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SUSTAINABLE CITIES PROJECT – II WITHIN THE SCOPE OF ADDITIONAL FINANCING

ELEŞKİRT MUNICIPALITY SOLAR POWER PLANT ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

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ABBREVIATIONS

| % | Percentage | |
|--------|--------------------------------------------|--|
| € | Euro | |
| μg | microgram | |
| Inc. | Incorporated company | |
| EU | European Union | |
| EIA | Environmental impact assessment | |
| ESIA | Environmental and Social Impact Assessment | |
| ESMP | Environmental and Social Management Plan | |
| dB | Decibel | |
| WB | World Bank | |
| AF | Additional Financing | |
| EHS | Environment, Health and Safety | |
| EMRA | Energy Market Regulatory Authority | |
| ESG | Environmental Social Governance | |
| FAA | US Federal Aviation Administration | |
| F.I. | Financial Intermediation | |
| SPP | Solar power plant | |
| На | Hectare | |
| IFC | International Finance Corporation | |
| ILBANK | ILBANK Joint Stock Company | |
| OHS | Occupational Health and Safety | |









| kg | Kilogram |
|----------------|----------------------------------------------------------------|
| KVS | Short Term Limit Value |
| kwe | Kilowatt Electricity |
| kwh | Kilowatt Hour |
| kwp | Kilowatt Peak |
| LARPF | Land Acquisition and Involuntary Resettlement Policy Framework |
| 1 | Liter |
| m | Metre |
| m ² | Square Meters |
| m³ | Cubic meter |
| MWh | Megawatt Hour |
| No. | Number |
| PV SYST | Photovoltaic System Software |
| SCP | Sustainable Cities Project |
| NGO | Non-Governmental Organizations |
| TAP | Portable Battery Manufacturers and Importers Association |
| TL | Turkish lira |
| UVS | Long Term Limit Value |









Executive Summary

World Bank (WB) and Europe Technical and financial support from the Union (EU) support ILBANK Inc. (ILBANK), Sustainable Cities Project (SCP) projects series is implemented. SCP, participant municipalities and public services infrastructure service needs to improve aims.

SCP-II Additional Funding (AF) focuses on expanding next-generation operations into urban planning systems, particularly the broader sectors that will deliver and program urban transportation. It includes zero waste, energy efficiency, **renewable energy**, municipal social services, disaster recovery, urban renewal and restoration sectors.

Solar Energy Power Plant Project (500,5 kwp, 415 kwe) is planned by Eleşkirt Municipality within the borders of Ağrı province, Eleşkirt district, Esentepe Neighbourhood, 50 lot of 206 block. The coordinate list and location map of the planned project area are given in the attachment (See ANNEX-1, See ANNEX-2). Within the scope of the project in question, the area where the Solar Power Plant will be established was allocated by Eleşkirt Municipality. Accordingly, the Allocation letter is attached (See ANNEX-3).

The project in question is one of the subprojects within the scope of the Sustainable Cities Project - II - Additional Financing (SCP-II-AF), supported by World Bank financing in order to support sustainable development in cities in Türkiye. The investment to be made within the scope of the project will comply with both National legislation and World Bank Safeguard Policies. In addition, ILBANK will act as a financial intermediary to ensure compliance with relevant World Bank policies and procedures.

With the project put into operation, approximately 58,4% of the total electricity consumption of Eleşkirt Municipality will be met. While determining this rate, the last year consumption data of Eleşkirt Municipality (936 MWH) and the production of the SPP Project (624 MWH) were taken as basis.

The approximate cost of the project is $410.180 \in$ and the unit price is $819,54 \in$ /kwp, based on market research. The loan to be paid for the project is calculated as $28.349,52 \in$ per year. In addition, the electricity unit price paid by the Authority is 3,4258 TL/kwh, which is $0,119 \in$ based on the current exchange rate (1 \in =28.60 TL). If the project is carried out with equity capital, the amortization period is calculated as 7 years, and if the project is carried out with a World Bank loan, it is calculated as 14 years.

Project production data was calculated using EMRA data, global sunshine duration and PV SYST program. In addition to contributing to the economy with an annual production of 624 MWH, the power plant will also prevent 387 tons of carbon emissions due to solar energy being a renewable clean energy source.









Since the power plant to be established is 500 meter away from the nearest residential area, it will not affect the local people much. While the power plant is being established, short-term excavation works, transformer installation and approximately 2.050 m transmission line operations will be completed in approximately 4 weeks.

The project area was examined and photographed. Photos of the project are attached (See **ANNEX-4**).

1. Subproject Description

The specific purpose of the project is; The aim is to produce electricity using solar energy, which is a renewable energy source, with the solar energy panels to be installed within the scope of the project. In this way, Eleşkirt Municipality will be able to use the budget allocated for electricity more efficiently and will be able to better respond to the needs of improving public and environmental health.

The constant increase in energy needs and the constant increase in unit costs significantly increase the energy costs of the municipality. Reducing carbon emissions through environmental policies and international agreements is another factor of this project. Satellite images of the project area are given in **Figure 1**.



Figure 1. Project Area Satellite Image-1

The project area is recorded by proceeding towards the south from the Erzurum-Ağrı road, through the Eleşkirt District. The visual describing the access route of the project area is given in **Figure 2**. There is a treasury land on the transportation route to the project area









(206 block 116 parcel). There is no private land on the project area route. In this context, the land acquisition process has started and will be completed by the end of 2024. The parcel in question will be used to create an electricity transmission line. The allocation request and response letter are given in **ANNEX-13**. When the allocation process is completed, the allocation approval letter will be forwarded to ILBANK. When the allocation process is completed, it will not be a problem for the transportation route to pass through the parcel in question.

The characteristics of this land is given below. The land registry is given in the annex of the report (See ANNEX-12).

Table 1. Transportation Route Parcel Details

| Block | Parcel | Area Size (m²) | Qualification | Ownership |
|-------|--------|----------------|---------------|---------------|
| 206 | 116 | 57.711,23 | Raw Soil | Treasury Land |

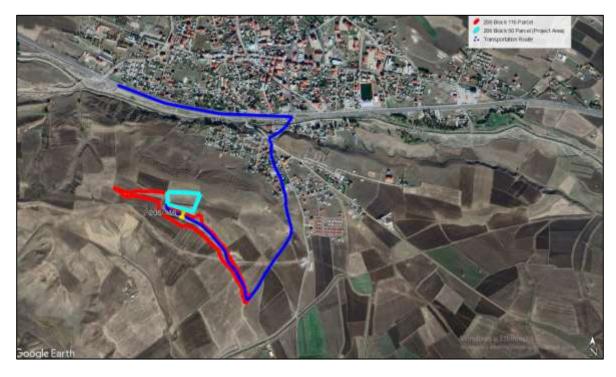


Figure 2. Project Area Transportation Route

By Eleşkirt Municipality, within the borders of Ağrı province, Eleşkirt district, Esentepe Neighbourhood, 50 lot of 206 block "Solar Energy" Power Plant Project (500,5 kwp, 415 kwe)" is planned. The connection agreement given by ARAS EDAŞ within the scope of the planned project is given attached (See **ANNEX-11**). In this direction, a grid connection will be made at a distance of approximately 2.050 meters.









The energy transmission line passes through the raw land area of 57,711.23 m² located within the borders of 116 lot of 206 block. The ownership of the area belongs to the treasury. In this context, the entire treasury land will be allocated to Eleşkirt Municipality for the purpose of creating an electricity transmission line. The allocation process will be completed by the end of 2024. The allocation request letter and response are attached (See ANNEX-13). When the allocation process is completed, the allocation approval letter will be forwarded to ILBANK.

The characteristics of this land is given below. The land registry is given in the annex of the report. (See ANNEX-12).

Table 2. Energy Transmission Line Route Parcel Details

| Block | Parcel | Area Size (m²) | Qualification | Ownership |
|-------|--------|----------------|---------------|---------------|
| 206 | 116 | 57.711,23 | Raw Soil | Treasury Land |

The energy transmission line route is given in **Figure 3**.



Figure 3. Project Area – Energy Transmission Line Route









2. Environmental and Social Screening

Under the World Bank's Operating Policy on Environmental Assessment (OP 4.01), projects are classified under categories A, B or C, depending on the degree of their potential impact on the environment.

Category A) Can be defined as projects that have significant negative environmental and social impacts. The impacts of these projects are large-scale, irreversible, sensitive, diverse and cumulative.

Category B) can be defined as projects whose environmental and social impacts are typically site-specific and reversible in nature. Although the impacts of these projects are less than the impacts of subprojects within the scope of Category A, the precautions and monitoring phases can be designed more easily.

Category C) Can be defined as projects that will have minimal or no environmental impact.

By Eleşkirt Municipality, within the borders of Ağrı province, Eleşkirt district, Esentepe Neighbourhood, 50 lot of 206 block "Solar Energy" Power Plant Project (500,5 kwp, 415 kwe)" is planned.

The planned project is a Solar Power Plant Application and is outside the scope of the EIA Regulation, which came into force after being published in the Official Gazette dated 29.07.2022 and numbered 31907.

It is also classified as Category B according to the World Bank Environmental Assessment (OP 4.01) Policy.

3. Legal and Institutional Framework

In this section, a summary of national legislation, international standards and guidelines regarding the project and its activities is presented.

3.1. National Legal Framework

There is sufficient legal and administrative basis in our country for environmental and social management during the implementation of development projects. In the ESIA study, both Turkey and the World Bank environmental and social policy documents and guides are taken into consideration. Many regulations and decrees have been put into effect within the scope of Environmental Law No. 2872. Article 10 of the "Environmental Law" states that









an EIA report must be prepared for investment projects that may cause negative environmental impacts due to their planned actions.

The "Environmental Impact Assessment Regulation", which came into force after being published in the Official Gazette dated 29.07.2022 and numbered 31907, defines the types of projects for which the EIA report is required and the issues that need to be specifically addressed.

Solar Power Plant application is considered out of scope since it is not included in Annex-1 and Annex-2 lists according to the national EIA legislation. The project in question is classified as Category B within the scope of the World Bank Environmental Assessment Policy (OP 4.01).

In addition to the EIA Regulation, other regulations regarding environment, health and safety and social issues are given below:

- Regulation on Water for Human Consumption (OG 17.02.2005 Date and 25730 Number)
- ➤ Waste Management Regulation (OG 02.04.2015 Date and 29314 Number)
- Zero Waste Regulation(OG 12.07.2019 Date and Number 30829)
- Packaging Waste Control Regulation (OG 26.06.2021 Date and Number 31523)
- Regulation on the Management of Waste Electrical and Electronic Equipment (OG 26.12.2022 Date and Number 32055)
- Industrial Air Pollution Control Regulation (OG 03.07.2009 Date and 27277 Number)
- Air Quality Assessment and Management Regulation (OG 06.06.2008 Date and 26898 Number)
- Regulation on Control of Exhaust Gas Emissions (OG 11.03.2017 Date and 30004 Number)
- Environmental Noise Control Regulation (OG 30.11.2022 Date and Number 32029)
- Regulation on Noise Emission in the Environment Created by Equipment Used in Open Areas
 - (OG 30.12.2006 Date and 26392 Number)
- Water Pollution Control Regulation (OG 31.12.2004 Date and 25687 Number)
- Regulation on the Control of Waste Batteries and Accumulators









- (OG 31.08.2004 Date and 25569 Number)
- Medical Waste Control Regulation (OG 25.01.2017 Date and 29959 Number)
- Regulation on Control of Excavation Soil, Construction and Demolition Waste (OG 18.03.2004 Date and 25406 Number)
- Regulation on Control of Soil Pollution and Point Source Contaminated Sites (OG 08.06.2010 Date and 27605 Number)
- Regulation on the Protection of Employees from Noise-Related Risks (OG 28.07.2013 Date and 28721 Number)
- Occupational Health and Safety Regulation in Construction Works (OG 05.10.2013 Date and 28786 Number)
- ➤ Health and Safety Signs Regulation (OG 11.09.2013 Date and 28762 Number)
- Regulation on Health and Safety Conditions in the Use of Work Equipment (OG 25.04.2013 Date and Number 28628)
- Occupational Health and Safety Risk Assessment Regulation (OG 29.12.2012 Date and 28512 Number)
- Regulation on Grounding in Electrical Installations (OG 21.08.2001 Date and 24500 Number)
- ➤ Electrical High Current Facilities Regulation (OG 30.11.2000 Date and 24246 Number)
- Electrical Internal Facilities Regulation (OG 04.11.1984 Date and 18565 Number)
- Regulation on the Authorities, Duties and Responsibilities of Electrical Scientists
 - (OG 11.11.1989 Date and 20339 Number)
- Subcontracting Regulation (OG dated 27.09.2008 and numbered 27010)
- Regulation on Solar Energy-Based Electricity Production Facilities (OG 19.06.2011 Date and Number 27969)
- Regulation on the Use of Personal Protective Equipment in Workplaces (OG 02.07.2013 Date and 28695 Number)
- Regulation on Noise Emission in the Environment Created by Equipment Used in Open Areas
 (OG 30.12.2006 Date and 26392 Number)
- Labor Law No. 4857
- Occupational Health and Safety Law No. 6331
- Environmental Law No. 2872
- Expropriation Law No. 2942
- ➤ Soil Conservation and Land Use Law No. 5403









- ➤ Energy Efficiency Law No. 5627
- Right to Information Law No. 4982
- ➤ General Hygiene Law No. 1593
- Law No. 5346 on the Use of Renewable Energy Resources for the Purpose of Electrical Energy Production
- Law No. 2863 on the Protection of Cultural and Natural Assets
- National Parks Law No. 2873
- Forest Law No. 6831

3.2. International Standards

For the investments defined and outlined within the scope of this Project and in accordance with the World Bank's Environmental Assessment Policy (OP 4.01), an Environmental and Social Management Report (ESMP) must be prepared by the Project Owner.

World Bank Environmental and Social Protection Policies include environmental assessments of projects, environmental and social adverse impacts, and other policies regarding impact mitigation and prevention. The following operational policies are included within the framework of ESMP;

- Natural Habitats (OP 4.04)
- Physical Cultural Resources (OP 4.11)
- Indigenous Peoples (OP 4.10)
- Land Acquisition and Involuntary Resettlement (OP 4.12)
- Physical Cultural and Other World Bank Protection Measures

The Environmental and Social Monitoring System will cover the following:

- General Environment
- Air emissions
- Soil
- Surface water and groundwater
- Biodiversity
- Noise and dust emissions
- Social Monitoring

The International Finance Corporation (IFC) guidelines, also known as the International Finance Corporation, which are considered relevant to the project and must be followed during the ESMP study, are as follows:









- IFC General ESG Guidelines dated 30 April 2007
- IFC General EHS Guidelines Construction and Decommissioning

4. Baseline Data

Solar Energy Power Plant Project (500,5 kwp, 415 kwe) is planned by Eleşkirt Municipality within the borders of Ağrı province, Eleşkirt District, Esentepe Neighbourhood, 50 lot of 206 block. The coordinate list and location map of the planned project area are given in the attachment (See ANNEX-1, See ANNEX-2). Within the scope of the project in question, the area where the Solar Power Plant will be established was allocated by Eleşkirt Municipality. Accordingly, the Allocation letter is attached (See ANNEX-3).

With the project put into operation, approximately 58,4% of the total electricity consumption of Eleşkirt Municipality will be met. While determining this rate, the last year consumption data of Eleşkirt Municipality (936 MWH) and the production of the SPP Project (624 MWH) were taken as basis.

Since the power plant to be established is 500 meter away from the nearest residential area, it will not affect the local people much. While the power plant is being established, short-term excavation works, transformer installation and approximately 2.050 m transmission line operations will be completed in approximately 4 weeks.

It is anticipated that 10 personnel will work during the construction phase of the project and the solar energy installation process will be completed within 8 weeks.

The project area is recorded by proceeding towards the south from the Erzurum-Ağrı road, through the Eleşkirt District.

According to the data of the Turkish Statistical Institute, the population of Eleşkirt district in 2023 is 30.103 people. This population consists of 15.183 men and 14.920 women. Accordingly, 50,44% of the population of Eleşkirt District is male and 49,56% is female. The population of Esentepe District consists of 307 people. In this context, the population of Esentepe District corresponds to approximately 1.02% of the population of Eleşkirt District.









5. Environmental and Social Management Plan

By Eleşkirt Municipality, within the borders of Ağrı province, Eleşkirt district, Esentepe Neighbourhood, 50 lot of 206 block "Solar Energy" Power Plant Project (500,5 kwp, 415 kwe)" is planned. It is anticipated that 10 personnel will work during the construction phase of the project and the solar energy installation process will be completed within 8 weeks.

Within the scope of the project, domestic solid waste and wastewater will be generated from the personnel who will work during the construction phase, and during the operation phase, glare and glare effects will occur due to photovoltaic panels.

In this regard, the possible environmental impacts that may occur within the scope of the project have been evaluated in detail below, the measures to be taken have been determined and monitoring plans have been prepared.

Water Use and Wastewater Generation

The water needs of 10 personnel who will work within the scope of the project will be met, and in parallel, wastewater will be generated due to the personnel. During the operation phase of the project, deionized water will be used to clean the panels, and the water falling on the ground will evaporate and will not cause wastewater formation. The cleaning of the panels will be done twice a year and will be in accordance with the current Occupational Health and Safety legislation.

The drinking water needs of the personnel who will work during the construction and operation phases of the project will be met with demijohns purchased from companies licensed by the Ministry of Health in accordance with the provisions of the "Regulation on Water for Human Consumption". Domestic water needs will be met from the network. Additionally, deionized water required for cleaning the panels will also be purchased.

The places where water will be used, its quantities, supply locations, wastewater amounts and the disposal method of wastewater during both the construction and operation phases of the project are given in **Table 3**.









Table 3. Water Supply Plan To Be Used in Construction and Operation Phases

| Project Period | Water use | The amount of water | Water Supply Place | Amount of Wastewater | Wastewater Disposal Method |
|-------------------|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Building | Drinking and potable water for 10 people who will take part in the land preparation phase | 10 people x 193 lt/person- day* = 1.93 m ³ /day | Drinking and utility water that will be needed during the land preparation and construction phase will be supplied by demijohns. | 10 people x 182 lt/person-day* = 1.82 m ³ /day** | A septic tank will be installed and removed by sewage trucks. |
| Business | Cleaning of Photovoltaic Panels (Twice a year) | 4 m³/year deionized water (0.01 m³/day) | Panel cleaning will be done twice a year with chemical-free water, except on rainy days. Domestic water will be provided by purchasing. | - | Since the water will remain on the concrete floor during the panel cleaning process, it will evaporate and wastewater will not be formed. Any remaining water on the panel will be wiped off with a dry cloth. |

Note 1*: The amount of water a person will need is taken as 193 lt/person-day (Turkish Statistical Institute, Ağrı, 2020).

Note 2:** The daily amount of wastewater generated by one person is taken as 182 lt/person (Turkish Statistical Institute, Ağrı, 2020).

Drinking water to be used by the personnel who will work during the land preparation and construction phase of the project will be supplied from branded, original packaged bottled water sold in the licensed market in accordance with the provisions of the "Regulation on Water for Human Consumption".

The drinking and potable water needed by the personnel who will work at all stages of the project will be subject to regular control and inspection monitoring analyzes authorized by the Ministry of Health every year, in accordance with the criteria of the "Regulation on Water for Human Consumption", which came into force after being published in the Official Gazette dated 17.02.2005 and numbered 25730. It will be carried out in accredited laboratories and analysis reports will be kept.

Within the scope of the project, Environment, Health and Safety Guidelines (Wastewater and Ambient Water Quality) published by the International Finance









Corporation (IFC) will be followed. In this context, the criteria given in **Table 4** will be complied with.

Table 4. Wastewater and Ambient Water Quality Criteria

Criteria

- Determining the quality, quantity, source and discharge point of liquid waste generated in the facility,
- Draining the septic tank periodically using a sewer truck before it fills with wastewater,
- Taking samples from the wastewater discharged to the sewerage infrastructure at certain periods and checking its compliance with the discharge limits,
- Obtaining the appropriate opinion from the infrastructure administration for discharge to the sewer,
- Meeting the pre-treatment and monitoring requirements of the sewage treatment system,
- Minimizing wastewater generation to reduce the burden of pollutants requiring treatment,
- Adopting and implementing water saving methods,
- Separation of rainwater and wastewater channels,
- Improving wastewater lines and preventing leaks.

Waste Management

Among the wastes that can be generated, recyclable (paper, plastic, glass, etc.) and non-recyclable wastes (food scraps, etc. organic waste) will be collected separately in garbage containers placed at various points of the project site. Wastes that can be recycled will be sent to licensed recycling companies; Domestic solid waste that cannot be recycled will be disposed of by sending it to licensed disposal facilities.

For the packaging waste generated in the facility, in accordance with the colors specified within the scope of the "Zero Waste Regulation" published in the Official Gazette No. 30829 dated 12.07.2019 (blue color for paper waste, yellow color for plastic waste, gray color for metal waste, green color for glass waste and black for non-recyclable waste) waste bins will be provided, a Zero Waste Management System will be established and data of the waste collected for the previous month will be entered into the Integrated Environmental Information System (e- çbs) within the framework of the relevant regulation by the 15th of each month.

During the operations to be carried out within the scope of the planned project, domestic solid waste will be generated due to the personnel working. According to the data received from Turkish Statistical Institute, the daily amount of solid waste generated per person in Ağrı in 2020 is 1.13 kg/day ⁽¹⁾, accordingly, the amount of domestic solid waste that will arise from people who will work during the construction phase of the project is 11,3 kg/day (10 people x 1.13 kg/person-day) solid waste will be generated.









⁽¹⁾ Municipal Waste Statistics, Ağrı Province, Average Municipal Waste Amount per Person (kg/person-day), Turkish Statistical Institute, 2020.

Since the solid waste within the scope of the project will not be stored in the project area for a long time, it will not cause any problems such as odor or distribution.

All regulations (Waste Management Regulation, Packaging Waste Control Regulation, Zero Waste Regulation) regarding the storage of all solid waste (food residues, packaging paper, pet bottles, glass bottles, etc.) within the scope of the project will be complied with. Additionally, employees will be informed that it is prohibited to release waste into seas, lakes and similar recipient environments.

Within the scope of the project, the Environment, Health and Safety Guidelines (Waste Management and Hazardous Material Management) published by the International Finance Corporation (IFC) will be followed. In this context, the criteria given in **Table 5** will be complied with.

Table 5. Waste Management Criteria

Criteria

- Obtaining all necessary permits, certificates and approvals from the relevant official authorities,
- Regular inspection of waste separation and collection practices,
- Monitoring records regarding hazardous waste collected, stored or shipped,
- Preventing waste generation, reducing it, reusing it, recovering it, recycling it, removing it and finally establishing a waste management hierarchy.
- Preventing or minimizing waste generation as much as possible,
- Recovering and reusing waste in cases where waste production cannot be prevented but minimized,
- In cases where wastes cannot be recycled or reused, their processing, destruction and disposal in an environmentally compatible manner,
- Identifying source reduction, reuse and recycling opportunities,
- Establishing purchasing measures that allow for opportunities to return usable materials, such as containers, and prevent overordering of materials.
- Minimizing hazardous waste generation by applying solid waste separation to prevent the mixing of non-hazardous and hazardous wastes to be managed,
- Identifying potentially recyclable materials,
- Determining recycling targets and monitoring waste production and recycling rates,
- Providing training and incentives to employees to achieve goals,
- Identifying potential impacts and risks associated with the management of hazardous waste generated throughout its entire life cycle,
- Storing waste in a way that prevents incompatible wastes from mixing or coming into contact with each other and allows monitoring of leaks or spills between containers,
- Store indoors, away from direct sunlight, wind and rain.
- Ensuring the reduction of waste at source.









Waste Panels

Waste panels, switches, solar regulators, inverters, etc. The materials will be temporarily stored in the Hazardous Waste Storage Area located in the existing facility. It will then be delivered to the closest or most economical licensed recycling company to the project area for recycling.

Waste Batteries

Waste batteries that may be removed from vehicles in the project area will be returned to the vendors and replaced with new batteries. Batteries used in the field will be reused by ensuring that they are rechargeable. Used batteries will be collected in battery collection boxes and left at collection points belonging to TAP (Portable Battery Manufacturers and Importers Association). The "Regulation on the Control of Waste Batteries and Accumulators" and its relevant provisions, which came into force after being published in the Official Gazette dated 31.08.2004 and numbered 25569, will be complied with.

Medical Waste

Medical waste is not expected to be generated in the project area as the nearest health institution will be visited in case of an accident. In case of occurrence, the relevant provisions of the "Medical Waste Control Regulation", which came into force after being published in the Official Gazette dated 25.01.2017 and numbered 29959, will be complied with. Medical waste that is likely to be generated as a result of the use of first aid materials available in the facility in case of emergency; tear, puncture, explosion and transportation resistant; It will be placed in leak-proof red plastic bags made of original medium density polyethylene raw material and bearing the phrase "CAUTION MEDICAL WASTE". The bags will be filled at most ¾ and their mouths will be tightly tied, and when deemed necessary, each bag will be placed in another bag with the same features to ensure absolute sealing.

Within the scope of the project, the Environment, Health and Safety Guidelines (<u>Waste Management</u> and <u>Hazardous Material Management</u>) published by the International Finance Corporation (IFC) will be followed. In this context, the Waste Management Criteria to be followed are given in **Table 5** and the Hazardous Material Management criteria are given in **Table 6**.









Table 6. Hazardous Material Management Criteria

Criteria

- Determining hazardous material management priorities based on hazard analysis of risky operations determined through Social and Environmental Assessment,
- Avoiding or minimizing the use of hazardous substances whenever possible,
- Preventing the uncontrolled release of hazardous substances into the environment or uncontrolled reactions that may lead to fire or explosion,
- Using engineering controls (limitation, automatic alarms and shutdown systems) appropriate to the nature of the hazard,
- Implementation of management controls (procedures, audits, communications, training and exercises) to address remaining risks that cannot be prevented or controlled by engineering measures,
- Recording the types and quantities of hazardous substances found in the project,
- Analyzing potential spill and release scenarios using available industry statistics on spills and accidents whenever possible,
- Analyzing the potential for uncontrolled reactions such as fire and explosion,
- Identification of the locations of hazardous materials and related activities on the emergency plan field map,
- A description of response activities in the event of a spill, release, or other chemical emergency.
- Performing occupational safety analysis to identify specific potential occupational hazards and industrial hygiene studies, as appropriate, to monitor and verify exposure levels to chemicals and compare with applicable occupational exposure standards.
- Conducting training, awareness-raising activities and exercises,
- Identification and implementation of permitted maintenance activities such as hot work or confined space entries,
- Providing appropriate personal protection equipment (PPE) (shoes, masks, protective clothing
 and goggles in appropriate areas), emergency eyewash and shower stations, ventilation systems
 and sanitary facilities,
- Preparation of monitoring and record keeping documents containing audit procedures designed to keep accident and incident investigation reports on file for a period of at least five years,
- Using transfer equipment that is suitable and compatible with the characteristics of the transferred materials and designing them to ensure safe transfer.

Excavation Waste

Within the scope of the project, excavation works will be carried out during the land preparation and construction phase, the opening of the energy transmission line, the arrangement of the land, the installation of machinery and equipment will be carried out, and a limited amount of excavation waste will be generated in this area. Excavation waste will be used as filling material.

In order to place the machinery and equipment to be installed within the scope of the project, excavation will be carried out at a depth of 0.2 m in an area of approximately $20,000 \text{ m}^2$.









According to this;

 $20.000 \text{ m}^2 * 0.2 \text{ m} = 4.000 \text{ m}^3 \text{ excavation will occur.}$

The works will be carried out in accordance with the provisions of the "Regulation on the Control of Excavation Soil, Construction and Demolition Wastes", which came into force after being published in the Official Gazette dated 18.03.2004 and numbered 25406. In the studies to be carried out, the provisions of the "Regulation on the Control of Soil Pollution and Point Source Contaminated Sites", which came into force after being published in the Official Gazette dated 08.06.2010 and numbered 27605, will also be taken into consideration.

In addition, the "Zero Waste Regulation", which came into force after being published in the Official Gazette dated 12.07.2019 and numbered 30829, will be complied with at all stages of the planned project.

Dust Emission

Within the scope of the project, excavation will be carried out during the opening of the energy transmission line during the land preparation and construction phase, which will last 3 week. Dust emissions will occur during the excavation process.

Calculations for dust emissions that may occur during land preparation and construction works are stated in Table 12.6 of the "Regulation on Control of Industrial Air Pollution", which came into force after being published in the Official Gazette No. 27277 dated 03.07.2009. It was calculated using "Emission Factors to be Used in Dust Emission Mass Flow Calculations" and is given in the attachment (See ANNEX-5).

According to the National Air Monitoring Network Eleşkirt Station data, the current air quality of the region is below the PM10 parameter limit values given in Annex-1A of the "Regulation on Assessment and Management of Air Quality". It is not thought that the dust emissions that will occur during the 4-week land preparation and construction phase of the Solar Energy Project will negatively affect the air quality. The dust emission concentration resulting from the activities carried out in this direction is evaluated in accordance with both the Industrial Air Pollution Control Regulation and the Air Quality Assessment and Management Regulation (**Table 7**).

Additionally, dust emissions will remain below the limit values in the Environment, Health and Safety Guidelines (Air Emissions and Ambient Air Quality) published by the International Finance Corporation (IFC).









Table 7. PM10 Pollutant Limit Values

| Table 7. P. | Table 7. PM10 Pollutant Limit Values | | | | | | |
|--------------------------------------------------------------|-------------------------------------------------------------------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| Regulation | Average Time | Limits | Annual Decrease of Limit Value | Warning Threshold | | | |
| | KVS (24 hour) 95%/year To protect human health | 300 μg/m³ | 100 μg/m³ starting from 1.1.2009 until 1.1.2014 It decreases annually by an equal amount every 12 months until (33% of the limit value). | | | | |
| Air Quality Assessment and Management Regulation | Winter Season Avg. (October 1 – March 31) To protect human health | 200 μg/m³ | The limit value is 90 µg/m³ starting from 1.1.2009 until 1.1.2014 It decreases annually by an equal amount every 12 months until it reaches (45% of the limit value). | First level: 260 μg/m³ Second level: 400 μg/m³ Third level: 520 μg/m³ Fourth level: 650 μg/m³ (The values given are 24-hour averages.) | | | |
| | UVS (Annual) To protect human health | 150 μg/m³ | Starting from 1.1.2009, the limit value decreases annually by an equal amount every 12 months until it reaches 60 µg/m³ (40% of the limit value) until 1.1.2014) | | | | |
| Industrial Air Pollution Control Regulation | 24 Hours (Cannot exceed more than 35 times in a year) | 50 μg/m³ | - | - | | | |
| | Yearly | $40 \mu g/m^3$ | - | - | | | |
| IFC Environmental, Health and Safety (EHS) | 24 Hours | - | | Temporary Target-1: 150 μg/m³ Temporary Target-2: 100 μg/m³ Temporary Target-3: 75 μg/m³ Directive: 50 μg/m³ | | | |
| Guidelines: Air emissions oath ambient air Quality | 1 Year | - | | Temporary Target-1: 70 μg/m³ Temporary Target-2: 50 μg/m³ Temporary Target-3: 30 μg/m³ Directive: 20 μg/m³ | | | |









Within the scope of the activity, the issues specified in the "Regulation on Control of Industrial Air Pollution", "Air Quality Assessment and Management Regulation" and the <u>Air Emissions and Ambient Air Quality Guide</u> published by the International Finance Corporation will be complied with.

Exhaust Gas Emission

Within the scope of the project, ego gas emissions will occur due to the vehicles used during the transportation of photovoltaic panels, materials and equipment to the project area, and will have a slight impact on the existing air quality. In this regard, the provisions of the "Exhaust Gas Emission Control Regulation" will be complied with in order to minimize the exhaust gas emissions arising from the vehicles to be used within the scope of the project. Maintained and repaired vehicles will be used.

Noise

During the construction phase of the project, the noise level will vary throughout the day. However, since the work will be carried out during daylight hours, noise generation will be limited.

It is thought that after the installation of the power plant, the noise level that the equipment will emit to the environment during operation, especially the inverter panel and substation equipment, will be below 25 dB and therefore it will not pose any problem as the noise will completely disappear at a distance of 60-80 m. Considering that the nearest residential area is 1 km away and the noise during the construction phase will end within 3 weeks, it will not pose any problem. In addition, the determined values are below the limit values given in national and international legislation. A complaint complaint mechanism will be implemented regarding these issues. Noise calculation is given in the attachment (See **ANNEX-6**).









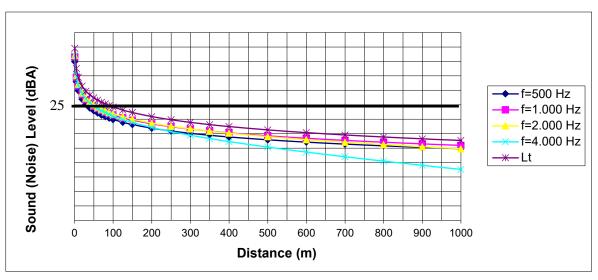


Figure 4. Noise Distribution Graph by Distance

Table 8. Environmental Noise Level Border Values

| N. 4. G | Measured | Environmental No | oise Level | |
|----------------------------------------------------------|-------------------|-----------------------|------------|-----------------------|
| Noise Source | Parameter | Daytime | Evening | Night |
| Industrial facilities, transportation resources | LA eq. 5 min. | 65dB(A) | 60dB(A) | 55dB(A) |
| Businesses that broadcast music | LA eq, 63-250 Hz. | 60dB(A) | 55dB(A) | 50dB(A) |
| Workplaces | LA eq, 5 min. | Background + 5 dB (A) | | Background + 3 dB (A) |
| If there is more than one workplace | LA eq, 5 min. | Background + 7 dB (A) | | Background + 5 dB (A) |
| All sources | LCmax _ | 100dB(C) | | |

Table 9. IFC Noise Management – Limit Values

| | Environmental Noise Level | |
|----------------------------------------------|----------------------------------|----------------------------|
| Noise Source | Daytime 07:00 – 22:00 | Nighttime 22:00 – 07:00 |
| Residential, Corporate | 55dB(A) | 45dB(A) |
| Educational Place, Industrial, Commercial | 70dB(A) | 55dB(A) |









The noise emissions that will occur during the land preparation and construction phases of the project remain below the limit values given in both the Environmental Noise Control Regulation and the Environment, Health and Safety Guides (Noise Management) published by the International Finance Corporation.

In the calculation, it is assumed that all vehicles and equipment operate simultaneously, there are no obstacles between noise sources and receivers, and noise sources operate uninterruptedly. There will actually be less noise.

In order to keep the noise level to a minimum, care will be taken to operate a minimum number of well-maintained vehicles and equipment at the same time. During construction work, not all vehicles will operate at the same time. The tools will operate in a specific order. In addition, the fact that the works will be carried out at certain times of the day (07:00 - 19:00) may limit noise generation to some extent.

Annex-2 (Measurement *and Monitoring of Environmental Noise Level*) *of the* "Environmental Noise Control Regulation" in the Official Gazette dated 30.10.2022 and numbered 32029; Table 1. Environmental Noise Level Limit Values will be followed.

In order to protect people within the scope of the project from risks involving health and safety information as a result of exposure to noise, the "Regulation on the Protection of Employees from Risks Related to their Departments" will be complied with.

In addition, the provisions of the "Regulation on Occupational Health and Safety in Construction Works" and the "Regulation on the Use of Personal Protective Equipment in Workplaces" will be followed.

For the noise levels of the equipment to be used, the provisions of the "Regulation on Noise Emission in the Environment Created by Equipment Used in Open Areas" will be complied with.

In addition, within the scope of the Project, action will be taken in accordance with the Environment, Health and Safety Guides (<u>Noise Management</u>) published by the International Finance Corporation.









Glare and Sparkle Effect

Another effect of solar power plants is the reflection and glare effect that occurs as a result of the image or light created by direct sunlight or a bright sky on the panels. Although the severity of glare and glare effects varies depending on the time of year and the geographical location of the power plant, the importance of the effect depends on variables such as potential receptor points (settlements in the impact area, transportation routes, airports, etc.). Since photovoltaic panels absorb sunlight, the glare and glare effects in PV type systems are lower than in systems using other solar energy technologies.

Photovoltaic panels are designed to maximize absorption and minimize reflection to increase electricity generation efficiency. To limit reflection, photovoltaic panels are made of dark, light-absorbing materials and coated with an anti-reflective coating. Today's panels reflect an average of 2% of incoming sunlight.

According to the U.S. Federal Aviation Administration (FAA), current solar panels reflect slightly more light than black asphalt, on par with bodies of water and well below bare soil, vegetation, roofs, glass, snow or metal.²









²https://www.savemoneycutcarbon.com/

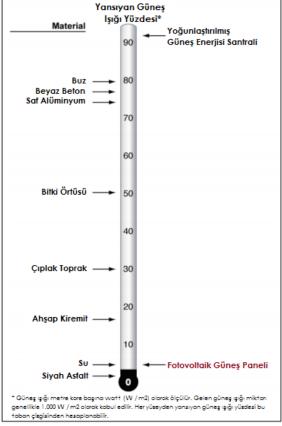


Figure 5. Sunlight Reflectance Percentages of Various Materials

 $\textbf{Source:} \underline{\text{https://www.savemoneycutcarbon.com/learn-save/do-i-need-to-worry-about-glare-from-solar-panels/}$

Against possible reflection and glare effects, points where there is a risk of reflection will be determined and in the first year of operation, vegetal or artificial curtains will be applied at the necessary points according to visual monitoring and complaints from nearby settlements.

Evaluation According to Bird Migration Routes

Turkey constitutes the southeastern borders of the wide geography defined as the Western Palearctic region. Every year, in spring and autumn, during periods defined as migration periods, very regular and large-scale bird migrations occur between the Western Palearctic Region and the central, eastern and southern parts of the African continent.









While one of these routes passes over the Bosphorus, the other one enters our country from the Caucasus, passes through Northeastern Anatolia, and leaves our country from the south, like the first route. In spring and autumn, these movements are exhibited in opposite directions. Turkey is located on the most important bird migration routes between Europe and Africa, and due to its location, the areas on the migration routes are of great importance. The project area is not located on the bird migration routes of our country.



Figure 6. Migratory Bird Migration Routes Map

Biodiversity

There is no distribution of natural flora and fauna in the area where the Project is located. Therefore, it is not possible for natural flora and fauna to be affected by the construction activity of the project.

Population/Demographics

There is no negative impact on the population level expected from the project in the residential areas that are expected to be generally affected within the scope of the planned project. Additionally, no camping area will be established for workers during the construction period. Within the scope of the project, it is planned to meet the personnel needs as much as possible from local people.

Subcontractors are obliged to provide professional ethics training to each worker in order to ensure that the workers who will work during the construction do not have any negative impact on the social order. The Project Owner will ensure that contractors establish a code of conduct and ensure that workers regarding communication with citizens receive training before starting work.









Economy/Employment

It is anticipated that temporary employment will be created for construction works during the renovation and capacity expansion works to be carried out in the project. During construction, priority will be given to contributing to the local economy by using local materials and paying attention to providing various goods.

Natural Habitats

In our country, ecologically protected areas under the legal legislation under the responsibility of the Republic of Turkey Ministry of Agriculture and Forestry, General Directorate of Nature Conservation and National Parks; National Parks, Nature Conservation Areas, Wildlife Development Areas, Wild Animal Settlement Areas, Natural Parks, Natural Monuments, Ramsar Areas and Wetlands.

In our country, areas that are ecologically protected by the legal legislation under the responsibility of the Ministry of Environment, Urbanization and Climate Change of the Republic of Turkey; They are Special Environmental Protection Areas.

When the project area is evaluated according to the ecologically protected areas under the legal legislation under the responsibility of both the Ministry of Agriculture and Forestry, General Directorate of Nature Conservation and National Parks and the Ministry of Environment, Urbanization and Climate Change of the Republic of Turkey, National Parks, Nature Conservation Areas, does not fall within Wildlife Development Areas, Wild Animal Settlement Areas, Natural Parks, Natural Monuments, Ramsar Areas, Wetlands and Special Environmental Protection Areas.

The closest protected areas to the project area are the Wildlife Development Area, located in the north-east direction of the project area and approximately 25.9 km away. The satellite image showing the distance between the project area and the wildlife development area is given below.









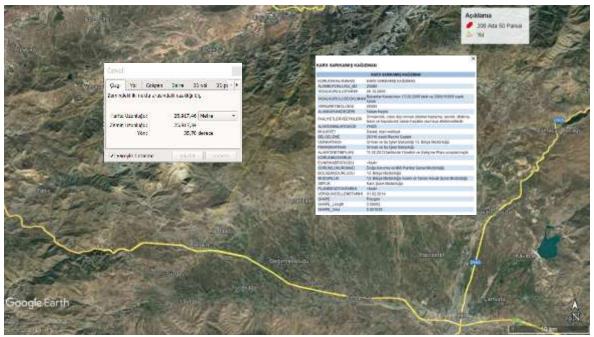


Figure 7. Project Area - Wildlife Development Area

Historical and Cultural Areas

The project area does not fall within the borders of any Tourism Center or Culture and Tourism Protection and Development Zone declared in accordance with the Tourism Incentive Law No. 2634.

If movable or immovable cultural assets are encountered during any work or operation to be carried out within the scope of the project, the nearest Museum Directorate will be informed in accordance with Article 4 of the Law Number 2863 on the Protection of Cultural and Natural Assets.

In addition, within the scope of the project, the provisions of the World Bank Physical Cultural Resources, chance finds (OP 4.11) will be followed.

Land Acquisition / Use

By Eleşkirt Municipality, within the borders of Ağrı province, Eleşkirt district, Esentepe Neighbourhood, 50 lot of 206 block "Solar Energy" Power Plant Project (500,5 kwp, 415 kwe)" is planned. The connection agreement given by ARAS EDAŞ within the scope of the planned project is given attached (See ANNEX-11). In this direction, a grid connection will be made at a distance of approximately 4,500 meters. Electrical connection will be provided via underground cable connection.









The energy transmission line passes through the raw land area of 57,711.23 m² located within the borders of 116 lot of 206 block. The ownership of the area in question belongs to the treasury. In this context, the treasury parcel in question will be allocated to Eleşkirt Municipality for the purpose of establishing an electricity transmission line. These transactions will be completed by the end of 2024. The allocation request and response letter are given in **ANNEX-13**. When the allocation process is completed, the allocation approval letter will be forwarded to ILBANK. When the allocation process is completed, it will not be a problem for the transportation route to pass through the parcel in question.

The characteristics of this land is given below. Land registry is included in the annex of the report. (See ANNEX-12).

Table 10. Parcel Details

| Block | Parcel | Area Size (m²) | Qualification | Ownership |
|-------|--------|----------------|---------------|---------------|
| 206 | 116 | 57.711,23 | Raw Soil | Treasury Land |

Within the scope of the project in question, the area where the Solar Power Plant will be established was allocated by Eleşkirt Municipality. Accordingly, the Allocation letter is attached (See ANNEX-3).

Existing access roads will be used for project activities and no additional land will be acquired for access roads. If additional access roads are required in the future, an environmental and social impact assessment will be conducted for the proposed route.

The measures presented in the ESMP will be complied with by the Project Owner and Subcontractors in order to create temporary security measures for the construction works to be carried out around the project area in order to avoid causing any inconvenience to the citizens.

Working conditions

The Project Owner will be responsible for human resources for the construction and operation periods. Turkey is currently in the middle of its harmonization process with the European Union and its labor laws are being reviewed to ensure compliance. The project will comply with national labor, social security and occupational health and safety laws, World Bank Environment, Health and Safety Guidelines and International Labor Organization convention principles and standards.

In addition, the Subcontractor will provide training to its personnel during the execution of the works about the environmental and social impacts that should be taken into consideration during field works and included in the ESMP document. The subcontractor will inform its personnel about taking all precautions to prevent and/or minimize









environmental and social impacts during field manufacturing. In addition, all these processes will be controlled by the Project Owner.

Occupational Health and Safety

It is planned to employ a total of 9 personnel during the construction process of the project, depending on the workload. The construction phase of the project includes excavation, filling and heavy vehicle use. Vehicle movements can cause accidents resulting in injury and death. Occupational Health and Safety (OHS) risks may arise due to the risk of pollution, dust emissions and noise generation during site preparation and construction works. In particular, construction works may cause accidents that will threaten the health and safety of employees if necessary precautions are not taken. In this context, the Project Owner and Subcontractor are obliged to provide a safe and healthy working environment for employees. During the construction period, workers are exposed to noise, dust, heat, chemicals, etc. may be exposed to various dangers. If potential risks at various stages of the Project are not managed appropriately, occupational accidents and injuries may occur. Potential accidents that may occur during the operation phases of the projects may cause potential health problems due to non-routine risks.

It will be ensured that employees are informed about their job descriptions, responsibilities and risks that may threaten health and safety related to the work performed. Employees will be provided with the necessary personal protective equipment and will be provided with information about work and occupational safety through regular training.

The Project Owner will take reasonable precautions to prevent occupational accidents, injuries and illnesses on site, including measures to reduce and prevent the risk of injury or illness, as well as the risk of exposure to harmful levels of environmental factors and chemicals.

The Project Owner will require all employees and contractors to comply with local and international health and safety legislation and guidelines. This will include the use of appropriate personal protective equipment (PPE), hearing protection and the implementation and adherence to a management system for activities associated with health and safety risks.

The risk of accidents that may arise from the technology and materials to be used within the scope of the project will be low if occupational health and safety legislation is strictly followed.

Within the scope of the project, the Occupational Health and Safety Regulation in Construction Works, Labor Law, Occupational Health and Safety Law and relevant regulations will be complied with.









In order to prevent all possible risks to human health at all stages of the project, all health and safety rules specified in the Labor Law, Occupational Safety Law and relevant regulations regarding occupational health and safety will be followed.

Work accidents, fire, etc. that may occur in the project area. to respond to emergencies; Fire extinguishing tools and equipment (fire extinguishers, buckets, shovels, etc.), first aid materials, etc. within the project site in accordance with current regulations and laws. Will be kept and placed in suitable places where everyone can easily reach them.

The equipment in question will be shaped according to the risk assessment study to be carried out within the scope of the project.

In this study, the concepts of "accept, share the risk, reduce the impact and frequency, avoid" are emphasized and the steps to be taken to manage the risks are given below.

Preparation of Risk Assessment Guide

Risk assessment analysis and checklists prepared by international organizations will be examined and a Risk Assessment Guide will be created for implementation in our country. Risk Assessment Guides include determining the dangers that may arise in advance and taking the necessary precautions. In order to protect the safety of workplaces and the health of employees in our country, a Risk Assessment Guide must be available.

During the preparation of the Risk Assessment Guide, a Checklist and Risk Table are included. The Checklist is easy to use and understand. By simply answering Yes or No, predetermined points are checked.

In this regard, a Risk Assessment Guide will be prepared by the Occupational Health and Safety expert appointed within the scope of the project, in which hazards in both the construction and operation phases are defined, risks are determined, risk control measures are decided and monitoring work is included before the start of the activity.

Control List

The Checklist, prepared by the Occupational Health and Safety Specialist before starting the operation for the convenience of the user, includes the stages of preliminary analysis, project planning and design, tests and commissioning, and finally the operation of the power plant. In the stages examined, technical reasons are predominant and although it is not directly related to Occupational Health and Safety, it has an indirect effect. Risks where no precautions are taken against technical hazards during power plant installation will turn into Occupational Health and Safety risks in the following stages. Technical risks are









included in the Checklist. In this regard, a Check List containing the risks and precautions that may occur in both construction and operation within the scope of the project will be prepared, and the personnel assigned for this job will periodically check whether the actions in the list are implemented.

Risk Assessment Table

The Risk Table, which is detailed in terms of Occupational Health and Safety, is more comprehensive than the Check List. In preparing the Risk Table, the risk value is determined by giving numerical values of the risks that may occur in the work area in advance. The Prepared Risk Table includes 3 stages for Solar Power Plants. These are installation, tests and commissioning, and finally operation and maintenance of the power plant. In the content of the Risk Table, unlike the Checklist, non-technical risks in terms of Occupational Health and Safety are examined. When using the Risk Table, firstly the hazards and the dangers that may arise from the hazards are determined. As a result of these, impact/harm consequences are defined. In order to determine the risk as a value, probability and severity values are determined and the risk value is created as a result of multiplying them. If the risk value is below the threshold value, it means that the risk is at an acceptable level and the measures are sufficient; if it is not below the threshold value, it means that the risk is not at an acceptable level and the measures taken are insufficient. In this case, the measures taken need to be increased. In this regard, a Risk Assessment Table will be prepared by an Occupational Health and Safety expert in which the impact of existing risks that may occur in both construction and operation will be determined.

Application of Risk Assessment Table

The Risk Assessment Table, which determines the impact of existing and possible risks in both construction and operation, prepared by an OHS expert before starting the activity, must be used both during the opening of the electricity transmission line and the installation of Solar Power Plants. Thanks to preliminary studies, possible risks are identified and precautions are taken. It is decided whether the measures are sufficient or not by taking into account the threshold value. If the risk value of a hazard is above the threshold value, it is seen that the measures taken are not sufficient. This may not always be the case. Although adequate precautions have been taken thanks to preliminary studies, the risk value may be above the threshold value. In this context, measures determined in line with the risk control hierarchy will be implemented in order to eliminate risks and create a safe working environment within the control of the OHS specialist.

Within the scope of the project, an Emergency Response Plan will be prepared by the project owner to protect occupational safety and worker health.









Within the scope of the project, action will be taken in accordance with the Environment, Health and Safety Guidelines (<u>Occupational Health and Safety</u>) published by the International Finance Corporation (IFC).

Institutional Arrangements

By Eleşkirt Municipality, within the borders of Ağrı province, Eleşkirt district, Esentepe Neighbourhood, 50 lot of 206 block "Solar Energy" Power Plant Project (500,5 kwp, 415 kwe)" is planned. It is necessary to have resources allocated to the management of environmental and social issues to ensure that the project in question is carried out in a way that minimizes its potential impacts. In this regard, first of all, the current structure of Eleşkirt Municipality was evaluated and the institutional infrastructure needed to provide the specified services was tried to be revealed.

Current Administrative (Institutional Structure)

There are 9 directorates within the municipality.









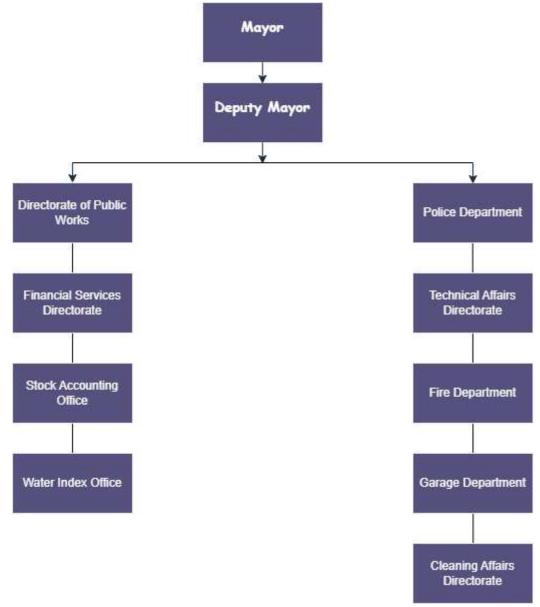


Figure 8. Eleşkirt Municipality Organizition Scheme

Duties and Responsibilities

It is the responsibility of Eleşkirt Municipality to manage the issues specified in the ESMP prepared for the healthy execution of the project and to ensure that the necessary mechanisms are developed and implemented by the Contractor.

The studies to be carried out within the scope of this ESMP and the parties responsible for these studies are given below.









Table 11. Duties and Responsibilities

| Table 11. Duties and Responsibilities | | | | | | | |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|
| Organisation | Duties and Responsibilities | | | | | | |
| World Bank | Checking whether the loan obtained from the bank is used within the scope of the relevant business, Verifying compliance with tender, contract documents and procedures Monitoring the transactions to be carried out at certain periods, Conducting site visits with a designated team at certain periods. | | | | | | |
| ILBANK | Preparing Eleşkirt Municipality's project documents in accordance with World Bank requirements and providing guidance on public participation and announcement requirements, To provide guidance to Eleşkirt Municipality officials and consultants on World Bank requirements for protection measures (documents and procedures) regarding cultural assets, land acquisition and involuntary resettlement, natural habitats, forests and international waterways, Reviewing documents related to the environmental and social assessment of the project, providing comments to consultants and granting official approval to these documents and procedures in accordance with World Bank safeguarding requirements, Monitoring studies such as the implementation of ESMP and other environmental and social impact mitigation measures, Monitoring and auditing Eleşkirt Municipality's ESMP practices and providing feedback on its performance, suggestions and steps to be taken within the scope of general project supervision, Obtaining the opinions of relevant groups and local environmental/social experts about the environmental and social dimensions of the project implementation and holding meetings with these groups when necessary during field visits, Ensuring coordination and communication regarding field visits to be carried out within the scope of World Bank inspection missions regarding environmental and social protection measures related to project implementation. | | | | | | |
| Eleşkirt Municipality | Execution of tenders in accordance with the Public Procurement Agency legislation and the legal requirements of the World Bank, monitoring the Construction Contract and working in cooperation with ILBANK on construction supervision, Implementation of ESMP and related management plans and fulfillment of all commitments within the scope of ESMP, Sharing the ESMP with the Contractor, guiding the Contractor in the preparation of sub-management plans, and approving these plans, Updating the ESMP when necessary and sharing additional commitments with the Contractor, Environmental review, monitoring and inspections regarding ESMP applications, evaluation of results, Auditing contractor activities in line with ESMP requirements, Providing EHS training to all Project personnel, | | | | | | |









| | Ensuring compliance with project standards, taking urgent action in case of non-compliance, To stop work in any situation that threatens the environment, society and occupational health and safety, To ensure the tracking and analysis of environmental (including OHS) and social accidents/incidents, Ensuring stakeholder participation, implementation of the complaint redressal mechanism, ensuring continuous information transfer through open communication, To report unexpected situations such as environmental, social and labor problems or accidents, incidents or loss of time to ILBANK and the World Bank within three business days, Coordinating actions and evaluations in case of changes in legislation regarding environmental and social issues, changes in permit provisions, new environmental/social data, construction/operation strategy changes. |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The Contractor | Fulfilling all requirements of ESMP and management plans, Implementation of additional commitments determined by Eleşkirt Municipality, Ensuring compliance with project standards and obtaining all relevant permits and licenses, Monitoring construction activities (including subcontractor activities) and taking measures within the scope of ESMP, Developing sub-management and monitoring plans/procedures in accordance with the ESMP structure and implementing them after the approval of Eleşkirt Municipality, Employing competent Environmental, Social and OHS Experts (at least one Social Expert, one Environmental Expert and one OHS Expert) within the scope of the project, Providing necessary training on environmental and social issues to contractor and subcontractor personnel, Ensuring follow-up and analysis of environmental and social accidents, Reporting environmental audits, monitoring and inspections regarding ESMP practices to Eleşkirt Municipality, Immediate notification of unexpected situations such as environmental, social and business problems or accidents, incidents or loss of time to the Project Owner and keeping an event log on site throughout the life of the Project, The incident report containing root cause analysis and corrective actions to be taken will be submitted to ILBANK and the World Bank within 30 days. |

It will include environmental, social and OSH experts to oversee the implementation of the ESMP. Experts will monitor the implementation of the ESMP by Eleşkirt Municipality and document performance, recommendations and other necessary actions. Provides guidance to municipal officials on World Bank procedures, consultation and disclosure requirements.









Education

Project Owner Eleşkirt Municipality will conduct a training and awareness program covering ESMP expectations and commitments. The Audit Consultant will organize a workshop for this training with the Project Owner. As a minimum requirement, this program will be implemented as training for employees and contractors responsible for the implementation of the ESMP. The Project Owner will provide training to employees and subcontractors before the construction phase begins.

The person will be given the necessary training before the recruitment process. Compliance with the rules of conduct, including gender-based violence, sexual harassment, sexual exploitation and abuse, included in the training to be provided, will be included in the contract clauses of the staff. The sanctions to be applied in case of non-compliance with the rules of conduct will be clearly stated in the contract.

Measurement and evaluation should be made at the end of the training given to the personnel. This aims to increase the competence of staff. According to the results of the review, it is determined whether the training is effective or not, and if necessary, changes can be made to the training program, instructors can be changed or the training can be repeated.

The Project Owner will ensure that all personnel responsible for the implementation of this ESMP are competent in terms of education, training and experience. All personnel will be provided with environmental and social training appropriate to their fields of activity and level of responsibility.

Trainings will be repeated at regular intervals, taking into account the changing and emerging new risks specified in the Regulation on the Procedures and Principles of Occupational Health and Safety Training of Employees. Informing and training activities will be carried out not only for employees but also about the measures to be taken for public health and safety. Within the scope of the project, action will be taken in accordance with the Environment, Health and Safety Guides (Occupational Health and Safety) published by the International Finance Corporation (IFC).









Table 12. Precautions Plan

| | Table 12. Precaution | 113 1 1411 | | | | | |
|-------------|---------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|----------------|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------|
| Probl | em | Potential Impact | Effect Type | Impact Significance | Mitigation Measures | Cost | Responsible Party |
| WASTE WATER | Land Preparation and Construction Phase; Domestic wastewater will be generated due to the personnel to work. | they cause underground and surface water pollution and soil pollution, and can | Indirect | Middle | Within the scope of the planned project, the water need of 10 personnel who will work in the construction and land preparation phase is 1.93 m³/day, and the amount of wastewater it will create is 1.82 m³/day. A septic tank will be installed for the sink needs of the people who will work in the planned project and will be drawn by a sewage truck at certain periods. | It is included | Project Owner |









| Prob | lem | Potential Impact | Effect Type | Impact Significance | Mitigation Measures | Cost | Responsible Party |
|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|----------------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|---------------------------------|
| SOLID WASTE- HAZARDOUS WASTE- MEDICAL WASTE-PACKAGING WASTE | Land Preparation and Construction Phase Municipal waste caused by personnel working in the project area Packaging waste from personnel In addition, there are hazardous waste, waste batteries and accumulators. | underground and surface water resources, soil pollution and odor problems for human | Indirect | Middle | Municipal waste will be generated due to a total of 9 personnel who will work during the land preparation and construction phases of the project. Among the wastes that can be generated, recyclable (paper, plastic, glass, etc.) and non-recyclable wastes (food scraps, etc. organic waste) will be collected separately in garbage containers placed at various points of the project site. Wastes that can be recycled will be sent to licensed recycling companies; Domestic solid waste that cannot be recycled will be disposed of by giving it to the relevant Municipality. Waste bins will be provided for the packaging waste generated in the facility in accordance with the colors specified in the "Zero Waste Regulation". Since the solid waste that will be generated within the scope of the project will not be stored in the project area for a long time, it will not cause any problems such as odor, appearance or leakage. All solid wastes (food scraps, packaging paper, pet bottles, glass bottles, | It is included in the construction cost. | Project Owner The contractor |









etc.) to be generated within the scope of the project are subject to the Management Regulation", "Packaging Waste Control Regulation", "Zero Waste Management Regulation", which came into force after being published in the Official Gazette dated 02.04.2015 and numbered 29314. It will be disposed of in accordance with the "Waste Regulation". 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.









| | Operation Phase It is possible for panels to become damaged/idle. | | Indirect | Middle | Recycling of PV modules basically consists of 3 steps. The first stage is mechanical, chemical and thermal delamination (separation of layers), the second stage is chemical coating removal and the final stage is chemical extraction. To recycle the crystal, it is necessary to recover crystalline silicon from the modules by pyrolysis at 500 °C and to remove metal anti-reflection and diffusion coatings by acid etching. Leaks caused by rare precious substances (silver, gallium, indium, germanium), conventional materials (aluminum and glass), and hazardous substances (lead and cadmium) in PV modules are among the most important environmental problems caused by PV modules. With the latest decisions taken by the European Union Commission, PV panels are included among the Electrical and Electronic Equipment Waste. Recycling 1-ton silicone in the PV module corresponds to approximately 370 kg CO2 equivalent, which increases to approximately 800 – 1200 kg CO2 equivalent when produced with 100 % recycled raw materials. Compared to landfilling, the recycling scenario has less impact on the environment. | in the | Project Owner |
|--|-------------------------------------------------------------------|--|----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------|
|--|-------------------------------------------------------------------|--|----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------|









| Prob | lem | Potential Impact | Effect Type | Impact Significance | Mitigation Measures | Cost | Responsible Party |
|---------------|---------------------------------------------------------------------------|-----------------------------------------|----------------|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------------------------|
| AIR POLLUTION | works and exhaust gas from construction machinery and vehicles to be used | indirectly soil and water pollution. It | direct | High | In order to minimize dust emissions that will occur during the land preparation and construction phase; Irrigation will be done with water sprinklers on the road routes, filling and unloading operations will be carried out without blowing, vehicles will be covered with tarpaulins during the transportation of materials and the upper part of the material will be kept at 10% humidity. In order to minimize the emissions resulting from vehicles, all vehicles and equipment to be used will be routinely checked, vehicles that require maintenance will be taken into maintenance, and other vehicles will be used in the works until their maintenance is completed. In addition, they will be warned to work in accordance with the Traffic Law and care will be taken to ensure that they load in accordance with the loading standards. At all stages of the project, the provisions of the "Regulation on the Control of Industrial Air Pollution" which came into force after being published in the Official Gazette dated 03.07.2009 and numbered 27277 will be complied with. The "Exhaust Gas Emission Control Regulation" and its provisions, which came into force after being published in the Official Gazette dated 11.03.2017 and numbered 30004, will be complied with during the land preparation, construction and operation stages of the Project. | 10 10 111010000 | Project Owner The contractor |









| NOISE AND VIBRATION | Land Preparation, Construction and Operation Stages: During the land preparation and construction phases of the project, noise will be generated from the operation of construction equipment and machinery equipment. | Noise has negative effects on human health and fauna. | direct | High | The noise that will occur during the construction phase of the project will be local and temporary and will end at the end of construction. During this phase, regular checks of the work machines to be used will be made to ensure that the limit values specified in the Environmental Noise Control Regulation are not exceeded. Care will be taken to ensure that as few vehicles as possible operate at the same time. During the construction phase, noise will vary throughout the day during the works, but since the works will be carried out during the day (07:00-19:00), noise generation will be limited. During the works within the scope of the project, necessary measures will be taken to minimize noise generation, taking into account the conditions to be observed in equipment used in open areas. In addition, in the project area, the issues specified regarding the "noise criteria for construction sites" will be complied with regarding the noise that will occur during the construction phase, and vehicles with traffic inspections, exhaust measurements and maintenance will be used. In addition, if necessary, workers will be provided with headgear, headphones, earplugs, etc. specified in the Labor Law Number 4857. Protective clothing and equipment such as will be provided. | in the construction | Project Owner The contractor |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|--------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------------------|
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|--------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------------------|









| Prob | lem | Potential Impact | Effect Type | Impact Significance | Mitigation Measures | Cost | Responsible Party |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|----------------|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------|
| EXCAVATION AND SOIL POLLUTION | Land Preparation and Construction Phase During the land preparation and construction phase of the project, excavation residue material will be generated during excavation. | If not disposed of, it causes visual pollution and dust spread. | Indirect | Middle | Flammable, explosive and hazardous materials will not be used in the excavation works to be carried out during the land preparation and construction phase. During the works, the provisions of the Waste Management Regulation, the Regulation on the Regular Storage of Numbered Wastes and the Regulation on the Control of Excavation Soil, Construction and Demolition Wastes will be complied with. | Included in Construction Budget | Project Owner The contractor |

| | Problem | Potantial Impact | Effect Type | Impact Signifinance | Mitigation Measures | Cost | Responsible Party |
|------------|--------------------------|--------------------------------------------------|----------------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|------------------------------|
| EXCAVATION | Chance Find Prodecure | Destruction or damage to cultural heritage | Indirect | Middle | Preparation of a Chance Find Procedure will be provided. Machinery and equipment used around archaeological sites will be carefully selected. The number of chance finds will be monitored. | Included in Construction Budget | Project Owner The contractor |









Table 13. Monitoring Plan

| | TER TO BE | | MONITORING METHOD | VIEWING FREQUENCY | REASON FOR WATCHING | CORPORATE RESPONSIBILITY | Cost |
|-----------------------|----------------------|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------|
| Excavation | Waste | In the project area | Visual inspection, record and report keeping | During the excavation works, continuous | Compliance with the Regulation on the Control of Excavation Soil, Construction and Demolition Waste | -Investor -Contractor | Included in the project budget |
| Air Manageme nt | Dust Emission | Construction site and transportation routes | Observational | Throughout the entire construction | Monitoring whether measures are taken to prevent dust emissions, protecting the environment and employee health, Industrial Air Pollution Control Regulation, Air Quality Assessment and Management Regulation, IFC Environmental Health and Safety Guidelines: Air Emissions and Ambient Air Quality | -Investor -Contractor | Included in the project budget |
| | Vehicle Emissions | Construction equipment exhausts | Observational | During periodic maintenance periods of vehicles | Ensuring compliance with the Exhaust Gas Emissions Control Regulation, IFC Environmental Health and Safety Guidelines: Air Emissions and Ambient Air Quality | Investor -Contractor | Included in the project budget |
| Noise | | In sensitive areas near construction sites and work areas | With Noise and Vibration Measurement Device, by a Qualified and Accredited Company (Observational) | In cases where there is a complaint | Environmental Noise Control Regulation, Regulation on the Protection of Employees from Noise-Related Risks, IFC Environmental, Health and Safety Guidelines: Noise Management | -Investor -Contractor | Included in the project budget |
| Vibration | | In sensitive areas near construction sites and work areas | With Noise and Vibration Measurement Device, by a Qualified and Accredited Company (Observational) | In studies carried out at different points or in cases where there is a complaint | Environmental Noise Control Regulation, Regulation on the Protection of Employees from Noise-Related Risks, IFC Environmental, Health and Safety Guidelines: Noise Management | -Investor -Contractor | Included in the project budget |









| PARAME MONITO | ETER TO BE DRED | LOCATION OF THE PARAMETER | MONITORING METHOD | VIEWING FREQUENCY | REASON FOR WATCHING | CORPORATE RESPONSIBILITY | Cost |
|---------------------|------------------------------------------------------|---------------------------------------------------------------------------|-------------------------------------------------------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------|
| Landscape | • | Areas where construction work will be carried out | Taking photos and recording with a camera | Continually observational | For landscaping works to be carried out after construction | -Investor | Included in the project budget |
| Waste | Municipal waste, Packaging Waste | In the construction area or in the area to be used as a construction site | observational Audit and Recording | Daily | Ensuring compliance with the Regulation on Soil Pollution Control and Point Source Contaminated Sites, Packaging Waste Control Regulation, Waste Management Regulation, IFC Environmental, Health and Safety Guidelines: Waste Management | -Investor -Contractor | Included in the project budget |
| Manage ment | Hazardous Wastes | In the construction area or in the area to be used as a construction site | observational Audit and Recording | Continually | Ensuring compliance with the Waste Management Regulation, IFC Environmental, Health and Safety Guidelines: Waste Management | -Investor -Contractor | Included in the project budget |
| | Other Wastes (Battery, Battery, etc.) | In construction sites | Recording the Delivery to Recycling Companies | Continually | Regulation on the Control of Waste Batteries and Accumulators, IFC Environmental, Health and Safety Guidelines: Waste Management | -Investor -Contractor | Included in the project budget |
| Occupatio Safety | nal Health and | In all studies | Observation and supervision | Continually | Ensuring compliance with Labor Law and Regulations, IFC Environmental, Health and Safety Guidelines: Occuptional Health and Safety | -Investor | Included in the project budget |
| | ation (Traffic nay occur during asportation of | On-site and off-site roads | Observational | Continually | Life and property safety Road Traffic Law | -Investor | Included in the project budget |
| Labor and | Labor Flow | In all studies | Inspection of inappropriate working conditions, child | Continually | Ensuring compliance with Labor Law and Regulations, | -Investor | Included in the project budget |









| PARAMETER TO BE MONITORED | LOCATION OF THE PARAMETER | MONITORING METHOD | VIEWING FREQUENCY | REASON FOR WATCHING | CORPORATE RESPONSIBILITY | Cost |
|--------------------------------------------------|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------|
| | | labor, unregistered employment | | IFC Environmental, Health and Safety Guidelines : Occuptional Health and Safety | | |
| Waste water | Discharge Point to Sewer | Analysis | During the construction phase | Water Pollution Control Regulation, IFC Environmental, Health and Safety Guidelines : Wastewater Management | -Investor -Contractor | Included in the project budget |
| Grievance Mechanism | In all studies | Documentation control, review of complaint records, number and nature of resolved complaints | Continually | Examining Accident Records, Carrying out Internal and External Audits and Due to the functioning of the Grievance Mechanism | -Investor | Included in the project budget |
| Climate Change | In all studies | Calculation of greenhouse gas emissions reduced within the scope of the project (documentation control) | 1 per year | Adapting to Climate Change / Reducing greenhouse gas emissions | -Investor | Included in the project budget |
| Public Health and Safety Community Engagement | In all studies | Documentation control Examining security records and keeping an eye out for elements that may threaten public health and safety during construction. | Monthly | Examining complaint records, Keeping training records, Preparation of exercise reports Archiving of Accident Registration, Meeting and Announcement Minutes IFC Environmental Health and Safety Guidelines: Community Health and Safety | -Investor | Included in the project budget |
| Land Use | During the Construction and Operation phase | Observational Audit and Recording | During the project | Grievance Mechanism Accident Records OP 4.12 Land Acquisition and Involuntary Resettlement Policy | -Investor -Contractor | Included in the project budget |
| Cultural Assets/chance finds | In excavations | Observational | During the construction phase | Law on the Protection of Cultural and Natural Assets, OP 4.11 Physical and Cultural Resources | -Investor -Contractor | Included in the project budget |









6. Stakeholder Participation

A stakeholder can be defined as any person, institution or group that has an interest/share in the project and its impacts. The purpose of stakeholder identification is; It is the identification and prioritization of project stakeholders, who may be directly or indirectly, negatively or positively affected by the project, or who are not directly affected but may be interested in the project, for consultation purposes. All stakeholder groups that are interested in the outcome of the project, that may be affected by the project, or that may have an impact on it will be identified. It involves screening a wide range of potential stakeholders, including institutions, associations, NGOs and other informal groups that should be included in the stakeholder engagement process.

Stakeholder participation plan is a plan that aims to establish strong, constructive and sensitive relationships by identifying the parties that may be affected by the project, which is necessary for the correct management of the environmental and social impacts of a planned project.

The purpose of stakeholder participation; It is to ensure continuous communication with stakeholders to provide them with information about the activities to be carried out during the construction and operation periods of the project, including project performance, project development and investment plans and their implementation. Stakeholder engagement is an activity that will continue throughout the planning, construction, operation and closure phases.

The people who will be primarily affected by the project are the people living in settlements close to the project route. Within the scope of the project, the land preparation and construction process will last 3 weeks. The total installation time of the project is expected to be 8 weeks. If needed within the scope of the project, local personnel will be employed.

During the transportation of the panels within the scope of the project, there will be temporary effects that will directly reflect on the public, such as increasing the traffic load, creating dust emissions, and noise emissions from working machinery and equipment.

It is important to make particular efforts to identify disadvantaged and vulnerable stakeholders who may be differently or disproportionately affected by the project or who may have difficulty participating in the participation and development process. Stakeholder identification is also an ongoing process and will require regular review and updating.









The stakeholder analysis table determined within the scope of the project in question is given below.

Table 14. Stakeholder Analysis Table

| Table 14. Stakeholder Alialysis Table | | |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Parties Affected by the Project | Project implementers, on-site and nearby settlements and people living there | |
| Other Interested Parties | World Bank İlbank Ministry of Environment, Urbanization and Climate Change Energy and Natural Resources Ministry Ağrı Governorship Provincial Directorate of Environment, Urbanization and Climate Change Eleşkirt District Governorate İlbank Van Regional Directorate Eleşkirt Municipality Türkiye Electricity Distribution Inc. ARAS Electricity Distribution Inc. The contractor Advisor | |
| Final Beneficiary | Eleşkirt Municipality Neighborhoods and people living in the project area and nearby settlements | |

Within the scope of the project in question, the opinions of all stakeholders will be taken into account, and a social impact assessment of the project will also be carried out. This evaluation will be shaped as a result of scientific and observational-based research within the framework of literature study, measurable sampling surveys (household and headman surveys), observations and evaluations.

The implementation stages of the research are planned as follows:

- Clearly determining the objectives and studying the literature,
- Data collection process,
 - * Design and selection of the sample
 - * Development of data collection tools
 - * Collection of data
- Entering and analyzing data into the statistical program for social sciences (SPSS),
- Writing the report in line with the data obtained,
- Utilizing these data within the scope of the project, The main aims of this research are;
- To determine the current social and economic situation of the people living in the settlements around the project area,









- To evaluate the socio-economic effects of the works planned to be carried out within the scope of the project on the households in the immediate vicinity and to investigate whether some social groups will be negatively affected,
- Eliminating adverse effects means reducing and compensating for their effects when it is not possible to eliminate them.

Surveys will consist of a mixture of closed questions (mainly statistical data) and open or semi-open questions (mainly to obtain qualitative information) to cover areas of interest emerging from the literature study. The surveys planned to be implemented will be household and headman surveys . Details of the surveys are given below.

Mukhtar Surveys:

The aim of the interviews with the headmen is to collect general information about the settlements. Mukhtar survey in general; It consists of questions aimed at learning the demographic profile and social structure, services, infrastructure, environment, cultural structure, economic activities, education, health, information about the problems in the settlement and the opinions of the headmen about the project.

Household Survey:

The household survey aimed to collect information about the general socio-economic status of the households within the research area and their general opinions and expectations about the project. Household survey in general; It consists of questions aiming to learn the demographic and economic profile of the households, infrastructure and housing situation, education, health, problems and their opinions about the project.

When evaluating social and environmental impacts, all direct-indirect, short-term-long-term, planned-unplanned, known-unknown, purposeful-unintentional, visible-invisible impacts should be taken into account. In some cases, the entire segment of the society may be affected, and in other cases, a certain segment of the society may be affected. Some effects may remain invisible for a long time. In this context, the potential impacts that the project may have on the socio-economic environment in the region will be evaluated and the mitigation measures that need to be taken regarding these impacts will be defined. In the light of the findings resulting from all these studies, impact mitigation strategies will be determined and positive steps will be taken for the project in consultation with stakeholders.









Grievance Mechanism

The purpose of the Grievance Mechanism is to ensure that people affected by the project, including primarily affected communities and project staff, have access to the problemsolving procedure. Complaints may indicate growing stakeholder concerns and may escalate if not identified and resolved. Identifying and responding to complaints supports the development of positive relationships between project staff, local communities and other stakeholders. To evaluate the Environmental and Social Impacts of the Project during the construction and operation phase of the Project; A Complaint Procedure will be prepared to cover all complaints expressed by internal and external stakeholders, including the activities of contractors. While the complaint mechanism is being established, a telephone line that will be active 24/7 will be established, and opinions and complaints will be collected by email, postal mail and orally. Stakeholders may request that their complaints be recorded anonymously.

A structured Grievance Mechanism ensures that Project-related complaints are addressed through a transparent and impartial process. In this regard, from the early stages of the project's life cycle, the complaint procedure will be and will continue to be disclosed to the public through individual or group meetings, printed materials and notice boards.

Since the current installed system does not have a project-specific mechanism and recording system that complies with international standards, it is expected that a projectspecific Grievance Mechanism will be established. In this regard, the personnel appointed by the municipality will record the complaints and suggestions received from different channels in a single established system and provide solutions within the time and application framework specified below. Personnel to be appointed by the municipality:

- From people communicating via phone/e-mail,
- From stakeholders who want to communicate based on project documentation,
- Coming from construction period personnel,
- From business personnel,
- It will record and track all complaints forwarded to contractors and written in petitions in a single system.

In order for this method to be successful, the appointed Municipal personnel, other municipal experts and subcontractors will be in constant contact. Introducing the complaint mechanisms, which are open to the public and will be established separately for employees,











to the relevant stakeholders will also be included in the job description of the Municipality personnel to be appointed.

The Grievance Mechanism will be informed about the guide prepared by the World Bank to prevent sexual exploitation, abuse and harassment of projects financed within the scope of construction works. Complaints of gender-based violence, exploitation and harassment can create a culture of silence due to possible negative reactions by society. In order to prevent this, it is of great importance for stakeholders to submit complaints regarding these issues regarding the Project anonymously. In addition, authorities handling complaints must handle such matters confidentially and with an unbiased approach.³

In the Mechanism to be established, all complaints received will be recorded in the Complaint Log by assigning a reference number.

Contact channels for formal complaints are provided below.

Eleşkirt Municipality:

The contact information of Eleşkirt Municipality, which stakeholders will use to convey their complaints, is given below.

Website: https://www.eleskirt.bel.tr/
Email: belediye@eleskirt.bel.tr

Phone number: 0472 711 20 84

Official letter: Karşıyaka Mh. Cumhuriyet Cd. Pk:04600 ELEŞKİRT/ AĞRI

Presidential Communication Center:

Presidential Communication Center (CİMER) provides a central complaint system for Turkish citizens, legal entities and foreigners. CİMER will be offered to Project stakeholders as an alternative and well-known channel to convey their complaints and feedback regarding the Project directly to government authorities.

Website: www.cimer.gov.tr

Call Center: 150

Phone number: +90 312 525 55 55









³ Environmental & Social Framework for IPF Operations

Fax number: +90 0312 473 64 94

Foreigners Contact Center:

Foreigners Communication Center: Foreigners Communication Center (YİMER) offers a central complaint system for foreigners. YİMER will be offered to foreign stakeholders of the Project as an alternative and well-known channel to convey their complaints and feedback regarding the Project directly to government authorities.

Web site: <u>www.yimer.gov.tr</u>

Call Center: 157

Phone number: +90 312 5157 11 22 **Fax number:** +90 0312 920 06 09

ILBANK:

In addition, if complainants do not find the feedback they receive from the municipality sufficient, they can forward their complaints to ILBANK as a higher authority, using the communication tools below.

Website: https://www.ilbank.gov.tr/form/bilgiedinmeuluslararasi

E-mail: <u>bilguidb@ilbank.gov.tr</u> andetikuidb@ilbank.gov.tr

Phone number: +90 312 508 79 79

Official letter: ILBANK International Relations Unit, GM Team (letters should be marked as personal or confidential) Kızılırmak Mahallesi Ufuk Üniversitesi Caddesi No:12 Çukurambar / Çankaya / Ankara

WORLD BANK:

Complainants, project-affected communities and individuals may submit their complaints using the following communication tools to the Bank's independent Inspection Panel, which determines whether harm has occurred or may have occurred as a result of the Bank's failure to comply with its policies and procedures.









Website: https://www.inspectionpanel.org/how-to-file-complaint

E-mail: ipanel@worldbank.org
Phone number: +1 202 458 5200

Official letter: Control Panel, Mail Stop MC10-1007, 1818 H Street, NW,

Washington, DC 20433, USA

In addition to the municipality's communication tools, the following communication channels can also be used to submit complaints.

- Complaint boxes at construction sites (mainly for internal complaints) and the muhtar's offices of the relevant neighborhoods and/or designated locations for complaint boxes,
- Direct contact with construction site managers,
- Meetings and/or formal/informal consultations

In addition, a Grievance Redressal Mechanism will operate for employees, and all project employees will be notified through written and verbal communication. Each employee will be informed about the grievance redressal mechanism when hired and details of how the mechanism works will be specified. Requests requiring urgent solution and/or support will be responded to and support will be provided on the same day.









Tablo 15. Grievance Mechanism Flow Chart

| Tablo 15. Grievance | Tablo 15. Grievance Mechanism Flow Chart | | | |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| Period | Action | | | |
| Business Induction Letter | Before the project activity begins, the residents of the neighborhood will be informed that the work will start with a Start of Work Information Letter (See ANNEX-8). This letter will include the contact information of a person authorized by the municipality. | | | |
| Submission of Complaint | The subject of the complaint is communicated by the complainant through any communication channel. | | | |
| | Complaints will be recorded with the Complaint Form (See ANNEX-7). All complaints will be recorded within two (2) days and feedback will be given to the complainant. | | | |
| Complaint Registration | If the complainant requests that this complaint be handled anonymously, this complaint will be recorded anonymously and the request will be accommodated. The action taken regarding the issue will be published on the Municipality's website if the anonymous person's communication channel is not available. | | | |
| Evaluation of Complaints | Complaints will be evaluated within 10 business days and it will be determined whether the complaint meets the acceptability criteria. If the complaint is not valid, the necessary explanation will be made to the complainant. | | | |
| Responding to Complaints | The complaint will be evaluated. If necessary, the complaint will be examined on-site. Depending on the type of complaint, representatives of the affected community will be interviewed. The actions taken to resolve the complaint and the results will be communicated to the petitioner. If the issue underlying the complaint is not resolved, the complainant will have the right to apply to the Court of First Instance and/or ILBANK, depending on the content of the complaint. | | | |
| Complaint Closing | Unless an alternative agreement is made regarding the closing time of the complainant's complaint, relevant actions will be taken and documented within fifteen (15) business days from the date of application. Then, the complaint will be closed with the complaint closing form (See ANNEX-9). Recorded complaints and their responses will be shared on the Municipality's website. Thus, all complainants, including anonymous complainants, will be informed about their complaints and their consequences. | | | |
| In Case the Complaint Cannot Be Resolved | The project complaint mechanism is monitored by ILBANK. Complaints will be evaluated by the Municipality and ILBANK will be informed. The actions taken to resolve the complaint will be communicated to the complainant by the Municipality. ILBANK will monitor the Municipality to ensure that the complaint mechanism operates smoothly. If the complaint is not resolved, the complainant can apply to the Civil Court of First Instance or ILBANK. | | | |









| Reporting | The responsible department will ensure that all processes are carried out in accordance with the Complaint Process. A Consultation form will be prepared to record the questions and/or concerns of stakeholders during the process (See ANNEX-10). |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Complaints will be monitored and reported at regular intervals so that they can be analyzed regarding their type, frequency and how the complaints are resolved. |

The Complaint Opening Form, Starting Work Information Letter, Complaint Closing Form and Consultation Form prepared within the scope of the Grievance Mechanism are attached (See ANNEX-7, ANNEX-8, ANNEX-9, ANNEX-10).

7. Attachments

| Annex-1 | Parcel Area Coordinates | | |
|----------|--------------------------------------------|--|--|
| Annex-2 | Location Map | | |
| Annex-3 | Allocation Letter | | |
| Annex-4 | Project Area Photos | | |
| Annex-5 | Dust Emission Mass Flow Calculation | | |
| Annex-6 | Noise Calculation | | |
| Annex-7 | Complaint Opening Form | | |
| Annex-8 | Information Letter on Starting Work | | |
| Annex-9 | Complaint Closing Form | | |
| Annex-10 | Consultation Form | | |
| Annex-11 | Connection Agreement | | |
| Annex-12 | Land Title | | |
| Annex-13 | Allocation Request Letter and Response | | |

ANNEX-1 PARCEL AREA COORDINATES

| AREA NAME | CORNER COORDINATES | Coordinates Order : Right, Up Datum : ED-50 Type : UTM D.O.M. : 45 Zon : 38 Scale Factor : 6 degrees | |
|--------------|-----------------------|---------------------------------------------------------------------------------------------------------------------|-------------|
| | Number | Y | X |
| | 1 | 300532,799 | 4407142,320 |
| | 2 | 300532,799 | 4407142,320 |
| | 3 | 300524,524 | 4407153,644 |
| | 4 | 300524,524 | 4407153,644 |
| | 5 | 300533,377 | 4407164,521 |
| | 6 | 300560,801 | 4407230,454 |
| | 7 | 300569,942 | 4407252,432 |
| Project Area | 8 | 300518,851 | 4407264,870 |
| | 9 | 300484,598 | 4407265,762 |
| | 10 | 300450,344 | 4407266,654 |
| | 11 | 300356,436 | 4407280,209 |
| | 12 | 300356,147 | 4407269,109 |
| | 13 | 300355,858 | 4407258,008 |
| | 14 | 300363,843 | 4407235,584 |
| | 15 | 300354,412 | 4407202,506 |

ANNEX-2 LOCATION MAP



ANNEX-3 ALLOCATION LETTER



T.C AĞRI VALİLİĞİ Çevre, Şehircilik ve İklim Değişikliği İl Müdürlüğü Milli Emlak Müdürlüğü

: E-71729667-756.01-5621597 Savi

Konu : GES TAHSISI

ELEŞKİRT BELEDİYE BAŞKANLIĞINA

; a) 28.12.2022 tarihli ve 3025 sayılı yazınız. Ilgi

> Özel Tahsis Dairesi Başkanlığının 24.01.2023 tarihli ve E-66844966-756.01[325.01.02]-5607907 sayılı yazısı.

İlimiz, Eleşkirt İlçesi, Esentepe Mahallesinde bulunan mülkiyeti Hazineye ait 206 ada 50 parsel numaralı ve 19.910,86 m² yüzölçümlü taşınmaz, üzerinde "güneş paneli yapılmak üzere" Belediyeniz adına 2 (iki) yıl ön tahsisli iken tahsis süresinin dolması nedeniyle ilgi (a) yazınız ile ön tahsis süresinin uzatılması talep edilmiştir.

Buna göre, konu ile ilgili Bakanlığımızdan alınan ilgi (b) yazılarının bir örneği ekte sunulmuş olup, söz konusu yazıda; taşınmazın, münhasıran belediye hizmetlerde kullanılması, ticari amaçla kullanılmaması, üçüncü kişilere ticari ya da gayri ticari amaçla kullandırılmaması/ devredilmemesi, tahsisli idarenin ilgili mevzuatları ile belirlenen ve alınması zorunlu olan gelirler dışında her ne ad altında olursa olsun herhangi bir ücret alınmaması, tahsisli idare tarafından tahsis amacına uygun kullanım nedeniyle ticari amaca yönelik ünitelerin söz konusu ve zorunlu olması durumunda ise Hazine Taşınmazlarının İdaresi Hakkında Yönetmeliğin 67, 70 ve 73/A maddesine göre işlem yapılması, ayrıca 6446 sayılı Elektrik Piyasası Kanunu, 5346 sayılı Yenilenebilir Enerji Kaynaklarının Elektrik Enerjisi Üretimi Amaçlı Kullanımına İlişkin Kanun ile Enerji Piyasası Düzenleme Kurumu (EPDK) mevzuatı kapsamında ilgili İdarelerden gerekli izinlerin alınması kaydıyla, 1 Numaralı Cumhurbaşkanlığı Kararnamesinin 101 inci maddesinin birinci fikrasının (ç) bendi ile 5018 sayılı Kanunun 47 nci maddesi gereğince "güneş enerjisi paneli" kurulmak üzere yeniden Eleşkirt Belediye Başkanlığı adına 2 (iki) yıl süreli ön tahsisi uygun görüldüğü bildirilmiştir.

Bu nedenle, belirtilen süre içerisinde yatırım projesinin hazırlanması, yatırım programına alınması ve üzerinde tesis/bina inşaatına başlanılması halinde ön tahsisin hizmet süresince devamı için kesin tahsise dönüştürülmesi yönünde talepte bulunulacaktır. Aksi halde tahsis işlemi herhangi bir işleme ve yazışmaya gerek olmaksızın kendiliğinden kalkmış sayılacaktır.

Bilgilerinize arz ederim.

Fettah ÖZMÜS Çevre, Şehircilik ve İklim Değişikliği İl Müdürü V.

Doğrulama Adresi: https://www.turkiye.gov.tr

Doğrulama Kodu: 4729BC5C-5627-4822-A7D7-E2574062A7E5

Bilgi için:Harun ARDAL Telefon No:(472) 711

ANNEX-4 PROJECT AREA PHOTOS









ANNEX-5 DUST EMISSION MASS FLOW CALCULATION

Mass Flow Calculations Emission Factors (SKHKKY)

| DDOCESS | EMISSION FACTOR | | |
|--------------------------|-----------------|---------------|--|
| PROCESS | Uncontrolled | controlled | |
| Disassembly of Materials | 0,025 kg/ton | 0,0125 kg/ton | |
| Storage | 5,8 kg/ha.day | 2,9 kg/ha.day | |

The excavation and ground preparation works of the planned project are expected to be completed within 30 days. In the calculations, the excavation density was taken as 1,7 tons/m³ and all calculations are given below:

Dismantling Excavation Materials and Loading them into Vehicles

Material Dismantling

Within the scope of the project, a total of 4.000 m³ of materials will be dismantled in the project area. The mass flow rate of the emission that will occur is calculated using the controlled and uncontrolled emission factor and is given below.

Controlled

Dust Emission (
$$\mathbf{E_1}$$
) = [4.000 m³ x 1,7 tons/m³ x 0,0125 kg/ton] / [30 day x (12 h/gün)] = **0,24 kg/hour**

<u>Uncontrolled</u>

Dust Emission (E1)
$$= [4.000 \ m^3 \ x \ 1,7 \ tons/m^3 \ x \ 0,025 \ kg/ton] \ / \ [30 \ dau \ x \ (12h/gün)]$$

$$= \textbf{0,48 \ kg/hour}$$

Storage of material

The resulting excavation waste will be temporarily stored where the excavation is carried out and will later be used as filling material. In this context, it is planned to store 4,000 m ³ of materials at approximately 3 m elevations. Calculations for controlled and uncontrolled dust emissions that will occur in these processes are given below:

Excavation storage area =
$$4.000 \text{ m}^3/3 \text{ m} = 1.333,33 \text{ m}^2 = 0,13 \text{ ha}$$

Controlled

Dust Emission (E₂) =
$$0.13 \text{ ha x } 2.9 \text{ kg/ ha.day x } (1 \text{ day/24 hours})$$

= 0.02 kg/hour

Uncontrolled

Dust Emission (E₂) = 0.13 ha x 5.8 kg/ ha.day x (1 day/24 hours) = 0.04 kg/ hour

Total Emission (Controlled); $= E_1 + E_2$ = 0.24 + 0.02= 0.26 kg/hour

Total Emission (Uncontrolled); $= E_1 + E_2$ = 0,48 + 0,04 = 0,52 kg/ hour

The dust emission that will occur if the dismantling, loading, unloading, transportation and storage of the excavation are carried out simultaneously within the scope of the land preparation and construction works of the project has been calculated.

Since the dust emission value calculated in the controlled situation was 0,26 kg/hour, air quality modeling was not needed within the scope of the construction phase of the project

ANNEX-6 NOISE CALCULATION

The total sound pressure level that will occur under the most adverse conditions, assuming that the machinery and equipment to be used during the construction works are working at the same time and in distant locations and dispersedly;

It is calculated using the formula L $_{\rm pt}$ = 10 Log (). $\sum_{i=1}^{n} 10^{Lpi/10}$

 L_{pt} = Total sound pressure level

L_{pi} = Sound pressure level resulting from each work machine

Lpi) created by each work machine at a distance r from each source is calculated by the formula below.

```
L_{pi} = L_{wi} + 10 \log (Q/A)
```

 $A = 4\pi r^2$

Q = Directivity coefficient (Hemispherical distribution of the sound source at ground level, O = 2

r = Distance from source (m)

L wi = Sound power level (dB) of each work machine

The decrease in sound due to the effect of the atmosphere (Aatm) depends on the frequency of the source and the distance from the source. The average frequency range for construction equipment and road vehicles is accepted as 3,000-3,500 Hertz. The decrease in the average sound pressure level due to atmospheric retouching is calculated by the formula below.

```
= 7.4 \times 10-8 \times f2 \times r / \phi
         = Decrease in sound pressure level (dBA) with atmospheric retouching
         = Frequency of transmitted sound (3.500)
         = Distance from source (m)
r
         = Relative humidity of air (59.8%)
```

The calculation of the total noise level is found by subtracting the atmospheric effect from the total sound pressure level.

$$L = L_{pt} - A_{atm}$$

In case noise sources operate simultaneously, equivalent noise levels according to distances are calculated using the formula given below. Equivalent noise level distribution is given in table.

Equivalent Noise of your level To the distances According to Distribution

| Distance (m) | 25 | 50 | one hundred | 200 | 300 | 500 | 750 | one thousand |
|-----------------|------|------|----------------|------|-----|-----|-----|-----------------|
| L spouse | 38.6 | 37.5 | 36.3 | 34.8 | - | - | - | - |

ANNEX-7 COMPLAINT OPENING FORM



ELEŞKİRT MUNICIPALITY

SOLAR POWER PLANT PROJECT

COMPLAINT FORM

| Person Filling Out the Form: | | Date and time: | |
|-----------------------------------|-----------------------|--------------------------------------------------------------|--|
| Meeting Agenda: | | Reference No: Eleşkirt Municipality- Project Code- 0001-2 | |
| 1. INFORMATION ABOUT THE COMP | LAINANT | | |
| Name surname: | | How the Complaint Arrives: | |
| TC Identification number: | | Telephone / Toll Free Line | |
| Telephone: | | Face to Face Meeting | |
| Address: | | Website / Email | |
| Email: | | Other (Explain) | |
| | Stakeholder Type | | |
| State agency PEB | State agency PEB | State agency | |
| Interest Groups Industrial Unions | Interest Groups Indus | trial Unions Interest Groups | |
| 2. DETAILED INFORMATION ABOUT T | HE COMPLAINT | | |
| Description of the complaint: | | | |

| Solution method requested by the complainant | |
|----------------------------------------------|---------------------|
| Registrant Name | Complainant Name |
| Company of Cimpatons | Common of Cinnatons |

Surname/Signature

Surname/Signature

ANNEX-8 INFORMATION LETTER ON STARTING WORK

Dear Esentepe Neighborhood Residents,

Some roads in your neighborhood will be affected during the "Opening of Electricity Transmission Lines" work within the scope of the Solar Power Plant project planned by Eleşkirt Municipality.

According to the approved work program, the work in your neighborhood will start **soon**. First of all, we would like to apologize in advance for any inconvenience we may cause to those around us during the work.

Temporary Traffic Circulation Plans approved by Ağrı Metropolitan Municipality Transportation Department will be notified to your neighborhood headman's office and transportation will be provided through the route determined by direction signs during the period the works continue.

We would like to inform you that we will do our best to cause you minimum inconvenience by completing the construction works as soon as possible in every street where excavation has started during our work.

In addition, the phone numbers of the authorities who can be called in case of any issue or disruption during the works are listed below. We would like to thank you in advance for your support and patience and tolerance to create a cleaner and more beautiful environment.

Regards,

Contact Persons:

Name Surname Phone.

ANNEX-9 COMPLAINT CLOSING FORM



ELEŞKİRT MUNICIPALITY

SOLAR POWER PLANT PROJECT

COMPLAINT CLOSING FORM

| complaint specified in the | |
|--------------------------------|---------------------------------------------------------------------------|
| "Complaint Registration | |
| Form" is resolved. | |
| | Name and Surname / Signature of the Person Who Closed the Complaint: Name |
| Complaint Closing Date: | and Surname / Signature of the Complainant: |
| // | |

ANNEX-10 CONSULTATION FORM



ELEŞKİRT MUNICIPALITY

SOLAR POWER PLANT PROJECT

CONSULTATION FORM

| Person Filling Out the Form | | | | Date and time: | | | |
|--------------------------------------|--------------------------|-----|----------------|----------------|----------------------------------------------------------------------------|--|--|
| Meeting Agenda: | | | | | Interview Registration Number: Eleşkirt Municipality / Project Code-0001-2 | | |
| 1. INTERVIEW INFOR | 1. INTERVIEW INFORMATION | | | | | | |
| Interviewed Institution: | | | | | Form of Communication | | |
| Name and Surname of the Interviewee: | | | | | Telephone / Toll Free Line | | |
| Telephone: | | | | | Face to Face Meeting | | |
| Address: | | | | | Website / Email | | |
| Email: | | | | | Other (Explain) | | |
| | Stakeholder Type | | | | | | |
| State agency | PEB | | State agency | PE | B State agency | | |
| Interest Groups | Industrial Uni | ons | Interest Group | os 🔲 Ind | dustrial Unions Interest Groups | | |
| 2. INTERVIEW DETAIL | _S | | | | | | |

| Questions about the project: | |
|------------------------------------------|--|
| Concerns/feedback regarding the project: | |
| Responses to the views expressed above: | |

ANNEX-11 CONNECTION AGREEMENT

LISANSSIZ ELEKTRİK ÜRETİCİLERİ İÇİN DAĞITIM SİSTEMİNE BAĞLANTI ANLAŞMASI

Üretici No: 2021/66 Tarih: 21/10/2021

Sayısı: 03 06 02 02 0000344

Bu Anlaşma; isim veya unvanı ile kanuni ikametgah adresi aşağıda belirtilen Üreticiye ait Elektrik Piyasasında Lisanssız Elektrik Üretimine ilişkin Yönetmelik kapsamında kurulmuş üretim tesisinin 4628 sayılı Elektrik Piyasası Kanunu (Kanun) ve 5346 sayılı Yenilenebilir Enerji Kaynaklarının Elektrik Enerjisi Üretimi Amaçlı Kullanımına İlişkin Kanun (YEK Kanunu) ile bu kanunlar uyarınca çıkarılmış ikincil mevzuat uyarınca dağıtım sistemine bağlanması için gerekli hüküm ve şartları içermektedir.

| Taraflar | Dağıtım Şirketi: ARAS Elektrik Dağıtım A.Ş. | Üretici: ELEŞKİRT BELEDİYE BAŞKANLIĞI |
|----------------------------|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| Kanuni Adresleri | Şükrüpaşa Mah. TEK Lojmanları Sok. No:57 25050 Yakutiye / ERZURUM | Karşıyaka Mahallesi Cumhuriyet Caddesi ELEŞKİRT / AĞRI |
| Temsile Yetkili Kişiler | Murat Alper GÜL ARAS EDAŞ Sistem İşletme Koordinatörü Vüsuf Yaşar BABUR ARAS EDAŞ Genes Müdür Yardımcısı | ABDURGATIMAN ASCAN ZZIENNE ZARAN JEKK |

Bu anlaşma, genel hükümleri içeren Birinci Bölümü ve özel hükümleri ve ekleri içeren İkinci Bölümü ile birlikte ayrılmaz bir bütündür. 21 sayıftdan ibarettir. İki asıl olarak düzenlenmiştir.

ANNEX-12 206 BLOCK 116 PARCEL LAND TITLE FOR THE ACCESS ROAD AND THE ETL





Kaydı Oluşturan: Mihriban Altun Gökçe (Eleşkirt Belediye Başkanlığı)

Tapu Kaydı (Hepsi)

TAPU KAYIT BILGISI

| Zemin Tipo | AnaTasinmuz |
|---------------------|---------------|
| Taşınmaz Kimilii No | 101606703 |
| Il/lige: | AĞRI/ELEŞKİRT |
| Kurum Adı: | Eleşkirt |
| Mahalle/Köy Adi: | ESENTEPE Mah. |
| Mevki: | TASYA SIRTI |
| Cit/Sayfa No: | 8/789 |
| Kayıt Durum: | Aktif |

| Ada/Persel | 206/116 |
|-----------------------------------|------------|
| AT Yüzölçüm(m2): | 57711.23 |
| Bağımsız Bölüm Nitelik | St. Carlot |
| Bağımsız Bölüm Brüt YüzÖlçümü: | 8 |
| Bağımsız Bistim Net YüzÖlçümüz | 5 |
| Blok/Kat/Biris/BBNo. | |
| Arsa Pay/Payda: | |
| Ana Tasınmaz Nitelik: | HAM TOPRAK |

TAŞINMAZA AİT ŞERH BEYAN İRTİFAK BİLGİLERİ

| \$/8/1 | Açıklama | Malik/Lehter | Tesis Kurum Tarih- Yevmiye | Terkin Sabebi- Tarib- Yevmiye |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------------------------|--------------------------------------------|
| Boyan | 3402 Sayılı Karumur 32. maddesinin 2. fikrasının (a) bendi uygulamasına- tabidir (Şablon: 3402 Sayılı Kadastro Kanurun 22. Md. Fikrasının (a) Bendi Gereği Belirime.) | | Elegkirt- 20-03-2017-10-17 - 367 | Eleçkiri- 06-08-2014 -10:40- 1305 |
| Beyan | 2942 Sayılı Kamulaştırma Kanununun 7. maddesine göre belirtme. | (SN:249216) | Elegkirt - | |

1/3

| | (Şablon: 2942 Sayılı Kamulaştırma Kanununun 7. Maddesine Göre Belirtme) | PETROL IŞLERI GENEL MÜDÜRLÜĞÜ VKN: | 04-11-2015 12:53 - 1310 | |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------------|---|
| Serfi | TEIAŞ IN 2942 SAYILI KANUNUN 31/B MADDESI GÖRE KAMULAŞTIRI.MIŞTIRI, Şablon: 2942 Sayılı Kamulaştırma Kanununun 31/b Maddesine güre Şerlı (HSSE)) | (SN-9460) TÜRKİYE ELEKTRİK İLETİM A.Ş. (TEİAŞ) VKN-8790304314 | Elegkirt - 01-08-2005-00:00 - 379 | (|

MÜLKİYET BİLGİLERİ

| (Hisse) Sistem No | Malik | El Birligi No | Hisse Pay/ Payda | Metrekare | Toplam Metrekare | Edinme Sebebi-Tarih- Yevmiye | Terkin Sebebi Tarih-Yevmiye |
|----------------------|-------------------------------------------|------------------|---------------------|-----------|---------------------|--------------------------------------------------------------------------------------|--------------------------------|
| 444899863 | (SN 47) MALIYE HAZINESI VKN 6110012806 | 7 | 1/1 | 57711.23 | 57711.23 | 3402 S.Y.nm 22/A Md. Geregince Ventlemento Tescili 06-06-2018 1305 | 4 |

MÜLKİYETE AİT ŞERH BEYAN İRTİFAK BİLGİLERİ

| \$/8/1 | Açıklarıs | Kisith Malik (Hisse) Ad Soyad | Mellk/Lehter | Tesis Kurum Tarih- Yevrriye | Terkin Sebebi- Turih Yevmiye |
|---------|-----------------------------------------------------------------------|-------------------------------------|------------------------------------------------------------------|----------------------------------------|---------------------------------------|
| Irtifak | TEIAŞ GENEL MÜDÜRLÜĞÜ LEHİNE 10643.80 M2 LİK KISIMDA İRTİFAK HAKKI | MALİYE HAZİNESI VKN | (SN:9460) TÜRKİYE ELEKTRİK İLETİM A.Ş. (TEİAŞ) VKN:8790304314 | Eleşkirt - 11-01-2008 00:00 - 49 | |

2/3

Bu belgeyi akilli telefonunuzdan karekod tarama programlari ile aşağıdaki barkodu taratarak; veya Web Tapu anasayfasından (https://webtapu.tkgm.gov.tr adresinden) t8VDM2UD-- kodunu Online İşlemler alanına yazarak doğrulayabilirsiniz.



ANNEX-13 ALLOCATION REQUEST LETTER AND RESPONSE LETTER



T.C. ELEŞKİRT BELEDİYE BAŞKANLIĞI Fen İşleri Müdürlüğü



Sayı : E-27159530-000-5146

Konu: Taksis Hk.

ELEŞKİRT MİLLİ EMLAK ŞEFLİĞİNE

Mülkiyeti Maliye Hazinesine ait ve Belediyemize tahsisli Ağrı İli Eleşkirt İlçesi esentepe mahallesi 206 ada 50 nolu parsel üzerinde Belediyemiz tarafından kurulacak olan Güneş Enerjisi Sisteminin nakil hattı için Mülkiyeti kurumunuza ait 206 ada 33 ve 206 ada 116 nolu taşınmazların belediyemiz tarafından tahsisi talep edilmiştir..

Bahse konu yapılacak olan Güneş Enerji Sisteminin nakil hattı için 206 ada 33 ve 206 ada 116 nolu taşınmazların tahsis işlemlerinin başlatılılıp başlatılmadığının tarafımıza bildirilmesi hususunda;

Gereğini bilgilerinize arz ederim.

Alpaslan ERDOĞAN Yazı İşleri Müdürü

Bu belge, güvenli elektronik imza ile imzalanmıştır.

Doğrulama Kodu: 38ea1642-f88f-492e-bd28-637733cb6a5f

Doğrulama Linki: https://www.turkiye.gov.tr/icisleri-belediye-ebys





T.C. ELEŞKİRT BELEDİYE BAŞKANLIĞI Fen İşleri Müdürlüğü



Sayı : E-27159530-000-5138

Konu: Taksis Hk.

ELEŞKİRT MİLLİ EMLAK ŞEFLİĞİNE

Mülkiyeti Maliye Hazinesine ait ve Belediyemize tahsisli Ağrı İli Eleşkirt İlçesi 206 ada 50 nolu parsel üzerinde Belediyemiz tarafından Güneş Enerjisi Sistemi kurulması planlanmaktadır. Kurulacak olan Güneş Enerjisi Sisteminin nakil hattı için Mülkiyeti kurumunuza ait 206 ada 33 ve 206 ada 116 nolu taşınmazların tahsisi gerekmektedir.

Bahse konu yapılacak olan Güneş Enerji Sisteminin nakil hattı için 206 ada 33 ve 206 ada 116 nolu taşınmazların tahsisinin yapılması husunda;

Gereğini bilgilerinize arz ederim.

Alpaslan ERDOĞAN Yazı İşleri Müdürü

Bu belge, güvenli elektronik imza ile imzalanmıştır.

Doğrulama Kodu: e8a3c671-58b0-40b1-942a-03302a38cc44

Doğrulama Linki: https://www.turkiye.gov.tr/icisleri-belediye-ebys





T.C AĞRI VALİLİĞI Çevre, Şehircilik ve İklim Değişikliği İl Müdürlüğü Milli Emlək Müdürlüğü



Savi E-71729667-310.03-10431228

12.09.2024

Konu : Tahsis Hk

ELEŞKİRT BELEDİYE BAŞKANLIĞINA

llgi : 12.09.2024 tarihli ve E-5146 sayılı yazınız.

İlimiz, Eleşkirt İlçesi, Esentepe Mahallesinde bulunan, mülkiyeti Hazmeye ait 206 ada 50 parsel no.lu taşımmaz üzerinde Belediyeniz tarafından kurulacak olan Güneş Enerjisi Santralinin nakil hattı için gerekli olan mülkiyeti Hazmeye ait 206 ada 33 ve 206 ada 116 parsel nolu taşımmazların talısisinin talep edildiği belirtilerek, yapılacak olan nakil hattı için İdaremizce talısıs işlemlerinin başlatılıp başlatılmadığının tarafınıza bildirilmesi ilgi yazmızda istenilmiştir.

Söz konusu taşımınazların Güneş Enerjisi Sautralinin nakil hattı olarak Belediyeniz adına tahsisine ilişkin ilgili kurumlardan kurum görüşleri sorulmak suretiyle, işlemler başlatılmış olup, işlem süreçleri devam etmektedir.

Bilgilerinize arz ederim.

Ferdi İLAN Çevre, Şehircilik ve İklim Değişikliği İl Müdürü

Bu belge, pivendi eteknonik inna de anzalaminju.

Dogrulana Kodu 0972D13C-A769-4322-BeB4-C413CE602F25

Dogrulana Kodu 0972D13C-A769-4322-BeB4-C413CE602F25

Dogrulana Kodu 0972D13C-A769-4322-BeB4-C413CE602F25

Bilgi (car Zehra KOCA Burger Personeli
Burger Personeli
Burger Personeli