2025

Malazgirt Solar Power Plant Sub-Project

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

MALAZGIRT MUNICIPALITY

May 2025

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Executive Summary

ILBANK (Iller Bankasi Inc.) and the World Bank (WB) have collaboratively devised the Sustainable Cities Projects, which constitute a series of initiatives. This Environmental and Social Management Plan (ESMP) is prepared for the SPP project planned by Malazgirt Municipalitywhich is installed capacity is 3000 kWe. The ESMP document aims to determine the risks and adverse social and environmental impacts that are likely to occur during the construction and operation phases of the Project, to evaluate these impacts, and to prescribe actions to mitigate and/or prevent negative impacts. The ESMP also establishes the E&S baseline for the project site, the organization structure, training, monitoring, and reporting requirements of ESMP implementation.

All investments implemented through this Sub-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 Malazgirt, a district within Türkiye's Muş province, has been initiated by Malazgirt 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 Malazgirt.

The installed capacity of the plant is 3603 kWp which has “EIA Not Necessary” decision according to EIA regulation (Annex 3) and it is expected to generate 5.678.502,00 kWh of electricity annually. The project site is located on a Malazgirt/Saltukgazi 302 Block 16 Lot and the land owned by Malazgirt Municipality. The solar panels which will be 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 from NDA Consulting. 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 Malazgirt Municipality. The loan has been provided on favorable terms, with a low-interest rate and a long repayment period. The loan has been used to finance the construction of the solar power plant, including the procurement of equipment and the construction of the power plant. The solar power plant project is expected to have a significant impact on the local economy and the environment. The project will create job opportunities during the construction phase and the operation phase. The project will also contribute to the development of the local infrastructure, including the construction of the substation and the transmission line. The project will also have a positive impact on the environment by reducing greenhouse gas emissions. The solar power plant will generate clean energy, which will replace the energy generated from fossil fuels. The project will also contribute to the country's efforts to address climate change. The solar power plant project in Muş, Malazgirt is a significant step towards the development of renewable energy sources in Türkiye. The project in Malazgirt 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 Türkiye'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 Malazgirt Municipality was examined to prepare ESMP for the Sub-project. Malazgirt district is located in the Muş Province. Since the land where the Malazgirt District settlement is located in Muş Plain, which looks like a high plateau.

This Sub-project has been prepared to establish an unlicensed solar power plant project with an installed power of 3000 kWe belonging to the Malazgirt District of Muş Province. The project implementation capacity is 3 Mwe and is exempt from the local environmental impact assessment regulation and all environmental requirements (Annex 3).

According to the connection power given in Table 1, Malazgirt Municipality will establish a solar power plant in Saltukgazi Neighborhood, which is approximately 1,6 km away from Malazgirt District Central settlement and located to the northeast of the district center (Figure 1). The construction of the power plant will be carried out in 50,520.00 m2 of the SPP project area (Figure 6).

During construction, the road near the area will be actively used. Transportation to the Sub-project area will be provided by highway. Transportation will be provided from the project area via an 870 m long road connecting to the Malazgirt-Mezraköy Highway, which passes through the nearest settlements in the project area. The current photo of the project access road is given in Photograph 1. The access road to the Sub-project area[1] is adequate for panel transportation and passage of construction equipment during construction. There are generally trees and wire strips around the access road, and there is a buffer zone along the road route between the settlements.

The solar power plant will be connected to energy transmission line passing by the Sub-project area, within 25 meters, and the transmission line is an underground cable, and the connection point of the ETL is within the Sub-project area. That is why no expropriation is required. The connection point of the ETL is shown in Figure 3, and Photograph 2. The panel installation area does not directly overlap with residential areas; therefore, there will be no direct intervention in the surrounding settlements during the project activities, and resettlement will not be necessary. These houses are located near but outside the panel installation area. Additionally, residents expressed no concerns in this regard during the field study. Since the unfinished structure is also located outside the panel installation area, it will not be affected. Nearby residents actively use the access road to the Sub-project area, and the necessary risk mitigation measures have been presented in this report.

[1] The “Sub-project area” refers to whole land, which is 302 Block 16 Lot

Figure 1: Location of Malazgirt District Center and SPP Sub-project Area

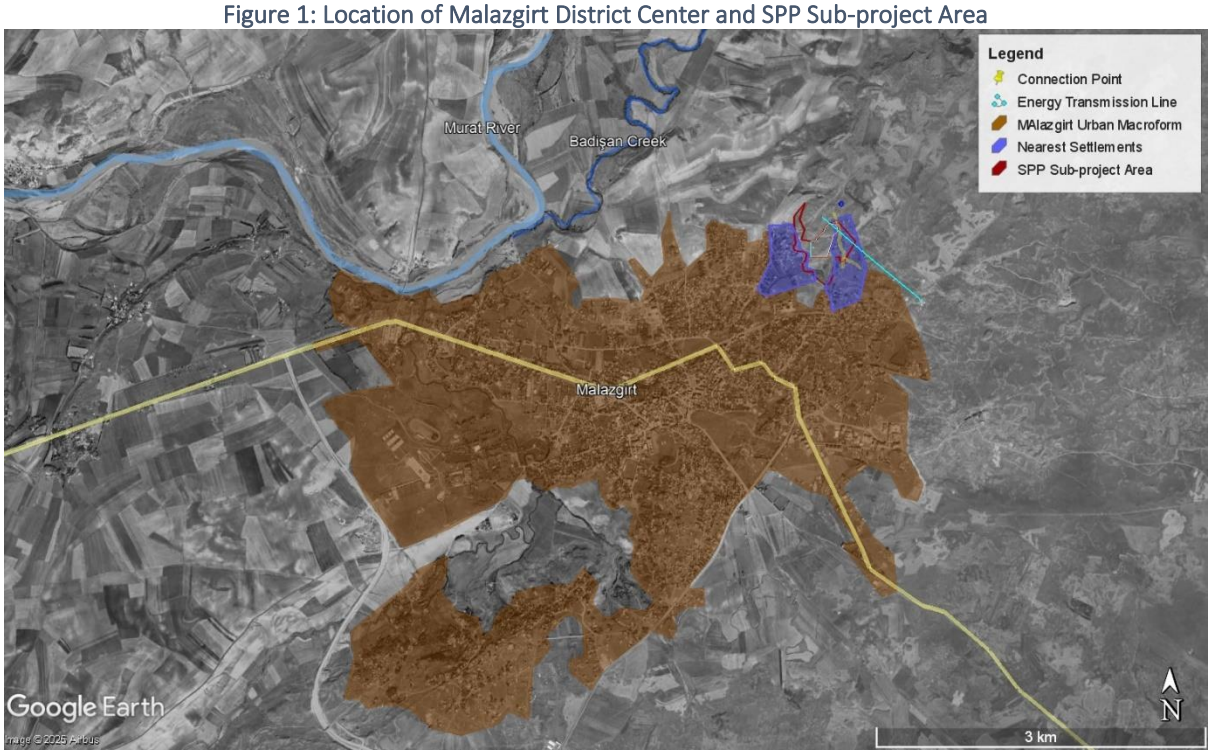


Figure 2: SPP Sub-project Area and Nearest Settlements

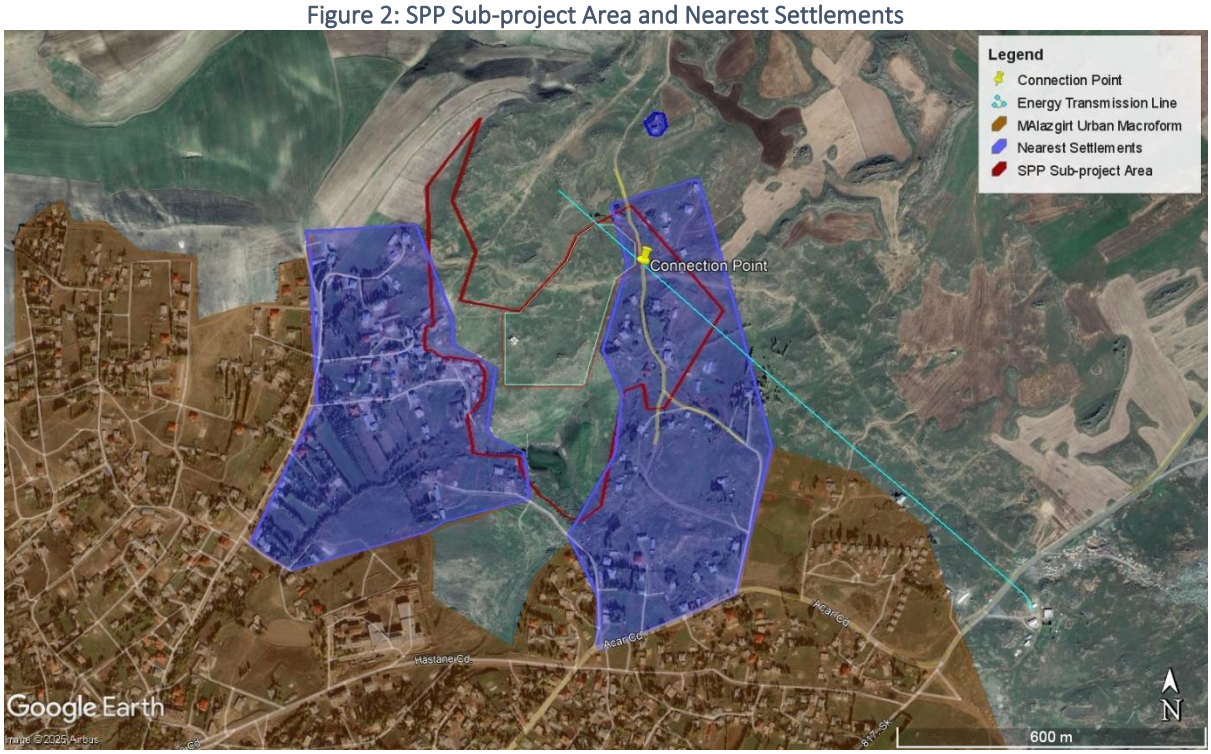
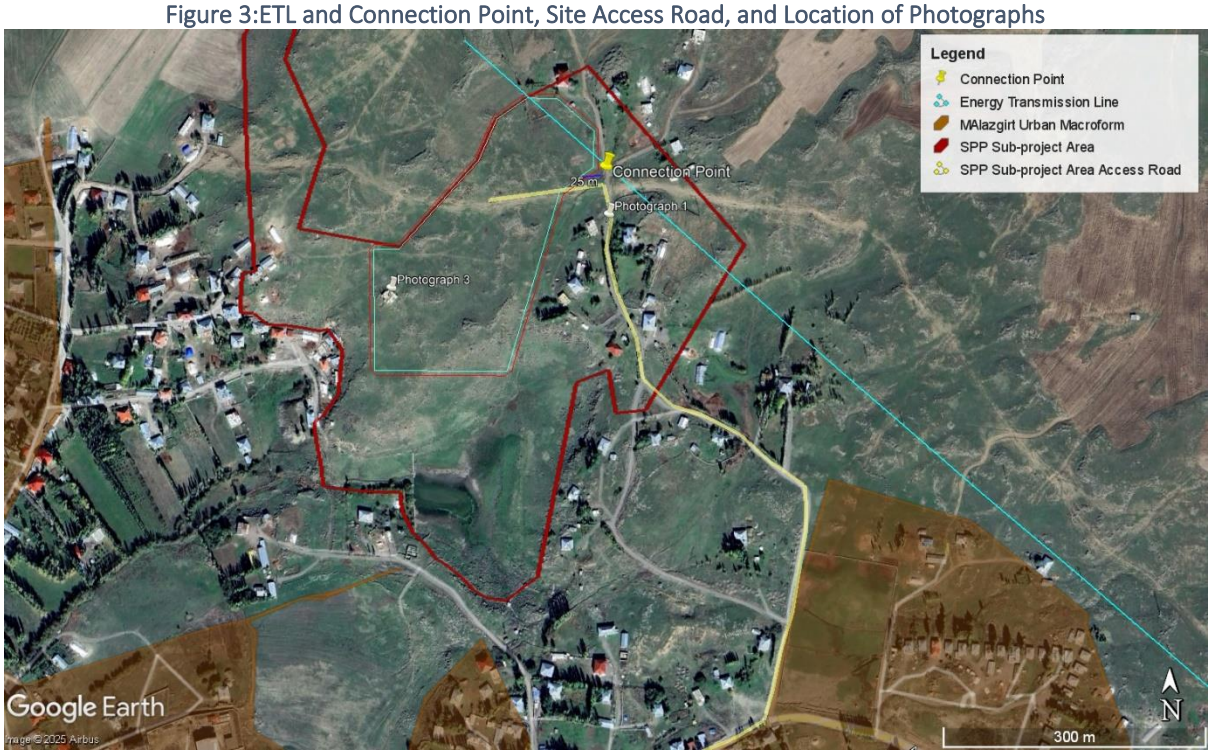


Figure 3:ETL and Connection Point, Site Access Road, and Location of Photographs



Photograph 1: Project Site Access Road

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.
The planned Solar Power Plant has **3603 kWp DC Capacity, 3000 kWe AC Capacity**. Equipped with 450 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 115.315,20** .

Table 1: Planned SPP Technical Details

Technical Information	
FV Panel Type	Monocrystalline MONOPERC
FV Panel Power Output	450 Wp
FV Panel Count	8008
Annual Degradation	%0,5
Inverter Power Output	250 kW
Inverter Count	12
Total DC Power	3.603,60 kWp
Total AC Power	3.000,00 kWe
Estimated Annual Energy Production	5.678.502,00 kWh
Annual Energy Consumption	2.720.662,00 kWh
Production/Consumption	%208,71 (%8,7 will be given free of charge)
Decommissioning Cost	EU 115.315,20

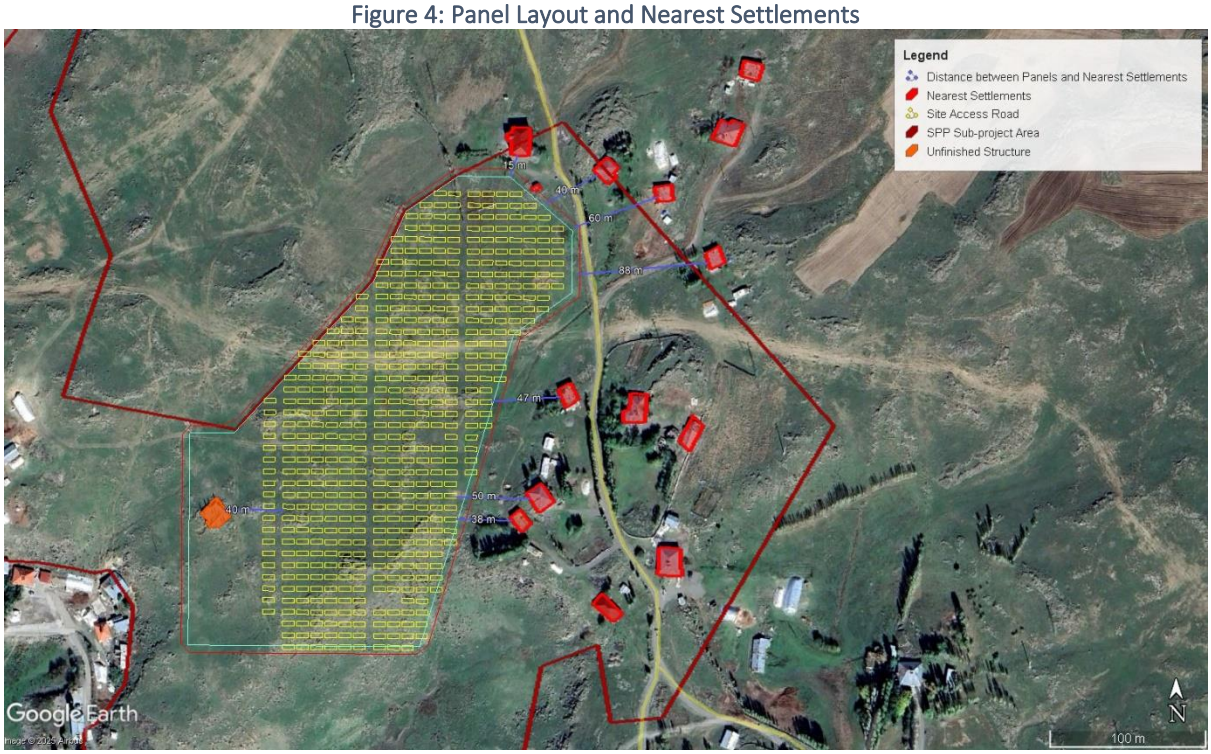
Project Land Use Rights

The Sub-project area's ownership belongs to Malazgirt Municipality (Annex 1). The Sub-project area is located in Saltukgazi Neighborhood, lot 16 of block 302. The lot size is 197.841,42 square meters, and the construction of the power plant will be carried out in 50.520,00 m2 of the parcel.

The energy transmission line passes by the Sub-project area within 190 meters and is connected with an underground cable, and the connection point of the ETL is within the Sub-project area, so there no expropriation is required (Figure 3). The current location of the connection point is shown in the Photograph 2, and it is also shown in Figure 3 as connection point.

There are buildings within the boundaries of the parcel where the Sub-project is located, but these buildings do not coincide with the area where the power plant will be installed. The Sub-project area is located close to residential areas, and there is an unlicensed and unfinished structure within the Sub-project area. SPP installation will be in a way that will not damage this unlicensed structure. There are residential units at different distances from the panel settlement. The distance to the nearest residential unit is approximately 15 meters as shown below. The distance to other residential units is shown in Figure 4. The distance to the unfinished structure within the parcel is approximately 40 meters, and the panel layout does not overlap with this structure.

Figure 4: Panel Layout and Nearest Settlements



Panel Layout Revision

During the field studies in the Sub-project area, it was determined that there was an unfinished and unlicensed structure in the old SPP panel layout (Figure 5). Within the scope of the Sub-project, a revision was made to prevent damage to the structure and to prevent the owner of the structure from being negatively affected. The panel layout was optimized by preserving the existing condition of the structure and the available areas in the project site were effectively utilized. The area where the structure was located was excluded from the SPP panel layout. The panels previously identified for this area have been relocated to other suitable and vacant areas within the Sub-project area, considering technical requirements (slope, shading, etc.). Figure 4 and Figure 6 shows the revised panel layout. As shown in Figure 4, the distance of the panel layout to the buildings and the distance to the unfinished structure is shown. The panel placements have been updated so that they do not overlap with the settlements and the unfinished structure.

While this revision constitutes a minor change in the overall layout of the project, it has not adversely affected the energy generation capacity or efficiency of the project.

Figure 5: Previous SPP Panel Layout

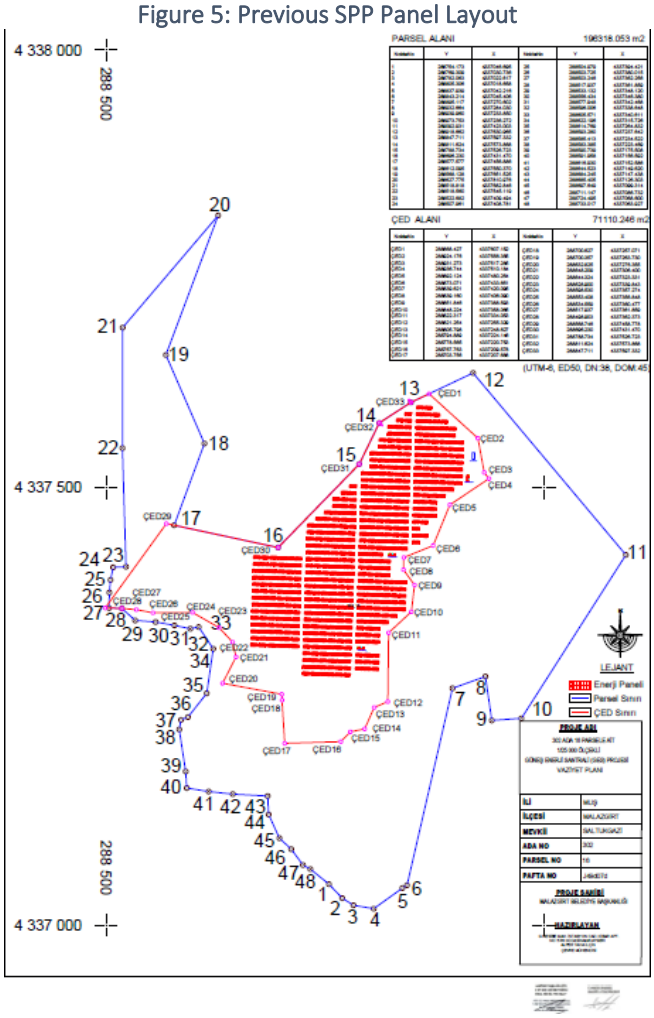



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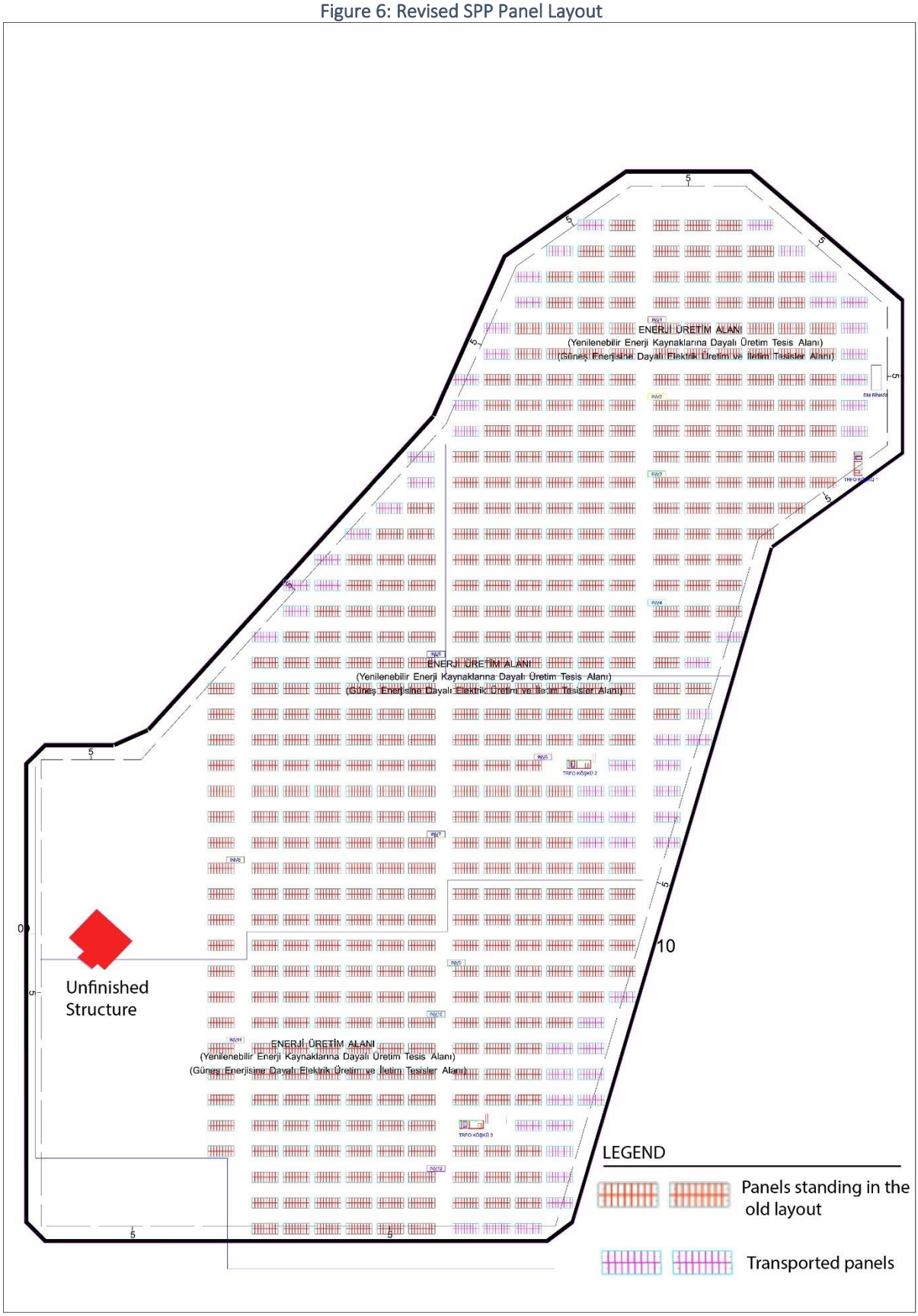
Figure 6: Revised SPP Panel Layout



Site Visit

On 5 November 2024, a site visit was conducted around the Sub-project area (Annex 11). As shown in Figure 4, there are 8 residential houses located around the Sub-project area, and apart from these houses, there are 6 structures used as barns and poultry houses. Interviews were conducted with the owner of the unlicensed and unfinished building and people living around the Sub-project. The owner of the unlicensed and unfinished building is 68 years old and lives with his wife. The citizen makes a living from animal husbandry and has approximately 15-20 cattle.

According to an interview conducted with another resident living near the Sub-project area, this resident lives with his wife and five children. The children seasonally travel to other cities to work in various sectors. This resident does not own any livestock.

Another resident lives with his wife and three children. He owns five cattle but does not engage in farming. He stated that he has no complaints about the installation of the solar power plant and that they do not use the sub-project area. He also mentioned that they take their livestock to grazing areas further away from their residence.

During the site visit, information was obtained from the residents who were present at their homes, providing general details about other residents living near the Sub-project area who could not be reached during the site visit. Other citizens living around the Sub-project area are also generally engaged in animal husbandry and have cattle. The number of cattle in households varies between 5 and 10. Household sizes are around 4-5 people. According to the information from the Mukhtar of Saltukgazi Neighborhood, the number of school-age children living in the Sub-project area is around 10-12.

The people living in the Sub-project area were informed about the Sub-project. The people living in the vicinity of the Sub-project stated that they do not use the Sub-project area because it is vacant and unproductive land. The local people do not have any complaints about the Sub-project. They are very positive about the Sub-project's construction and want the Sub-project to be constructed as it will contribute to the region's development. It was also stated that there is no active user of the Sub-project area and no grazing or agricultural activity in this area. They stated that the area is inefficient for grazing and that those engaged in animal husbandry take their animals to grazing areas further away from where they live.

Photograph 2: ETL Connection Pylon

Photograph 3: Unlicensed and Unfinished Building in the Sub-project Site

Table 2: Planned SPP Land Information

Land Information	
Type	Main Property
Province, District, County, Nbhd.	Muş, Malazgirt, Saltukgazi
Block, Lot	302/16
Total Area	197.841.42 m2
Right to Property Use	Municipality
EIA Status	EIA process is completed. “EIA Exempted” decision is granted (Annex 3)

2. Environmental and Social Screening

The sub-project was prepared by ensuring compliance with universal human rights principles, particularly focusing on inclusivity, non-discrimination, and equitable access to benefits. The project design prioritizes the rights of all individuals, including vulnerable and disadvantaged groups, by

ensuring they are not negatively impacted and that their participation in decision-making processes is actively encouraged. Following loan approval, Malazgirt 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.

The Sub-project area is located in an inefficient area close to settlements and not used by the public. Community consultations have confirmed that local residents do not have concerns regarding the project. However, as with any infrastructure development, temporary and localized effects such as dust, noise, and increased vehicle movement, occasional maintenance activities, reflection and glare effect may occur during the construction and operation phase due to its proximity to settlements. These impacts will be minimized by taking necessary risk mitigation measures.. With the Solar Power Plant (SPP) project, the electrical energy need will be met within the framework of social justice, without creating an unfair and discriminatory impact on the disadvantaged groups in the environment. Using renewable energy for electricity generation ensures efficient use of municipal resources, positively impacts the entire regional population and promotes inclusion.

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

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

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

The project strengthens accountability through transparent decision-making, active participation, accessible information, responsive complaint mechanisms, regular reporting and open communication. Stakeholders participate in decision-making processes, provide collective input, and regular participation strengthens the sense of ownership and accountability. The project will establish a dedicated grievance mechanism (GM) which will be available through a toll-free hotline, email, and a GM within the municipality. This GM will be monitored regularly, and all grievances will be logged, reviewed, and addressed within a specified timeframe. A strong complaints mechanism addresses concerns and regular reporting and audits keep stakeholders informed. Also, stakeholder consultation 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 16.

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 (World Bank, 2024). 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. 6203 Expropriation 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
- Law No. 4749 on the Regulation of Public Finance and Debt Management published in the Official Gazette No.27272 dated June 28, 2009

In terms of stakeholder analysis:

- Law No. 4982 on the Right to Information published in the Official Gazatte No. 25269 dated October 24, 2003Law No. 3071 on the Use of the Right to Petition published in the Official Gazette No. 18571 dated November 1, 1984
- Law No. 6698 on the Protection of Personal Rights published in the Official Gazette No. 29677 dated April 7, 2016

Moreover, the project is the subject of the 30th clause of the "Regulation on Unlicensed Electricity Generation in the Electricity Market", published by the Energy Market Regulatory Authority no. 30772 on May 12, 2019 and amendment published on Official Gazette No: 31479 dated May 09, 2021, updated on Official Gazette No: 31920 dated August 11,2022, final update on Official Gazette No: 32120 dated March 02,2023. Article 1st Paragraph: " In order to meet the electricity needs of the consumption facilities, not exceeding the contractual power of the relevant consumption facilities in

the connection agreement; Within the scope of subparagraph (h) of the first paragraph of Article 5, a production facility based on renewable energy sources may be established. Within the scope of this article, a production facility based on renewable energy sources may be established by public institutions and organizations within the scope of subparagraph (c) of the first paragraph of Article 5." Section 26 of the same regulation. In paragraph 30-(3) under the heading "Applications for consumption needs", referring to the article, it reads: "In the production facilities established within the scope of this article, transactions are established within the scope of the fourth paragraph of Article 26 for surplus energy supplied to the grid during each billing period.

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

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

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

Indirect and direct government incentives for solar power plants include:

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

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

- Law:
- Electricity Market Law No. 6446 published in the Official Gazette dated March 30, 2013 and numbered 28603Environmental Law No. 2872 published in the Official Gazette dated August 11, 1983 and numbered 18132Decree:
- Presidential Decree No. 1044 published in the Official Gazette dated May 10, 2019 and numbered 30770Regulation:
    - Regulation on Unlicensed Electricity Generation in the Electricity Market published in the Official Gazette dated May 12, 2019 and numbered 30772; Amended according to the regulations published in the Official Gazette dated May 9, 2021 and numbered 31479, in the Official Gazette dated August 11, 2022 and numbered 31920, and in the Official Gazette dated March 02, 2023 and numbered 32120.

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

Malazgirt District is located between 37° 7¹ - 39° 11¹ north parallels and 42° 30¹ - 42° 36¹ east meridians. Malazgirt is the largest district of Muş and 138 km from the city center, and it is the farthest district from Muş. Located in the southeastern part of the Murat River, the district is about 1550 m above sea level. The SPP sub-project area is located in the southwest of the district center and far away approximately 1,6 km from the Malazgirt District center. Also, the Sub-project area is far away from Muş Province center, approximately 103 km, and located in the southwest of the province center.

The SPP sub-project is located in the northeast of the Malazgirt District settlement, and its elevation level is between 1400-1600 meters. Although the Sub-project area is not very sloping, it has a land structure with sloping and flat areas in places.

Figure 7:Geographical location of Malazgirt Province and Sub-Project Area

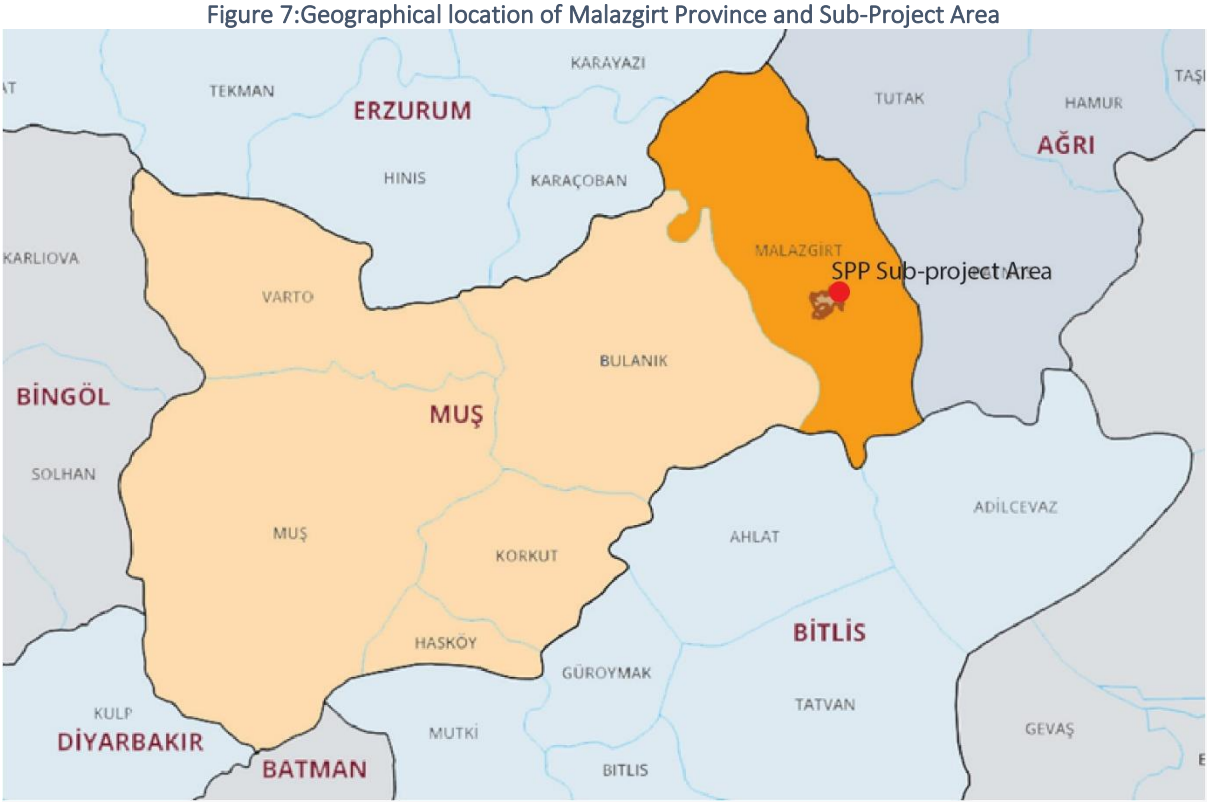


Figure 8:Malazgirt District Topography Map

Geography

Malazgirt District is covered with wide plains and mountains. The Murat River, a tributary of the Euphrates River, passes through the north of the district. For this reason, it is a district located in the Murat River basin. Malazgirt Plain, Badişan Plain and Ulusu Plain are irrigated by the Murat River, Hınıs

Stream, and Badişan Stream. Katevin Mountain is located in the northeast of the district where 65% of the land is hilly and Süphan Mountain is located in the southeast, and Süphan Mountain is approximately 30 km away from Malazgirt District center. The Malazgirt Plain, on which the district is built, has the appearance of a high plateau and is covered with the lava of Süphan Volcano. Solhan Volcanites are widespread in the western part of the project area. Malazgirt Volcanites outcrop in a wide area. Old Stream Sediment is surfaced in the northwestern part of the project area.

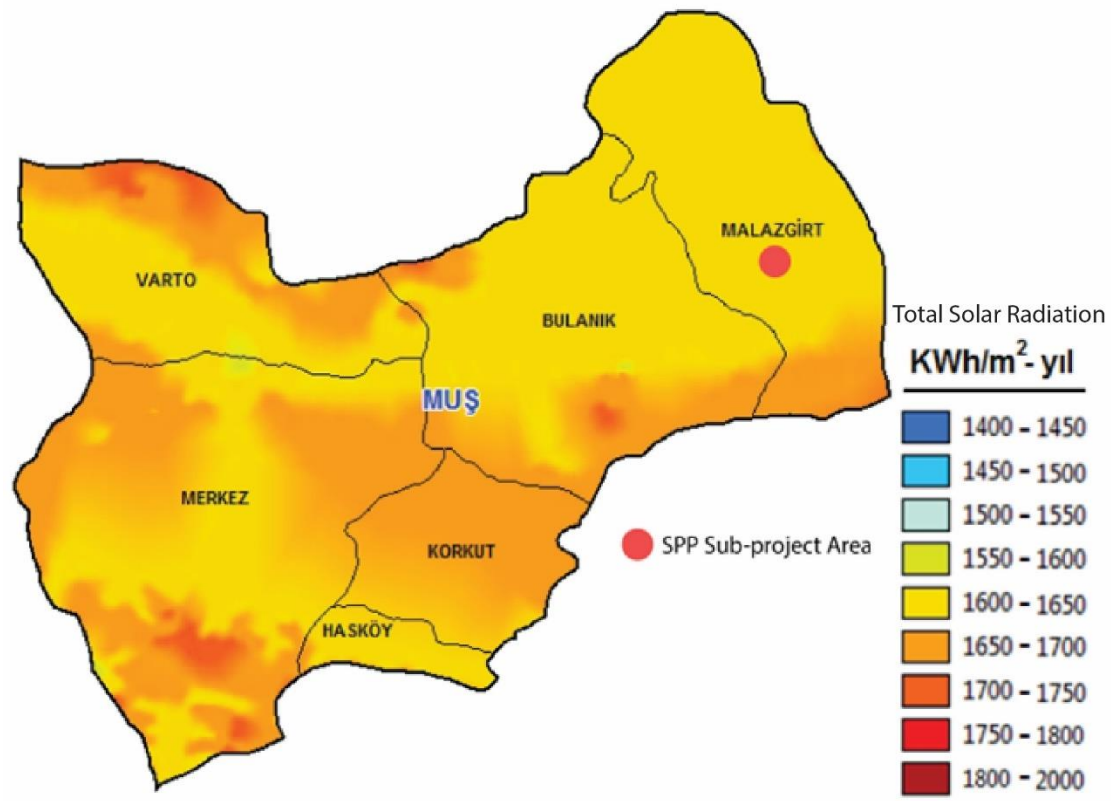
Figure 9: Elevation Map of Malazgirt and SPP Sub-project Area

Climate

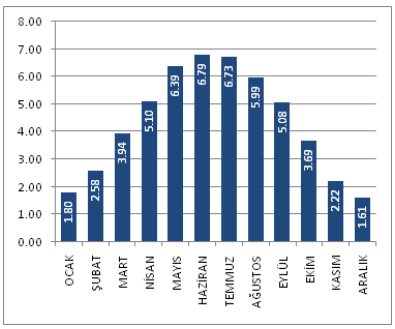
Malazgirt District has the typical continental climate of the Eastern Anatolia Region. Summers are hot and dry, while winters are long, very cold, and snowy. In the Malazgirt District, precipitation falls mostly in the spring months. Since Malazgirt is far from Lake Van and has no coastline, the continentality is quite prominent. Most of the winter season in the district is covered in snow. The rainiest period in the district is spring. The months with the highest drought severity are July and August. After October, precipitation starts to increase again. The rainiest period in Malazgirt district is the winter months when temperatures drop to minus values. There is quite a lot of snowfall during this period.

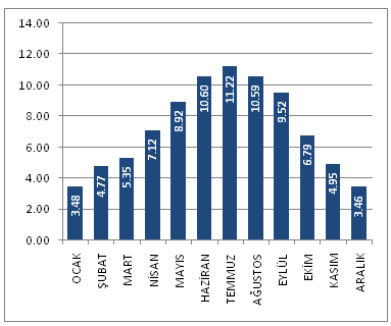
According to the Solar Energy Potential Atlas, Türkiye's average annual total sunshine duration is 2,737 hours, daily total is 7.5 hours, and annual total incoming solar energy is 1,527 kWh/m2/year. It is seen that Malazgirt's average solar radiation throughout the year is in the range of 1600- 1700 KWh/m2/year (Figure 10). Global radiation values are over 6.00 KW/m2/day in May, June, July, and over 5.00 KWh/m2/day in a total of 6 months from April to the end of September (Graphic 1).
In Malazgirt, the month with the longest sunshine duration (11.22 hours) is July, and the shortest sunshine duration (3.46 hours) is December. Generally, the duration of sunshine is above 7 hours in six months (from April to September) throughout the year in most seasons. Since the district's sunshine duration is to above Türkiye average, it turns out that project area in Malazgirt is an important investment area for solar energy.

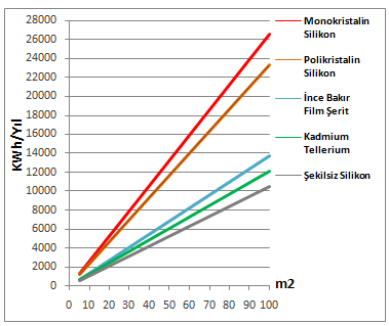
Figure 10:Muş Province Solar Atlas and Project Area



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







Flora

The presence of forest is quite insufficient in Malazgirt district. Considering the climatic, soil and landform conditions in Malazgirt, there should be forest vegetation, but there are dry agricultural

areas, pastures and anthropogenic steppes. Around the Murat River and locally in Malazgirt National Park, there are poplar trees that do not cover a large area and larch trees in places.
In addition, oak trees are common along the Murat River and anthropogenic steppe formations are common in and around Süphan Mountain. The project area has sparse vegetation consisting of drought-tolerant grasses. The area is vegetatively poor and belongs to a steppe ecosystem. According to informations given in the Malazgirt SPP Project Identification Document[2], "National Parks", 'Nature Parks', 'Nature Monuments' and 'Nature Protection Areas' defined in Article 2 of the National Parks Law and designated in accordance with Article 3 of this Law do not exist within the project area.The Project area is located outside the Protected Areas I and II of the "Important Sea Turtle Breeding Areas" and the "Mediterranean Monk Seal Habitat and Breeding Areas", which are protected areas under the "Convention on the Conservation of European Wildlife and Habitats" (BERN Convention). The Project area is outside the protected areas under the RAMSAR Convention. However, the project area is a meadow pasture and an area whose natural character will be preserved.

Photograph 4:Vegetation of the SPP Sub-project Area

Earthquake Risks

Muş province is located in a very active earthquake zone in terms of earthquakes. Muş province and its immediate surroundings have been affected by many earthquakes of both tectonic and volcanic origin. Muş Fault Zone, Varto Fault Zone, Kavakbaşı Fault, Bulanık and Malazgirt faults are important tectonic structures that may affect the province. The Malazgirt Fault, which consists of several fractures with different orientations and dimensions, has a left lateral strike-slip fault characteristic. Its general direction is NE-SW, and it is located 8 km east of Malazgirt District and its total length is approximately 20 km. Two earthquakes of magnitude M= 6.3 occurred on 28.04.1903 and 27.01.1907 on the seismically active Malazgirt fault (AFAD, 2022). According to the Türkiye Earthquake Hazard Map, Malazgirt District is located above 0.5 in terms of seismicity. When the Sub-project area is examined based on the "Türkiye Earthquake Hazard Map" , and according to the coordinates 39.1591964° latitude, 42.5544717° longitude, 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 0.536 PG in the SPP Sub-project area (Figure 12). This value applies directly to the project area, indicating its seismic risk level.

[2] MUŞ İLİ, MALAZGİRT İLÇESİ, SALTUKGAZİ MAHALLESİ, KIZILBAŞKAN MEVKİİ, 302 ADA 16 PARSEL, J49d1 PAFTA, ALTA ÇED Proje Mühendislik A.Ş., Haziran 2021

Figure 11:Faults in Malazgirt and its Region, General Directorate of Mineral Research and Exploration (MTA)

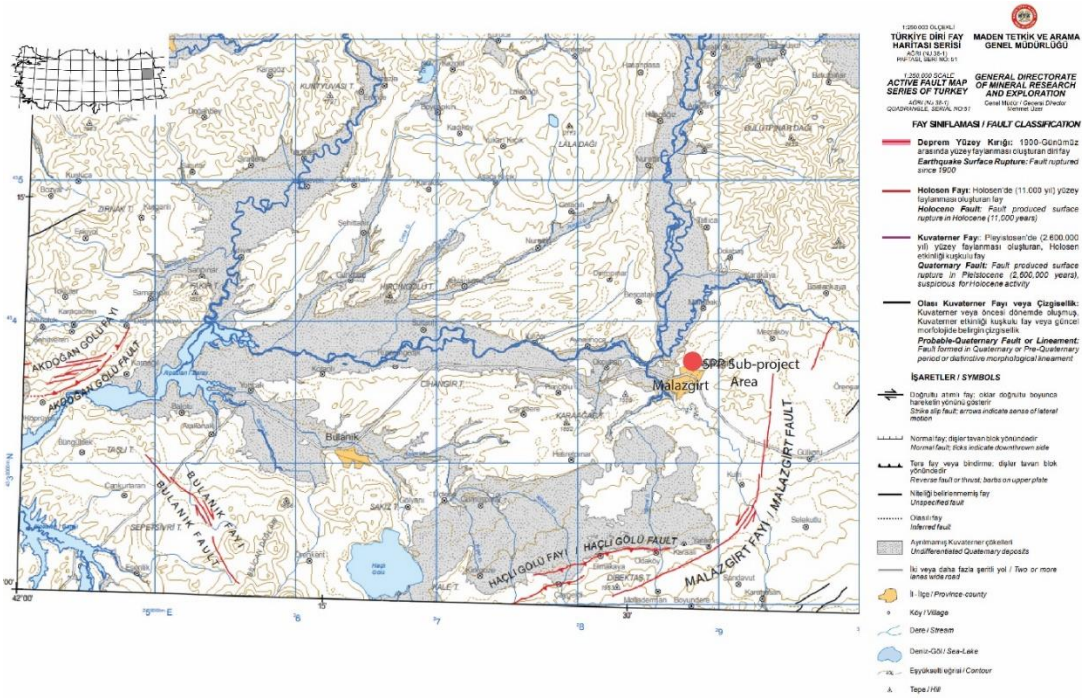
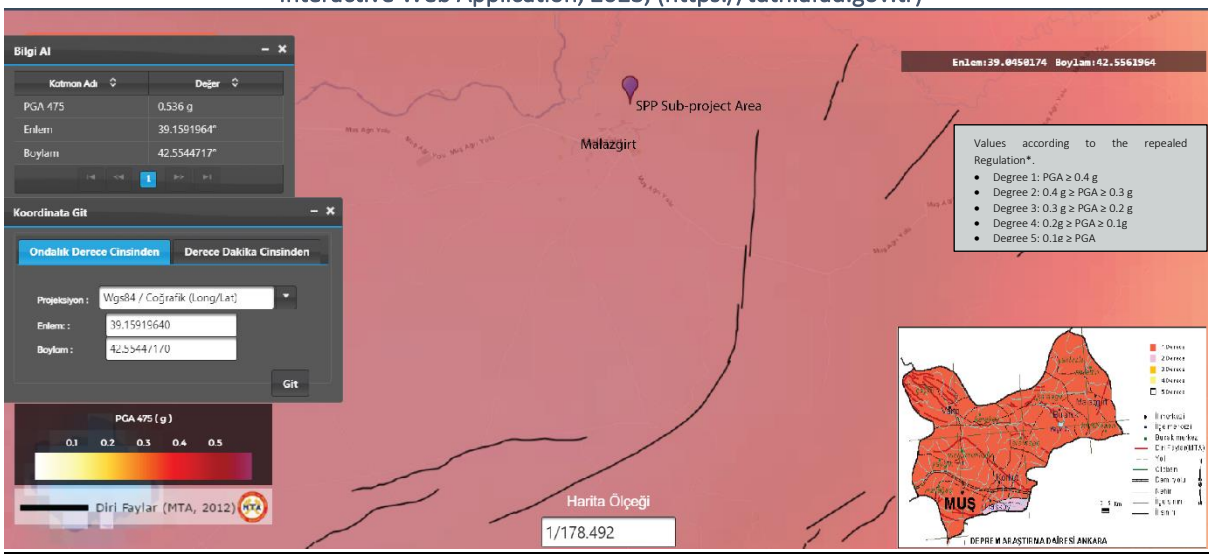


Figure 12:Earthquake Hazard Map of Sub-Project Area and Surroundings, Türkiye Earthquake Hazard Maps Interactive Web Application, 2023, (https://tdth.afad.gov.tr)[3]



*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

Muş province is situated in the Euphrates-Dicle basin. Malazgirt district has rich underground and surface waters. The district center is located east of the Murat River. The Murat River, which passes through the district, flows into the Persian Gulf after merging with the Euphrates River.

The month with the highest number of floods and inundation events in Muş Province is April. The amount of rainfall in this month is an important factor in the high number of floods and floods experienced in April. April is the month with the most rainfall in Muş Province (106.11 mm). After

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

April, the month with the highest number of floods and floods is March (AFAD, 2022). A similar situation is observed in Malazgirt district as in the province. According to Muş Provincial Disaster Risk Reduction Plan 2022, there were 3 floods happened between 1963-2015 in the Malazgirt district which are occurred in 1963, 1997 and 2004 year. Malazgirt district is located east of the Murat River and the flood susceptibility of the district ranges between moderate and high. According to Figure 13, it is found that the flood sensitivity of this area is at a moderate level. Since the flood sensitivity of the project area is moderate, it is essential to implement appropriate drainage and water management measures to prevent potential impacts on the solar panels and related infrastructure. Water may accumulate in the Project area as a result of excessive rainfall or runoff, but prolonged water retention or severe flooding is not expected.

Figure 13:Muş Province and SPP Sub-project Area Floods Susceptibility Map (AFAD, 2022)

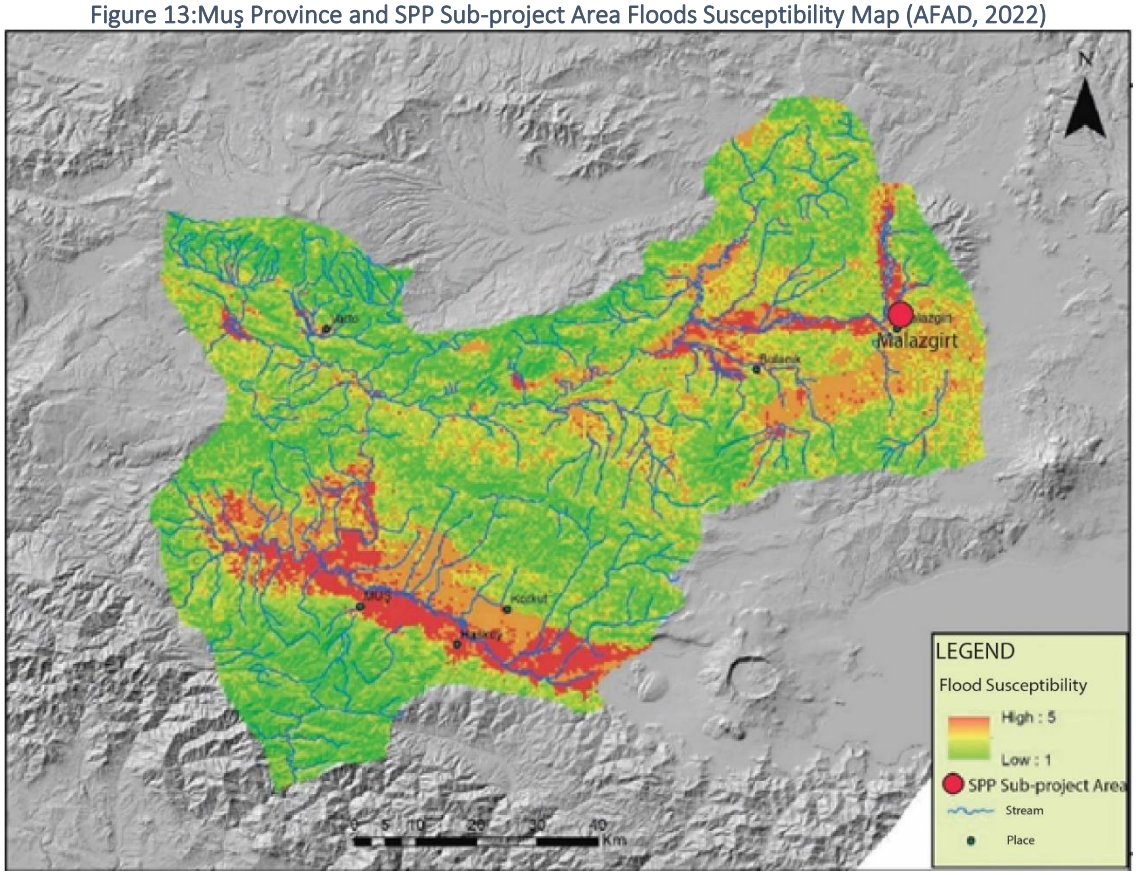
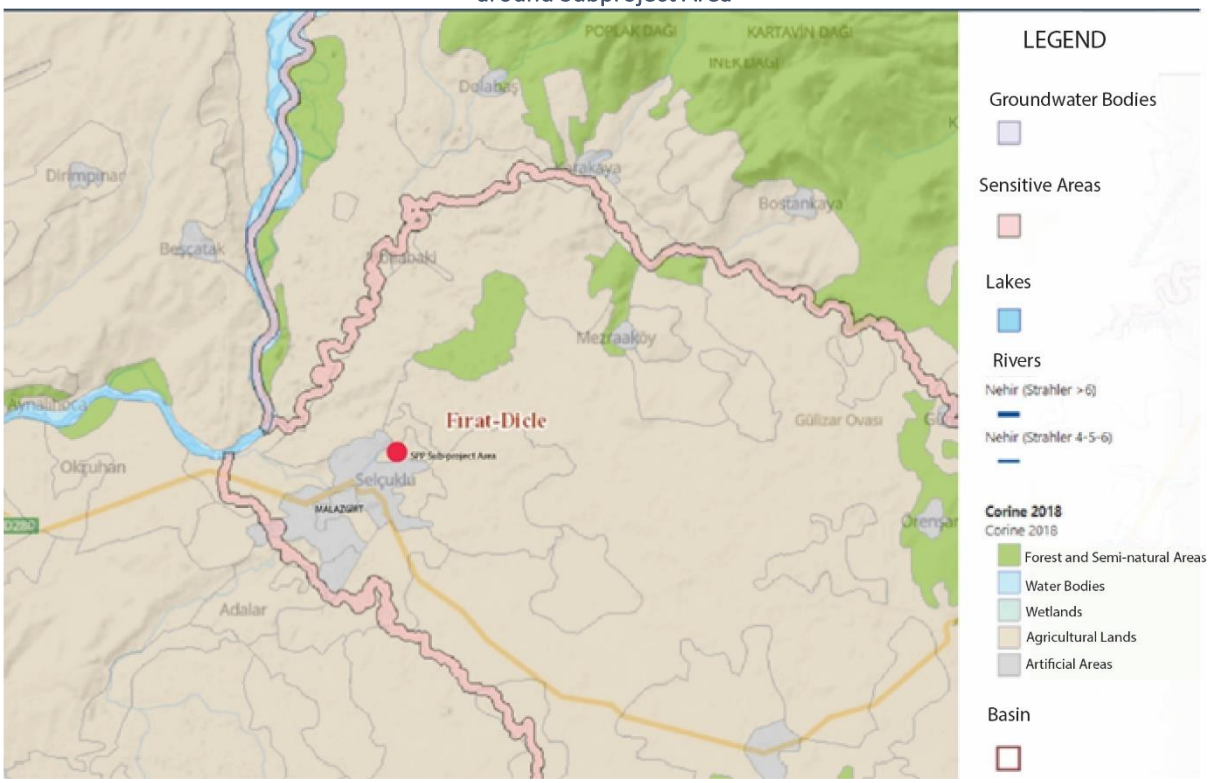


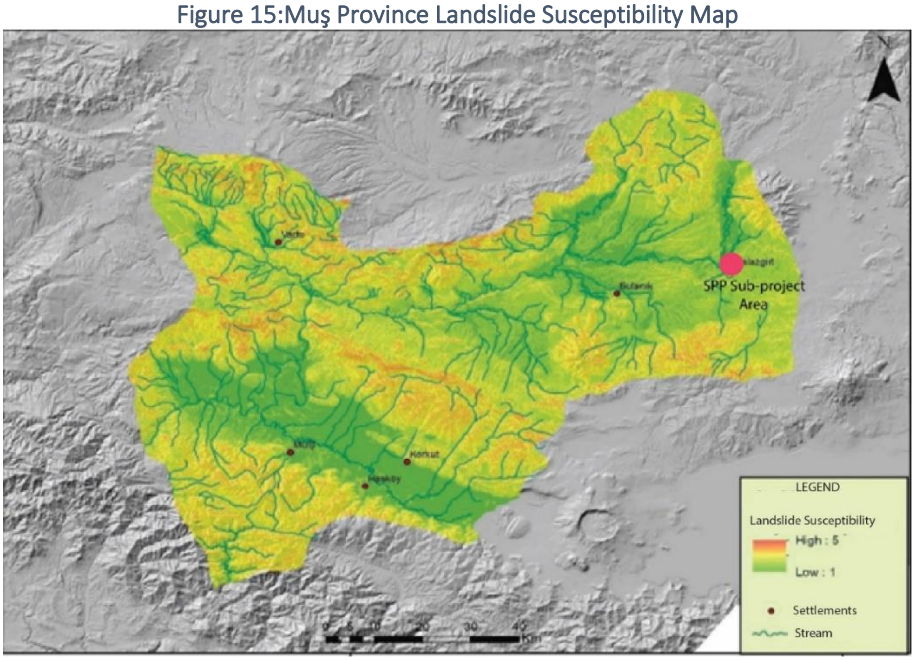
Figure 14:National Water Information System (USBS) Sensitive Areas and Water Assets (Groundwater etc.) around Subproject Area



Landslide Risk

Most of the landslides in the hanging wall of the Muş Fault Zone, located in the north of Korkut district and mapped as an active thrust fault by Mineral Research and Exploration, are still active landslides. Malazgirt district is located between low-moderate level of risk according to Figure 15. Muş center and Malazgirt district are among the districts that suffered the most damage from the landslide in terms of the number of households. When the Sub-project area is examined, it is seen that the landslide risk is low. The fact that the project area is not highly sloped also reduces the risk of landslides in the area. Therefore, the land is located on a stable, flat terrain and is not prone to large-scale soil movements.

Figure 15:Muş Province Landslide Susceptibility Map



Social Baseline

Demography

Within the borders of Muş Province, the distribution of population and settlements varies greatly between plains/basins/valley bottoms and mountainous areas. This situation has led to the concentration of population and settlements at certain elevation levels. Depending on the elevation, both the number of settlements and population decrease. The fact that geomorphological units such as plains, basins and river valleys experience relatively favorable climatic conditions compared to their surroundings, and that agriculture and transportation facilities are easier has made these geomorphological units more attractive for settlements. Especially the margins of Muş, Varto, Malazgirt and Bulanık plains and the Karasu and Murat valleys are the places where the population and settlements are denser than their surroundings.

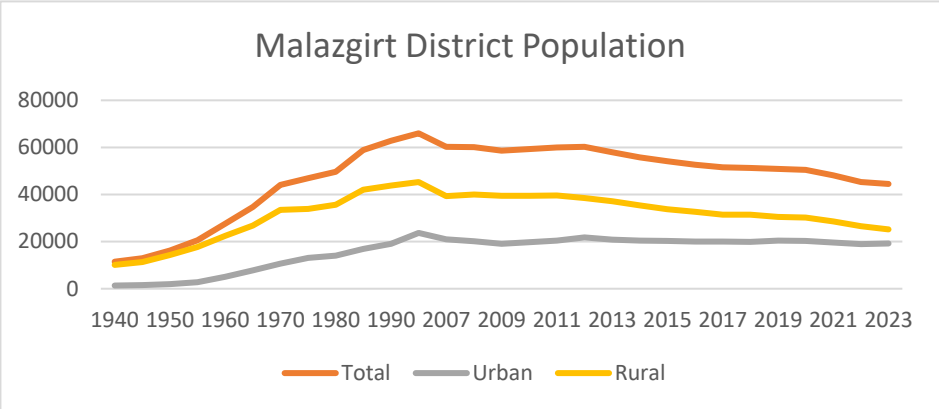
In Malazgirt district, the rural population has a large share in the total district population. Between 1940 and 2000, the rural population of Malazgirt District increased continuously (Graphic 2). Since the 2007 census year, it is seen that outward migration from rural settlements has accelerated. Despite the high birth rates in rural areas, the rate of increase in the rural population slowed down and the rural population continued to decrease at negative values between 2011 and 2023 (Graphic 2). Malazgirt District has 12 neighborhoods and there are 74 villages, 2 municipalities and 19 hamlets connected to Malazgirt urban settlement. Malazgirt District total population is 42.135 in 2023, and Saltukgazi Neighborhood population is 2959 in 2024.

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

Year	Urban	Rural	Total	Year	Urban	Rural	Total
1940	1354	10121	11475	**2010**	19776	39500	59276
1945	1516	11386	12902	**2011**	20477	39533	60010
1950	1932	14334	16266	**2012**	21733	38528	60261
1955	2793	17755	20548	**2013**	20837	37097	57934
1960	5060	22516	27576	**2014**	20388	35416	55804
1965	7826	26886	34712	**2015**	20340	33772	54112
1970	10642	33455	44097	**2016**	19986	32620	52606

1975	13094	33910	47004	**2017**	20038	31508	51546
1980	14068	35643	49711	**2018**	19880	31443	51323
1985	16849	42030	58879	**2019**	20386	30540	50926
1990	19079	43772	62851	**2020**	20314	30182	50496
2000	23697	45293	65990	**2021**	19628	28564	48192
2007	20987	39276	60263	**2022**	18873	26498	45371
2008	20110	39976	60086	**2023**	19261	25181	44442
2009	19130	39515	58645	**2024**	18563	23572	42135

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



Cultural Heritage

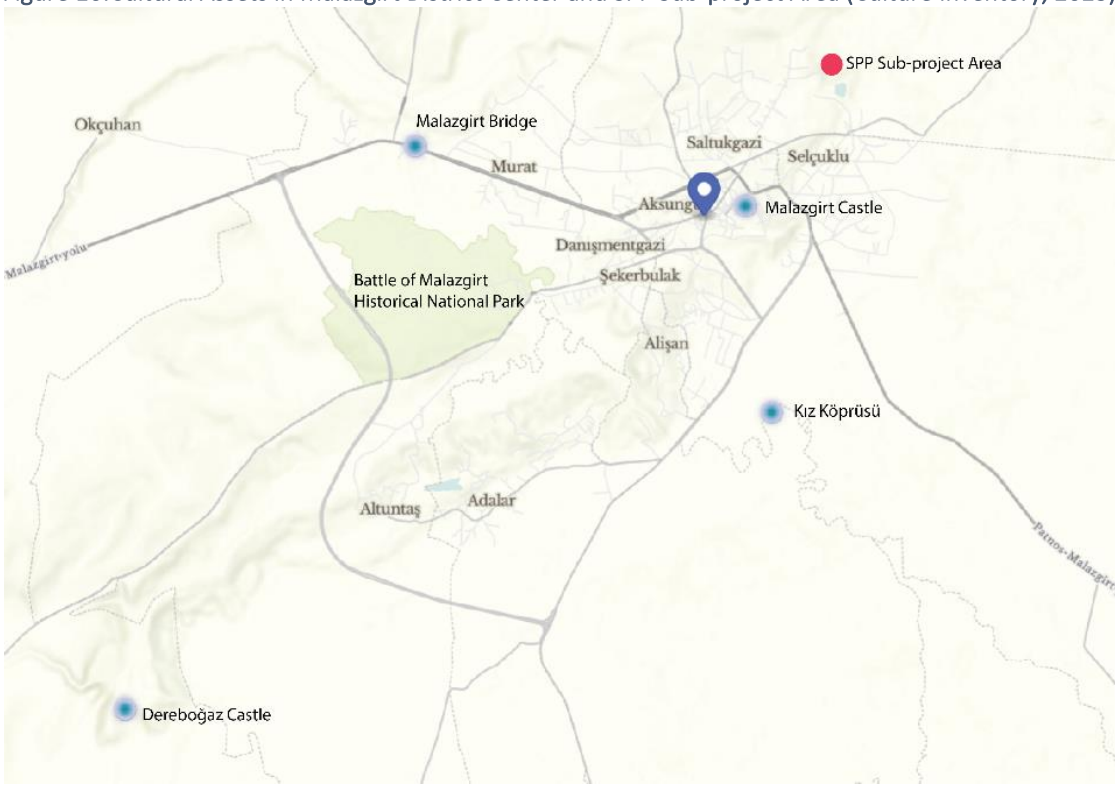
Malazgirt District has hosted different civilizations since ancient times. There are a total of 194 registered cultural inventories in Muş and its districts. 28 of these cultural inventories are located in Malazgirt District (Muş Provincial Directorate of Cultur and Tourism, 2023). The historical martyrs' cemetery belonging to the Seljuk period, Malazgirt Castle, Hatun Bridge, Kız Bridge, Bostan Castle are the prominent historical monuments in the district. There are also various mounds and caves in the district. Malazgirt Castle is an important cultural asset in the district, and Malazgirt Castle is approximately 1.6 km away from the SPP Sub-project area. The history of Malazgirt castle dates back to the Urartians and has become the symbol of the district.

The Battle of Malazgirt Historical Natural Park is another important cultural and touristic inventory in the district. The national park, which was declared on February 5, 2018, by the decision of the Council of Ministers No. 2018/11366, is located on the area where the Battle of Malazgirt took place. . Malazgirt/Hatun Bridge is another important cultural asset in the district, and it is approximately 4 km away from the Sub-project area.

Table 4: Malazgirt District Cultural Inventory

Malazgirt Registered Cultural Inventory (Quantity)			
Monument	1	Rock Tomb Room	1
Store	1	Bridge	2
Hazire	1	Cave Settlement	1
Mound	2	Cemetery	13
Castle	3	Battlefield	1
Door Relic	1	Temple Area	1

Figure 16:Cultural Assets in Malazgirt District Center and SPP Sub-project Area (Culture Inventory, 2023)



Photograph 5: Malazgirt Castle (Muş Provincial Directorate of Culture and Tourism, 2023)

Photograph 6:Battle of Malazgirt Historical National Park (BirGün Gazetesi, 2021)

Economic Sectors and Facilities

The district's economy is largely based on agriculture and animal husbandry. The agricultural land in the district is 624,902 da. These agricultural areas correspond to 60.4% of the total land. Dry and irrigated agriculture activities are carried out on these lands. Irrigated agricultural lands are generally located around the Murat River (Malazgirt District Directorate of Agriculture and Forestry , 2023). The fact that the district has a high proportion of agricultural land is an indication of its agricultural potential, and the fact that meadow and pasture areas are in second place is an indication of its high livestock potential. The main agricultural products in the district are wheat, sugar beet, barley, chickpeas, lentils, and beans. Gardening has been developing since 2000, but sugar beet production and animal husbandry have been declining. The feed factory is an important industrial facility in the district. Malazgirt feed factory has been in operation since 2000. Beekeeping and fishing are also recently developing sectors in the district. Although fishing is not done at a sufficient level despite the Murat River passing through the district, the fish hatchery in Malazgirt Adalar District is among the important fish breeding centers in Muş. Although the industry and service sectors in the district are not sufficiently developed, there have been investments made in recent years. There is a small-scale industrial settlement established in 2010 in Malazgirt District. Many agricultural equipment produced in the Agricultural Machinery Specialized Industrial Site, such as tractor trailers, seed and fertilizer machines, are exported abroad. In addition, there is 1071 Textile City Workshop, the foundation of which was laid in 2022, and which currently employs 200 people.

The primary livelihood of the residents of the Saltukgazi neighborhood is based on livestock farming. Some residents travel to other cities as seasonal workers. The local population, primarily engaged in livestock farming, focuses on cattle breeding.

5. Environmental and Social Management Plan

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

Table 5: Mitigation Plan for the Land Preparation, Construction 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.	The Contractor with support from the Site Supervisor	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 the work. Contact responsible authorities. Organizing all necessary measures to protect the location. No work to proceed until official notification is received. · Chance Finds Procedures will be prepared before construction works.	Municipality and ILBANK, with Contractor ensuring compliance	Visual observations	Included in the subproject budget
Constructional Phase I = 4 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 (e.g., diesel or gasoline for construction machinery). · Implement proper storage practices for waste and chemicals, including used oils, fuels, lubricants, and cleaning agents.Install secondary containment systems (such as bunded areas or drip trays) for hazardous liquid storage.. · Develop and implement an emergency preparedness and response plan outlining the steps to be taken in the event of a leak or spill of fuel, oil, or other hazardous substances.	The Contractor with support from the Site Supervisor	Visual observations ESMR Findings	Included in the subproject budget
Constructional Phase I = 4 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	The Contractor with support from the Municipality	Traffic Grievance Records Visual observations (such as traffic signs and warnings are placed at appropriate	Included in the subproject budget

Phase Impact and Likelihood (1-5)	Risk Description	Mitigation Measures	Responsibility	Key Performance Indicators	Cost
				locations) ESMR Findings	
Constructional Phase I = 4 L = 2	· Risk 5: Dust and Exhaust Emissions from Soil Excavation, Vehicle Traffic and Equipment	· Implement dust control measures, such as watering construction areas. · Use dust screens or barriers to prevent dust dispersion. · Promote the use of eco-friendly construction equipment. · Pave or stabilize dirt roads to reduce dust emissions. · Enforce speed limits to minimize dust generation. · Maintain vehicles to reduce emissions. · Use low-emission or electric vehicles whenever possible. · Encourage the adoption of clean fuel options. · Develop an emissions control and reporting program.	The Contractor with support from the Site Supervisor	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 = 4 L = 2	Risk 6: Temporary Blockage of Transportation Roads between Settlements Traffic Vehicles Cause Destruction on Roads and Buildings .	· Plan construction schedules to minimize road closures. · Provide alternative routes for affected communities. · Communicate road closures in advance to residents. · Ensure construction vehicle operators follow road safety guidelines. · Enforce strict speed limits for construction vehicles within residential areas to ensure pedestrian safety and reduce wear on local roads. · Regularly inspect and repair access roads used by construction vehicles to prevent damage, such as potholes or rutting, which can affect residents' daily travel and safety. · Adjust construction work hours to avoid school entry and exit times. · Assign traffic supervisors or safety personnel at roads frequently used by children. · Provide school transport or alternative safe commuting options for children if necessary.	The Contractor with support from the Municipality	Traffic Grievance Records Visual observations (such as traffic signs and warnings are placed at appropriate locations) ESMR Findings	Included in the subproject budget
Constructional Phase I = 2 L = 2	Risk 7: Community health and safety during the execution of works	· Ensure that construction work is performed during designated working hours and at times that minimize disturbance to nearby residential areas.. · Fence the approach areas and storage areas to prevent unauthorized access.	The Contractor with support from the Municipality	Visual observations ESMR Findings	Included in the subproject budget

Phase Impact and Likelihood (1-5)	Risk Description	Mitigation Measures	Responsibility	Key Performance Indicators	Cost
		· Provide clear signage to warn the public of construction activities. · Implement dust control measures to minimize air quality impact. · Conduct regular site security checks. · Engage the local community in awareness campaigns about project safety protocols. · Provide training and awareness programs on SEA/SH and worker rights. · Install clear, visual warning signs around the perimeter of the site stating that children and animals are not allowed. · Establishing specific safe entry points for entry and exit to and from the Sub-Project area and keeping these points under constant surveillance. · Install child-friendly safety barriers and clear warning signs around the perimeter of the construction area. · Establish temporary safe pathways or crossings for children in areas where construction affects school routes.			
Constructional Phase I = 3 L = 1	Risk 8: · Chemical Spills and Leaks · Improper Storage and Disposal of Materials · Inadequate Stormwater Management · Inadequate Hazardous Material Handling	· Establish safe delivery/storage/handling procedures in accordance with material safety data sheets (MSDSs) Immediately contain and clean-up any spilled material.	The Contractor with support from the Site Supervisor	Visual observations ESMR Findings	Included in the subproject budget
Construction Phase I = 4 L=4	· Risk 9: Earthquake Risk	· Parameters suitable for 1st degree earthquake zones should be taken into consideration in construction. · During construction, current earthquake safety standards and regulations must be followed. · The design of the solar power plant should be made considering the earthquake resistance in accordance with the earthquake risk of the region.	The Contractor with support of Site Supervisor	Visual observations Records	Included in the subproject budget
Construction Phase I = 4	· 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.	The Contractor with support of Site Supervisor	Visual observations	Included in the subproject budget

Phase Impact and Likelihood (1-5)	Risk Description	Mitigation Measures	Responsibility	Key Performance Indicators	Cost
L=2		· 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.		ESMR Findings	
Construction Phase I = 2 L=2	· Risk 11: Landslide Risk	· Install erosion control measures such as retaining walls, or erosion control blankets to minimize soil erosion, which can contribute to landslide initiation. Consider gentle slope modifications or terracing to reduce the overall slope angle, enhancing stability and minimizing the risk of moderate landslides. · Conduct regular site inspections to identify any changes in topography, vegetation, or soil conditions that may indicate increased landslide risk. .	The Contractor with support of Site Supervisor	Visual observations ESMR Findings	Included in the subproject budget
Constructional Phase I = 4 L=1	· Risk 13: 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 Preparedness and Response Plan · Control of working hours and work permits, · Regular safety inspections. · Ensure all workers have access to proper health and safety equipment. · Conduct regular audits to ensure compliance with labor and safety standards.	The Contractor with support of Site Supervisor	Sub-contractor Agreements Grievance Records ESMR Findings	Included in the subproject budget

Table 6: Mitigation Plan for the Operation Phases of the Project

Phase Impact and Likelihood (1-5)	Risk Description	Mitigation Measures	Responsibility	Key Performance Indicators	Cost
Operational Phase I = 1 L =1	· Risk 3: Leakage of Contaminants into the Soil and Waste and Chemical Storage	· Wastes generated should only be temporarily stored on site in the temporary storage area that is maintained/equipped with appropriate precautions according to the type of wastes, when needed, and wastes should be transported to licensed disposal facilities with licensed transport vehicles appropriate to the type of waste. Information related to the operations in this context should be recorded and records should be kept.	The Contractor with support from the Site Supervisor	Visual observations ESMR Findings	Included in the subproject budget
Operational Phase I = 1 L =1	· Risk 5: Dust and Exhaust Emissions , Vehicle Traffic and Equipment	· Vehicles and equipment used during the operation phase will undergo regular maintenance, with maintenance records being kept. · Whenever possible, electric-powered vehicles and equipment will be used instead of those powered by fossil fuels	The Contractor with support from the Site Supervisor	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	The Contractor with support from the Site Supervisor	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.	The Contractor with support from the Site Supervisor	Visual observations Records	Included in the subproject budget
Operational Phase I=1 L=2	· 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.	The Contractor with support from the Site Supervisor	Visual observations ESMR Findings	Included in the subproject budget

Phase Impact and Likelihood (1-5)	Risk Description	Mitigation Measures	Responsibility	Key Performance Indicators	Cost
		.			
Operational Phase I = 2 L=2	· Risk 11: Landslide Risk	· Install erosion control measures such as retaining walls, or erosion control blankets to minimize soil erosion, which can contribute to landslide initiation. · Conduct regular site inspections to identify any changes in topography, vegetation, or soil conditions that may indicate increased landslide risk. .	The Contractor with support from the Site Supervisor	Visual observations ESMR Findings	Included in the subproject budget
Operational Phase I=3 L=3	· Risk 12: 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. · Use **anti-reflective (AR) coatings** on solar panels to minimize glare and reflection. · **Optimize panel orientation and tilt** to ensure minimal reflection towards nearby houses, roads, and other sensitive areas. · Establish **visual barriers** such as vegetation, fences, or screen panels to reduce glare effects. · Implement a **grievance mechanism** to address concerns related to glare and take corrective measures if needed.	The Contractor with support from the Site Supervisor	Visual observations ESMR Findings	Included in the subproject budget
Operational Phase I = 3 L=1	· Risk 13: Effects on Workforce and OHS	· Implementing comprehensive OHS (Occupational Health and Safety) training programs for all workers. · - Providing appropriate personal protective equipment (PPE) to all employees and ensuring its proper use. · - Conducting regular safety drills and emergency response training. · - Establishing a clear reporting system for hazards and incidents. · - Regularly inspecting and maintaining all equipment and machinery to ensure safe operation. · - Providing access to medical facilities and first aid on-site. · - Promoting a safety culture through regular communication and engagement with workers.. · Develop Labor Management Plan	The Contractor with support from the Site Supervisor	Sub-contractor Agreements Grievance Records ESMR Findings	Included in the subproject budget
Operational Phase I = 2	· Risk 14: Storage of Damaged or End of Lifecycle Panels	· Develop a procedure for temporary storage of damaged or end-of-lifecycle panels on site in secured areas.	The Contractor with support from the Site Supervisor	Sub-contractor Agreements	Included in the subproject budget

Phase Impact and Likelihood (1-5)	Risk Description	Mitigation Measures	Responsibility	Key Performance Indicators	Cost
L=2		· - Ensure proper delivery to specified recycling areas. · Panels, switches, solar regulators, inverters, etc that break down and become idle during or after the activity in question. The materials will be temporarily stored in the Hazardous Waste Storage Area in the existing facility, classified according to their properties and delivered to licensed recycling companies for recycling. Wastes that cannot be recycled will be given to licensed companies to be disposed of in accordance with the conditions specified in the "Waste Management Regulation", which came into force after being published in the Official Gazette dated 02.04.2015 and numbered 29314.		Grievance Records ESMR Findings	

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

Table 7: Monitoring Plan for the Land Preparation and Construction Phases of the Project

Phase Impact and Likelihood (1-5)	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
Land Preparation Phase I = 4 L = 2	Risk 1: Stripping of the Vegetative Topsoil Layer and Soil Compaction	· Analysis organic matter content and compaction levels of soil in the project site regularly.	· Soil Organic Matter Content Soil compaction levels	· Sampling and laboratory analysis · Soil compaction tests	· Project site · Areas with construction and traffic intensity	· Before and after topsoil stripping · Periodic checks during and after construction	· Any significant decrease in soil organic matter content · Soil compaction beyond allowable limits
Land Preparation Phase I = 2 L=2	Risk 2: The possibility of discovering artifacts or other cultural and historical items of value.	· Coordinate with relevant regulatory authorities and heritage preservation agencies to ensure compliance with cultural heritage protection regulations	· Chance findings	· Coordination with the Museum affiliated to the Ministry.	· Project Site	· -	· Once a chance finding discovered

Phase Impact and Likelihood (1-5)	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
Constructional Phase I = 4 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 neccessary. · .	· 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 = 4 L = 2	Risk 4: Noise Resulting from Temporary Traffic Load Noise Caused by Construction Vehicles and Equipment Vibration Effects	· 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 = 4 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 = 4 L = 2	Risk 6: Temporary Blockage of Transportation Roads between Settlements Traffic Vehicles Cause Destruction on Roads and Buildings	· Analyzing road blockages, duration, and frequency through real-time assessments of transportation routes. · Analyzing damages to roads and buildings by conducting periodic visual assessments in areas where construction vehicles operate. · Monitoring children's school routes for construction-related disruptions or safety risks. · Recording incidents involving children's safety on school routes due to construction activities. .	· Road blockages, duration, and frequency. · Damage to roads and buildings · Child safety risks on school routes.	· Record road closure incidents and duration. · Visual inspections, documenting damages.	· Vehicle operation areas. · Transportation routes. · Areas where construction vehicles operate.	· Periodic emissions testing during construction and operation. · Real-time monitoring of road conditions. · Periodic visual assessments	· Road closures exceeding acceptable frequency. · Occurrence of damages to roads and buildings beyond permissible levels.
Constructional Phase I = 2 L = 2	Risk 7: Community Health and Safety During Execution of Works	· Regular inspections of fenced areas and signage to ensure they are maintained and effective. · Monitoring of work hours to ensure that activities are conducted outside of high-traffic or operational hours. · Inspection of approach areas and storage areas to verify they are secured and inaccessible to unauthorized personnel.	· Condition and visibility of fencing and signage. · Compliance with established work hours. · Security of approach and storage areas. · Dust particle levels in the surrounding environment	· Visual inspection, regular audits, air quality sampling	· Approach roads, storage areas, and work sites within the project boundary.	· Daily during construction activities. · Weekly (dust monitoring.) · Ad hoc inspections based on complaints or identified risks.	· Breach in fencing or unauthorized access. - Deviation from work hours. - Dust levels exceeding standards.

Phase Impact and Likelihood (1-5)	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
		· Periodic checks for dust levels to ensure compliance with air quality standards. · Organizing SEA/SH awareness trainings for employees and local communities. · Establish anonymous complaint mechanisms for SEA/SH cases. . · Regular assessments to monitor the functioning of the grievance mechanism. · Regular consultation with the community living close to the project area to assess whether there are any issues regarding the access of children and animals.					
Constructional Phase I = 3 L = 1	Risk 8: · Chemical Spills and Leaks · Improper Storage and Disposal of Materials · Inadequate Stormwater Management · Inadequate Hazardous Material Handling	Monitor and control chemical levels and respond to incidents	Chemical concentrations	. · Visual inspection and periodic manual testing. .	. · Areas where chemicals are stored, handled, or processed .	. · Regular inspections .	. · Immediate response to any signs of leakage or contamination .
Construction Phase I = 4 L=4	Risk 9: Earthquake Risk	· Earthquake activities should be constantly monitored with sensitive earthquake sensors and monitoring systems placed in the project area.	· Liquefaction rates · Soil classification · earthquake design classes · settlement suitability data	· Ground survey · Structural strengthening · Earthquake sensors and monitoring systems	· Project Site and surrounding areas	Continuous monitoring with real-time updates. Continuous monitoring with	· Alarming system according to the earthquake intensity · Preventive systems that are

Phase Impact and Likelihood (1-5)	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
		· 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. .		· Seismic isolation technologies		real-time or periodic reviews. · Immediate reporting for any incidents and periodic documentation for routine checks	automatically activated according to vibration level detection · Ground movement sensor · Remote sensing technologies, such as energy distribution
Construction Phase I = 4 L=2	Risk 10: Possibility of floods due to excessive rainfall	· Utilize advanced weather forecasting services to receive timely and accurate information about potential heavy rainfall. Early warning systems should be in place to alert relevant authorities and the public.	· Monitor the intensity of rainfall, measured in millimeters per hour. This parameter helps assess how quickly precipitation is accumulating and if it reaches levels that may lead to flooding.	· Ground-based rain gauges, weather radar, and satellite precipitation estimates can be used. .	· Project Site and areas where the workforce is most active and where with heavy equipment use	· Regular and ongoing monitoring during periods of intense rainfall events	· detect changes in rainfall and water level with scales and indicators .
Construction Phase I = 2 L=2	Risk 11: Landslide Risk	· Implement slope stability monitoring using inclinometers or tilt sensors to detect any gradual changes in slope angles that may indicate instability. · Conduct regular site inspections to visually assess changes in topography, erosion, or vegetation cover that may indicate increased landslide	· Changes in slope angles by surveys · Visual observations of changes in topography, erosion, or vegetation cover.	· Utilize devices installed at key points on the slope to measure any deviation from the original slope angle · On site visual inspections	· At critical points along the slope, focusing on areas with identified landslide risk .	· Continuous monitoring with real time on slope stability conditions · Periodic site inspections, typically scheduled monthly or seasonally, depending on	· Exceeding acaptable frequency (due to visible signs of potential instability, such as cracks, soil erosion, or changes in vegetation health, or devices measurement)

Phase Impact and Likelihood (1-5)	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
						project characteristic and local conditions	· Occurrence of damages to slopes beyond permissible levels
Constructional Phase I = 4 L=1	Risk 13: 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, · The dedicated OHS Expert of the site supervision consultant company will perform regular inspections to authorities to identify potential hazards in the construction area and alleviate the physical and mental fatigue of workers during intensive Conducting emergency drills to ensure swift action in case of	· Workforce health and safety indicators, including accident rates, workplace stress levels, and health-related incidents/ near misses, injuries, and safety violations/near misses, fire and environmental incidents/near misses	· Data collection through incident reports, health assessments, safety inspections, accident investigations and surveys	· Project site and areas where the workforce is most active and where with heavy equipment use	· Regular and ongoing monitoring during periods of intense construction and operation activities	· Define thresholds for incident rates and workforce stress levels that warrant corrective action

Phase Impact and Likelihood (1-5)	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
		emergencies, and ensuring that all employees are familiar with evacuation procedures and emergency protocols, · Maintaining effective and transparent communication among employees, employers, and relevant stakeholders, establishing continuous communication channels for reporting any safety concerns or issues, · Monitoring and regulating working and break hours to prevent excessive fatigue, ensuring that employees take regular breaks.					

Table 8:Monitoring Plan for the Operation Phases of the Project

Phase Impact and Likelihood (1-5)	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
Operational Phase I = 1 L =1	Risk 3: Leakage of Contaminants into the Soil and Waste and Chemical Storage	· Analysis contaminants and waste in the soil of the project site regularly.	· Presence of oil, lubricants, or fuels in soil.	· Visual inspection, soil sampling, and analysis if neccessary. ·	· Areas near equipment refueling stations and vehicle storage. · Near waste and chemical storage areas	· Regular checks during refueling and maintenance	· Presence of contaminants
Operational Phase I = 1	Risk 5: Exhaust Emissions from	· Regular maintenance checks on vehicle and equipment exhaust systems.	· Exhaust emissions levels	· Periodic visual inspections	· High-traffic areas within the site ·	· After significant maintenance	· Visible dust accumulation or

Phase Impact and Likelihood (1-5)	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
L =1	Vehicle Traffic and Equipment	· Monitoring of air quality parameters using basic portable devices in critical areas. .	· PM (Particulate Matter) concentration	· Maintenance records and periodic exhaust testing		· Monthly or quarterly	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 · Simple water testing (pH, turbidity)	· Chemical storage and handling areas · Designated storage areas	· Weekly/monthly/ annually · 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=3	Risk 9: Earthquake Risk	· Earthquake activities should be constantly monitored with sensitive earthquake sensors and monitoring systems placed in the project area. · Continuous monitoring systems should be established for solar power panels, support structures, inverters and other structural elements. · Structural strengthening works should be carried out within a certain period in order to minimize the damages that may occur	· Liquefaction rates · Soil classification · earthquake design classes · settlement suitability data	· Ground survey · Structural strengthening · Earthquake sensors and monitoring systems · Seismic isolation technologies	· Project Site and surrounding areas	Continuous monitoring with real-time updates. Continuous monitoring with real-time or periodic reviews. · Immediate reporting for any incidents and periodic documentation for routine checks	· Alarming system according to the earthquake intensity · Preventive systems that are automatically activated according to vibration level detection · Ground movement sensor · Remote sensing technologies, such as energy distribution

Phase Impact and Likelihood (1-5)	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
		under the influence of earthquakes. .					
Operational Phase I=1 L=2	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	· Visual inspection	· Low-lying areas within the project site	· As needed	No blockages or debris in drainage pathways
Operational Phase I = 2 L=2	Risk 11: Landslide Risk	· Implement slope stability monitoring using inclinometers or tilt sensors to detect any gradual changes in slope angles that may indicate instability. · Conduct regular site inspections to visually assess changes in topography, erosion, or vegetation cover that may indicate increased landslide	· Changes in slope angles by surveys · Visual observations of changes in topography, erosion, or vegetation cover	· Utilize devices installed at key points on the slope to measure any deviation from the original slope angel · On site visual inspections	· At critical points along the slope, focusing on areas with identified landslide risk .	· Continuous monitoring with real time on slope stability conditions · Periodic site inspections, typically scheduled monthly or seasonally, depending on project characteristic and local conditions	· Exceeding acceptable frequency (due to visible signs of potential instability, such as cracks, soil erosion, or changes in vegetation health, or devices measurement) · Occurrence of damages to slopes beyond permissible levels
Operational Phase I=3 L=3	Risk 12: Reflection and Glare Effect	· Implement visual monitoring protocols to observe and record glare and reflection events. · Use specialized glare measurement tools to provide quantitative data.	· The intensity and frequency of glare and reflection from the solar panels and surrounding areas and the times of the day, seasons, or specific weather conditions when	· The intensity and frequency of glare and reflection from the solar panels and surrounding areas and the times of the day, seasons, or specific weather conditions when	· The intensity and frequency of glare and reflection from the solar panels and surrounding areas.	· The intensity and frequency of glare and reflection from the solar panels and surrounding areas.	· Define specific detection limits that indicate the threshold beyond which glare, and reflection effects become significant and

Phase Impact and Likelihood (1-5)	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
		· Conduct monitoring during different times of the day and under various weather conditions to capture variations.	glare and reflection effects are most pronounced.	glare and reflection effects are most pronounced.			may require corrective action.
Operational Phase I = 3 L=1	Risk 13: 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,	· Workforce health and safety indicators, including accident rates, workplace stress levels, and health-related incidents/ near misses, injuries, and safety violations/near misses, fire and environmental incidents/near misses	· Data collection through incident reports, health assessments, safety inspections, accident investigations and surveys	· Project site and areas where the workforce is most active and where with heavy equipment use	· Regular and ongoing monitoring during periods of intense construction and operation activities	· Define thresholds for incident rates and workforce stress levels that warrant corrective action

Phase Impact and Likelihood (1-5)	Risk Description	Monitoring Measures	Parameters	Method	Sampling Locations	Frequency	Detection Limits
		· Conducting emergency drills to ensure swift action in case of emergencies, and ensuring that all employees are familiar with evacuation procedures and emergency protocols, · Maintaining effective and transparent communication among employees, employers, and relevant stakeholders, establishing continuous communication channels for reporting any safety concerns or issues, · Monitoring and regulating working and break hours to prevent excessive fatigue, ensuring that employees take regular breaks.					
Operational Phase I = 2 L=2	Risk 14: Storage of Damaged or End of Lifecycle Panels	· Analysis of storage conditions and recycling processes regularly.	· Condition of stored panels	· Visual inspection	· Temporary storage areas on site	· Regular checks	· Presence of damaged panels beyond allowable limits

Measures for Institutuional Arrangements, Capacity Development, and Training

In the context of the Sub-Project aiming to increase renewable energy production in the Malazgirt 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 should be defined, and necessary adjustments should be made for the effective implementation of sub-projects.For the SPP project to be constructed in the Malazgirt district, the main actors are the World Bank, ILBANK, Malazgirt Municipality, Contractor, Supervision Consultant, and E&S Consultant.

Malazgirt Municipality

Renewable energy projects in Malazgirt 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 Malazgirt 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 9: Roles and Responsibilities for the Implementation of ESMP

Actor/Stakeholders	Responsibilities
Malazgirt Municipality	ESMP Management, Notifying ILBANK within 24 hours in case of any accident/incident Ensuring proper accident and incident reporting and investigation.Implementation of mitigation measures, Monitoring of environmental and social impacts, Establishment of Grievance Mechanism, Reporting on ESMP compliance and progress to ILBANK 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 and OHS measures during construction. Reporting all workplace accidents, near-misses, and occupational incidents to Malazgirt Municipality immediately. Notifying grievances/comments regarding worker management and working conditions (e.g. Worker rights, OHS, etc.) Ensuring all workers receive OHS training and wear PPE (Personal Protective Equipment). Maintaining records of all work-related accidents and implementing corrective actions Reporting environmental and social issues to Malazgirt Municipality. Ensuring compliance with ESMP requirements in all activities. Informing Malazgirt Municipality on construction activities (such as road closures and service interruptions).

Actor/Stakeholders	Responsibilities
	Managing environmental impacts like waste, noise, and pollution. Internal Reporting to Malazgirt Municipality on ESMP Implementation.
Supervision Consultant	Providing guidance on ESMP compliance. Monitoring contractor adherence to Occupational Health and Safety regulations. Provide necessary information to Malazgirt Municipality Assisting Malazgirt Municipality in managing and mitigating impacts. Monitoring the effectiveness of ESMP measures.
WB	Audit the Malazgirt 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 Malazgirt Municipality. It will provide a framework for all physical work 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 implementation of the ESMP, prepared in accordance with the requirements of the World Bank Safeguard Policies, will be publicly disclosed and will be the responsibility of Malazgirt Municipality. Malazgirt 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, Malazgirt 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 must be disclosed to all stakeholders and the public as part of environmental and social impact assessment studies.

It is expected that this ESMP will be completed by the Consultant before the project's implementation phase. 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.

Institutional Capacity Building and Training

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

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

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

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

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

Environmental and Social Monitoring Report

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

Long-term monitoring reports are used to objectively evaluate the environmental and social performance of the project and determine its sustainability, and monitoring reports will be prepared every three months. 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 Malazgirt 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

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 Malazgirt Municipality Solar Power Plant Project of this project, a comprehensive list of the internal and external stakeholders is given in Table 10.

Table 10: Comprehensive List of the Stakeholder Identified for the Project

Stakeholder Groups	Level of Interest	Level of Influence
Direct Stakeholders		
Directly Affected Communities		
Residents in the project area of influence	Moderate	Low
Vulnerable individuals/groups in the project area of influence	Low	Low
SuTP living in project areas of Muş	Low	Low
Formal or informal users of lands allocated to the project	Low	Low

Stakeholder Groups	Level of Interest	Level of Influence
Direct Stakeholders		
Public Administrations at National Level		
The Ministry of Environment, Urbanization and Climate Change.	Low	Low
Ministry of Energy and Natural Resources	High	High
Turkish Energy Market Regulatory Board	Low	Low
Ministry of Industry and Technology	Low	Low
General Directorate of Energy Affairs	High	High
General Directorate of ILBANK	High	High
Directorate General of Migration Management	Low	Low
Public Administrations/Authorities/Agencies at Provincial Level		
Malazgirt Municipality	High	High
Malazgirt Municipality	Medium	Medium
Provincial Directorate of Environment, Urbanization and Climate Change	Moderate	High
Mukhtar of Saltukgazi Neighborhood	Moderate	High
Vedaş 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 Malazgirt	Low	Moderate
Provincial Directorate of Disaster and Emergency	Low	Low
Provincial Directorate of Health	Low	Low
T.C. DAKA Development Agency	Low	Low
Turkish Employment Agency (IS-KUR) –Muş 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
Muş Alparslan University	Low	Low

The types and causes of exposures and how the above-mentioned stakeholder groups are affected (positive/negative) are given in Table 11.

Table 11: 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.Risk of accidents and delays in local transportation.
OHS and Community H&S	Negative	Potential risks include water pollution (if mismanaged), air emissions, noise, and visual pollution. Workplace safety hazards may arise during construction..Risks related to unauthorized access to the construction site, potential accidents,

Social Component	Type of Potential Impact (Positive/Negative)	Potential Impact Definition
		and damage to nearby assets during construction activities.

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 12.

Table 12: Potential Vulnerable/Disadvantaged Groups and their needs

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

Stakeholder Engagement Plan

Stakeholder Engagement is a control mechanism that ensures the implementation of key principles during the project. The engagement activities will not be scheduled in a manner due to the small capacity of solar power plant project. To maximize stakeholder engagement, it prevents disruption of local stakeholders' daily work and regulates the timing and number of engagement activities. Accordingly, recording the findings and feedback together in accordance with all engagement activities, sharing them with the responsible parties, and following the process are essential. Also, engagement activities need to be culturally appropriate, provide equal access to relevant stakeholders, and enable their feedback.

Grievance Mechanism

Malazgirt 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.
At the earliest convenience, the stakeholders will have access to Malazgirt 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) (0436 511 20 71)
- Personal visit to Malazgirt Municipality and Contractor head office/branches
- Grievance boxes (installed at the Malazgirt Municipality Units / Contractor)
- Relevant public administrations (district governorship, municipality, headmen)
- Email (bilgi@malazgirt.bel.tr)
- Address: Şekerbulak, Cumhuriyet Street. No:1, 49400 Malazgirt/Muş
- Meetings
- Staff and local communication desk of Malazgirt Municipality / Contractor
- By written petition to Malazgirt 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 Malazgirt Municipality responsibility will be immediately communicated with PIU by Contractor and handled by the PIU accordingly. 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 13.

Table 13:Grievance Mechanism Flowchart

Stage of GM	Required Action
Grievance submission	Receiving the grievance by any above-mentioned communication channel. (Following to receive more sensitive grievances i.e., SEA/SH, child abuse or abuse, necessary action will be taken within 48 hours. For such cases at the workplaces, the complaint will be directed by the GM focal point (based in ILBANK headquarter) to relevant legal authorities/service providers such as Ministry of Family and Social Services and Prosecutors Office.)
Grievance registration	Grievance Form and Grievance Register Table are used during registration process. After grievance registration, feedback will be sent to the Complainant for the purpose of confirmation within two (2) days. Anonymous registration will be conducted if a Complainant requests that complaint of whom is handled anonymously.
Grievance assessment	Grievances are assessed within 10 working days with the clarification of the fact that relevant grievance is compliance with admissibility criteria. The Complainant will be informed appropriately in case of invalid grievances.
Responses to the grievances	According to the grievance type, consultation with stakeholders in question can be conducted on site. After grievance assessment, grievance will be responded appropriately via previously mentioned communication channels. Application to ILBANK or Court of First Instance is also available for Complainants if a resolution cannot be figured out for whose grievances.
Grievance closure	As long as alternative agreement is not conducted, grievance of Complainant is closed within fifteen (15) Business Days as of submission date and the Grievance Close Out Form is filled accordingly. In the case of grievances cannot be closed within fifteen (15) Business Days, it is ensured that well documented mitigatory circumstances related to which are reported.

Stage of GM	Required Action
	Regarding the anonymous grievances, outcome of GM process and associated taken actions should be declared on Malazgirt 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 Malazgirt" Municipality and information to ILBANK accordingly -Communication of grievance response to Complainant by the Malazgirt 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 Malazgirt 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

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

Malazgirt 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 14.

Table 14: Grievance Mechanism Monitoring Framework

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

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

Public Consultation Meeting

The draft version of this ESMP, approved by ILBANK and the World Bank, was shared with the district residents at a public participation meeting held at the Malazgirt Municipality Meeting Hall on May 12, 2025. The Ardea Project Consultancy team and the Mayor of Malazgirt Municipality presented the project's purpose, expected social, environmental, and ecological impacts, measures to prevent or reduce the impacts, monitoring and management measures, the path to be followed for complaints or suggestions, and the method of handling the complaint to the participants.

The Public Participation Meeting was held with the participation of the district residents and the Malazgirt Municipality team. At the end of the presentation, the participants asked questions about the possible negative impacts that may occur during the construction of the project, the cost of the project, and the contributions it will provide to the district. Requests and suggestions were also received from them. It was conveyed to the participants that the construction works will start after the contractor is determined by the project owner, and the construction is planned to last approximately 9 months. The minutes of the meeting attended by 43 people are given in Annex 12.

7. Annexes

Annex 1: Land Register Document of SPP Project Area

BU BELGE TOPLAM 5 SAYFADAN OLUŞMAKTADIR BİLGİ AMAÇLIDIR.

Tarih: 4-7-2023-16:47

webtapu
tapunun kısayolu

Kaydı Oluşturan: MUSTAFA ERDEM (Malazgirt Belediyesi (Muş))

Tapu Kaydı (Hepsi)

TAPU KAYIT BİLGİSİ

Zemin Tipi:	AnaTasinmaz
Taşınmaz Kimlik No:	33679185
İl/İlçe:	MUŞ/MALAZGİRT
Kurum Adı:	Malazgirt
Mahalle/Köy Adı:	SALTUKGAZİ Mah.
Mevkii:	KIZILBAŞKAN
Cilt/Sayfa No:	8/752
Kayıt Durum:	Aktif

Ada/Parsel:	302/16
AT Yüzölçüm(m2):	197841.42
Bağımsız Bölüm Nitelik:	
Bağımsız Bölüm Brüt YüzÖlçümü:	
Bağımsız Bölüm Net YüzÖlçümü:	
Blok/Kat/Giriş/BBNo:	
Arsa Pay/Payda:	
Ana Taşınmaz Nitelik:	SULAMA KANALI VE ARSASI

MÜLKİYET BİLGİLERİ

(Hisse) Sistem No	Malik	El Birliği No	Hisse Pay/ Payda	Metrekare	Toplam Metrekare	Edinme Sebebi-Tarih-Yevmiye	Terkin Sebebi-Tarih-Yevmiye
82420414	(SN:2860009) MALAZGİRT BELEDİYESİ VKN:1620050465	-	1/1	197841.42	197841.42	Tesis Kadastrosu 25-07-1996 0	-

MÜLKİYETE AİT ŞERH BEYAN İRTİFAK BİLGİLERİ

1 / 5

Annex 2: Official Decision of Muş Provincial Directorate of Agriculture and Forest

T.C.
MUŞ VALİLİĞİ
İl Tarım ve Orman Müdürlüğü

GIDANI KORU
SOFRANA SAHİP ÇIK

Sayı : E-23178443-230.04.02-1286727 26.04.2021
Konu : Tarım Dışı Amaçla Kullanım İzinleri

MALAZGİRT BELEDİYE BAŞKANLIĞINA

İlgi : 23.03.2021 tarihli ve E-13594140-622.03-820 sayılı yazınız.

İlgi yazı ile İlimiz Malazgirt İlçesi Saltukgazi Mahallesi sınırları dahilinde 302 ada 16 nolu taşınmaz üzerinde GES (güneş enerji santaralı) yapılması amacıyla Kurum görüşümüz talep edilmektedir.

İlgi yazı ekinde gönderilen 302/16 nolu taşınmazın tapu kaydında 25.07.1996 tarihinde tesis kadastrosu yapıldığı görülmüştür.

İlgi yazıda niteliği sulama kanalı ve arsası olan ana taşınmazın edinme sebebi tesis kadstrosu olarak belirtilmiş olup, tescilinden itibaren Malazgirti Belediyesine ait olduğu belirtilmektedir.

Yukarıda yapılan tespit ve açıklama doğrultusunda talep, 5403 Sayılı Toprak Koruma ve Arazi Kullanım Kanunu ve 4342 sayılı Mera Kanunu kapsamında yapılan değerlendirmelerde; 302/16 nolu taşınmaz üzerinde Malazgirt Belediyesi tarafından Belediyenin öz tüketiminde kullanmak amacıyla GES (güneş enerji santaralı) yapılması konusunda kamu yararı ve kamu yatırımı olması olduğu düşünülerek yatırıma konu taşınmaz yukarıda belirtilen kanunlar kapsamında olan yerlerden olmadığı hususunda;

Bilgilerinizi rica ederim.

Alay YAZICI
Vali a.
Vali Yardımcısı

Bu belge, güvenli elektronik imza ile imzalanmıştır.
Doğrulama Kodu: BB619C85-526F-47AD-89AA-5B03E8A21B97 Doğrulama Adresi: https://www.turkiye.gov.tr/tarim-ebys

Sunay Mah.Bitlis Yolu Üzeri No : 4 Merkez / MUŞ
Tel: (0436) 212 37 90 Faks: (0436)212 20 55
E-Posta: mus@tarim.gov.tr Kep: tarimveormanbakanligi@hs01.kep.tr
Bilgi için:Veysel ARSLAN
Mühendis
Telefon No:(436) 212 37 90

Annex 3:Official Decision of Muş Provincial Directorate of Environment and Urbanization for EIA Is Not Necessary

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

T.C.
MUŞ VALİLİĞİ
ÇEVRE ve ŞEHİRCİLİK İL MÜDÜRLÜĞÜ

Karar Tarihi : 10-06-2021
Karar No : 78778103 220-02 E-202152

ÇEVRESEL ETKİ DEĞERLENDİRME BELGESİ

25.11.2014 tarih ve 29186 sayılı Resmi Gazete'de yayımlanarak yürürlüğe giren Çevresel Etki Değerlendirmesi Yönetmeliği'nin Ek-II listesinde yer alan '3 MWe GES' projesi ile ilgili olarak inceleme-değerlendirme yapılmış ve Proje Tanıtım Dosyasında çevresel etkilere karsı alınması öngörülen önlemler yeterli görülmüştür. Ayrıca ÇED Raporu hazırlanmasına gerek bulunmadığı tespit edilmiş olup, söz konusu projeye ÇED Yönetmeliğinin 17. Maddesi gereğince Valiliğimizce "Çevresel Etki Değerlendirmesi Gerekli Değildir" kararı verilmiştir.

Muhammet Fatih DEMİREL
Vali a.
Vali Yardımcısı

Proje Sahibi : Malazgirt Belediye Başkanlığı
Proje Yeri : Muş İli, Malazgirt İlçesi, Saltukgazi Mah. Kızılbaşkan Mevkii, 302 Ada 16 Parsel
Kapasite : 3,0 MWe

Annex 4:Official Decision of VEDAŞ Electricity Distribution Company

VEDAŞ
Vangölü Elektrik Dağıtım A.Ş.

Dağıtım Şirket Müdürlüğü
Proje Tesis Grup Müdürlüğü

-115004 19/08/2021

Sayı :122.03 **Tarih:**
Konu :Malazgirt Belediyesi GES Bağlantı Görüşü Çağrı Mektubu

T.C.
MALAZGİRT BELEDİYE BAŞKANLIĞI
Fen İşleri Müdürlüğü'ne
Mengüçgazi Mah. Şehit Ast. Ömer Halis Demir Cad. NO:249400 MALAZGİRT/MUŞ

İlgi : 26/07/2021 tarihli ve 1875 sayılı yazı,

İlgi yazınız ile; 12.05.2019 tarih ve 30772 sayılı Resmi Gazetede yayımlanan Elektrik Piyasasında Lisanssız Elektrik Üretimine İlişkin Yönetmelik kapsamında **3000 kW** kurulu gücünde kurmayı planladığınız güneş enerjisine dayalı lisanssız elektrik üretim tesisi için bağlantı görüşü ve çağrı mektubu talep edilmektedir.

MALAZGİRT BELEDİYESİ GES Lisanssız Elektrik Üretim Tesisine ait sistem bağlantısına ilişkin hususlar aşağıda belirtilmiştir.

İli	: Muş	İlçesi	: Malazgirt / Saltukgazi Mah.
Ada	: 302	Parsel	: 16
Gücü	: 3000 kWe	Kaynak Türü	: Güneş (Arazi)

Bağlantı Şekli : OG

Tüketim Abone No:

9307018-9307019-9307020-9307021-9307022-9307023-9307024-9307025-9307026-9307027-9313531-9305798-9350002-9305844-9305841-9312410-9312406-9303477-9303499-9313521

Yukarıda bilgileri yazılı lisanssız elektrik üretim tesisi ile ilgili olarak **26.07.2021** tarih ve **165286** sayı ile yapmış olduğunuz bağlantı başvurunuz Komisyon tarafından değerlendirilerek ***"Elektrik Piyasasında Lisanssız Elektrik Üretim Yönetmeliğinin 30. maddesi kapsamında"*** kabul edilmiş olup;

Adilcevaz TM / F3 Malazgirt Fideri / Malazgirt DM / Aktuzla 3/0 ENH çıkışı üzerinde bulunan CBS GIS ID (10489421) nolu 18/7 beton direkten branşman alınarak uygun kesitli havai veya yeraltı kablo ile üretim santralinin trafo kabininin enerjilendirilmesi ve yönlü korumanın sağlanarak şebekeye bağlantısı uygun değerlendirilmiştir. Ayrıca bu proje kapsamında tüketim tesisi abonelerinden kesik/kapalı/tüketimi olmayan ve sayacı sökülen abonelerin geçici kabulden önce aktif hale getirilmesi gerekmektedir.

GENEL HÜKÜMLER

1. Mülkiyet ve işletme sınırları, bağlantı anlaşmasında belirlenecektir.

Şirket Merkezi Adres : Süphan Mahallesi Sümerbank Caddesi Vedaş Sitesi B Blok No :9 Edremit / VAN
Mersis:0922054792200024 VAN V.D:9220547922 Ticaret Sicil No : VAN/7686
Tel: 850 3149400 Faks: 850 2116502
Kayıtlı e-posta adresimiz: vangoluelektrikdagitim@hs03.kep.tr
www.vedas.com.tr
Ayrıntılı Bilgi: MERVE OZDOGAN

2. Ortak yapılacak tesisler çağrı mektubunun oluşturulduğu tarih itibarıyla mevzuat hükümlerince değerlendirilecektir.
3. Kumanda panosu üzerinde "hat enerjili" sinyali oluşturulacak ve ayrıca hücre kapısına "hat enerjili" lambası tesis edilecektir.
4. Hatta gerilim varken, hat kesicisi ile toprak bıçağının kapatılmasına kilitleme konulacak ve hücre kapısının açılması elektrik kilitleme ile engellenecektir.
5. Yeraltı kablolarının kazı ve kanal işleri için gerekli müsaadeler ve çalışmalar talep sahibi tarafından yapılacak olup dağıtım şirketinin bilgisi ve kontrolü dahilinde yapılacaktır.
6. Her türlü hukuki ve fenni mesuliyetler, tesisinizin geçtiği bölgedeki arazi sorunları, YG ve AG hatlarının Orman arazisi, Sit alanı, Demiryolu, Karayolu, DSİ kanal geçişlerindeki alınması gereken izinler ve PTT hatları ile paralellik ve kesişmelerindeki sorumluluk proje müellifine ve tesis sahibine ait olacaktır.
7. Dağıtım şirketinin bilgisi dışında üretim tesisinin dağıtım sistemine bağlantısı yapılmayacaktır.
8. Dağıtım sistemine AG ve YG seviyesinden bağlanacak üretim tesislerinin yapımı, işletmeye alınması, işletilmesi ve iş güvenliği sorumluluğu üretim yapan gerçek veya tüzel kişiye aittir. Gerçek veya tüzel kişi bu kapsamda;
   a. AG seviyesinden yapılacak bağlantılar için, üretim tesisinin geçici kabulü yapılıncaya kadar,
   b. YG seviyesinden yapılacak bağlantılar için, üretim tesisinin projelendirilmesi aşamasından başlamak üzere işletme süresince, ilgili teknik mevzuata göre görev yapacak yetkili işletme sorumlusu(elektrik mühendisi) istihdam etmek ve/veya bu konuda gerekli hizmetleri almakla yükümlüdür.
9. Üretim Tesislerinde kullanılacak invertör veya jeneratörün çalışma ve şebekeye bağlantı durumu Dağıtım Şirketi tarafından uzaktan izlenebilir; ilaveten aktif ve reaktif güç, güç faktörü, akım, gerilim, frekans değerleri alınabilir ve kontrol edilebilir olacak şekilde tesis edilecektir.
10. Tesislerde kullanılacak teçhizatlar TS, CENELEC, IEC, EN ve diğer uluslararası standartlara uygun olacaktır.
11. Tüm tesis ve uygulamalar yürürlükteki mevzuatlar doğrultusunda yapılacaktır.
12. Yönetmelik kapsamında kurulacak üretim tesislerinde kullanılacak YEK Kanununa ekli II sayılı Cetvelde adı geçen mekanik ve/veya elektro-mekanik aksamdan her birinin, ithalat tarihi baz alınarak, en fazla önceki beş takvim yılında üretilmiş olması zorunludur.
13. Üretim tesisi, sayacın bulunduğu nokta itibarıyla dağıtım sisteminin gerilim seviyesi ve frekans düzeyi (50 Hz) ile uyumlu olmalı ve akım ve gerilim harmonikleri ile fliker etkisi bakımından diğer dağıtım sistemi kullanıcılarına olumsuz etki yapmamalıdır.
14. Üretim tesisi, şebeke kaybı (Loss of Mains) veya dağıtım sisteminde bir kısa devre arızası oluşması durumunda ve olağandışı şebeke koşullarının varlığında dağıtım sistemiyle bağlantısı kesilecek ve dağıtım sistemine kesinlikle enerji vermeyecek şekilde tasarlanır, kurulur ve işletilir.
15. Üretim tesisinin dağıtım sistemine bağlantısının, dağıtım sisteminin topraklama sistemine ve ilgili teknik mevzuata uygun olarak yapılması şarttır.
16. Dağıtım sistemine bağlanmış bir üretim tesisi ve/veya teçhizatı ayarlarında herhangi bir değişiklik ancak dağıtım şirketinin onayı ile imalatçı talimatlarına uygun olarak yapılabilir.
17. Bağlantı noktası itibarıyla, üretim tesisinin kısa devre akımına katkısı ile birlikte oluşabilecek kısa devre akımı, dağıtım sistemi teçhizatının kısa devre akımı dayanma değerini aşamaz.
18. Can ve mal emniyetinin sağlanması amacıyla dağıtım şebekesinin, enerji kesintisi ve diğer durumlar sebebiyle normal çalışma sınırlarının dışında olması halinde Tablo 1 ve Tablo 2'de verilen süreler içinde üretim tesisi dağıtım sisteminden otomatik olarak ayrılmalıdır.

19. Elektrik dağıtım şebekesine bağlı/bağlanacak her bir üretim tesisinde üretilecek elektriğin; harmonik, gerilim dalgalanması ve fliker şiddeti karakteristikleri Faz akımı 16 A'den büyük olan (>11 kW) ve dağıtım sistemine AG seviyesinden bağlanacak üretim tesislerinin şebekeye bağlantısı CLC/FprTS 50549-1:2011 standardına ve bu standartta verilen diğer referans standartlarına uygun olacaktır. Arayüz Koruması kapsamında en asgari koruma röleleri; frekans değişim oranı rölesi (ANSI 81R), düşük ve yüksek frekans rölesi (81U, 81O), düşük ve yüksek gerilim röleleri (ANSI 27, 59) ile vektör kayması rölesi (ANSI 78) korumalarını içerecek türde seçilecektir.
20. Geçici kabul öncesi test çalışmaları sırasında teçhizatta meydana gelebilecek hasarlardan ve enerjilenecek tesisler ile (havai hat v.b.) ilgili can ve mal emniyetinden tesis sahibi sorumludur.
21. Geçici kabul öncesi ve geçici kabul işlemleri sürecinde test işlemlerinde dağıtım sistemine verilen elektrik enerjisinden dolayı üretici hiç bir şekilde ücret talep etmez.
22. Yapılacak testler ve süreleri dağıtım şirketine tesis sahibince bildirilir.
23. Yönetmelikte atıfta bulunulan standartların en son baskılarına göre işlem tesis edilecektir.
24. Evirici ile bağlanacak üretim tesislerinin, tasarımı sebebiyle dağıtım sistemine enjekte ettiği doğru akım miktarı üretim tesisinin anma akımının binde beşini geçemez.
25. İşletme sorumlusu, üretim tesisi ve mütemmim cüzlerinin ilgili mevzuat ve ilgili teknik mevzuata uygun olarak teçhiz edilmesi ve işletilmesinden ve söz konusu mevzuatlara aykırılıklardan kaynaklanacak zararlardan işletme sahibi ile beraber müteselsilen sorumludur.
26. Bağlantı anlaşmasında belirlenecek yere ilgili mevzuatta uzlaştırma mekanizmasının gerektirdiği haberleşmeyi sağlayabilecek çift yönlü elektronik sayaç takılacaktır. Ayrıca; Üretim ve tüketim tesislerinin aynı yerde bulunması halinde üretim tarafına, üretim tesisinin tüketim tesisiyle aynı yerde bulunmaması halinde tüketim tesisi için haberleşmeyi sağlayabilecek tek yönlü elektronik sayaç takılmalıdır.

UZAKTAN İZLEME VE KONTROL SİSTEMİ

1. Kurulacak olan Üretim tesisi uzaktan izleme ve kontrol sisteminin kurulması için uygun olmalıdır.
2. Veri iletişimine ilişkin masraflar ilgili mevzuata göre tahakkuk ettirilir.
3. Şebeke işletmecisinin kullanmış olduğu SCADA/DMS/OMS altyapısına uygun cihazların (Röle, RTU, modem, switch vb.) temini, tesisi, işletmesi ve bakımı üreticiye ait olacaktır.

ÜRETİM SANTRALLERİNİN VANGÖLÜ EDAŞ SCADA SİSTEMİNE DAHİL EDİLMESİ

Üretim Tesisinin, Vangölü EDAŞ SCADA sistemine dahil edilmesi için gerekli olan ekipmanlara ait özellikler, sinyal listeleri ve iletişim altyapısına ait mimari Vangölü Elektrik Dağıtım A.Ş tarafından paylaşılacak olan "ÜRETİM TESİSLERİNİN VANGÖLÜ EDAS SCADA SİSTEMİNE DAHİL EDİLMESİ TEKNİK ŞARTNAMESİNE" uygun olacak ve Vangölü EDAŞ SCADA sistemine entegrasyonu sağlanmadan üretim santralinin geçici kabulü yapılmayacaktır.

OSOS

Elektrik Piyasasında Lisanssız Elektrik Üretim Yönetmeliği uyarınca tesis edilmesi öngörülen üretim sayaçlara OSOS kurulumu yapılması zorunludur.

Haberleşme donanımı ve OSOS ile iletişim kurulması için gerekli teçhizatın ve altyapının temini ilgili Şirketimiz Müşterileriler Müdürlüğü (OSOS) biriminden görüş alınarak işlem tesis edilmelidir.
Üretim tesisi üretime başlamadan önce OSOS kurulumunun tamamlanması gerekmektedir.

KORUMA SİSTEMİ

1. Üretim tesisinin topraklama sistemi dağıtım şebekesinin topraklama sistemine uygun olmalı ve Elektrik Tesislerinde Topraklamalar Yönetmeliğinde belirtilen şartlar içinde yapılmalıdır.
2. Üretim tesisine ait bağlantı noktasında koruma sistemlerinin ayarları aşağıdaki tablolarda verilen sınır değerlere uygun olmalıdır. Bu değerler test raporlarıyla doğrulanmalıdır.

Tablo–1: YG seviyesinden bağlanan üretim tesisleri için koruma ayarı sınır değerleri;

Parametre	Temizleme Süresi	Açma Ayarı [a]
Aşırı Gerilim (ANSI 59) –Kademe 1	0,2 s	V≥ 120
Aşırı Gerilim (ANSI 59) – Kademe 2	1,0 s	110 < V < 120
Düşük Gerilim – Kademe 1 (ANSI 27)	2,0 s	50 ≤ V < 88
Düşük Gerilim – Kademe 2 (ANSI 27)	0,2 s	V< 50
Aşırı Frekans (ANSI 81/O)	0,2 s	51 Hz
Düşük Frekans (ANSI 81/U)	0,2 s	47 Hz
Düşük Frekans (ANSI 81/U)	Dağıtım şirketi görüşüne uygun olarak 0,2–300 sn aralığında ayarlanabilir.	Dağıtım şirketi görüşüne uygun olarak 47– 49,5 Hz aralığında ayarlanabilir.
Vektör Kayması [c]	0,2 s	(6°…9°) [b]
Frekans değişim Oranı (ROCOF) (df/dt) (ANSI 81R) [c]	0,2 s	(0,5…2,5) [b] Hz/s
Artık Gerilim (ANSI 59N) [d]	d	d

[a] Gerilim ayarları anma gerilimin yüzdesi olarak verilmiştir
[b] Verilen aralıkta uygun değer dağıtım şirketi tarafından ayarlanabilecektir.
[c] Dağıtım şirketinin yapacağı etüt çalışmasına göre dağıtım şirketince gerek görülmesi halinde bu korumalardan birisi istenilebilir.
[d] Topraklama sistemine bağlı olarak gerektiği durumda dağıtım şirketi tarafından istenebilir. Statik jeneratörler için uygulanabilir değildir. Bu koruma talep edildiğine temizleme süresi ve açma ayar değerleri dağıtım şirketi tarafından belirlenir.

Tablo–2: AG seviyesinden bağlanan üretim tesisleri için koruma ayarı sınır değerleri;

Parametre	En Uzun Temizleme Süresi	Açma Ayarı
Aşırı Gerilim (ANSI 59)	0,2 s	230 V + %15
Düşük Gerilim – Kademe 1 (ANSI 27)	1,5 s	230 V – (%15…%20) b
Düşük Gerilim – Kademe 2 (ANSI 27)	0,2 s	230 V – (%50…%75) b
Aşırı Frekans (ANSI 81/O)	0,5 s	51 Hz
Düşük Frekans (ANSI 81/U)	0,5 s	47 Hz
Vektör Kayması c	0,2 s	(6o…9o) b
ROCOF (df/dt) (ANSI 81R) c	0,2 s	(1…2,5) b Hz/s

a) Arızayı tespit ve kesici açma süresi dâhildir.
b) Verilen aralıkta uygun değer dağıtım şirketi tarafından istenebilir ve ayarlanabilir.
c) Jeneratör, adalanma durumunda çalışmaya elverişli teknik özellikte ise ilave olarak bu koruma rölelerinden en az biri kullanılmalıdır.

Not: Gerilim değerleri etkin (r.m.s) d-eğerlerdir ve faz-nötr gerilimi olarak verilmiştir.

VEDAŞ
Vangölü Elektrik Dağıtım A.Ş.

Yukarda bahsi geçmeyen ancak başta **"ELEKTRİK PİYASASINDA LİSANSSIZ ELEKTRİK ÜRETİM YÖNETMELİĞİ"** olmak üzere ilgili diğer mevzuat gerekleri yerine getirilmelidir.

Elektrik Piyasasında Lisanssız Elektrik Üretim Yönetmeliği'nin 17. Maddesinde;
(1) *Kendisine bağlantı anlaşmasına çağrı mektubu tebliğ edilenlere, bağlantı anlaşmasına çağrı mektubunun tebliğ tarihinden itibaren yüz seksen gün süre verilir. Bağlantı anlaşmasına çağrı mektubu sahipleri söz konusu sürenin ilk doksan günü içerisinde üretim tesisi ve varsa bağlantı hattı projesini Bakanlık veya Bakanlığın yetki verdiği kurum ve/veya tüzel kişilerin onayına sunar. Doksan gün içerisinde proje onayı için başvuruda bulunmayan gerçek veya tüzel kişilerin bağlantı başvuruları geçersiz sayılarak sunmuş oldukları belgeler kendilerine iade edilir.*

(2) *İlgili gerçek veya tüzel kişilerin aşağıdaki belgeleri ilgili şebeke işletmecisine birinci fıkrada belirtilen süre içerisinde eksiksiz ve usulüne uygun olarak sunmaları halinde, ilgili şebeke işletmecisi kendileriyle otuz gün içerisinde bağlantı anlaşması imzalamakla yükümlüdür:*

a) Üretim tesisinin inşaatına başlanabilmesi için ilgili teknik mevzuat çerçevesinde alınması gereken proje onayı.
b) Hidrolik kaynaklara dayalı başvurularda su kullanım hakkı anlaşması.

(3) *İkinci fıkrada belirlenen belgeleri zamanında edinemeyen başvuru sahiplerine, birinci fıkrada belirlenen süreler içerisinde yazılı olarak ilgili şebeke işletmecisine başvurması ve bu başvuruda üretim tesisi ve varsa bağlantı hattı projesini Bakanlık veya Bakanlığın yetki verdiği kurum ve/veya tüzel kişiye birinci fıkrada tanımlanan süre içerisinde sunduğunu belgelerle tevsik etmesi şartıyla, ilgili şebeke işletmecisi tarafından yüz seksen gün ilave süre verilir.*

(4) *Birinci fıkrada tanımlanan süreler içerisinde veya kendisine üçüncü fıkra kapsamında ek süre verilen başvuru sahiplerinin, verilen ek süre sonuna kadar söz konusu belgeleri ilgili şebeke işletmecisine sunamamaları halinde ilgili gerçek veya tüzel kişiler, bağlantı anlaşması imzalama hakkını kaybeder ve mevcut belgeleri kendilerine iade edilir.*
hükümleri yer almaktadır.

Çağrı mektubuna konu tesis sürecinin mezkur hükümler çerçevesinde ikinci fıkrada belirtilen belgelerin süresi içerisinde ve eksiksiz olarak sunulmasına müteakip Şirketimiz ile tarafınız arasında Dağıtım Sistemine Bağlantı Anlaşması imzalanacaktır.

Bilgilerinizi ve gereğini arz ederiz.

E-İmzalı
Muharrem KALKAN
Proje Tesis Grup Müdürü

E-İmzalı
Emrullah OKUDUCU
Dağıtım Şirket Müdürü

Ek :TEK HAT ŞEMASI

Şirket Merkezi Adres : Süphan Mahallesi Sümerbank Caddesi Vedaş Sitesi B Blok No :9 Edremit / VAN
Mersis:0922054792200024 VAN V.D:9220547922 Ticaret Sicil No : VAN/7686
Tel: 850 3149400 Faks: 850 2116502
Kayıtlı e-posta adresimiz: vangoluelektrikdagitim@hs03.kep.tr
www.vedas.com.tr
Ayrıntılı Bilgi: MERVE OZDOGAN


MALAZGİRT BELEDİYESİ GES BAĞLANTI PLANI
MALAZGİRT DM
ADİLCEVAZ TM
154 / 31, 5 kV
44,5 km
477 MCM
AKTUZLA ENH
2,8 km
3/0 AWG
0,2 km
3/0
CBS GIS ID
(10489421)
0,2 km
3/0
DEVAM EDEN HAT
MALAZGİRT
BELEDİYESİ
GES
3000 kW

Annex 5:Official Decision of Social Security Institution Presidency Muş Social Security Provincial Directorate

T.C.
SOSYAL GÜVENLİK KURUMU BAŞKANLIĞI
Muş Sosyal Güvenlik İl Müdürlüğü

Sayı : E-22313093-641.03.03-25286698 27.05.2021
Konu : Saltukgazi Mah 302 Ada 16 parsel taşınmaz Hk.

MALAZGİRT BELEDİYE BAŞKANLIĞI
Malazgirt/MUŞ

İlgi: 24.05.2021 tarih 1330 sayılı yazınız

İlgide kayıtlı yazınız da sorulduğu üzere, Belediyenize ait Saltukgazi Mah 302 Ada 16 parsel taşınmaz üzerinde haczimizin olduğu ve taşınmaz üzerinde Güneş Enerji Santrali kurulması Planı nedeniyle Müdürlüğümüze herhangi bir sakınca olup olmadığına dair görüş sorulmaktadır;

Müdürlüğümüzce yapılan değerlendirmeler neticesinde **Saltukgazi Mah 302 Ada 16 parsel** taşınmaz üzerinde Güneş Enerji Santralinin kurulmasında haczimizin baki kalması şartı ile herhangi bir sakınca olmadığı hususunu;

Gereğini bilgilerinize arz ederim.

Gökmen BURKAZ
Sosyal Güvenlik İl Müdür Yardımcısı V.

Bu belge, güvenli elektronik imza ile imzalanmıştır.
Belge Doğrulama Kodu: 07f2-b312-3d67-ad82-659b Belge Doğrulama Adresi: https://uyg.sgk.gov.tr/DYSEvrakDogrulamaWEB

Saray Mahallesi Sık Cad. 36. Sokak No:61 Merkez/Muş
Telefon No: 0 436 212 13 54 2016 Faks No: 0 436 212 16 27
e-Posta: mussgim@sgk.gov.tr İnternet Adresi: www.sgk.gov.tr
Kep Adres: sgk@hs01.kep.tr

Bilgi için: Sinan ÇİMEN
Memur (s)
Telefon No: 0 436 212 13 54 2016

Annex 6:Official Decision of Muş Governorship Provincial Culture and Tourism Directorate Cultural Affairs Branch

T.C.
MUŞ VALİLİĞİ
İl Kültür ve Turizm Müdürlüğü
Kültür İşleri Şubesi

Sayı : E-82063537-168.01.01-1366323 03.05.2021

Konu : Muş İli, Malazgirt İlçesi, Saltukgazi Mah.302 Ada, 16 Parsel, GES

MALAZGİRT BELEDİYE BAŞKANLIĞINA
(Fen İşleri Müdürlüğü)

İlgi : a) 27.04.2021 tarihli ve 1134 sayılı yazınız.
b) Van Kültür Varlılarını Koruma Bölge Kurulu Müdürlüğü'nün30.04.2021 tarihli 1360320 sayılı yazısı.

İlgi (a) yazınızda; Belediyenizce Malazgirt İlçesi, Saltukgazi Mahallesi, 302 ada16 parsel GES kurulması işlemine esas olmak üzere, 2863 ve 2634 sayılı Kanunlar kapsamına girip girmediği ile ilgili Müdürlüğümüz görüşü istenmektedir. Ancak, Van Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü ilgi (b) yazısıyla cevap verilmiştir.

Bilgilerinize rica ederim.

Mehmet ŞENGÜL
İl Kültür ve Turizm Müdürü

Annex 7:Official Decision of Ministry of Culture and Tourism General Directorate of Cultural Heritage and Museums Van Cultural Heritage Preservation Regional Board Directorate

T.C.
KÜLTÜR VE TURİZM BAKANLIĞI
Kültür Varlıkları ve Müzeler Genel Müdürlüğü
Van Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü

PATARA

Sayı : E-80401175-168.01.13-1360320 30.04.2021

Konu : Muş İli, Malazgirt İlçesi, Saltukgazi Mahallesi, 302 Ada, 16 Parael, GES

MALAZGİRT BELEDİYE BAŞKANLIĞINA
(Fen İşleri Müdürlüğü)

İlgi : 27.04.2021 tarihli ve 13594140-150.01-1131 sayılı yazınız.

Muş İli, Malazgirt İlçesi, Saltukgazi Mahallesi, 302 ada, 16 parsel numaralı taşınmazda GES kurulmasına yönelik 2863 sayılı Kültür ve Tabiat Varlıklarını Koruma Kanunu'nun kapsamında olup olmadığına ilişkin Müdürlük görüşümüzün bildirilmesine dair ilgi yazınız incelenmiştir.

Konuya ilişkin olarak Müdürlüğümüz arşiv kayıtlarında yapılan inceleme sonucunda, söz konusu taşınmazın Kurumumuz yetki ve sorumluluk alanında kalan, bugüne kadar tespit ve tescili tamamlanmış herhangi bir sit veya taşınmaz kültür varlığı kaydının olmadığı ve korunma alanı içerisinde kalmadığı anlaşılmış olup; taşınmazda GES kurulmasında Müdürlüğümüzce herhangi bir sakınca bulunmamaktadır. Ancak, yapılacak inşai ve fiziki müdahaleler sırasında herhangi bir kültür varlığına rastlanıldığı takdirde konunun, 2863 sayılı Kanun'un 4. ve 5. maddeleri gereği en yakın müze müdürlüğü veya mülki idare amirliğine bildirilmesi gerekmektedir.

Bilgilerinize ve gereğini arz ederim.

Necmeddin BAYHAN
Koruma Bölge Kurulu Müdürü

Bu belge, güvenli elektronik imza ile imzalanmıştır.
Doğrulama Kodu: 92CA066F-A0DC-4805-A6A9-21E29C3D3A32 Doğrulama Adresi: https://www.turkiye.gov.tr/

Şerefiye Mah. Santral 6. Sokak Haydaroğlu İş Merk. B Blok Kat:3 - İpekyolu / VAN Bilgi için:Nüzhet Berk ERİÇOK
Tel: 0432-2120858 – 2120851 Faks: 0432-2120856 Şehir Plancısı
e-posta: vankurul@ktb.gov.tr Kep Adresi: vankurul@hs01.kep.tr

Türkiye

Annex 8:Official Decision of Ministry of Agriculture and Forestry, General Directorate of State Hydraulic Works, DSI 17th Regional Directorate

T.C.
TARIM VE ORMAN BAKANLIĞI
Devlet Su İşleri Genel Müdürlüğü
DSİ 17. Bölge Müdürlüğü

Sayı : E-53642915-045.99[045.99]-1255152
Konu : malazgirt saltukgazi 302 ada 16 parsel GES Kurulumu

DAĞITIM YERLERİNE

İlgi : 05.05.2021 tarihli ve 13594140-150.01-1215 sayılı yazınız.

İlgi yazınızda; Muş İli, Malazgirt İlçesi, Saltukgazi Mahallesi sınırları içerisinde bulunan 302 ada 16 parselde Güneş Enerji Santrali yapılmak istenmesinden bahisle, Kurumumuzca sakınca olup olmadığının bildirilmesi istenmektedir.

Konu incelenmiştir. İlgi yazınız ekinde göndermiş olduğunuz koordinatlarla sınırlı taşınmazda Güneş Enerji Santrali yapılmasında Kurumumuz sorumluluk sahası açısından bir sakınca bulunmamaktadır.

Bilgilerinize rica ederim.

Suat ARVAS
Bölge Müdürü A.
Bölge Müdür Yardımcısı

Dağıtım:
Gereği:
Malazgirt Belediye Başkanlığına
Bilgi:
172. ŞUBE MÜDÜRLÜĞÜNE

Bu belge, güvenli elektronik imza ile imzalanmıştır.
Doğrulama Kodu: 5B6FE5F6-BFEB-4600-98D9-F68F7095E727 Doğrulama Adresi: https://www.turkiye.gov.tr/ebd
Adres: İpekyolu Üzeri Havaalanı Kavşağı/VAN
e-posta: dsi17@dsi.gov.tr Kep Adresi : dsi.17blgmud@hs01.kep.tr
Bilgi için:Tanju KATBAY
Mühendis

Annex 9:Official Decision of General Directorate of Highways 11th Regional Directorate

T.C.
KARAYOLLARI GENEL MÜDÜRLÜĞÜ
11. Bölge Müdürlüğü

12. ULAŞTIRMA VE HABERLEŞME ŞÛRASI 6-7-8 Ekim 2021

Sayı : E.61842760- 000 / 437797 05.05.2021
Konu : GES Projesi Hk.

MALAZGİRT BELEDİYESİ BAŞKANLIĞINA

İlgi: 27/04/2021 tarihli ve 30654375 - 1124 sayılı yazınız.

Muş İli, Malazgirt İlçesi mevkiinde Malazgirt Belediye Başkanlığı tarafından kurulması planlanan "3 MW GES (Güneş Enerji Santrali)" projesinin izin talep edilen ÇED alanının yol ağımıza etkisi olmadığı görülmüştür.

Projenin uygulanması sırasında ulaşımın engellenmemesi ve yol gövdesinin zarar görmemesi için gerekli tüm tedbirlerin alınması,

Trafik güvenliğini tehlikeye düşürecek şekilde duman, yanmamış gaz, toz ve benzeri maddeler yola doğru verilmemesi,

Projenin inşaat ve işletme aşamasında olumsuzlukların meydana gelmesi durumunda ortaya çıkabilecek her türlü zarar, ziyan, hasar ve onarım giderlerinin karşılanması,

Projenin uygulanması sırasında, karayollarına her ne şekilde olursa olsun, herhangi bir madde düşürülmemesi, konulmaması veya atılmaması,

Bu şartlar dahilinde izin talep edilen "3 MW GES (Güneş Enerji Santrali)" projesinin uygulanmasında Bölge Müdürlüğümüzce sakınca bulunmamaktadır.

Bilgilerinize arz ederim.

Hacı Emin TOPCU
Bölge Müdürü a.
Bölge Müdür Yardımcısı

"Bu belge, güvenli elektronik imza ile imzalanmıştır."
Belge Doğrulama Kodu: "vqlvq72F4A62" Belge Doğrulama Adresi: "https://www.turkiye.gov.tr/kgm-ebys"

Çiçekli Mah. Şantiye Sok. Edremit/Van
Bilgi İçin: Ilyas TOPRAK
Çevre Araştırma ve Uygulama Mühendisi
Telefon No : 04324851050 Faks: 04324851130
Tel - Faks: 04324851050-
İnternet Adresi : www.kgm.gov.tr KEP: kgm11bolge@hs01.kep.tr
e-posta : itoprak@kgm.gov.tr
Ilgili Birim : Etüt, Proje ve Çevre Başmühendisliği -

1/1

Annex 10: Roles and Responsibilities of Main Actors of SPP Subproject

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

		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.	team.		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 ESIA, ESMP and Grievance Mechanism	The main responsible for monitoring ESIA, 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 municipalities after approval of Ilbank and WB	Confirm and Disclose the ESMP on Ilbank's official website Disclosure of official approval of environmental and social assessment documents and related procedures for the project in accordance with WB safeguarding requirements, to perform the overall quality assurance function to	Confirm and Disclose the ESMP on WB's official website			

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

	changes, route/location changes, legislative changes related to environmental and social issues, authorization provision changes, new environmental/social data, construction/operation strategy changes.					
Monitoring Roles	Evaluate performance indicators, environmental reviews, monitoring, inspections, and results related to ESMP applications.	Monitoring the implementation of ESMP and other environmental and social mitigation measures, auditing Malazgirt 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 Malazgirt 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 Malazgirt Municipality every three months.		Submit Monthly Environmental and Social Monitoring Reports (ESMRs) to the Project Owner Municipality	Monitore and evaluate the performance of services provided by the contractor	
	Monitor contractor activities.	Submit Project Progress Reports to WB every 6 months.			Ensure regular (monthly) reporting of the Contractor's C&S performance to the Municipality and ILBANK	
Training Responsibilities	Provide necessary training on Environmental and Social Management issues to Project Management Unit (ILBANK) and relevant directorates.				Provide necessary environmental and social training to the contractor and subcontractor personnel	

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

Annex 11: Photographs from Site Visit

Annex 12: Minutes of Public Consultation Meeting

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SUSTAINABLE CITIES PROJECT-II
Additional Financing

MALAZGIRT SOLAR POWER PLANT PROJECT

MINUTES of PUBLIC CONSULTATION MEETING

Revision	:	*REV.00*
Meeting Date	:	*12 May 2025*
Meeting Place:		*Malazgirt Municipality Meeting Hall*

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1. PUBLIC CONSULTATION MEETING

Malazgirt Solar Power Plant Project is one of the sub-projects under the Sustainable Cities Project (SCP) Financing, aimed at supporting sustainable development in cities across Turkey.

The Environmental and Social Management Plan (ESMP) was prepared in accordance with Turkish environmental and social legislation, the World Bank Safeguard Policies including Operational Policies (OPs), the World Bank General EHS Guidelines, Industry Sector Guidelines, and ILBANK's ESMP framework. In addition to these efforts, following the completion of the ESMP, a Public Participation Meeting was held on May 12, 2025, at 11:00 AM. Announcements for the meeting were published on the official website and in national and local newspapers. Additionally, brochures regarding the meeting were distributed to the neighborhood headman's office and posted on local notice boards.

1.1. Summary

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

The Mayor of Malazgirt delivered the opening speech for the project. An authorized electrical engineer from the consulting firm emphasized the importance of the solar power plant project, explaining that it is a World Bank-financed initiative under the Sustainable Cities Project Financing and a significant step for the municipality in terms of renewable energy and combating climate change. It was stated that the project would help meet a large portion of the municipality's energy costs through the use of clean energy. The project is planned to be completed within 9 months and is expected to contribute socially to the district.

A presentation by the social expert from the consulting firm introduced the project and provided information about the environmental and social management plan. The location of the land on which the project will be established and other technical details were explained. The suitability of Malazgirt district for solar energy and its solar irradiation potential were highlighted. Under the ESMP, the project's environmental and social risks were assessed, and a current situation analysis was conducted. This included evaluations of the area's geography, climate conditions, solar exposure, vegetation, natural and cultural values, and risks related to natural disasters such as floods and earthquakes.

It was noted that the project could create opportunities for local residents in the future, and that the use of renewable energy sources is crucial in the fight against climate change. Social benefits of the project were also emphasized, stating that this is a significant step for Malazgirt and a model project for the future. The importance of the grievance mechanism during both the construction and operation phases was underlined. Information was provided about the channels through which the grievance mechanism can be accessed and the monitoring and reporting processes.

1.2. Question & Answer Session

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

Question 1: ***Mukhtar of Selçuklu Neighborhood:***
How will the excavation waste be disposed of during the construction phase of the project, considering our neighborhood is adjacent to Saltukgazi? Will priority be given to the local population during the project?

Answer 1: ***Municipal Official (Civil Engineer):***
There will not be any major excavation during the construction phase. A designated disposal site will be identified before the tender, and excavation waste will be transported there.

Answer 2: ***Mayor:***
Priority will be given to local residents during the construction phase. However, during the operation phase, there will be minimal need for a workforce.

Question 2: ***A resident of Malazgirt:***
What is the timeline for credit allocation and the start of the tender process?

Answer 2: ***Consulting Firm Representative:***
This project uses long-term financing with low-interest loans distributed over 24 years, with semi-annual payments. According to this financial model, 30% of the income will go toward loan repayment while 70% remains in the municipal budget, making it a cost-effective model for a well-managed municipality.
The tender process will be completed within 2025, following the signing of the sub-project agreement.

1.3 Conclusion

The Public Participation Meeting lasted approximately 45 minutes, including the project presentation by municipal staff and the subsequent Q&A session with the public. The necessary information about the Malazgirt Solar Power Plant Project was provided to the public, their questions were answered, and the next steps of the process were explained.

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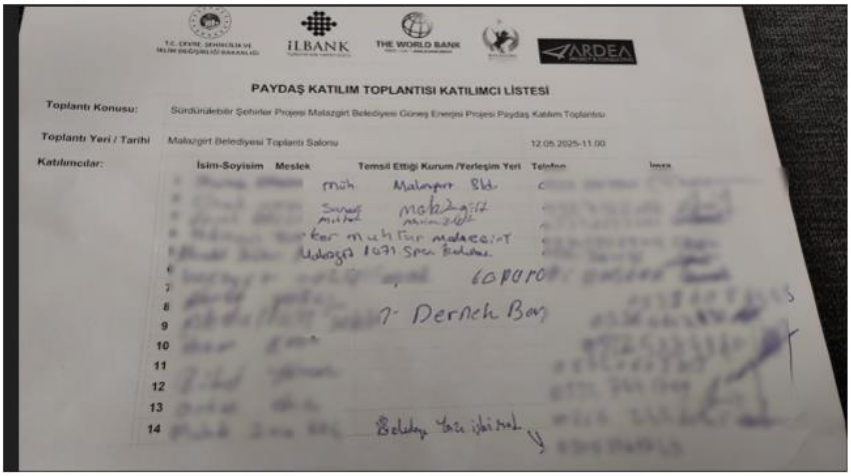
2. PARTICIPANT LIST

Figure 1: Participants Signature List



PAYDAŞ KATILIM TOPLANTISI KATILIMCI LİSTESİ

Toplantı Konusu: Sürdürülebilir Şehirler Projesi Malazgirt Belediyesi Güneş Enerjisi Projesi Paydaş Katılım Toplantısı

Toplantı Yeri / Tarihi: Malazgirt Belediyesi Toplantı Salonu — 12.05.2025-11.00

Katılımcılar:	İsim-Soyisim	Meslek	Temsil Ettiği Kurum /Yerleşim Yeri	Telefon	İmza
1		müh	Malazgirt Bld.		
2			Malazgirt		
3			Malazgirt		
4			Malazgirt		
5			60 Paro		
6			7- Dernek Bay		
7					
8					
9					
10					
11					
12					
13					
14					

5

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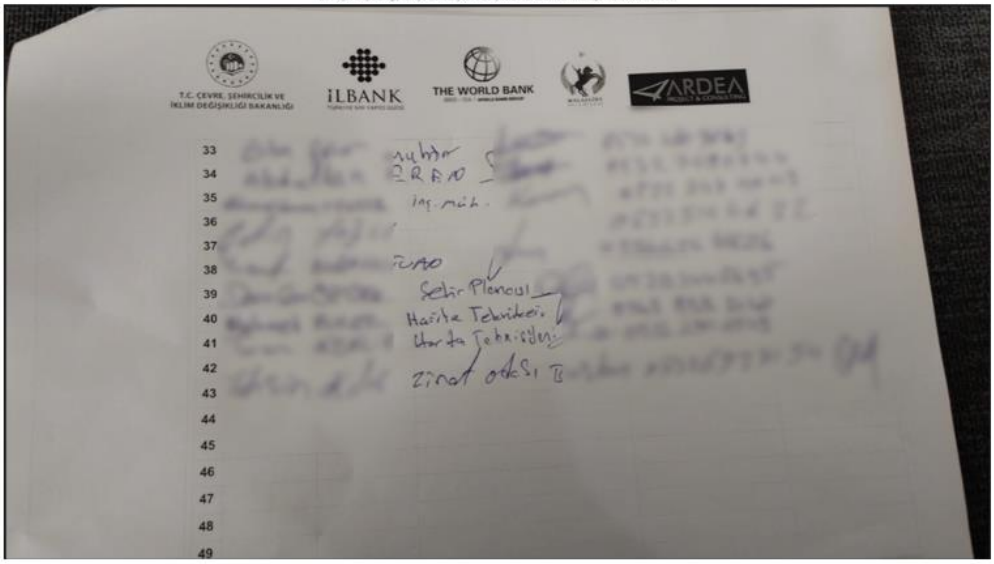

6

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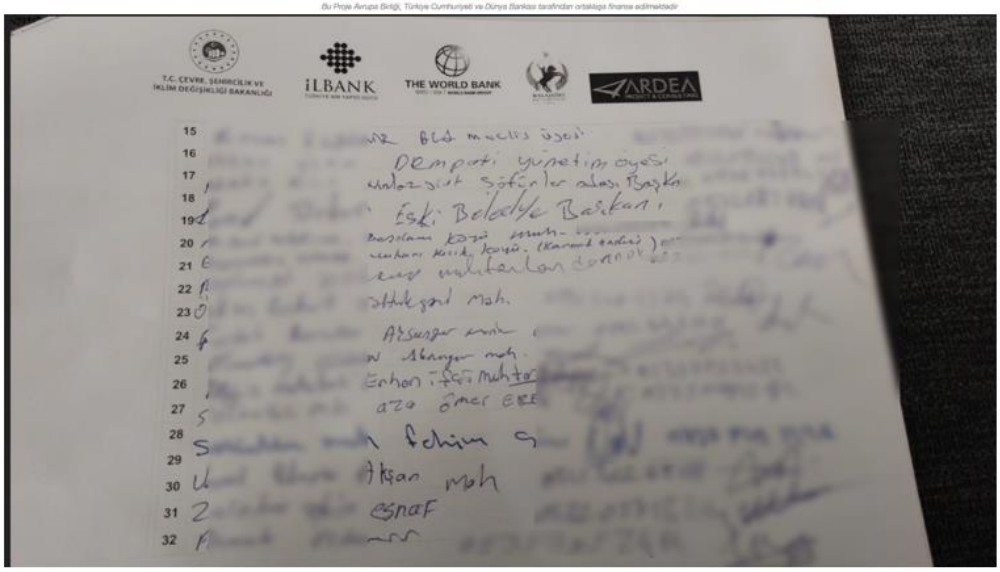

7

3. ANNEXES

Annex 1: Photos of Public Consultation Meetings

Figure 2: Photos of Meetings-1

8

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Annex 2: Newspaper Advertisements

Figure 3: Takvim Newspaper Advertisement for Public Consultation Meetings of Malazgirt SPP

11

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Figure 4: Alparslan Diyarı Newspaper for Advertisement for Public Consultation Meetings of Malazgirt SPP

01 Mayıs 2025 — Alparslan Diyarı — Sayfa 6

Malazgirt'te Bahar Bereketi: Soryaz, Mantar, Kariberg, Çiriş, Uçkun!

MALAZGİRT BELEDİYESİ GÜNEŞ ENERJİ SANTRALİ PROJESİ HALKIN KATILIM TOPLANTISINA DAVET

MALAZGİRT OVASI SULAR ALTINA KALDI!

Muş'un Malazgirt ilçesinde öğleden sonra etkili olan sağanak yağış, Malazgirt Ovası'nda su baskınlarına neden oldu.

12

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Annex 3: Announcement regarding the Public Consultation Meeting Published in the Official Website of Malazgirt District Governorate

Figure 5: Public Consultation Meeting Announcement on the Official Website of Malazgirt District Governorate

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Annex 4: Malazgirt Municipality Public Consultation Meeting Brochure

Ayrıca ÇSYP kapsamında uygulanacak izleme ve denetim faaliyetleri de tanımlanacaktır. ÇSYP çalışmaları kapsamında hava ortamları, gürültü, koku, biriken atıklar, projenin kurulacağı alana dair var olan doğal afet riskleri, GES kaynaklı yaşanabilecek yansıma ve parlama gibi etkiler belirlenip ilgili konuların sakınım azaltma önlemleri belirtilecektir.

İzleme gerekliliklieri de ÇSYP kapsamındaki izleme tablolarında tanımlanarak sunulacaktır. Buna göre projenin inşaat aşamasında, üst toprak kaybı ve sıkışması , kirleticilerin ve kimyasalların toprağa ve yer altı sularına sızmasıyla oluşacak toprak ve su kirliliği ,toz emisyonları, hava kirliliği, inşaat sırasında ve geçici trafik yükünden oluşacak gürültü, atık üretimi ve iş sağlığı ve güvenliği ; işletme aşamasında ise kimyasalların depolanması ve kullanımı , atıklar , gürültü ,santralin yansıma ve parlama etkisi , geçim kaynakları , şikayetler, toplumsal çatışmaları , paydaş katılımı , iş sağlığı ve güvenliği ve işgücü parametreleri ÇSYP'de belirlenen şartlara uygun izlenecektir.

Bu Çevresel ve Sosyal Yönetim Planının (ÇSYP) uygulanmasından sorumlu ana kurum, projenin inşaatından ve işletme aşamalarından da sorumlu olan Malazgirt Belediyesidir. Projenin farklı aşamalarında çeşitli taraflar (Yüklenicilar, Müşavir firma, Proje Uygulama Birimi,) ÇSYP kapsamında çeşitli konularda sorumluluk alacaklardır. Sözü edilen tüm çalışmalar Malazgirt Belediyesi tarafından koordine edilecektir. Proje dokümanları Malazgirt Belediyesi tarafından web sitesinde yayınlanacak ve paylaşıma açık olacaktır.

5

Malazgirt Belediyesi, projeden etkilenebilecek topluluklar için endişelerini ve şikayetlerini dinlemek, çözmek ve takip etmek amacıyla bir Şikâyet Mekanizması kuracaktır. Tüm şikayetler, önceden belirlenmiş bir zaman çizelgesi içinde ve içeriklerine göre etkin bir şekilde alınacak, kaydedilecek ve yanıtlanacaktır.

Şikâyet Giderme Mekanizmasının kurulumu ve takibi Malazgirt Belediyesi tarafından sağlanacaktır. Bu kapsamda proje ile ilgili beklenti, görüş, öneri ve şikayetlerin paylaşılması için aşağıda verilen iletişim kanallarını da ayrıca kullanabileceklerdir.

Malazgirt Belediyesi:

Telefon: 04360 511 20 21

E-mail: malazgirt-belediyesi@hotmail.com

Adres: Meydanüstü, Cumhuriyet Cad. No:1, 49400 Malazgirt/Muş

Web Sayfası: http://www.malazgirt.gov.tr/malazgirt-belediye-baskanligi

Tüm paydaşlar, alt-projeler ile ilgili şikayetlerini ve geri bildirimlerini doğrudan devlet yetkililerine iletmek için projenin tüm paydaşlarının erişimine açık ve ülke çapında kullanılan Cumhurbaşkanlığı İletişim Merkezi (CİMER) gibi alternatif şikâyet mekanizmalarında da yararlanma haklarına sahip olacaklardır.

- **Web sitesi:** www.cimer.gov.tr
- **Çağrı merkezi: 150**
- **Telefon numarası: 0312 590 20 00**

6

SÜRDÜRÜLEBİLİR ŞEHİRLER PROJESİ

Malazgirt Belediyesi Güneş Enerjisi Santrali Projesi

Halkın Katılımı Toplantısı Bilgilendirme Broşürü

Tarih: 12 Mayıs 2025

Saat: 11.00

Yer: Malazgirt Belediyesi Toplantı Salonu

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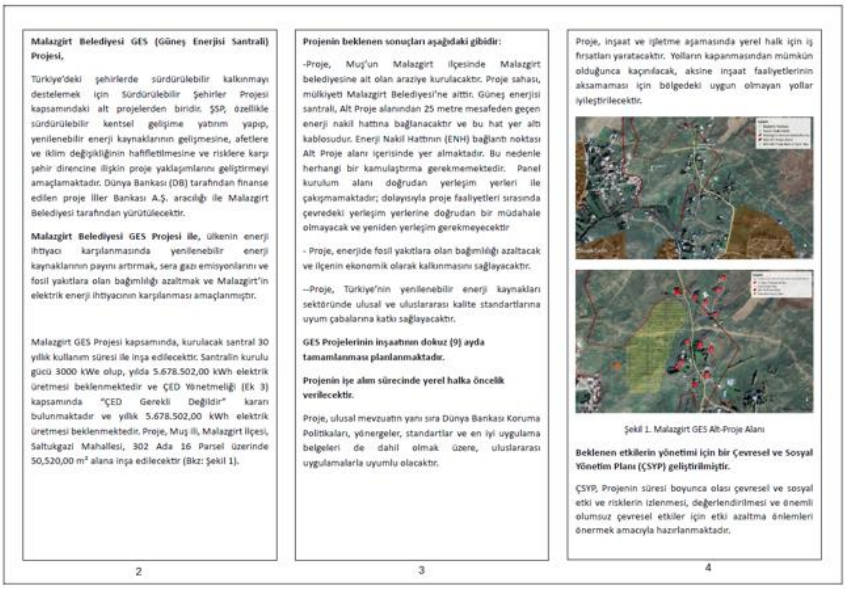

Malazgirt Belediyesi GES (Güneş Enerjisi Santrali) Projesi,

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

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

Malazgirt GES Projesi kapsamında, kurulacak santral 30 yıllık kullanım süresi ile inşa edilecektir. Santralin kurulu gücü 3000 kWe olup, yılda 5.678.502,00 kWh elektrik üretmesi beklenmektedir ve ÇED Yönetmeliği (Ek 3) kapsamında "ÇED Gerekli Değildir" kararı bulunmaktadır ve yıllık 5.678.502,00 kWh elektrik üretmesi beklenmektedir. Proje, Muş ili, Malazgirt İlçesi, Saltukgazi Mahallesi, 302 Ada 16 Parsel üzerinde 50,520,00 m² alana inşa edilecektir (Bkz: Şekil 1).

2

Projenin beklenen sonuçları aşağıdaki gibidir:

-Proje, Muş'un Malazgirt ilçesinde Malazgirt belediyesine ait olan araziye kurulacaktır. Proje sahası, mülkiyeti Malazgirt Belediyesi'ne aittir. Güneş enerjisi santrali, Alt Proje alanından 25 metre mesafeden geçen enerji nakil hattına bağlanacaktır ve bu hat yer altı kablosudur. Enerji Nakil Hattının (ENH) bağlantı noktası Alt Proje alanı içerisinde yer almaktadır. Bu nedenle herhangi bir kamulaştırma gerekmemektedir. Panel kurulum alanı doğrudan yerleşim yerleri ile çakışmamaktadır; dolayısıyla proje faaliyetleri sırasında çevredeki yerleşim yerlerine doğrudan bir müdahale olmayacak ve yeniden yerleşim gerekmeyecektir

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

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

GES Projelerinin inşaatının dokuz (9) ayda tamamlanması planlanmaktadır.

Projenin işe alım sürecinde yerel halka öncelik verilecektir.

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

3

Proje, inşaat ve işletme aşamasında yerel halk için iş fırsatları yaratacaktır. Yolların kapanmasından mümkün olduğunca kaçınılacak, aksine inşaat faaliyetlerinin aksamaması için bölgedeki uygun olmayan yollar iyileştirilecektir.

Şekil 1. Malazgirt GES Alt-Proje Alanı

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

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

4

15

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Annex 5: Public Consultation Meeting Presentation Document

SÜRDÜRÜLEBİLİR ŞEHİRLER PROJESİ (SŞP)

Malazgirt Belediyesi Güneş Enerjisi Santrali Projesi

Halkın Katılımı Toplantısı

12.05.2025

11.00

Malazgirt Belediyesi Toplantı Salonu

16

- Sürdürülebilir Şehirler Projesi (SŞP) kapsamında finanse edilecek 3603 kWp / 3000 kWe kapasiteli alt proje Malazgirt Belediyesi tarafından yenilenebilir enerji tesislerinin kurulumunu içermektedir.
- Proje, Muş İlinin Malazgirt İlçesi Saltukgazi Mahallesi'nde 302 ada 16 parsel üzerinde yer almaktadır.
- 10.06.2021 tarihli Resmi Gazete ile yürürlüğe giren ulusal ÇED Yönetmeliği uyarınca, Malazgirt Belediyesi GES alt-Projesi ÇED Yönetmeliği'nin Ek-II'ine tabidir ve Haziran 2021'de ÇED Etki Değerlendirmesi Gerekli Değildir kararı verilmiştir.
- Proje kapsamında hazırlanan Paydaş Analizi, "paydaşları" oluşturan projeden etkilenen taraflara, diğer ilgili taraflara ve hassas gruplara, Alt Proje ve etkileri hakkında görüş ve endişelerini ifade etme fırsatına sahip olmaları için ilgili, zamanında ve erişilebilir bilgi sağlanmasını temin etmek amacıyla oluşturulmuştur.
- Paydaş katılımı, geniş bir paydaş çevresine sahip olan alt projelerin başarıyla tamamlanmasında önemli bir rol oynamaktadır; bu çevre, yerel halktan hassas gruplara, kamu kurumlarından sivil toplum kuruluşlarına kadar geniş bir yelpazeyi kapsamaktadır.

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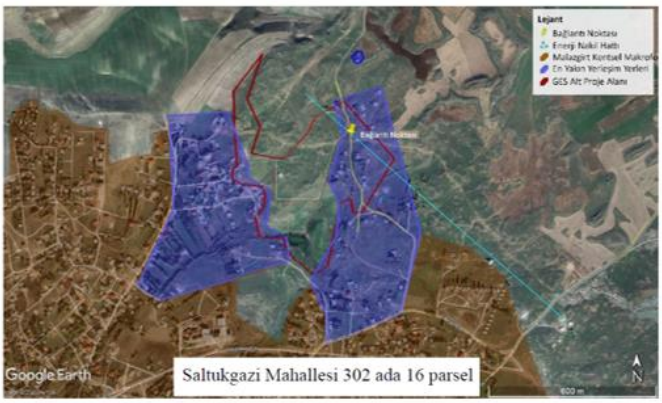
Malazgirt Alt-Projesi Konumu



Malazgirt İlçesi merkez yerleşimine yaklaşık 1,6 km mesafede ve ilçe merkezinin kuzeydoğusunda yer alan Saltukgazi Mahallesi'nde bir güneş enerjisi santrali kuracaktır. Santralin inşaatı, GES proje alanı olan 50.520,00 m²'lik alanda gerçekleştirilecektir

ARDEA

18

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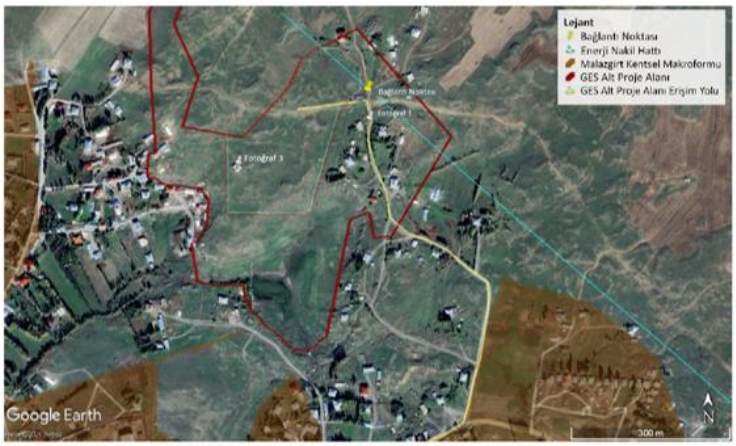
Enerji Nakil Hattı



Güneş enerjisi santrali, Alt Proje alanından 25 metre mesafeden geçen enerji nakil hattına bağlanacaktır ve bu hat yer altı kablosudur. ENH'nin bağlantı noktası Alt Proje alanı içerisinde yer almaktadır. Bu nedenle herhangi bir kamulaştırma gerekmemektedir.

ARDEA

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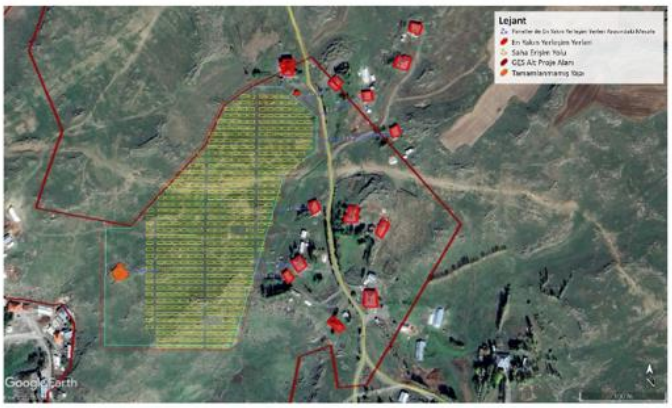
Panel Yerleşimi ve En Yakın Yerleşimler



Alt Proje'nin yer aldığı parsel sınırları içerisinde yapılar bulunmaktadır, ancak bu yapılar santralin kurulacağı alan ile çakışmamaktadır. Alt Proje alanı, yerleşim yerlerine yakın konumda olup, Alt Proje alanı içerisinde ruhsatsız ve tamamlanmamış bir yapı bulunmaktadır. GES kurulumu, bu ruhsatsız yapıya zarar vermeyecek şekilde gerçekleştirilecektir. Panel yerleşiminden farklı mesafelerde konutlar bulunmaktadır. En yakın yerleşim birimine olan mesafe aşağıda gösterildiği üzere yaklaşık 15 metredir. Parsel içerisindeki tamamlanmamış yapıya olan mesafe yaklaşık 40 metre olup, panel yerleşimi bu yapıyla çakışmamaktadır.
Bu haneler, panel kurulum alanına yakın ancak dışında yer almaktadır. Ayrıca saha çalışması sırasında bölge sakinleri bu konuda herhangi bir endişe bildirmemiştir.

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Panel Revizyonu

- Alt Proje alanında gerçekleştirilen saha çalışmaları sırasında, eski GES panel yerleşiminde ruhsatsız ve tamamlanmamış bir yapının bulunduğu tespit edilmiştir. Alt Proje kapsamında, yapıya zarar verilmemesi ve yapı sahibinin olumsuz etkilenmemesi amacıyla bir revizyon yapılmıştır. Mevcut yapının durumu korunarak panel yerleşimi optimize edilmiş ve proje sahasındaki uygun alanlar etkin şekilde kullanılmıştır. Yapının bulunduğu alan, GES panel yerleşiminden çıkarılmıştır.

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- Alt Proje Etki Alanı, alt projenin çevresel ve sosyal etkilerinin meydana gelmesinin beklendiği coğrafi bölgeyi ifade etmektedir. Bu alan, inşaat, işletme ve bakım faaliyetlerinden etkilenen yerleri içermekte olup, yerel ekosistemler, yakın yerleşim yerleri ve altyapılar gibi unsurları kapsamaktadır.
- Alt projenin sosyal mevcut durumu, yerel demografi, sağlık ve eğitim hizmetleri, arazi kullanımı/edinimi, kültürel miras, yerel halkın geçim kaynakları, mevcut altyapı ve alt proje etki alanında yer alan hassas grupları kapsamlı bir şekilde ortaya koymaktadır. Bu bağlamda, ilgili sosyal etki alanı Saltukgazi Mahallesi ile sınırlıdır.
- Proje kapsamında oluşabilecek olası olumsuz etkileri en aza indirmek ve toplum üzerinde kalıcı olumsuz etkiler oluşturmamak adına, Saltukgazi Mahallesinde düzenli bilgilendirme toplantıları yapılması ve şikâyet mekanizmalarının hayata geçirilmesi önerilmektedir. Ayrıca, inşaat aşamasında çevresel etkileri azaltmaya yönelik alınacak önlemlerin düzenli olarak izlenmesi önem arz etmektedir.

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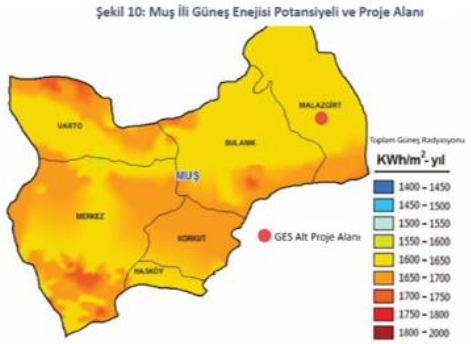
Çevresel ve Sosyal Mevcut Durum

- Çevresel ve sosyal mevcut durum koşullarını belirlemek amacıyla çeşitli veri toplama yöntemleri kullanılmıştır. Malazgirt Belediyesi yetkilileri ve Alt Proje Etki Alanı mahalle muhtarı ile yapılan görüşmeler, kurumlardan alınan raporlar, izin belgeleri, ve saha çalışmaları yerel durum hakkında sosyal ve çevresel mevcut duruma dair önemli bilgiler sunmuştur.
- Hâlihazırda arazi üzerinde herhangi bir faaliyet veya gelişim söz konusu değildir. Bu alan kullanılmamakta olup, konut, tarım veya ticari amaçlarla değerlendirildiğine dair herhangi bir bulguya rastlanmamıştır. Ayrıca, söz konusu arazi ile ilgili herhangi bir gayri resmi yerleşim veya özel mülkiyet anlaşmazlığı bulunmamaktadır. Proje sahası Malazgirt Belediyesi'ne aittir.
- Alt proje alanı çevresinde yaşayanlar, Saltukgazi Mahallesi muhtarı güneş enerji santrali projesi ve olası etkileri hakkında bilgilendirilmiş ve görüşleri alınmıştır. Yapılan görüşmelerde, proje kapsamında herhangi bir olumsuz etki beklemediklerini ifade etmişlerdir. Ayrıca, şikâyet mekanizması hakkında bilgilendirilmişler ve olası sorunlarını veya görüşlerini ilgili makamlara iletebilecekleri konusunda bilgilendirilmişlerdir.

- Çevresel ve sosyal mevcut durum koşullarını belirlemek amacıyla alt-proje alanlarının fiziksel çevresi, biyoçeşitliliği, ve sosyal çevresi analiz edilmiştir. Bu kapsamda proje alanları, topografya, jeoloji, depremsellik, toprak ve arazi yapısı, hava kalitesi, su kaynakları, gürültü ve doğal afetler, flora fauna, demografik yapı, altyapı hizmetleri, ekonomik koşullar, kültürel miras ve proje alanlarında yaşayan dezavantajlı gruplar bakımından incelenmiştir.
- Malazgirt İlçesi, Doğu Anadolu Bölgesi'nin tipik karasal iklim özelliklerine sahiptir. Yazlar sıcak ve kurak, kışlar ise uzun, çok soğuk ve karlıdır. Güneş Enerjisi Potansiyel Atlası'na göre, Türkiye'nin yıllık ortalama toplam güneşlenme süresi 2.737 saat, günlük toplam güneşlenme süresi 7,5 saat ve yıllık toplam gelen güneş enerjisi 1.527 kWh/m²/yıl'dır. Malazgirt'in yıllık ortalama güneşlenme radyasyonu ise 1.600-1.700 kWh/m²/yıl aralığında olduğu görülmektedir.

Şekil 10: Muş İli Güneş Enejisi Potansiyeli ve Proje Alanı



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Şekil 12: Alt Proje Alanı ve Çevresi Deprem Tehlike Haritası, Türkiye Deprem Tehlike Haritaları Etkileşimli Web Uygulaması, 2023, (https://tdth.afad.gov.tr)[1]

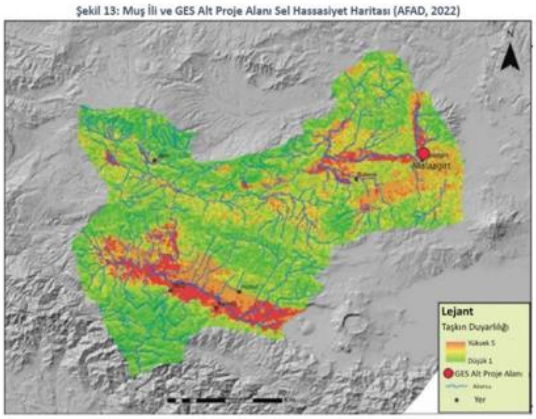
*18.4.1996 tarih ve 96/8109 sayılı Bakanlar Kurulu Kararı ile yürürlüğe giren Türkiye Deprem Bölgeleri Haritası 01.01.2019 tarihinde yürürlükten kaldırılmıştır. Yeni Türkiye Deprem Tehlike Haritası ve Bina Deprem Yönetmeliği 18 Mart 2018 tarih ve 30364 sayılı Resmî Gazete'de yayımlanarak 01.01.2019 tarihinde yürürlüğe girmiştir.

Muş ili, depremler açısından oldukça aktif bir deprem kuşağında yer almaktadır. Türkiye Deprem Tehlike Haritası'na göre, Malazgirt İlçesi 0.5 üzeri sismisite değerine sahip bir alanda yer almaktadır. 1.derece deprem bölgesinde yer almaktadır. Projenin inşaat veişletme aşamasında deprem yönetmeliğine uyulacaktır.

Proje alanı, kuraklığa dayanıklı otlardan oluşan seyrek bir bitki örtüsüne sahiptir. Alan, bitki örtüsü açısından zayıf olup step ekosistemine aittir. Alt proje alanı, herhangi bi doğal çevre koruma bölgesinde yer almamaktadır.

Malazgirt ilçesi, Murat Nehri'nin doğusunda yer almakta olup, ilçenin taşkın hassasiyeti orta ile yüksek arasında değişmektedir. Şekil 13'e göre, bu alanın taşkın hassasiyetinin orta düzeyde olduğu tespit edilmiştir. Proje alanının taşkın hassasiyetinin orta seviyede olması nedeniyle, güneş panelleri ve ilgili altyapı üzerinde potansiyel etkilerin önlenmesi için uygun drenaj ve su yönetimi önlemlerinin uygulanması gereklidir. Aşırı yağış veya yüzey akışı sonucunda Proje alanında su birikimi meydana gelebilir, ancak uzun süreli su tutma veya şiddetli taşkın beklenmemektedir.

Şekil 13: Muş İli ve GES Alt Proje Alanı Sel Hassasiyet Haritası (AFAD, 2022)



- Proje sahasına yakın herhangi bir kültürel miras olmaması projenin sorunsuz bir şekilde ilerlemesini sağlamaktadır.
- İlçe ekonomisi büyük ölçüde tarım ve hayvancılığa dayanmaktadır. Saltukgazi Mahallesi sakinlerinin temel geçim kaynağı hayvancılıktır. Bazı sakinler mevsimlik işçi olarak diğer şehirlere gitmektedir. Yerel halk, büyük ölçüde hayvancılıkla uğraşmakta ve sığır yetiştiriciliğine odaklanmaktadır.
- Proje sırasında oluşablecek olası etkilere dair etki azaltma önlemleri önerilmiştir.

Aşama Etki ve Olasılık (1-5)	Risk Açıklaması	Etki Azaltma Önlemleri	Sorumluluk	Anahtar Performans Göstergesi	Maliyet
İnşaat aşaması I = 4 L = 2	Risk 4: Geçici Trafik Yükünden Kaynaklanan Gürültü İş Makinaları ve Ekipmanlarından Kaynaklanan Gürültü - Titreşim Etkileri	- Hareketliği azaltmak ve rotaları optimize etmek için trafik yönetimi planları uygulanması; Gürültü yaydırmını azaltmak için gerekirse gürültü bariyerlerinin kullanılması - Gürültülü inşaat faaliyetlerinin gündüz saatlerinde planlanması; gürültü azaltma teknolojileriyle donatılan araç ve makinelerin kullanılması - İnşaat faaliyetleri için titreşim limitleri belirlenmesi. - Mülk sahiplerinin herhangi bir hasar oluşması ihtimali karşısında bilgilendirilmesi ve uyarılması, etkilenen mülk sahipleri varsa oluşan hasarın bedelinin karşılanması ve tazmin edilmesi	Yüklenici, Belediye'nin desteğiyle	Trafik Mağduriyeti Kayıt Görsel gözlemler (Trafik işaretleri ve uyarıları uygun konumlara yerleştirilmeli) ÇSİR Bulguları	Alt proje bütçesine dahil edildi
İnşaat aşaması I = 4 L = 2	Risk 5: Toprak Kazısı, Araç Trafiği ve Ekipmanlarından Kaynaklanan Toz ve Egzoz Emisyonları	- İnşaat alanlarının sulanması gibi toz kontrol önlemlerinin uygulanması - Toz dağılımını önlemek için toz perdeleri veya bariyerler kullanılması - Çevre dostu inşaat ekipmanlarının kullanımının teşvik edilmesi - Toz emisyonlarını azaltmak için toprak yolların döşenmesi veya stabilize edilmesi - Toz oluşumunu en aza indirmek için hız sınırlarının uygulanması - Emisyonları azaltmak için kullanılan araç ve ekipmanların düzenli bakımının yapılması - Mümkün olduğunca düşük emisyonlu veya elektrikli araçlar kullanılması - Temiz yakıt seçeneklerinin benimsenmesini ve teşvik edilmesi - Emisyon kontrol ve raporlama programının geliştirilmesi.	Yüklenici, Şantiye Şefi'nin desteğiyle	Trafik Mağduriyeti Kayıt Görsel gözlemler (trafik işaretleri ve uyarıları uygun konumlara yerleştirilmeli) ÇSİR Bulguları	Alt proje bütçesine dahil edildi
İnşaat aşaması I = 4 L = 2	Risk 6: Yerleşim Yerleri Arası Ulaşım Yollarının Geçici Olarak Kapatılması Trafik Araçlarının Yollarda ve Yaylalarda Tahribata Neden Olması	- Yol kapanmalarının en aza indirilmesi için inşaat programlarının planlanması. - Etkilenen topluluklar için alternatif güzergahların sağlanması. - Yol kapanışlarının önceden sakinlere bildirilmesi. - İnşaat araç operatörlerinin yol güvenliği yönergelerine uymasının sağlanması. - Yaya güvenliğini sağlamak ve yerel yolları aşınmasını azaltmak için yerleşim alanlarında inşaat araçları için katı hız sınırlarının uygulanması.	Yüklenici, Belediye'nin desteğiyle	Trafik Mağduriyeti Kayıt Görsel gözlemler (trafik işaretleri ve uyarıları uygun konumlara yerleştirilmeli) ÇSİR Bulguları	Alt proje bütçesine dahil edildi

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İnşaat aşaması I = 2 L = 2	Risk 7: Çalışmaların yürütülmesi sırasında toplum sağlığı ve güvenliğinin sağlanması	- İnşaat çalışmalarının belirlenen çalışma saatleri içerisinde ve çevredeki yerleşim alanlarını en az rahatsız edecek zamanlarda gerçekleştirilmesini sağlayınız. - Yetkisiz erişimi önlemek için yaklaşım alanlarının ve depolama alanlarının çevrilmesi. - Halkı inşaat faaliyetleri konusunda uyarmak için not tabelalarını sağlanması. - Hava kalitesine olan etkileri en aza indirmek için toz kontrol önlemlerinin uygulanması. - Düzenli saha güvenlik kontrollerinin yapılması. - Proje güvenlik protokolleri hakkında farkındalık kampanyalarına yerel topluluğun dahil edilmesi. - Cinsel Sömürü ve İstismarı (CSİ) ile çalışan hakları konusunda eğitim ve farkındalık programlarının sağlanması. - Çocukların ve hayvanların alana girmesinin yasak olduğunu belirten açık ve görsel uyarı işaretlerinin alan çevresine yerleştirilmesi. - Alt Proje alanına giriş ve çıkış için belirli güvenli giriş noktalarının oluşturulması ve bu noktaların sürekli gözetim altında tutulması. - İnşaat alanının çevresine çocuk dostu güvenlik bariyerlerinin ve net uyarı işaretlerinin yerleştirilmesi. - İnşaatın okul yollarını etkilediği alanlarda çocuklar için geçici	Yüklenici, Belediye'nin desteğiyle	Görsel gözlemler ÇSİR Bulguları	Alt proje bütçesine dahil edildi
İnşaat Aşaması I = 4 L=4	- Risk 9: Deprem Riski	- İnşaatta 1. derece deprem bölgelerine uygun parametrelerin göz önünde bulundurulması. İnşaat sırasında mevcut deprem güvenliği standartlarına ve yönetmeliklerine uyulması. - Güneş enerjisi santralinin tasarımının bölgenin deprem riskine uygun olarak depreme dayanıklılığı göz önünde bulundurularak yapılması.	Yüklenici, Şantiye Şefi'nin desteğiyle	Görsel gözlemler Kayıtlar	Alt proje bütçesine dahil edildi
İnşaat Aşaması I = 4 L=2	- Risk 10: Aşırı yağış nedeniyle taşkın riski	- Şantiyede toprak erozyonunu önlemek için geçici kaplamalar, çökeltme havuzları ve erozyon kontrol bariyerleri gibi önlemlerin alınması.. - Şantiyede su yönetimini düzenlemek ve taşkın sularını kontrol etmek için bir su yönetim planı oluşturulması - İnşaat malzemeleri ve ekipmanları taşkın riski göz önünde bulundurularak güvenli bir şekilde depolanması.	Yüklenici, Şantiye Şefi'nin desteğiyle	Görsel gözlemler ÇSİR Bulguları	Alt proje bütçesine dahil edildi
İnşaat Aşaması I = 2 L=2	- Risk 11: Heyelan Riski	- Heyelanın başlamasına katkıda bulunabilecek toprak erozyonunu en aza indirmek için istinat duvarları veya erozyon kontrol bataniyeleri gibi erozyon kontrol önlemlerinin alınması. - Genel eğim açısını azaltmak, stabiliteyi artırmak ve orta dereceli heyelan riskini en aza indirmek için hafif eğim değişiklikleri veya teraslama yapılması. - Artan heyelan riskine işaret edebilecek topografya, bitki örtüsü veya toprak koşullarındaki değişiklikleri belirlemek için düzenli saha incelemeleri yapılması.	Yüklenici, Şantiye Şefi'nin desteğiyle	Görsel gözlemler ÇSİR Bulguları	Alt proje bütçesine dahil edildi

- Bilgi yaymak amacıyla medya kanalları mümkün olduğunca kullanılacaktır
- Yazılı bilgiler, broşürler, el ilanları, afişler vb. çeşitli iletişim araçları ve materyaller aracılığıyla halka duyurulacaktır. Malazgirt Belediyesi, alt projeyle ilgili önemli güncellemeler ve alt projenin çevresel ve sosyal performansına ilişkin raporları web sitelerinde düzenli olarak güncelleyecektir. Web siteleri ayrıca alt projeye ilişkin şikayet mekanizması hakkında bilgi sağlayacaktır.
- Gerekli görüldüğünde, alt projenin inşaat, işletme ve kapanma aşamaları boyunca, medya kuruluşları veya yerel yönetimden seçilen paydaşlar için saha ziyaretleri veya gösterim turları düzenlenecektir.
- Malazgirt Belediye binasındaki Bilgilendirme Masası, yerel sakinlere paydaş katılım faaliyetleri, inşaat güncellemeleri, şikayet yöntemlerinin iletişim bilgileri gibi konularda bilgi sağlayacaktır.
- Alt projenin yaşam döngüsünün erken aşamalarından itibaren, alt proje ve şikayet mekanizması ile ilgili bilgiler bireysel veya grup toplantıları, basılı materyaller, ilan panoları, SMS ve WhatsApp grup mesajları aracılığıyla kamuya açıklanmaya devam edecektir.

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Şikayet Mekanizması

- Uluslararası gereklilikler doğrultusunda, Alt Projeden etkilenen toplulukların ve iş gücünün endişe ve şikayetlerini almak, çözmek ve takip etmek amacıyla Malazgirt Belediyesi tarafından bir şikayet mekanizması oluşturulacaktır. DB standartlarına göre Şikayet Mekanizması (ŞM), alt projenin ömrü boyunca, inşaat öncesi, inşaat ve işletme aşamaları dahil olmak üzere, belediye tarafından uygulanacaktır.
- Malazgirt Belediyesi, Projeden etkilenen toplulukların kaygı ve şikayetlerini almak, çözmek ve takip etmek için bir Şikâyet Mekanizması (ŞM) kuracaktır. Tüm şikayetler, önceden belirlenmiş bir zaman çizelgesi içerisinde ve içeriklerine göre etkili bir şekilde alınacak, kaydedilecek ve yanıtlanacaktır.
- Paydaşlar, en kısa sürede şikayetlere verilen yanıtlara yanıt vermek için Malazgirt Belediyesi PUB'una ve Yükleniciye özel TİG'lere erişebilecektir. Paydaşlar, şikayetlere verilen tatmin edici yanıtlar ve düzeltici faaliyetler hakkında bilgilendirilecektir. Paydaşlara yönelik ŞM aşağıdaki prosedüre göre işletilecektir.
- Malazgirt Belediyesi Proje Uygulama Birimi (PUB), tüm paydaşlarla yakın ilişkiler kurmaktan sorumlu olacaktır.

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- Ayrıca, şikayet mekanizması, anonim başvuruların dikkate alınması ve ele alınmasını sağlayacak şekilde tasarlanacaktır.
- Malazgirt Belediyesi'nin iletişim araçlarına ek olarak, şikayetleri iletmek için aşağıdaki iletişim kanalları kullanılabilir: İnşaat alanlarında işçi şikayetleri için seçilen şikayet kutuları ve ilgili mahallelerin muhtarları için şikayet kutuları, İnşaat alanlarındaki site yöneticileri ile doğrudan iletişim,Toplantılar ve resmi/özel istişareler. Eğer kamu paydaşları ve etkilenen gruplar, Malazgirt Belediyesi PUB'daki Ç&S Ekibi tarafından sunulan çözümlerden memnun değillerse veya daha yüksek düzeyde bir açıklama talep ediyorlarsa şikayetler/istekler/öneriler İLBANK'a da şikayetlerini iletebileceklerdir.
- Halka açık şikayet kanallarına ek olarak, Alt Projeye dahil olan çalışanlara yönelik özel bir Şikayet Mekanizması (ŞM) kurulmuştur. Bu çalışan ŞM'si, tüm çalışanların, alt yüklenici personeli dâhil, çalışma koşulları, ücretler, ayrımcılık, taciz, sağlık ve güvenlik endişeleri veya diğer istihdamla ilgili hususlar gibi konuları gizli ve bağımsız bir şekilde raporlayabilecekleri bir kanal sağlamaktadır.

2. Şikayetler aşağıda belirtilen kanallar aracılığıyla iletilebilir:
   - Telefon (Çağrı Merkezi ve birimleri) (0436 511 20 71)
   - Malazgirt Belediyesi ve Yüklenici Merkez Ofisi/Şubelerine Şahsen Ziyaret
   - Şikâyet kutuları (Malazgirt Belediye Birimlerine / Yükleniciye monte edilir)
   - İlgili kamu idareleri (kaymakamlık, belediye, muhtarlar)
   - E-posta (bilgi@malazgirt.bel.tr)
   - Adres: Şekerbulak, Cumhuriyet Street. No:1, 49400 Malazgirt/Muş
   - Toplantılar
   - Malazgirt Belediyesi Personel ve Yerel İletişim Masası / Yüklenici
   - Malazgirt Belediyesi / Yükleniciye yazılı dilekçe ile
   - Saha ziyaretleri ve çeşitli işlemler sırasında

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İzleme ve Raporlama

Tablo 14: Şikâyet Mekanizması İzleme Çerçevesi

Parametre	Anahtar Performans Göstergesi	Aşama	Frekans	Sorumlu Taraf
ŞM	• Konsültasyon sırasında alınan şikâyet/yorum sayısı • Şikâyet/yorum türleri (topluluk, istihdam, yerel satın alma vb.) • Her şikâyete yanıt vermek için zaman dilimleri • Açık veya kapalı şikayetlerin sayısı • Geçersiz veya devam eden şikayetlerin sayısı	İnşaat	Üç ayda bir	- Malazgirt Belediyesi PUB ve Yüklenici Tarafından Görevlendirilecektir
		İşlem	İlk iki yılda altı ayda bir; Daha sonra her yıl	- Malazgirt Belediyesi PYB ve Yüklenici Tarafından Görevlendirilecektir
İşçilerin ŞM'si	• Kendi çalışanları tarafından alınan şikâyet/yorumların sayısı • Dolaylı çalışanlar tarafından alınan şikâyet/yorum sayısı • İşçi yönetimi ve çalışma koşullarına ilişkin şikâyet/yorum türleri (örn. İşçi hakları, İSG vb.) • Her şikâyete yanıt için zaman dilimleri • Açık veya kapalı şikayetlerin sayısı • Geçersiz veya devam eden şikayetlerin sayısı	İnşaat	Aylık	- Malazgirt Belediyesi PUB ve Yüklenici Tarafından Görevlendirilecek
		İşlem	İlk iki yılda altı ayda bir; Daha sonra her yıl	- Malazgirt Belediyesi PUB ve Yüklenici Tarafından Görevlendirilecek
ŞM	ŞM'nin Etkinliği	İnşaat	Üç ayda bir	Malazgirt Belediyesi

Malazgirt Belediyesi Proje Yönetim Ekibi ve Yüklenici Yetkilisi şikâyet gelen tüm kurum şikâyet/yorum veri tabanlarını kaydedecektir. Malazgirt Belediyesi PUB, şikayetlerin/yorumların (varsa) sayısını ve niteliğini ve kapatılan şikayetlerin sayısı ve yüzdesine göre bunların şikayetleri/yorumları ele alma etkinliğini üç ayda bir değerlendirecektir. İzleme çerçevesi Tablo 14'de açıklanmıştır.

Annex 13: Consultation Form

	MALAZGİRT MUNICIPALITY Malazgirt Municipality Solar Power Plant Project			
	Consultation Form			
Person Filling Out the Form:				
Meeting Agenda:				
1.CONSULTATION INFORMATION				
Interviewed Institution:				
Name and Surname of the Interviewee:				
Telephone:				
Adress:				
E-mail:				
Stakeholder Type				
Public Institution □	People Affected by the Project □			
Interest Groups □	Industry Associations □			

2.CONSULTATION DETAILS	
Questions about the project:	
Project concerns/feedback:	
Responses to the views expressed above:	
Recording *Name-Surname / Signature*	Complainant *Name-Surname / Signature*

Annex 14: Grievance Form

	MALAZGİRT MUNICIPALITY Malazgirt Municipality Solar Power Plant Project
	Grievance Form

Person Filling Out the Form:	
Meeting Agenda:	

1.INFORMATION ABOUT THE COMPLAINANT	
Full Name: If the complainant requests that this grievance be processed anonymously, it will be recorded as anonymous, and the request will be fulfilled.	
Turkish ID Number:	
Telephone:	
Address:	
E-mail:	

Stakeholder Type				
Public Institutions □	People Affected by the Project □			
Interest Groups □	Industry Associations □			

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

Annex 15: Grievance Closure Form

	MALAZGİRT MUNICIPALITY Malazgirt Municipality Solar Power Plant Project
	GRIEVANCE CLOSURE FORM
Reference No:	
1.DETERMINATION of CORRECTIVE ACTION	
1	
2	
3	
4	
5	
Responsible Departments	
2.CLOSURE OF THE GRIEVANCE	
This section will be completed and signed by the Complainant in case the complaint specified in the "Grievance Registration Form" is resolved.	
Date: **Name-Surname/ Signature Closure of the Grievance** ……/……./……	**Name-Surname/Signature of the Complainant**

Annex 16: Environmental and Social Screening Checklist

This checklist is used by executing agency to review the potential environmental and social safeguard impacts of subprojects and determine whether the subprojects will trigger relevant safeguard policies of 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 a settlement on the parcel border of the SPP project and within the project area. The area is located close to settlements and there is an unlicensed but unfinished building in the project area where a solar power plant will be installed. The incomplete illegal structure within the area where the SPP will be installed will be demolished and there will be no demolition of the structures located in the project parcel but outside the SPP installation area, so there will be no displacement for the people living there. 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, Malazgirt 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 need. The plant will meet the energy of more than 4.700 households with 5.678.502,00 kWh of electrical energy production. 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. The SPP project is designed to meet the electric energy needs of the district. 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 discriminations 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 different roles and positions of women and men in accessing environmental goods and services. There are no activities that could lead to natural resources degradation or depletion in communities that depend on these resources for their livelihoods and well-being. The project is not expected to exacerbate 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 meeting, 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. According to Muş Governorship Provincial Directorate of Agriculture and Forestry in 2021, the main immovable property, the nature of which is irrigation canal and land, was subjected to facility cadaster in the land registry. There are agricultural lands in the immediate vicinity of the project area, and there is a pond within the parcel boundaries of the project area. Therefore, soil loss in this area carries a risk of deteriorating the quality of agricultural lands.
		Operational Phase I = 0 L =0	**Low**		It is not possible to affect the Stripping of the Vegetative Topsoil Layer and the Compaction of the Soil in the area during the operation phase of the project. There is a possibility that the soil content may change only during the life cycle of the project.
	Risk 3: Leakage of Contaminants into the Soil and Waste and Chemical Storage	Constructional Phase I = 4 L = 2	**Moderate**		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 is approximately 100 meters. The project area, which is approximately 2 km away from Badişan Creek and 3 km away from the Murat River, is approximately 250 meters away from one of the tributaries of Adalar water, which passes through the district center and extends to the pond within the project area. The fact that the project area is close to residential areas and water resources will increase the impact that will occur in case of pollutant leakage during the construction phase.
		Operational Phase I = 1 L =1	**Low**		During the operation phase, there are no activities that will cause pollutants to enter the area.
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 be taken to protect the excavation areas.	Malazgirt has a very old and deep-rooted history. There are lots of cultural assets in the district (Figure 16). According to Ministry of Culture and Tourism General Directorate of Cultural Heritage and Museums Van Cultural Heritage Preservation Regional Board Directorate, 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.
		Operational Phase I=0 L=0	**Low**		The likelihood and impact for this risk have been evaluated as 0 during this period, since: • In case of discovery of an artifact before the operation phase, the operations will be stopped. • The necessary operations will be carried out before the operation phase.

					There would be no excavation activity during the operation phase.
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 = 4 L = 2	**Moderate**		During construction, the road near the area will be actively used. There are residential units varying between 100-200 meters within the project area. Transportation to the project area will be provided by highway. Transportation will be provided from the project area via an 870 m long asphalt road connecting to the Malazgirt-Mezraaköy Highway which is passes through the nearest settlements in the project area. For the subproject area in Malazgirt, it is possible that impacts that will harm human health and the environment will occur during the construction phase. 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 = 4 L = 2	**Moderate**		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. However, since there are residential units within 100-200 meters, mitigation

					measures have been developed to protect against temporary exhaust and toxic emissions.
		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 = 4 L = 2	**Moderate**		Traffic load will increase during the construction phase. Due to the increasing traffic load, especially with the use of heavy tonnage vehicles, road surface improvements become mandatory during the construction phase. Transportation from the project area will be provided by the 870 m long asphalt road connecting to the Malazgirt-Mezraaköy Highway, but this road extends to the Malazgirt district center. There is residential area in the immediate vicinity of the subproject area, and possibility of temporary closures in transportation connections between settlements would be moderate.
		Operational Phase I = 0 L =0	**Low**		Heavy tonnage vehicles will not be used during the operation phase.
Community Health and Safety	Risk 7: Community health and safety during the execution of works	Constructional Phase I= 2 L= 2	**Low**		SPP sub-project area is located approximately 100-200 meters away from the residential area which are within the project parcel. Therefore, necessary measures need to be taken to address the potential risks to public health and safety posed by the conduct of construction works due to noise, dust, traffic disruptions and accidental spills or emissions.
		Operational Phase I = 0 L =0	**Low**		There is no risk to community health and safety during the operational phase.

Pollution in Groundwater	Risk 8: Chemical Spills and Leaks Improper Storage and Disposal of Materials	Constructional Phase I = 3 L = 1	**Moderate**		To mitigate the risk of groundwater pollution during the construction of solar power plants, it is essential to implement best practices in environmental management. The SPP sub-project area is located approximately 2 km away from Badişan Creek and 3 km away from Murat River and 200 meters away from pond, and the region where project area built is rich in terms of water sources. This includes proper storage and handling of materials, implementation of erosion control measures, appropriate stormwater management, and adherence to regulatory guidelines for environmental protection. Environmental impact assessments and monitoring during the construction phase are also crucial to identify and address potential sources of pollution promptly.
		Operational Phase I = 1 L =1	**Low**		There is no risk about chemical spills and leaks, improper storage and disposal of materials during the operation phase.
Natural Disaster	Risk 9: Earthquake Risk.	Construction Phase I = 4 L=4	**Substantial**		Muş is located in the active fault line region and 1st degree earthquake zone. 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.
		Operational Phase I=1 L=3	**Low**		Equipment must be well secured in a safe position.
Natural Disaster	Risk 10: Possibility of floods due to excessive rainfall	Construction Phase I = 4 L=2	**Moderate**		Malazgirt district is located east of the Murat River and flood susceptibility of district is located between moderate and high degree. When the SPP Sub-project area is examined, flood sensitivity of the project area is moderate degree.

		Operational Phase I=1 L=2	**Low**		Since mitigation measures will be implemented against flood risk during the construction phase, the flood risk will be reduced during the operation period.
Natural Disaster	Risk 11: Landslide Risk	Construction Phase I = 2 L=2	**Low**		Malazgirt district has low level of landslide risk due to its topographic structure, district located in Malazgirt plateau. The SPP sub-project area is located in the low level of elevation and flat area.
		Operational Phase I = 2 L=2	**Low**		Since mitigation measures will be implemented against landslide risk during the construction phase, the landslide risk will be reduced during the operation period.
Reflection and Glare Effect	Risk 12: Reflection and Glare Effect	Constructional Phase I = 1 L=1	**Low**	Reflection and glare effect is an effect created by solar power plants (SPP). This effect occurs as a result of reflection or glare from sunlight on photovoltaic panels or from a bright sky. The severity of reflection and glare effects may vary depending on the time of year and the geographical location of the power plant. Additionally, impact significance may vary depending on potential receptor points (settlements	During the construction phase, the level of glare and reflection effects is quite low. During the operation phase, this impact level is higher compared to the construction phase due to the complete installation and operation of the panels.
		Operational Phase I=3 L=3	**Moderate**		After determining the area with reflection risk in the Solar Power Plant area, visual monitoring should be carried out in the first year of operation to observe the reflection and glare effects.

				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 13: 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
Storage of Damaged or End of Lifecycle Panels	Risk 14: Storage of Damaged or End of Lifecycle Panels	Constructional Phase I=0 L=0	**Low**		There is no risk during the construction phase.

		Operational Phase I=2 L=2	**Low**		Secured areas on-site specifically designated for the temporary storage of damaged or end-of-lifecycle panels will be established. Develop a recycling plan. Develop a recycling plan in collaboration with certified recycling facilities to ensure environmentally responsible disposal of panels.

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

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

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

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

Environmental Screening Checklist

Sub-project Information	
Sub-project title	Malazgirt Municipality SPP Subproject
Sub-project beneficiaries	Malazgirt 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	Muş,Malazgirt, Saltukgazi, Lot 302 of Block 16
Sub-project cost	EU 3.315.312,00
Status of the national EIA process of the Sub-project	The sub-project area is exempted from EIA regulation Process because the installed capacity of the plant is 3603 kWp. Also, "EIA Exempted" decision of Muş Provincial Directorate of Environment and Urbanization is granted.

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

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

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

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

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

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

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

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

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