurs as a result of reflection or glare from sunlight on photovoltaic panels or from a bright sky. The severity of reflection and glare effects may vary depending on the time of year and the geographical location of the power plant. Additionally, impact significance may vary depending on potential receptor points (settlements in the impact area, transportation routes, airports, etc.). Since photovoltaic panels absorb sunlight, the reflection and glare effects in PV type systems are generally lower than in systems using other solar energy technologies.	During the construction phase, the level of glare and reflection effects is quite low. During the operation phase, this impact level is higher compared to the construction phase due to the complete installation and operation of the panels.
		Operational Phase I=3 L=3	**Moderate**		After determining the area with reflection risk in the Solar Power Plant area, visual monitoring should be carried out in the first year of operation to observe the reflection and glare effects.

Workforce and OHS	Risk 12: Effects on Workforce and OHS	Constructional Phase I = 4 L=1	**Low**		The number of personnel needed during the construction phase will be higher. The factors that threaten occupational health are slightly more than the operational phase. Measures have been developed in accordance with the relevant regulations due to national and international legal frameworks.
		Operational Phase I = 3 L=1	**Low**		Since only maintenance and repair activities will be carried out during the operation phase, the number of working personnel is low and occupational health and safety risks are lower. Measures have been developed in accordance with the relevant regulations due to national and international legal frameworks
Risk: 13 Storage of Damaged or End of Lifecycle Panels	Risk: 13 Storage of Damaged or End of Lifecycle Panels	Constructional Phase I=0 L=0	**Low**		There is no risk during the construction phase.
		Operational Phase I=2 L=2	**Low**		Secured areas on-site specifically designated for the temporary storage of damaged or end-of-lifecycle panels will be established. Develop a recycling plan. Develop a recycling plan in collaboration with certified recycling facilities to ensure environmentally responsible disposal of panels.

4.The overall project risk categorization?		
Low Risk	☐	**Category C**
Moderate Risk	☒	**Category Low B**
Substantial Risk	☐	**Category High B**
High Risk	☐	**Category A**

5. The requirements of the SES based on the identified risks and risk categorization			
Only required for Moderate, Substantial and High-Risk projects			
Is assessment required? (check if "yes")			**Status? (completed, planned)**
if yes, indicate overall type and status	☐	Targeted assessment(s)	Since the project is Category Low B, these assessments are not required.
	☐	ESIA (Environmental and Social Impact Assessment)	
	☐	SESA (Strategic Environmental and Social Assessment)	
Are management plans required? (check if "yes)			
If yes, indicate overall type	☐	Targeted management plans (e.g. Gender Action Plan, Emergency Response Plan, Waste Management Plan, others)	Since the project is moderate risk, these management plans are not required. However, in the cope of SCP II AF, **Simplified ESMP** has been prepared for this project with low risk.
	☒	ESMP (Environmental and Social Management Plan which may include range of targeted plans)	
	☐	ESMF (Environmental and Social Management Framework)	

Based on identified risks, which Principles/Project-level Standards triggered?		**Comments (not required)**
Overarching Principle: Leave No One Behind		
Human Rights	☒	
Gender Equality and Women's Empowerment	☒	
Accountability	☒	
The Environmental and Social Standards of World Bank (ESS)		
1. Biodiversity Conservation and Sustainable Management of Living Natural Resources	☒	

2. Assessment and Management of Environmental and Social Risks and Impacts	☒	
3. Community Health, Safety and Security	☒	
4. Cultural Heritage	☒	
5. Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement	☐	
6. Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	☐	
7. Labor and Working Conditions	☒	
8. Resource Efficiency and Pollution Prevention and Management	☒	
9. Financial Intermediaries	☒	
10. Stakeholder Engagement and Information Disclosure	☒	

Environmental Screening Checklist

Sub-project Information	
Sub-project title	Alaşehir Municipality SPP Sub-project
Sub-project beneficiaries	Alaşehir Municipality
Proposed date of start of work	
Brief description of sub-project	One of the main justifications of the SPP sub-project is to use clean energy to meet the electric energy need of district.
Site area, location	Manisa province, Alaşehir district, İsmetiye neighborhood, Lot 1 of Block 101
Status of national EIA process of sub-project	The sub-project area is exempted from EIA regulation Process because the installed capacity of the plant is 3150 kWp.

Environmental and social impacts related to the proposed sub-project – the existing situation			
	Yes	**No**	**Details**

Will the sub-project adversely affect legally protected areas or internationally recognized areas of high biodiversity value[4]?	☐	☒	The sub-project will not affect any protected areas or internationally recognized areas of high biodiversity value, since there is no such areas around the-project area.
Will the sub-project be located in or near the environmentally sensitive or protected area (in accordance with national legislation)?	☐	☒	The sub-project will not be located in or near the environmentally sensitive or protected area (in accordance with national legislation), since there is no such areas around the-project area.
Will the sub-project adversely affect critical habitats such as forest ecosystems, wetlands, marshlands, and aquatic ecosystems or natural habitats?	☐	☒	There is no habitat with high sensitivity around the subproject area.
Will the sub-project adversely affect endangered plant and animal species?	☐	☒	There are no endangered flora or fauna species in or near the area.
Will the sub-project affect archaeological sites, historic monuments and settlements?	☐	☒	There is no negative impact on any historical assets located near the project.
Is there woods or forest around the sub-project area?	☐	☒	There are no woods or forest around the sub-project area.
Will the sub-project adversely affect the woods and forest?	☐	☒	Since there are no woods or forest area in the subproject area, it will not affect adversely any woods or forest.
Is there any combustible and flammable subsidence material around the sub-project area?	☐	☒	No, there is not any combustible and flammable subsidence material around the sub-project area.
Is there underground facilities such as gas pipeline, electrical facilities?	☐	☒	No, there is not underground facilities such as gas pipeline, electrical facilities
Are there any overhead lines such as high-voltage lines in or near the sub-project area?	☐	☒	No, there is not any overhead lines such as high-voltage lines in or near the sub-project area
Will people permanently or temporarily lose access to facilities, services, or natural resources because of the sub-project activities?	☐	☒	No, local people will not be affected by losing access to facilities, services, or natural resources because ıf the sub-project activities.
Is this sub-project intervention requiring private land acquisitions?	☐	☒	The property is allocated for the municipality.
If the land parcel has to be acquired, is the actual plot size and ownership status known?	☐	☒	-
If new land is required and the site is privately owned, can this land be purchased through Willing Buyer–Willing Seller agreement?	☐	☒	-
Will the sub-project require the acquisition of public lands?	☐	☒	-

[4] Internationally recognized areas of high biodiversity value include World Heritage Natural Sites, Biosphere Reserves, Ramsar Wetlands of International Importance, Key Biodiversity Areas, Important Bird Areas, and Alliance for Zero Extinction Sites, among others.

If public lands will be acquired, are there any formal/informal users utilizing these lands for income generation purposes?	☐	☒	-
Will there be loss of/damage to productive trees, fruit plants or crops that generate livelihood income for the households?	☐	☒	There is no productive trees, fruit plants or crops in the land where the SPP subproject will be built
Is there any soil contamination observed at the sub-project area?	☐	☒	Currently, no soil contamination observed, but monitoring measure will be applied to control over.

Impacts of sub-project (in case of rooftop solar sub-project only):			
Will the sub-project affect the daily operation of the building and people?			
Is the building protected under the law for the protection of cultural heritage?			
Is the building of special significance to any vulnerable group (i.e. disabled people, minorities, youth, etc.)?			

Environmental and social/impacts related to sub-project construction/installation			
	Yes	**No**	**Details**
Will the sub-project involve the use of forest trees or other natural resources as building materials?	☐	☒	The sub-project does not involve the use of forest trees or other natural resources as building materials.
Will the sub-project emit greenhouse gases (CO_2, NOx, O_3) or ozone-depleting substances (CFC, methyl bromide, etc.)?	☐	☒	The sub-project will not emit greenhouse gases
Will the sub-project use, produce, or discharge hazardous and toxic materials (e.g., hospital waste, industrial waste, or other?)	☐	☒	
Will the sub-project produce or cause occupational hazards?	☐	☒	Related measures are planned in this ESMP, and they will be taken into consideration
Will the sub-project cause dust and noise pollution?	☒	☐	The sub-project would cause dust and noise only in construction phase. Measures related to this issue has been developed in this ESMP. In the operational phase there will be no dust and noise.
Will the sub-project cause water pollution?	☐	☒	-
Will the sub-project cause soil pollution?	☐	☒	-
Will the sub-project result in temporary disruption to the livelihoods of any persons/households?	☐	☒	-
Will the sub-project cause community safety-related hazards?	☐	☒	-
Will the sub-project include significant OHS concerns?	☐	☒	Related measures are planned in this ESMP, and they will be taken into consideration
Will the sub-project cause additional traffic load?	☒	☐	The sub-project would cause traffic load in construction phase. In operational phase there will be no

			traffic load originated from the sub-project.
Will the sub-project cause any adverse impact on the closest sensitive receptors (if there is any)?	☐	☒	-
Is there a population that can be negatively affected by the sub-project?	☐	☒	No population in the lot where subproject will be built
Other environmental or social impacts (describe the nature and severity of its impact)	*Preparatory phase:* *Construction phase:* *Operation phase:*		

According to OP4.01, OP 4.10 and OP 4.12 of World Bank, the following social safeguard documents shall be prepared for the subproject:

1. According to the Environmental screening checklist above the subproject is in Category low B in terms of risk. and recommendations of World Banks that is Category low B project does not need environmental management plan and does not need to take environmental protection measures to mitigate the impact, however, in any situation, a simplified ESMP has been prepared. In this regard, it reveals that the World Bank has not triggered the relevant safeguards policies, except for this simplified ESMP.
2. According to the social screening checklist above, there is no reason to trigger World Bank Social Safeguard Documents such as Resettlement Action Plan, Reemployment Plan, Job Transfer Training.

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