2024



Alaşehir SPP Sub-Project

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN ALAŞEHIR MUNICIPALITY

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List of Abbreviations

AF	Additional Financina					
AFAD	Additional Financing					
	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					
ОР	Operation Policy					
PIU	Project Implementation Unit					
PM	Particulate Matter					
РҮВ	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	P Solar Power Plant					
UN	United Nations					
USBS	SBS 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 Plan (ESMP) will be prepared as defined in the Environmental and Social Management Plan (ESMP) (ILBANK, 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 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, and the cost is written into the cash flow as **decommissioning cost** which is **EU 32.000,00/MWp**. So, the overall power plant decommissioning cost will be, **EU 100.800,0**.

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
Decommissioning Cost	EU 100,800

Table 1: Planned SPP Technical Details

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.

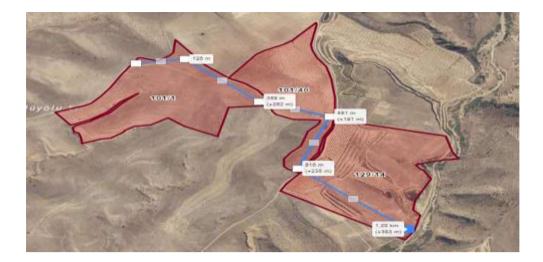
The SPP with an installed capacity of 2640 kW, which is planned to be installed, will be connected to the system through transformers of appropriate power and number to be fed by the loose/tight bond to be taken from the pole No. 51 of Kavaklıdere Şarapları E.N.H. with 3x3 AWG cross section coming from Kemaliye TR-7 fed from the 34.5 kV Kemaliye-2 feeder coming out of 154/34.5 kV Alaşehir Havza TM. The electrical energy generated by the Solar Panels will be connected to TEİAŞ energy lines with 1 substation. The Energy Distribution Line passes through 2 parcels that need to be expropriated. These are 101 Block 40 Parcel and 129 Block 14 Parcel (Figure 4).

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

Table 2: Planned SPP Land Information



Figure 4: Energy Transmission Line Route Plan







Land Acquisition Principles

OP 4.12 (ILBANK, 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 acquisitionacquisition, 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 nonresidential 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 nonrenewable 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 8.

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:
 - o Electricity Market, Law no. 6446 dated 14 March, 2013
 - o 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

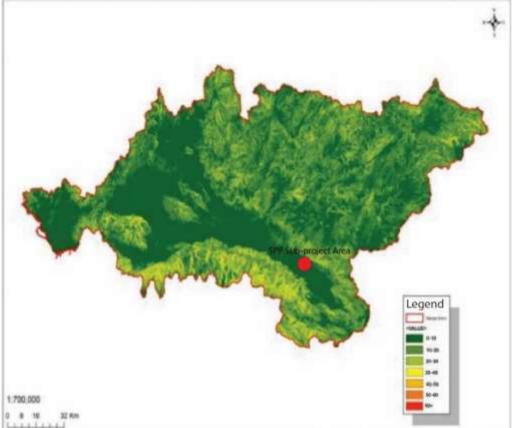


Geography

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 2070 m high, and the highest district center is 850 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 km². 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.





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.

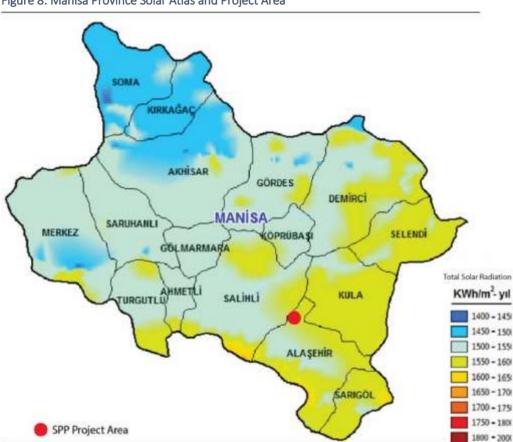
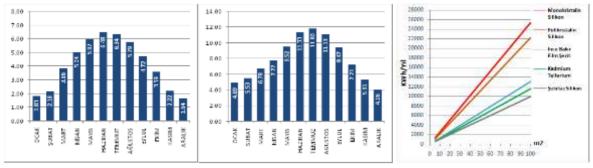


Figure 8: Manisa Province Solar Atlas and Project Area

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, menengice 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).

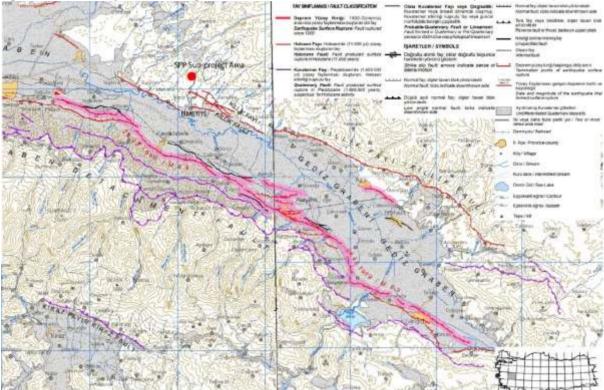
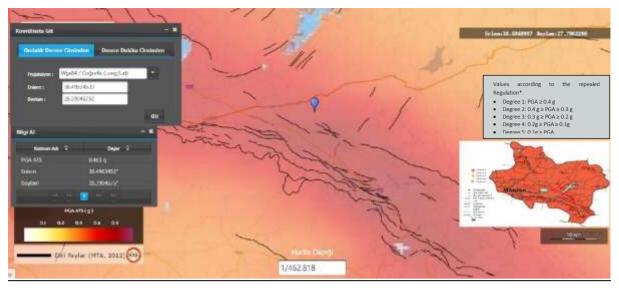


Figure 9: Faults in Alaşehir and its Region, General Directorate of Mineral Research and Exploration (MTA)

Figure 10:Earthquake Hazard Map of Sub-Project Area and Surroundings, Türkiye Earthquake Hazard Maps Interactive Web Application, 2024, (https://tdth.afad.gov.tr)¹

¹ 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

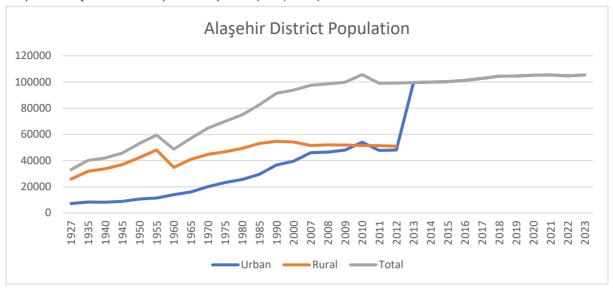
Demography

Manisa province has a total of 17 districts. Manisa has a surface area of 13.269 km² and 109 people per square kilometer. Manisa population density is 109/km². The surface area of Alaşehir district is 977 km². 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.

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

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	• Risk 5: Dust and Exhaust Emissions from	 Implement dust control measures, such as watering construction areas. 	Alaşehir Municipality/PIU	Traffic Grievance Records	Included in the subproject budget

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

L = 2	Soil Excavation, Vehicle	· Use dust screens or barriers to prevent dust dispersion.	Contractor and/or	Visual	
	Traffic and Equipment	·.	subcontractor	observations	
		· Promote the use of eco-friendly construction equipment.	Supervision Consultant	(such as traffic	
		· Pave or stabilize dirt roads to reduce dust emissions.		signs and warnings	
		 Enforce speed limits to minimize dust generation. 		are placed at	
		 Maintain vehicles to reduce emissions. 		appropriate	
		· Use low-emission or electric vehicles whenever possible.		locations)	
		• Encourage the adoption of clean fuel options.		ESMR Findings	
		• Develop an emissions control and reporting program.		0	
Constructional Phase	Risk 6: Temporary	• Plan construction schedules to minimize road closures.	Alaşehir Municipality/PIU	Traffic Grievance	Included in the
I = 2	Blockage of	Provide alternative routes for affected communities.	Contractor and/or	Records	subproject budget
L = 2	Transportation Roads	• Communicate road closures in advance to residents.	subcontractor	Visual	
	between Settlements	 Employ regular road maintenance and repair. Ensure construction vehicle operators follow road safety 	Supervision Consultant	observations	
	Traffic Vehicles Cause	guidelines.		(such as traffic	
	Destruction on Roads	guidelines.		signs and warnings	
	and Buildings			are placed at	
				appropriate	
				locations)	
				ESMR Findings	
Constructional Phase	Risk 7: Community	\cdot Fence the subproject area, approach areas, and storage areas to	Alaşehir Municipality/PIU	Visual	Included in the
= 2	health and safety	prevent unauthorized access.	Contractor and/or	observations	subproject budget
L = 2	during the execution	\cdot Provide clear signage to warn the public of construction activities.	subcontractor	ESMR Findings	
	of works	· Implement dust control measures to minimize air quality impact.	Supervision Consultant		
Constructional Phase	Risk 8:	· Establish safe delivery/storage/handling procedures in	Alaşehir Municipality/PIU	Visual	Included in the
I = 2	· Chemical Spills and	accordance with material safety data sheets (MSDSs)	Contractor and/or	observations	subproject budget
L = 2	Leaks	Immediately contain and clean-up any spilled material.	subcontractor	ESMR Findings	
	 Improper Storage and 		Supervision Consultant		
	Disposal of Materials				
	 Inadequate 				
	Stormwater				
	Management				
	 Inadequate Hazardous Material Handling 				
Construction Phase	· Risk 9: Earthquake Risk	· Parameters suitable for 1st degree earthquake zones should be	Alaşehir Municipality/PIU	Visual	Included in the
	TISK 3. Lattiquake RISK	taken into consideration in construction.	Contractor and/or	observations	subproject budget
L=2		· During construction, current earthquake safety standards and	subcontractor	Records	Supproject budget
L-2		regulations must be followed.		NECULUS	
		-	Supervision Consultant		

		• The design of the solar power plant should be made considering the earthquake resistance in accordance with the earthquake risk of the region.			
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	Risk Description	Mitigation Measures	Responsibility	Key Performance	Cost
Impact and Likelihood				Indicators	
(1-5)					
Operational Phase	· Risk 3: Leakage of	· Wastes generated should only be temporarily stored on site in	Alaşehir Municipality/PIU	Visual	Included in the
=1	Contaminants into the	the temporary storage area that is maintained/equipped with		observations	subproject budget
		appropriate precautions according to the type of wastes, when			

L =1	Soil and Waste and Chemical Storage	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	Contractor and/or subcontractor Supervision Consultant	ESMR Findings	
Operational Phase I = 1 L =1	• Risk 5: Dust and Exhaust Emissions, Vehicle Traffic and Equipment	 should be recorded and records should be kept. 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
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	Visual observations ESMR Findings	Included in the subproject budget

		· Design of project area according to flight routes.	Supervision Consultant		
Operational Phase	· Risk 12: Effects on	· For sub-projects that may have labor influx issues, camp sites	Alaşehir Municipality/PIU	Sub-contractor	Included in the
I = 3	Workforce and OHS	should be arranged to properly accommodate workers and meet	Contractor and/or	Agreements	subproject budget
L=1		their needs within the camp site. Workers must be provided with	subcontractor	Grievance Records	
		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	Supervision Consultant	ESMR Findings	
Operational Phase	· Risk 13: Storage of	· Develop a procedure for temporary storage of damaged or end-	Alaşehir Municipality/PIU	Sub-contractor	Included in the
I = 2	Damaged or End of	of-lifecycle panels on site in secured areas.	Contractor and/or	Agreements	subproject budget
L=2	Lifecycle Panels	\cdot - Ensure proper delivery to specified recycling areas.	subcontractor	Grievance Records	
			Supervision Consultant	ESMR Findings	

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

Phase	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
Impact and							
Likelihood							
(1-5)							
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

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
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.
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

Phase Impact and Likelihood (1-5)	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
Constructional Phase I = 2 L = 2 Constructional	Risk 6: Temporary Blockage of Transportation Roads between Settlements Traffic Vehicles Cause Destruction on Roads and Buildings Risk 7: Community	 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. Regular inspections of 		documenting damages. • Visual inspection,	 Vehicle operation areas. Transportation routes. Areas where construction vehicles operate. Approach roads, 	 Periodic emissions testing during construction and operation. Real-time monitoring of road conditions. Periodic visual assessments Daily during 	0
Phase I = 2 L = 2	Health and Safety During Execution of Works	 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. 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. 	 and signage. Compliance with established work hours. Security of approach and storage areas. Dust particle levels in the surrounding environment 	quality sampling	storage areas, and work sites within the project boundary.	construction activities. • Weekly (dust monitoring.) • Ad hoc inspections based on complaints or identified risks.	or unauthorized access. - Deviation from work hours. - Dust levels exceeding standards.
Constructional Phase I = 2 L = 2	Risk 8: • Chemical Spills and Leaks • Improper Storage and Disposal of Materials • Inadequate Stormwater Management	 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 . .

Phase Impact and Likelihood (1-5)	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
Construction	 Inadequate Hazardous Material Handling Risk 9: Earthquake Risk 	· Earthquake activities should	· Liquefaction rates	· Ground survey	· Project Site and	Continuous	· Alarming system
Phase I = 4 L=1		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 under the influence of earthquakes.	 Soil classification earthquake design classes settlement suitability data 	• Structural strengthening	surrounding areas	monitoring with real-time updates. Continuous monitoring with real-time or periodic reviews. • Immediate reporting for any incidents and periodic documentation for routine checks	according to the earthquake intensity • Ground movement sensor • Remote sensing technologies, such as energy distribution
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. 	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

Phase F	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
Impact and							
Likelihood							
(1-5)							
Constructional F	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, 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 	 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	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
Impact and							
Likelihood							
(1-5)							
		 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	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
Impact and							
Likelihood							
(1-5)							
Operational	Risk 3: Leakage of	· Analysis contaminants and	 Presence of oil, 	· Visual inspection, soil	· Areas near equipment	 Regular checks 	· Presence of
Phase	Contaminants into the	waste in the soil of the	lubricants, or fuels in	sampling, and	refueling stations and	during refueling	contaminants
l = 1	Soil and Waste and	project site regularly.	soil.	analysis if necessary.	vehicle storage.	and maintenance	
L =1	Chemical Storage		·.	•			

Phase	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
Impact and							
Likelihood (1-5)							
(1-5)					 Near waste and chemical storage areas 		
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 L=1	Risk 10: Possibility of floods due to excessive rainfall	 Regular visual checks of drainage pathways to ensure they are clear of debris. Ensure basic grading and slope management to avoid water pooling in low-lying areas. 	 Surface Water flow Drainage efficiency 	 Weather radar, and satellite precipitation estimates can be used. Visual inspections 	 Project Site and areas where the workforce is most active and where with heavy equipment use Low-lying areas within the project site 	 Regular and ongoing monitoring during periods of intense rainfall events 	 detect changes in rainfall and water 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. 	 The intensity and frequency of glare and reflection from the solar panels and 	 The intensity and frequency of glare and reflection from the solar panels and 	• The intensity and frequency of glare and reflection from the	 The intensity and frequency of glare and reflection from 	 Define specific detection limits that indicate the threshold beyond

Phase	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
Impact and							
Likelihood							
(1-5)							
		 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. 	surrounding areas and the times of the day, seasons, or specific weather conditions when glare and reflection effects are most pronounced.	surrounding areas and the times of the day, seasons, or specific weather conditions when glare and reflection effects are most pronounced.	solar panels and surrounding areas.	the solar panels and surrounding areas.	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 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 	 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 and	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
Impact and							
Likelihood							
(1-5)							
		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	Risk 13: Storage of	· Analysis of storage	· Condition of stored	· Visual inspection	 Temporary storage 	· Regular checks	· Presence of
Phase	Damaged or End of	conditions and recycling	panels		areas on site	Repaid checks	damaged panels
l = 2	Lifecycle Panels	processes regularly.					beyond allowable
	,						limits
L=2							

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 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.

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		

Stakeholder Groups	Level of	Level of Influence
	Interest	
Direct Stakeholders		Law
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	L terre	Leun
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	I	
Alaşehir Municipality	High	High
Alaşehir Governate	Medium	Medium
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.

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

Table 11: Potential Vulnerable/Disadvantaged Groups and their needs

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			

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

Stage of GM	Required Action
	-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
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.

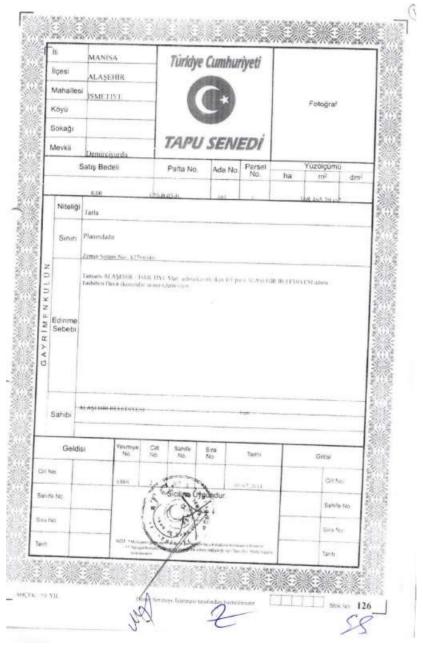
Alaşehir Municipality PIU will assess the number and nature of grievances/comments (if any) quarterly and their effectiveness to address grievances/comments based on the number and percentage of closed grievances. The monitoring framework is described in Table 13.

Parameter	Key Performance Indicator	Phase	Frequency	Responsible Party
	Number of grievances/comments received during per consultation	Construction	Quarterly	 To be assigned by Alaşehir Municipality PIU and Contractor
Project GM	 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 	Operation	Semi-annually in the first two years; Annually afterwards	 To be assigned by Alaşehir Municipality PIU and Contractor
	Number of grievances/comments received by own workers Number of	Construction	Monthly	 To be assigned by Alaşehir Municipality PIU and Contractor
Workers' GM	grievances/comments received by indirect workers • Types of the grievances/comments regarding worker management and working conditions (e.g. Worker rights, OHS, etc.)	Operation	Semi-annually in the first two years; Annually afterwards	 To be assigned by Alaşehir Municipality PIU and Contractor

Parameter	Key Performance Indicator	Phase	Frequency	Responsible Party
	 Timeframes for response to each grievance The number of open or closed grievances Number of invalid or in progress grievances 			
GM	Effectiveness of the GM	Construction	Quarterly	ILBANK

7. Annexes

Annex 1: SPP Project Area Title Deed



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





THE REPORT OF CARDING AND PLAN PLAN APPLICA

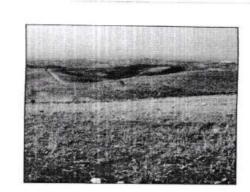
1. Then TWE simulations are assumed to the second secon

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



Annex 4: Ground Survey Report

	TABLE IF AT ATTING A MARKED
1.Genel Durum	TARIMSAL ETÜT RAPORU
1.1. Anzinin Yeri ve Alam	
lu	MANISA
liçesi	ALAŞEHİR
Mahalie	: GOLFINAR, ISMETTYE
Takip Numerase	: 2022-45-000072
Ente Tarihi	: 23.01.2023
Uzakhk	Etik olan, İsrretiye Mahalksine yaklaşık 3,5km, Alaşehir'e 23 km
Bakı	Marssa ya ise 110 km uznickictadar,
Rakm	: Dogs-Batt : 300 metre
Etikki Yapılan Alan (m2)	: 108.426,16
	limit, Alaschir Rossi, Ismetree mahallesinde buikmut ve Gimes Energisinsten
	heansu Elektrik Energisi Uretirri GBc Tesisi GESikurulmak istenen erüt alam
	lametrye Mahalesi, Demociyurdu mevkinde, tupuran 101 ada. 1 no'lu
	pusselinde kayıtlı, "Tarla" vasufi, 10,846539 heknar büyüklikandir Estir alam halihazırda boş taran yapılmayan tapelik ve yarmıç arazi
	konumandadır. 1/25000 ölçekli haritada gösterilen ve ölçü kreikisinde köse
10.00000	knortifinatkan veriken (101/207, 208, 367, 368, 369, 370, 371, 372, 374, 375, 376, 377, 378, 379, 380, 301, 397, 389, 390, 391, 392, 394, 395, 396, 397, 398, 399, 399, 399, 399, 399, 399, 399
Arazinin Kanamu	. 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 noktalan) 1 parselin kuarvinde
	Salihii Mevlukli Kadastro suun boş tarmı yapılmayan anazler ve dikili tanın anazisi(yeni fidan dilahmiş zeytin balçosi) gitneyinde, batanda boş tarmı
	yapimuyan arazier, doğusunda zeytin dikili tariş balanmaktadır. Erseselin
	ekii hanta pian örneginde de görükluğu üzere karnuya ai kadastrol yeilu
Ada / Parsel	bukurmanaktadır. : Ada/Passel latesi ektedir.
1.2.Etildin Amacı	
Ettit, Himiz, Alaschir Ikesi, Alaschir I	Belediye Başkanlığı İmar ve Şehirelik Muldirliği'niniyen 21.12.2022 tarih ve E-90573066-115.99-27701 sayılı yazanda, İliniz mini yardı myekirdə teremen 101 ədə Larih azərdi ilə başkanlışı ilə başkanlışı ilə başkanlışı ilə başkanlışı il
Angelar ligesi, ismetiye Mahalesi, D	emini jurdu merkinde, inpanar 101 ada. 1 noʻla perseinde knytt, "Tarla" vazifi, 10,846539 hektar ytabilarini parselin mükiyeti oman tararman 556660 helmatik tarasilari ada. 2 noʻla perseinde knytt, "Tarla" vazifi, 10,846539 hektar ytabilatini parselin mükiyeti
APARALIPU DE DE LEED, SEXPER	the state of the s
Nazm Imer Plan ve 1/1000 ölcekli	omisu taparnian 5,596450 hektar julia i no to presonae knym, jiarkii vaarh, 10,846539 hektar juliäjulii panelin milikijeti i Uygniam Imar Plara voiminis takiheite hindel se behavde i behavde in teasa in takiheit kurdensona ikikin 1/5000 ölçekli
Nazan İmar Plan ve 1/1000 ölçekli Güneş Enorji SantraP'ne ad söz konu yapılmıştır.	Uyyahan Jaru Soortoo nekanik kata taetude "Lanasar Ghey Enrij Santal" tesisin kuntaman ilijah. 15000 djeda Uyyahan Jaru Palar jajiman taibhado bahandidiji belmireka, uqarutun plantas alandgar aliha, yajahak olan "Liansaz au inur plan yapimandasaknea haknap, bahannedgan ilijah Karan gérigantista sonalmas üzerine 23.01.2023 tarihinde mit
Nazm Imr Plan ve 1/1000 šlocki Göreş Enerji Santrali'ne ad söz kora yapılmıştır. 2.Amai Özellikleri	i Uygalam Imar Plan yapámus nabbado bulanakága belmiere, ganya santari tessáni kunáranan ájaki 15000 éjedel au imar plan yapámusadásakinea halanap, bulanmedigna íljáin Kurum gérüjömösin sorulmasi üserine 23.01.2023 tarihinde ettöl
Güneş Enerji Santrali'ne ad söz konı yapılmıştır. 2. Arnat Özellikleri	anı inur plan yapılmışındışakınca balanışı, balarındığına ilşicin Kururı görüşdmösün sonalmışı üzerine 23.01.2023 tarihinde etik
Otreş Enerji SanmiFne ai söz koru yapılmıştı: 2.Arasi Özellikleri Manisa ve cevresinde temeli nakozyukl	au inur plan yapitmandasaknea haimap, bahrmedigna ilajan Karara görüşömözün sonalması üzerine 23.01.2023 tarihinde ettü
Offreş Enerji Sárimil'ne ad söz kora şaplmıştır. 2.Arazî Özellikleri Marisa ve çevresinde temeli paleozyyik örliklen olışmış iki birim olarak çhişirini ver alır Metanrifism denvesi çekiretde	au inur plan yapılmışandaşakınca bakınıp, bakırmıdığın ilşirin Kururı görüşdmösin sonansız akadığır aldığı, sıpakızik nim "Lisansız yaşık metaformik kayaçılar oluşturu: Menderes mesif olarak adlanılmlan temeldeki kayaçılar, bir çekindek ve burun iteerinde bir miştik. Çekindek grayılardın olaşmaştır. Bariar gödü guyşlar ve mavi gödü guyşturu üzerinde şistlerden olaşmaş kalın bir örü
Offreş Enerji Sárimil'ne ad söz kora şaplmıştır. 2.Arazî Özellikleri Marisa ve çevresinde temeli paleozyyik örliklen olışmış iki birim olarak çhişirini ver alır Metanrifism denvesi çekiretde	au inur plan yapılmışandaşakınca bakınıp, bakırmıdığın ilşirin Kururı görüşdmösin sonansız akadığır aldığı, sıpakızik nim "Lisansız yaşık metaformik kayaçılar oluşturu: Menderes mesif olarak adlanılmlan temeldeki kayaçılar, bir çekindek ve burun iteerinde bir miştik. Çekindek grayılardın olaşmaştır. Bariar gödü guyşlar ve mavi gödü guyşturu üzerinde şistlerden olaşmaş kalın bir örü
Götteş Farirji Startmö'ne at söz kona japalmıtr. 2.Amat Özetlikkeri Marika ve çerres-inde sameli paleozoyuk örtiken olaşmış ki birim okrak döşümü yer ular. Metaorfism derresesi çekridekt uyunusu oknak negienin karasatı öyekler Etti atim, ternek ve samu a	mi inur plan yapılmışandaşakınca bakınıp, bakınmıdığu özmerine, taşınrasın planısız akındığırı alıfığı, sipilacak olan "Esanssez ana inur plan yapılmışandaşakınca bakınıp, bakınmıdığına ilşicin Kurura görüşdmösin sondanısı üzerine 23.01.2023 terihinde ettü raşak metaformik taşaçılar oluşturu: Menderes mesifi olanuk adlanılmılan tenvidekti kayaçılar, bir çakındek ve burun iteerinde bir miştik. Çekindek gaşaylandan oluşmuştu: Banlar gözdi gaşaşlar ve mavi gözdi gaşatının üzerinde şisterden oluşmuş kalın bir örm an dışa doğu azahrakındır. Metamarik kaşaçıların tasırice masonok yaşa kereçtaşları geler. Mesonyik kireçtaşlarını üzerinde ive Kula vakarak kaşalamışları bazıdır yer alır.
Conny Energi Sterma ² he at söz kons yapılmıpır. 2.Arnari Önellükleri Marika ve çevresinde termili palorozyık örlüken olaşmış iki birim olanda düşündü energi alır. Metanim derocesi çekirdekt yanımaz olanık recijenin karasatı öbkelle Ettir alam, terpisik ve yanıng a Toprak bitmesi tamişk tili karak ve yanıng a Toprak bitmesi tamişk tili karak yaşınınga	mi inur plan yapilmasndasaknea baknap, bakemedigna ilgicin Kurun görüşdmösin sonalmas ükerine 23.01.2023 tarihinde etü yaşlı metaformik kayaçılar oluşturu: Menderes mesifi olaruk adlanılman tenekleki kayaçılar, bir çekardek ve bunan itnerinde bir miştik. Çekirdek gayaşlarılan okamıştır. Hanire gözü gayaşlar ve mavi gözü gayaşların Davinde şistlerden okaşmaş kalın hir öntü niştik. Çekirdek gayaşlarılan okamıştır. Hanire gözü gayaşlar ve mavi gözü gayaştırın Davinde şistlerden okaşmaş na dışta döyt azarahındar. Menderesi mesifi olaruk adlarıklaşları barinde şistlerden okaşmaş kalın hir öntü i ve Kula volkarak kayaşlarındarı bazarlar yer alır. masi tapoğrafik pozişyonarah edap, duğuk bir yaşışı az etmekledir. Ameinin eğimi %10-18 ile %18-25 amaşında değiaredinedir.
Göreş Enerji Stermi'ne at söz kon yapılmıştır. 2. Arazi Örceflikleri Marika ve çevresinde kemeli paleozeyik Örtiklen olışmış iki birim olarak dişişimi yamıştız olarak recijerin karasal okeller Etit atam, tepelik ve yaranş a Topak birgesi kanik kili kareşi yaşılar Etit atam, tepelik ve yaranş a Topak birgesi kanik kili kareşi yaşılar	nu inur plan yapılmışındaşakınca bakınıp, bakınmıdığın üşön Kurun görüşömbirin sonanışı üzerine 23.01.2023 tarihinde etti yaşlı metaformak kayaçlar oluşturu: Menderes mesifi olanık odlandınları temeldeki kayaçlar, bir çekindek ve buran itzerinde bir irrigitik. Cekindek gaşışıbatları okuşturu: Menderes mesifi olanık odlandınları temeldeki kayaçlar, bir çekindek ve buran itzerinde bir irrigitik. Cekindek gaşışıbatları okuşturu: Menderes mesifi olanık odlandının temeldeki kayaçlar, bir çekindek ve buran itzerinde bir irrigitik. Cekindek gaşışıbatları okuşturu: Menderes mesifi olanık odlandının temeldeki kayaçılar, bir çekindek ve buran itzerinde bir ir dışa doğu asalmakındır. Metarmarik kayaçların tazırke masonok yaşlı kıreçinşları gelir. Mesonoyle kireçinşlarını üzerinde ir ve Kulu vekanak kayalarındır buzdur yer akı: razi topoğrafik pooisyonaralı olaşı, dığışlı bir yaşı arz etmektedir. Amarinin eğini %10-18 ile %18-25 anaşında doğuşmektedir. Taşılaş doğu asalmışdır. bir başları daşış genel olarak yakaydıdır. Taşlıkı da yer yer değinmekte birlikte ortakırın %
Offreş Enerji Stertmi ² 'ne at söz kona yapılmıştır. 2.Arnat Önellükleri Marika ve çorvesinde termik paleonyyık örniken olgunşı ki birim olarak düşiriri yer ulır.Metaarifarm derecesi çekindekt yamaz oknak recijerin karasal çökeller Etit atanı, tepelik ve yamaş a Toprak hünyesi kanik-kilk-kerşi yapıdı 15-20 cararınladır. Etit kater DS/1'mı 15-20 cararınladır. Etit kater DS/1'mı	mi inur plan yapılmaşındaşıkınca bakınap, bakınmediğini ilgicin Kurura görüşdirdisin saralmışı ükerine 23.01.2023 tarihinde ettür yaşlı metafilemik tayaşlar oluşturu: Manderes mesifi olaruk adlanılmlan temekletci kayaşlar, bir çekirdek ve bunun (terrinde bir maşlık Çekirdek gauşışlandan olaşmaştır. Planim göldi gauşsin ve mavi göldi graystara üzerine şisterden olaşmaş kalın bir ömi an dışa doğu analmatandır. Manmaştır. Planim göldi gauşsin ve mavi göldi graystara üzerine şisterden olaşmaş kalın bir ömi an dışa doğu analmatandır. Manmaştır. Planim göldi gauşsin ve mavi göldi graystara üzerine şisterden olaşmaş kalın bir ömi ti ve Kalı valkarak tayaharatan bazınlar yer alır. mat tayaştırak tayaharatan bazınlar yer alır. mat tayaştırak tayaharatan daşı ana tayaş genel olanık. yüzeyeledir. Taşlak da yer yer değünükki birlike enikarın 48 nalırın serines dişarda kaharatanır. Etti alışın genel olanık. yüzeyeledir. Taşlak da yer yer değünük birlike enikarın 48 han barada enişmel alırakınıktarır. Etti alışın genel olanık. yüzeyeledir. Taşlak da yer yer değünük birlike enikarın 48
Conney Energi Stertma ² he at söz kona yapılmıştır. 2.Arnari Önetlikkeri Marisa ve çerreşinde termiş paleoraryışlı önliden olaşmış iki birim okmak dişinini ve alır. Matarılma derocesi çekirdeki yanımaz oknik recijerin karasası poleeler Etit atım, terpösk ve yanıng a fonak tehnyesi tambi kati kararı yaşındı (5-20 enarmaladır. Etit aları DS.)'mi r hilikke hoğalay arşa, hağ ve ayarın e alıraşadır. Buchan sahlı de slocomari	mi inur plan yapitrusyadasakuwa bakung, bakumedigna ilajan Karura gletajan bianza akualoger alitig, sepiketa etain "Lianssaz yapit metaformik kayapitr olusturu: Menderes mesif olaruk adlanzimian tenekideki kayapitr, bir çekardek ve burun iterinde bir intatu (Cekindek graystantan okaruştur. Hanire gödi graystar ve mavi gödi graystara Davinde şistlerden okajmaş kalın bir öml in dişa döğu azarabizdar. Menderesi mesif olaruk adlanzimian tenekideki kayapitru Davinde şistlerden okajmaş kalın bir öml in dişa döğu azarabizdar. Menderesi mesif olaruk adlanzimian tenekideki kayapitru Davinde şistlerden okajmaş kalın bir öml in dişa döğu azarabizdar. Menderesi mesif adları birine masonok yaşlı korçinşim gelir. Mesonoyêk kireçinşimma üterinde inat topoşindi pozişoyanah okap, dağalı bir yapı arz etmektedir. Amerini eğini %10-18 ile %18-25 arasında değinerdinedir. adır. Toprak dermiği göna karlık dağı, ma kaya genel olarık yüzeydekir. Taşlık da yer yer değinenki birlek omların % adam saftasa dişında kalırakırın. Eği ahın terminde genel danık tarın yapitrurankındır. Yörade yayışın olarak tarını yapışın yaşları barda tarırışı hağışteteri engeliyen doğul şebeşiniş iş taşışışlarıların yanışı barakarışı yaşlarışı doğu ate anana yaşla tarınış yaşlar.
Coney Energi Sterme ² 'ne at söz kone yapılmıştır. 2.Arnat Özellükleri Marika ve çerersinde termili palorozyık önliden olaşmış iki birim olanda düşündi ören alır. Matadımı derocesi çekirdekt yamına olanü recejenin karasatı öbkelle Etit alamı, torpola torpat bitiyesi kumik-tili kareşi yapıdı (5-20 coarmaladı: Etit alam DS1'mı r bilikler, hoğlayı arpa, hağ ve ayatın a bilikler, hoğlayı arpa, hağ ve ayatın a "Kara Marjimil Tarım Anazisi(KTA)" sınal	mi inur plan yapitmandasakinca bakung, bakemedigna ilgicin Kurura görüşdiribirin sonalmısı ükerde 23.01.2023 tarihinde ettü yaşlı metaformik kayaçılar oluşturu: Menderes mıssif olaruk adlanılmını tenekleki kayaçılar, bir çekardek ve bunun iterinde bir intatik (Cekindek gauşılandan okamıştır. Hanira gözü gauşılar ve mavi gözül gauşıtının Davinde şistlerden okaşmaş kalın hir ömü or dşa döğu azarıkındar. Menderesi mıssif olaruk adlanılmıştır. Bayaşı adla gauştura Davinde şistlerden okaşmaş kalın hir ömü or dşa döğu azarıkındar. Menderesi muştirin barine gözül gauşıştır ve mavi gözül gauşıtının Davinde şistlerden okaşmaş kalın hir ömü or dşa döğu azarıkındar. Menderesi muştirin barine musozok yaşlı korçıtaşları gelir. Mesozoyêk kireçinşlarının Barinde inat tapoğrafik pozişoyenatlı okaş, dağalı bir yaşışı azı etmektedir. Amerini eğini %10-18 ile %18-25 arasında değarırdındetir. adım safuse dişında kalırakındar. Biti alın terininde genel danık tarını yaşılarınındarı yer değinmek bir bitike ontanın % adamı safuse dişında kalırakındar. Biti alın terinde genel danık tarını yaşınanındar. Yorde yaygın olarak tarını yaşınaşının yaşı barınayandar. 100 ada. 1 pesel ettir yapıtanına zikinya tapoğuşi terinde garış danık tarını yaşındarının yaşı başışınış yaşının yaşınına fina göreşleredir.
Comes Energi Sterma ² he at söz kom yapılmıştır. 2.Arnari Önellükleri Marika ve çevresinde termili paleororyali önliden olaşmış iki birim okandı diştinti ile alar Mataşının derocesi çekirdekt yaramaz okanlı recijerin karasası pölecile Etiz aları, tepekir ve yarançı ar Toprak tümşeti tamihe kitik kareşi yapadı (5-20 coararaladı: Etiz aları DS1'mı r bilikler, hoğlayı arça, hağ ve ayarın a "Kara Marjimal Taran Anazisi(KTA)" sıral	mi inur plan yapılmısındasıkınca bakınış, bakınındığu özemene, taşırmanı planası alandığır alılığı, sipilacak olan "Esanssez su inur plan yapılmısındasıkınca bakınış, bakınındığu özemenişti işkin Kurura görlişdiribirin sondanısı üzerine 23.01.2023 tarihinde ettü syaşlı metaformik tayaşlar oluşturu: Menderos mesifi olanuk adlanılmını tenekideki kayaşlar, bir çekindek ve bunan iteerinde bir miştik (Cekindek grayılantan olaşmıştır. Baniar gözdi gauyslar ve məvi gözdi gauştanı üzerinde şisterine olaşmış kalan bir örmi an dışa doğu asalmakındır. Metamarik kayaşların üzerine masonok yaşa kıreçinştanı gele Mesonyik kireçinştanını üzerinde mişti koşlaşı kayaşlarında bazdar yer alır. mai tapoğraflı posisyonaralı olaşın dağın bir yapı arz etimekicdir. Amerinin eğini %10-18 de 5%18-25 anışında değinerilerder dalı Toprak derriğiş 50 cm alındı olaşı, ara kaşaş genel olanık tarım yapılmamakındır. Yörade yaygın olanla tarımı şayıları mayaşakır. 101 adı. 1 pesel ettir yaştışın anza ikim, tapoganlışınış kaşdırışıklaşı başaşının yüzeyde olanış ve sasızı fina görmekinde.
Conney Energi Startma ² be at söz kona yapahnpir. 2.Amar Ömellikkeni Manisa ve çorosekinde tarmeli paleozoyuk ömiken olegning köl birim okarak okujumi yer alır. Metanrikmi deroseci çekindek inyumuse oknink recejenin karasasal okolem Etta atam, sopolik ve yaman şa Toprak binyeni karahe-kili-kireçil yapadı 15-20 examındar. Etta alırı DS/Tim Hinkir, hoğiya, arap, hağ ve ayatın a ohşadır. Buckum sihih du eksenemik oğ "Kara Marijimi Taren Anzekir(KTA)" sanı Mesisa Timin kirim Ege İsplaya	mi inur plan yapılmışındaşıkınca bakınap, bakınmediğini üğün Kururu görüğünüşün şalanğayır alılığı, sapikezik olun "Lisarssez 1948'n retaformik izayaçlar oluşturu: Menderos mesifi olunuk adlanılmının tenekideki kayaçılar, bir çekindek ve burun iteerinde bir miştik (Cekindek grayılanılan oluşmuştur. Burur gödü gayaşlar ve mavi gödü gayaşlarını üzerinde şisterden oluşmuş kalın bir örü an dışa doğu asalmakındır. Metamarik kayaçıları tezine masonok yaşa kereçinşları gelet. Mesonyik kireçinşlarını üzerinde miştik (Cekindek grayılanıları bazadır yer alır. mişti tapoğrafik posişorarıla daşın diştişti bir yapı arz etimekiselir. Amerine çini %10-18 de 5%18-25 anaşında değineriketler dar. Toprak derriğiş 50 cm alındı oluşı, ara kaşaş genel olunuk tarım yapılmamıkındır. Yörade yayışın olunla tarını yapılmı mayanakır. 101 adı. 1 pesel etik yapılan uzerine taşışı genel olunuk yaşış kireçinşi adı bir yaşı araşı alınış yaşı bir araşınışı kaşaşının şiştir. mayanakır. 101 adı. 1 pesel etik yapışlan uzerine şiş taşınak şiştiş bir şaşışışı bir şiştiraşışı yaşını yaşıkıraşı daşındık bir şiştişi tarışışı şiştiştirin şiştiştiştirin şiştiştir. mayanakır. 101 adı. 1 pesel etik yapılan araşı kirin, taşışışış şiştiştiştiştiştiştirin yaşıklarını daşınış daşışı bir şiştiştiştiştiştiştiştir. ma mazının daşla sernir, Yadım acaşı ke şiştiştiştiştiştiştiştiştiştiştiştiştişt
Corres Energi Sterme ³ 'ne at söz kona yapılmıştır. 2.Amat Öve Corresinde termeli paleozoyuk örliken olgamış köl bilim olarak düşümü yer alır. Metantinem dervocesi çekrindet işyunusa olarak termeli paleozoyuk Etta alım, sopok ve yamaş az Topuk hünyeni karıma kili kareçil yapıdı 15-20 examındar. Etta alım DSI'tim ildake hoğlay, arpa, hağ ve ayşıtı a dınşanı Marşimi Tarım Anazkir, KTA'y son Metan İlimin kilim kişi ge şaylara yaradı 83,3mm. Ve en az yağa Ağanor a	mi inur plan yapılmısındasıkınca bakınış, bakınındığu özemene, taşırmanı planası alandığır alılığı, sipilacak olan "Esanssez su inur plan yapılmısındasıkınca bakınış, bakınındığu özemenişti işkin Kurura görlişdiribirin sondanısı üzerine 23.01.2023 tarihinde ettü syaşlı metaformik taşışışlandan okumuştır. Baniar gözdi gauşslar ve məvi gözdi gauştanın üzerinde şisterine okuşma kalan hir örmi an dışa doğu asalmakındır. Metamarik kayaçların üzerine masonok yaşak kereçinşların üzerinde şisterine okuşma kalan hir örmi ni ve Kula vakanak kayakınınları bazıdar yer alır. mai taşışığışları denriğiş 50 em alındı okuş, anı kaşaş genel olanak tarım yaşılarınakındır. Yörede yayışın olanak birikine ortakının işaşı başındır. 101 ede, i aşaşışını denrinde genel olanak tarım yaşılarınakındır. Yörede yayışın olanak anını şaşını mayanakır. 101 adı, 1 pesel ettir yaşının anza ikim, taşışışındış tarşışıklığı ev sukanabinik karama dikkate alınığında
Coneş Enerji Stermi'ne at söz kon yapılmışır. 2.Arnat Özellikleri Marika ve çevresinde termit paleorayışlı örliken olgamış iki birim olanda düşimit yer alır.Metaarime derocesi çekirdekt yamına olanit recijerin karasatı öbledle Etit alımı korpet çekirdekt taşınık bityesi tanık kitik kereşi yapıdı (5-20 coarmıladır. Etit alıen DS1'mı ı bilikler, hoğlayı arpa, hağ ve ayıtın yapıdı Butyesi taşılar bir di ekocarin ço "Kara Marjimi Tarım Anazisi(KTA)" sını Marika İlimin kitirat Ege kayları yırdı 83.3mın. Ve en az yağış Ağastor sı Abaşehir İlçeminin yülk cetaların KS4'dır.	mi inur plan yapılmışındaşıkınca bakınap, bakınmediğini üğün Kururu görüğünüşün şalanğayır alılığı, sapikezik olun "Lisarssez 1948'n retaformik izayaçlar oluşturu: Menderos mesifi olunuk adlanılmının tenekideki kayaçılar, bir çekindek ve burun iteerinde bir miştik (Cekindek grayılanılan oluşmuştur. Burur gödü gayaşlar ve mavi gödü gayaşlarını üzerinde şisterden oluşmuş kalın bir örü an dışa doğu asalmakındır. Metamarik kayaçıları tezine masonok yaşa kereçinşları gelet. Mesonyik kireçinşlarını üzerinde miştik (Cekindek grayılanıları bazadır yer alır. mişti tapoğrafik posişorarıla daşın diştişti bir yapı arz etimekiselir. Amerine çini %10-18 de 5%18-25 anaşında değineriketler dar. Toprak derriğiş 50 cm alındı oluşı, ara kaşaş genel olunuk tarım yapılmamıkındır. Yörade yayışın olunla tarını yapılmı mayanakır. 101 adı. 1 pesel etik yapılan uzerine taşışı genel olunuk yaşış kireçinşi adı bir yaşı araşı alınış yaşı bir araşınışı kaşaşının şiştir. mayanakır. 101 adı. 1 pesel etik yapışlan uzerine şiş taşınak şiştiş bir şaşışışı bir şiştiraşışı yaşını yaşıkıraşı daşındık bir şiştişi tarışışı şiştiştirin şiştiştiştirin şiştiştir. mayanakır. 101 adı. 1 pesel etik yapılan araşı kirin, taşışışış şiştiştiştiştiştiştirin yaşıklarını daşınış daşışı bir şiştiştiştiştiştiştiştir. ma mazının daşla sernir, Yadım acaşı ke şiştiştiştiştiştiştiştiştiştiştiştiştişt
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Coneş Enerji Stermi'ne at söz kon yapılmışır. 2.Arnat Özellikleri Marika ve çevresinde termit paleorayışlı örliken olgamış iki birim olanda düşimit yer alır.Metaarime derocesi çekirdekt yamına olanit recijerin karasatı öbledle Etit alımı korpet çekirdekt taşınık bityesi tanık kitik kereşi yapıdı (5-20 coarmıladır. Etit alıen DS1'mı ı bilikler, hoğlayı arpa, hağ ve ayıtın yapıdı Butyesi taşılar bir di ekocarin ço "Kara Marjimi Tarım Anazisi(KTA)" sını Marika İlimin kitirat Ege kayları yırdı 83.3mın. Ve en az yağış Ağastor sı Abaşehir İlçeminin yülk cetaların KS4'dır.	mi inur plan yapılmışındaşıkınca bakınap, bakınmediğini üğün Kururu görüğünüşün şalanğayır alılığı, sapikezik olun "Lisarssez 1948'n retaformik izayaçlar oluşturu: Menderos mesifi olunuk adlanılmını temeklekli kayaçlar, bir çekindek ve burun iteerinde bir miştik (Cekindek grayılantan oluşmuştur. Burur gödü gayaşlar ve məvi gödü gayaşlarını üzərinde şisterine oluşmuş kalın bir örü an dışa doğu asalmakındır. Metamarik kayaçların tezinie masoarok yaşa kereçinşları gelet. Mesoaryik kireçinşlarını üzerinde miştik (Cekindek grayılantan oluşmuştur. Burur gödü gayaşları ve məvi gödü gayaşlarını üzerinde şisterine kireçinşlarını üzerinde ni daşa doğu asalmakındır. Metamarik kayaçların tezinie masoarok yaşa kereçinşları gelet. Mesoaryik kireçinşlarının üzerinde tire Kuda vokarak kışakarındarı bazadır yer alır. mai topoğrafik posişorarınlı oluşu, diğut bir yapı arz etimekledir. Amerine çini %10-18 de 5%18-25 anasında doğuretketdir datir. Toprak derniği 50 cm alındı oluşı, ma kaşıng genel olunuk yapaşlarınakındır. Yörade yaygın olunla tarını şaşılarını mayacıkar. 101 adı. 1 pesel etik yapıların zirakırı tarını şaşışlarık tarını yaplışturanıkındır. Yörade yaygın olunla tarını şaşını mayacıkar. 101 adı. 1 pesel etik yapılan arzış ikim, tarşışı genel birak kişaşı berak aşırış deşinekliştiği etir şina görmekledir.



Ehit alam hulhazvda boş havm yapılmıyan tepelik ve yamış atazı konurmandadır. Devlet ve çiliçi sularmas hukarmıştar parselin "Kuru Marjinal Tarım Anazist(KTA) sınıfada oldığa belirkamiştir. Anazinin çevresinde de berzer tarım azazlıri bukarmıştadır. Arazin yolu te tarin yolu ile taşşirmaktadır. Anazinin doğlal duramu ve mevçir kullarım şeki kazı, doğla ve berzeri filleke tariyi edilerek mevrek kullarım şekinin bonármağı görlürinştir. En alımada hulhazında tarım yapıhanımıktadır. Yörede yaygın olank kurum yaşıdan buğanın ontanım veririnin yakaşıkı deşi deşindeşi deşindeşi kuru tarım, buğalyala böğa ortalarım verini 400.kgida, anşada 300 kgida, Boğarde çoğuntakla Edirmit olmuk tarere Usta ve Triye zeytin çeşikiri yetşirininektedir. Verini olduğu yakla yetşinin teşin biş göz 25kgidişe ürün vermektedir. Ettili alanam tarımal desliklerinin çok anşıf olmus nedeniyle böğe ortalarım verinin diteşi alanda verim alınabicenşi kanasıkıştır.

Söz konasu 1/25000 ülçekli hartada göserken ve ölçü. kroksinde köge knontinarlan verilen 101 ada, 1 parselle "Güneş Enerji Szentni Tesis(Güneş Panelleri ile Elektrik Üreán Tesis)'teri armelt 1/5000 ölçekli Nazan Inar Plans ve 1/1000 ölçekli Uygakınıs İmar Plans yapdınsa ile ilgil okrak; 4342 saylı Metn Kanaru ile meta saylan yerke; 3083 Sayla "Solaran Almânenda Anzi dizenisemesine Dair Tarın Reforms Kanaru" 3573 sayla "Zeytinlerin İtala'a ve Yabanlerine Aşlatarahnısa ile ek 4086 sayla Zeytinelle Kanaru" kapsarındakli olan yerlenten değilir.

4.Some ve Öneriler

4.1. Anuinia Yöre İçin Önemi

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EBR alamada ekonomik anlanda tamensal firetian yapılmadığından Manisa ili ve üçelerinin artan enerji takplarini kesintisiz, kulleti ve götemlir şakida karşılıyacak ve yönenin ekonomiste olamla kata sağlayacak Güreş Enerji Sastmä Tasis(Güreş Panelleri de Elektrik Gretim Tesis)/Teri, korulması ile enerji yönfarden önemi ön plana çıkmaktadır.

4.2. Tanım Dişi Kullanımında Çevre Arazilere ve Tanımal Üretime Etkisi

("Gitneş Energi Santral"hin yapılacağı arazi üzerine usas edilecek yatırmların inşant aşarmanda veya faaliyeti arnanda, çevresine zunu verilmanesi için gerekli aşağıla belinlim totbirleri içeren Toprak Koruras Projesinis hazılatmışı, bu projerin Valiliçe oraylarmışı ve hazırhanın bu projeye uyulması gerekmiktedir.

4.3.a. Parselin içerikinden dere geçmekte olap, geçen dere için her iki sahilinde taşkat debitini geçirebüccik ve hidrolik açıdan yeteri şerikari alan ile şerikari alan gözengin boyunca parsel tarafına tegen metariki ayılan de yerikari alan gözengin boyunca parsel tarafına tegen metariki ayılan de yerikari alan gözengin boyunca parsel tarafına tegen bacıla yerikari alan gözengin boyunca parsel tarafına tegen bacıla yerikari alan gözengin boyunca parsel tarafına tegen bacıla yerikari alan gözengin boyunca parsel tarafına tegen bacıla yerikari alan gözengin berikari alan gözengin boyunca parsel tarafına tegen bacıla yerikari alan gözengin bacıla yerikari alan gözengin boyunca parsel tarafına tegen bacıla yerikari alan gözengin bacıla yerikari alan gözengin bacıla yerikari alan gözengin bacıla yerikari alan bacıla yerikari alan gözengin bacıla yerikari alan gözengin bacıla yerikari alan gözengin bacıla yerikari alan gözengin bacıla yerikari alan gözengin bacıla yerikari alan gözengin bacıla yerikari alan gözengin bacıla yerikari yerikari yerikari alan gözengin bakını yerikari yerikari yerikari yerikari alan gözengin bacıla yerikari yerik

Ayren görtiş sonilen purselin, dere taşkedamdan etkilarme riski bulanmaktadır. Bu nedesle taşkına karşı gerekli önlemler çevre duvar, su basmay-lena ve,

yatarınış taraflıdan alamıkdır. Dere yatağında taşkın kontrol, uşkırdan korurma todhirkri alamıdan sör konsau alanda Bathete başkunmundukr. Toroğrafferi bağlı olarak yüzeysel suların dırmış sığlarımıklır

4.3.b-Tesislerin yapılacağı arazılerin etrafina tel çit çekilmesi 9 59 Sayfa 2/3 Du

-5 -4.5.0-Inpast aparteenis, baityot malernesi kakirinken etminiski tarm siniamalaki tarm tirbinine verilevek olar zanzhan önlamesi amacyla, toz olapartana baspiarmas we olapartana orgekennesi, malernesia supanta smaanda toprak yolanda olapasak toz mktarma heaplannasa ve önlemesi için gereki --4.3.6-Çalşacak personet ve konakların yapacak misafirler tarafındın okşascak olan evset nielikli sısı niklar için fixseptik ürlesi plantarmasın yönelli, kalı anklar için dörğanu ölsaslı çöplerin ayrşarılarak kaları katı atkların Kanarıları uşgan şekikle bertandina yönelk, taprak konara projesini hazdırarılması gerekmistikati, Aprao DSI 2.808 Madablığı'nin bila tarih ve E-54495999-622.02.3063942 sayılı görüp yazavada belinleri hazakırın yönesini kaşılışı bekara bekarmanakladır. h ÷ -4.3. Etiidi Yapılan Aruzinin Çevresinde Tarım Dışı Amıçla Kullandabilecek Alternatif Alanianın Olup Olmudığı -Fitiz yapılan alan toprak smit olarak tarımsal potansiyelinin çok zayıf olması nederilyle alternatif alan özelliklerini taşımaktadır. --4.4. Etūdū Yapanlarm İlave Değerlendirmeleri 4.4. Ezetisi Üretini Giçi Tesisi(GES)kurdinuk isamen toplam 10,846519 hektar böştöklütöki anzioin (101 ada/1 pansd) "Kuru Matjind Tarm Anzök" senfinda olukyu teşi olukyu t ----amigi kulauwi tseperribe, nu atau, urinana kulaumi blaz ago ogla tsaknici populaci, ostore attaine. Vizojet plaznika belinkligi 101 adož parsel, topiam 10.84639 bektar ykolici populaci, ostore attaine belinkin 5.596450 bektarik kiem taevisle Akajebi Bektorg Bagada urina "Topiam Parel Alamot 73000 bektar (20100 bektar), "Komma Bardi, Alamot 551107/net/ar(5311,07/net/)". Alamot 2,5064, Mixtader 36,50m2, "Doglam Merkezi2,2006,40=16.00m2," Hain Bina Alamot 0,00m2, "Foosepeik/s)0000". "Otopiak Marci 20,8800" delim karbane platiannikonta. Topiam Szakos Marci 20,8800" delim karbane attaina attaina platiannikonta. Topiam Szakos Marci 20,8800" delim karbane attaina platiannikonta. Topiam Szakos Marci 20,8800" delim Karbane attaina attaina platiannikonta. Topiam Szakos Marci 20,8800" delim Karbane attaina karbane attaina platiannikonta. Topiam Szakos Marci 20,8800" delim Karbane attaina platiannikonta. Topiam Szakos Marci 20,8800" delim Karbane attaina platiannikonta. Topiam Szakos Marci 20,8800" delim Karbane attaina platiannikonta. Topiam Szakos Marci 20,8800" delim Karbane attaina karbane attaina attaina karbane attaina karbane attaina karbane attaina karbane attaina karbane attaina karbane attaina karbane attaina karbane attaina karbane attaina karbane attaina karbane attaina att ---÷, Topiam 10,846539 bektar yüzölçümlü 101 ada, 1 parcelin koonfinatin beliriken 5,996450 bektarkt kasın üverinde Alaşehir Bekoliye Başkardığı tarafından Gitneş Enerji Santmii TesisqGitneş Parcileri ke Elekirik Üretim Tesisi'yopırman ik gül bayunmur, 69.12.2017 tarih ve 30265 sayıl Tarın Analekirin Korummu, Kultarahnış ve Plankurusana dar yotentmiğin 12.maddanimi (7) bondi genşif Kama karan ve kondışkın tarafından yuştını mır ve çeve diterin plankuruş genşim ve değiştimlisteni de turun anoliminin tarın dışa araşılı haliyetlere syntemsan Kurulun uşgarı görüşü aharank Bakanlıkça tiri veridebilir, foldeni genşif 19.07.2005 anılı ve 25880 sayılı Rosmi Gazetade yayımkanaki yaraşılığı genşif yaşık Topinak Korumu ve Anızi Kulturen Kanana'han 13.ducü maddesi genşif 19.07.2005 anılı Koruma Kanalı'na sunalındı üzere Biti Ruporu hazıktarınıştır. 1 -

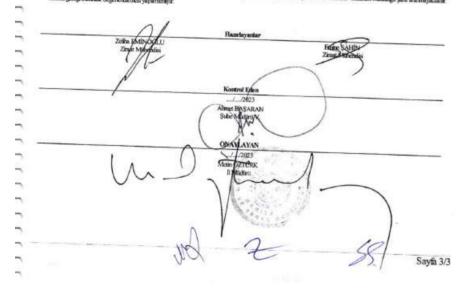
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4.5. Tammal Bütünlük Ve Proje Bütünlüğü Bilgileri

Ohney Enejis Sastrali (GES) mitmeautlarının değerlendirilmesi MADDE 16- '18) Göney enerjisi santralleri, rüqşir enerjisi santralleri, höroelderik enerji santralleri i jotormul eneji santralleri üzeflikeri ve kardabilecekleri alanlar göz önüre alanınlı, ila venerji yatırınları için tursmal kalanını bütünüğü şarta anarmayacaktır. Yine doğuğuz ve petol arama ik enegi iletim hati ve bu hata hağlı olarak tesis edilmesi zuvendi (rönk, Sait merkezi, kölk, pilon darek yeri, vana, basay, döşürme istasyona ve) möştemiata, az kayaları ve ataksa arama tesisleri için hüyaç doyalan alarkar için de alternatif alan araştarması ve tarınmal kullarım bütünüğü şarta anarmayacaktır. Mikmi geneği bütünlük değerlendirmesi yapâramıştır.



Annex 5: Letter of General Directorate of State Hydraulic Work





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



Savi +E-54495999-622 02-3063942

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

DAĞITIM YERLERİNE

llgi : 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.

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Bu belge, güvenli elektronik imza ile imzalanmıştır. Doğrulanta Kodu: 35CC4D0E-072C4EB9-A89B-F80565996028 Doğrulanta Adresi: https:// Adresi: DEVLET SU IŞLERI 2. BÖLGE MÜDÜRLÖGÜ KAZIM DIRK MAHALLESI SANAYI CADDESI NO:39 35100 BORNOVA/IZMIR KEP Adresi : dsi.gnimud@hs01.kep.tr

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

w.turkiye.gov.tr/devlet-su-isleri-ebys

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: DSÌ 22. ŞUBE MÜDÜRLÜĞÜ

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Annex 6: Letter of GDZ Electricity Distribution Services

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1.2. Bağlonti Hattinin GDZ EDAŞ tarafından tesisinin tercihi halinde; Ouaylı Üterlin Tesist Projesi, Cagri Mektubu ve Tercih Diddirim Forma ile birlikte mitracaat etmeniz halinde dağıtım ristemine boğlantı andaşmaşt ve Encaktir.

 Dağıtan Sustemine Rağlantı Anlaşınaşı moza tarihinden inharen talebiniz, Sirketinde yatarın pratrami kapsanında 2027 yılı omana kadar karşılanabüceçektir.

 Dagitiru sistemine Baglami Anlaymaii yupurnaisi eenasmda yukanda belittisen bogkom bedeli ulunaaktur. Danga vergisinden inonti olun kanui kuruni ve koniluplimindan danga vergisi bedeli alminavaaktur. Kabule mittaseyy buftani hatti kesin inormann give EPDK tarafindan belirkinen naglanti bedeli boa ulimeeki, alvoni ilk totar tirela ise inderi, disak see lark turaru tunsili yupuhani ve Görevli Todarik Sukerine bildinim datus senas gerektestriiteeskin.

2. Elektrik Piyuwan Baglanti ve Sisterii Kullanan Yönetmeligi 10.0 mahdesi beşinci fiktuar doğutluşanda, tretim tevisleri için bağlantı hattınar bağlantı bettinin ödermelişi i tora doğutluşanda, tretim tevisleri için bağlantı hattınar bağlantı bettinin ödermelişi instratlığı doğutluşanlıka tesis edildiği daramlarda gerekmesi halinde taramına teminin gerektirdiği idenseler, orman ve yol geçiş terinleri ile içar beçderi gili kullanası torafından kershane. Beğlanı hattının üreficiler taratından tesis edile edil doğudanı gerektirdiği idenseler, orman ve yol geçiş terinleri ile taratından tesis edile edile doğudanı gerektirdiği idenseler, orman ve yol geçiş terinleri ile taratından tesis edile edile doşudarının başınlarması, issuntazı terininin gerektirdiği idenseler, orman ve yol geçiş terinleri ile karı bedeli gili anıldar tesisme ilektin tesisme taratında tesismi turu terin işteri edine ile taratından tesismi turu terininin gerektirdiği idenseler, orman ve yol geçiş terinleri ile karı bedeli gili anıldar turunası taratından tesismi turu terini tesisi turu terini tesismi terinden tesismin tesismi turu terini tesismi turu terini tesismin terinderi daratının teşiştiri taratından tesismin terinderi ile karı bedeli gili anıldar.

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 Tesis editocik ibetim sammlini ve titketim terisiolein igletme ve bakum tarafiniza ait elacak olup sör komise tesiste ilgili isleme mevznatlar corveveninde yapılacaktır.

5. Bu yazarar taritinden dikaran 180 yan kerisade projemzin vetkali kurumlara onaylatilmusi halimle (ilk 90 gün kerisinde projenin verilmesi kuydi iler onzyli miksadentar yazarlikiteki yüncmeriklerie göre geçerli kultacaktar. Aksa takdirde sartlarınaz birklarısılır olmaktar, Belgelerintri 180 gün şende tanamlanışmı balınde yarketimizle 30 gün gende hağlantı ve sisanı kultarını anlaşman yaşılabinincestir.

 Bu energi mitoasilesi cercervesinde tosis edenginiz santralia dirizzve girme aşamasında mevcur tiketim tesislerinize alı tom borçler ödeneceldir.
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7. Is bit ohorji missadesinde beliriilmeven hasadarda (J. 10. 2022 tarih ve 31970 sayih Resmi Garstede ynyintanan Elektrisi Prynasandu Llaanse Elektrik Oriettiniine Bişkin Yönetmelis maddelerine oyahasakar Kurahasa olan tiretiin teoso ile iigili Elektrik Piyasannala Lisansoa Elektrik üzeiniine Bişkin Yönetmeligii 21. Maddevi kapeanimali Uraktan Eleme ve Kuratol Stotemi GDZ Elektrik Doğumi A.S. Feknologi Yahemilan Mudaringsi gönişleri doğuntlaranda tasıs adilecektir.

 Harmonik, Olçu, Güç kalnesi, Koroma, Usaktar ozleme ve kontral, reletive ile ilgili yapılmısı gereken hususlur internet saytomizdaki rasliğde sonulmakludat. Talimitlara oyulmaması halinde ürenası har darifi serumluğuğu kabul eker.
 Ornim ve ilterim nedelerimin assa sonta halinan kallıda kası.

 Üretim ve tüketim tesisterinin aynı yerde bulunması halinde, bağlantı anlaşmasında belirlenen yere ilgili mevzuntlu dengeleme ve oztasıtırma sistemanın gerekcindiği laberleşmeyi sağlayncak çifi yördü ölçüni yopahilen sandık soyay takılıcaktır.

10. Uretun tervinin niketim tesin ole zoni verde tulimmanian halmis bağlantı anlaşmasında börirlenen yere öğül mevininta verişelmine ver urlimtir is soronunun gerektimbişi höbörlenmeyi segletik oktor belatleren özefliklere olap onifik urtuk tak başları;

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 Konalacak ürenin testone ilgili Võnenneliğin 21. Maldesi gereği sayaç tests edilecektet.
 Dağınan sistemine bağılı her bir üzetur testsinin tretimini ölemek annezyla ayn bu sayne bulandurulnası zonanladır. Loruntanınya esis örçünü nöktusi dağıları sistemine tağılantı nöktusında ilgili mevzuara uygun olarak tests edilecak sayağır. Birinci ve ikinci tikralara pöre testi edilen saynelar ilgili mevzuara göre testi edilecek utumatik sayağı ektera sistemine uyanlu olacaktır.

Geruchtte mits edlerite.

e-imzahdu Effet TÜRKMEN Yaturun Planhana Miadieti e-îmzalətir Mustafa Can ÖZBAY YG Bağlantı Görüyü ve Proje Vönöticisi

Dugnun Gerege ALASEHIR BELEDITE HASKANLIGINA

Bilgi : Alnşelir İşlenne Voneticiliğine Sistan İşlenne ve Bakın Müdürlüğu Possa İşlenderi Müdürlüğuye



Annex 7: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	Submit Demand Based	Review / analyze the	Concur the final selection			
Process	Applications	applications in order to	of eight participating			
		provide information to WB	municipalities.			
		Prepare Alaşehir				
		Municipality's subproject				
		documents in accordance				
		with WB requirements,				
Preparation	Welcome and apply the	Coordinate the selected	Assist ILBANK in	Ensure compliance with	Identify and	Preparing
Process	relevant laws and	municipalities to ensure all	Developing Performance	all requirements of the	managing	Environmental
	regulations that are	the relevant rules and	and Monitoring Database	ESMF and management	environmental,	and Social
	introduced by WB through	regulations will be	system during the	plans.	social, and OHS-	Assessment
	ILBANK	adopted throughout the	preparation phase.		related risks	Reports, i.e., ESMF
		project.		Ensure conformity with		and Resettlement
			Provide technical guide	project standards and		Action Plans (and,
		Organize internal working	for ILBANK.	obtaining all relevant		if necessary,
		structure for the		permits and licenses		RAP/LRP), for
		investment options.	Implementation and			approval by
			inspection of the ESMP of			ILBANK and the
		Although the project site is	the subproject and			World Bank.
		in the low risk category, in	development of recommendations			
		case of need, Alaşehir Municipality officials and	recommendations			
		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				

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 qualification of team members will be defined by ILBANK and WB. Individual freelance consultants can be employed.	Assist ILBANK in establishing monitoring team.	Employe competent Environmental, Social, and OHS Experts (at least one 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	Confirm and Disclose the ESMP on WB's official website		

	assurance function to ensure that EA documents				
	meet WB requirements				
Prepare tender documents for the construction process.	Obtaining the opinions of affected groups and local environmental/social experts on the	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	
	aspects of the project implementation and organizing field visits with these groups when necessary			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.					
necessary and share additional commitments with the Contractor. Coordinate actions and evaluations in case of					
	for the construction process. Conduct tenders in accordance with public procurement legislation and WB legal requirements. 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.	Image: Construction process.ensure that EA documents meet WB requirementsPrepare 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 necessaryConduct 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.Share the ESMP with the Contractor, guide the Contractor in preparing sub-management plans, and approve these plans.Coordinate actions and environmental and share additional commitmentsUpdate the ESMP when necessary and share additional commitmentsLetter the the contractor.Letter the contractor.Coordinate actions and evaluations in case ofCoordinate actions and evaluations in case ofLetter the contractor	ensure that EA documents meet WB requirementsPrepare tender documents for the construction process.Obtaining the opinions of affected groups and local environmental/social aspects of the project implementation and organizing field visits with these groups when necessaryVisit project sites from time to time, when necessary, as part of the projectConduct tenders in accordance with public procurement legislation and WB legal requirements.Coordinating regarding the environmental and social protection measures of the project implementation in organizing field visits.Antice Supervision officers regarding the environmental and social protection measures of the project implementation in organizing field visits.Antice Supervision officers regarding the environmental and social protection measures of the project implementation in organizing field visits.Share the ESMP with the Contractor, guide the Contractor in preparing sub-management plans, and approve these plans.Antice Supervision undervision share additional commitments with the Contractor.Update the ESMP when necessary and share additional commitments with the Contractor.Share the Contractor.Coordinate actions and evaluations in case ofCoordinating commitments	ensure that EA documents meet WB requirementsImage WB requirementsPrepare tender documents for the construction process.Obtaining the opinions of affected groups and local experts on the environmental and social aspects of the project implementation and organizing field visits with these groups when necessaryVisit project sites from time to time, when necessary, as part of the projectImplement all commitments determined by Alagehir Municipality.Conduct tenders in accordance with public procurement legislation and WB legal requirements.Coordinating communicating with WB inspection offices regarding the environmental and social projection measures of the projection measures of the projection measures of the contractor, guide the Contractor in preparing, sub-management plans.Coordinating commitmentsSupervise communicating with WB inspection offices regarding the environmental and social projection measures of the projection measures of the projection measures of the projection measures of the projection measures of the project implementation in organizing field visits.Supervise contractor in preparing sub-management plans.Implement contractor.Supervise commitmentsUpdate the ESMP when necessary and share additional commitments with the Contractor.Implement conditions and evaluations in case ofImplement contractorImplement contractorCoordinate actions and evaluations in case ofImplement contractorImplement contractorImplement contractorCoordinate actions and evaluations in case ofImplement contractorImplement 	ensure that EA documents meet WB requirementsvisit project sites from time to time, when construction process.Implement call dificials determined by Alagehir Municipality.Guide Alagehir Municipality.Calic Alagehir Municipality.Guide Alagehir Municipality.Calic Municipality.Guide Alagehir Municipality.Calic Municipality.Guide Alagehir Municipality.Calic Municipality.Guide Alagehir Municipality.Calic Municipality.Guide Alagehir Municipality.Calic Municipality.Guide Alagehir Municipality.Calic Municipality.Guide Manicipality.Calic Municipality.Guide Manicipality.Calic Municipality.Guide Manicipality.Calic Municipality.Guide Manicipality.Calic Municipality.Calic Municipality.Guide Municipality.Calic Municipality.

	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				Provide necessary environmental and social training to the contractor and	

	Unit (ILBANK) and relevant			subcontractor	
	directorates.			personnel	
Urgent Action	Ensure compliance with		Promptly notifying the	Ensure the tracking	
Roles	project standards and take		Project Owner of	and analysis of	
	urgent actions in case of		unexpected situations,	environmental and	
	non-compliance.		such as environmental,	social incidents	
			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.		
	Halt work in any situation			notify ILBANK and	
	threatening the			the Municipality,	
	environment, community,			exercising the	
	and occupational health			contract authority	
	and safety.			in case non-	
				compliance persists	
	Analyze and monitor				
	environmental and social				
	accidents/incidents.				
Stakeholder	Ensure stakeholder	Provide guidance on public		Provide guidance on	Taking part in
participation	participation, implement	participation and		public participation	organizing the
Roles	the grievance redress	announcement		and announcement	introduction
	mechanism, and ensure	requirements when		requirements in	ESMP to the public
	continuous information	necessary		accordance with	and NGOs within
	transfer through open			World Bank	the scope of the
	communication.			requirements	project and
					stakeholder
					engagement
					events

Annex 8: 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 wellbeing. 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 ismetiye 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	Low	During the operation phase, there are no activities that
		l = 1 L =1		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 Operational Phase I = 0 L =0	Low	Traffic load will increase during the construction phase.Due to the increasing traffic load, especially with the useof heavy tonnage vehicles, road surface improvementsbecome mandatory during the construction phase.Heavy tonnage vehicles will not be used during theoperation phase.
Community Health and Safety	Risk 7: Community health and safety during the execution of works	Constructional Phase I= 2 L= 2 Operational Phase	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. There is no risk to community health and safety during
		I = 0 L =0		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	Low	There is no risk about chemical spills and leaks, improper
		= 1		storage and disposal of materials during the operation
		L =1		phase.
Natural	Risk 9: Earthquake	Construction	Moderate	Manisa is located in the active fault line region and 1st-
Disaster	Risk.	Phase		degree earthquake zone, and Alaşehir district is located
		l = 4 L=2		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 1 st 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	Low	Equipment must be well secured in a safe position.
		I=1		
Natural	Risk 10: Possibility of	L=3 Construction	Low	Alaşehir district is not located flood risk area. When the
Disaster	floods due to	Phase	LOW	SPP Sub-project area is examined, flood sensitivity of the
Disaster	excessive rainfall	l = 2		project area is low degree. There is a dry stream in the
		L=2		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	Low		Since mitigation measures will be implemented against
		l=1	2010		flood risk during the construction phase, the flood risk
		L=1			
		Constructional			will be reduced during the operation period.
Reflection	Risk 11: Reflection	Constructional Phase	Low	Reflection and glare effect are	During the construction phase, the level of glare and
and Glare	and Glare Effect	= 1		an effect created by solar	reflection effects is quite low. During the operation
Effect		L=1		power plants (SPP). This	phase, this impact level is higher compared to the
				effect occurs as a result of	construction phase due to the complete installation and
				reflection or glare from	operation of the panels.
		Operational Phase	Moderate	sunlight on photovoltaic	After determining the area with reflection risk in the
		I=3		panels or from a bright sky.	Solar Power Plant area, visual monitoring should be
		L=3		The severity of reflection and	carried out in the first year of operation to observe the
				glare effects may vary	reflection and glare effects.
				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.	

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:13StorageofDamagedorEndofLifecyclePanels	Damaged or End of	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		Cate	gory C			
Moderate Risk			Category Low B			
Substantial Risk			Category High B			
High Risk			gory A			
			5- 7			
5. The requirements of the SES bas	ed on t	the ide	entified risks and risk catego	orization		
Only required for Moderate, Substa	antial a	nd Higl	h-Risk projects			
Is assessment required? (check if				Status? (completed,		
<u>"yes")</u>				planned)		
if yes, indicate overall type and			Targeted assessment(s)	Since the project is Category		
status			ESIA (Environmental and	Low B, these assessments are		
			Social Impact	not required.		
			Assessment)			
			SESA (Strategic			
			Environmental and Social			
			Assessment)			
Are management plans required?						
(check if "yes)						
If yes, indicate overall type			Targeted management	Since the project is moderate		
			plans (e.g. Gender Action	risk, these management		
			Plan, Emergency	plans are not required.		
			Response Plan, Waste	However, in the cope of SCP		
			Management Plan,	II AF, Simplified ESMP has		
			others)	been prepared for this		
			ESMP (Environmental	project with low risk.		
	\square		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		Com	ments (not required)			
Standards triggered?						
Overarching Principle: Leave No						
One Behind						
Human Rights	\square					
Gender Equality and	\boxtimes					
Women's Empowerment						
Accountability						
The Environmental and Social Star	dards					
of World Bank (ESS)						

 Biodiversity Conservation and Sustainable Management of Living Natural Resources 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		
Sub-project cost	EU 3.856.568,00		
Status of national EIA process of sub-projectThe sub-project area is exempted from EIAProcess because the installed capacity of t3150 kWp.			

Environmental and social impacts relate	Yes	No	Details
Will the curb project of uprochy offect levely			
Will the sub-project adversely affect legally protected areas or internationally recognized areas of high biodiversity value ² ?			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 o 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?		\square	There are no endangered flora o fauna species in or near the area
Will the sub-project affect archaeological sites, historic monuments and settlements?			There is no negative impact of any historical assets located nea the project.
Is there woods or forest around the sub- project area?			There are no woods or fores around the sub-project area.
Will the sub-project adversely affect the woods and forest?			Since there are no woods o 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 b affected by losing access to facilities, services, or natura resources because if 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?			-

² 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 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?	\boxtimes	-
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?	\square	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					
			Details		
	Yes	No			
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.)?		\boxtimes	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?		\square	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?		\square	-		
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: <u>Construction phase</u> <u>Operation phase:</u>	

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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