TURKIYE PUBLIC AND MUNICIPAL RENEWABLE ENERGY PROJECT (PUMREP)

Environmental and Social Management Plan (ESMP) Checklist

for Odunpazarı Municipality 639 kWp/596 kWe Solar Power Plant of Odunpazarı Municipality

Date of Issue: 2 September 2025

Document History

Revision	Submitted to	Issue Date	Revision Details
v1	ILBANK	18 April 2025	Draft
V2	ILBANK	15 May 2025	Draft
V3	ILBANK	21 May 2025	Draft
V4	ILBANK	26 May 2025	Draft
V5	ILBANK	23 June 2025	Draft
V6	ILBANK	27 June 2025	Draft
V7	ILBANK	18 July 2025	Draft
V8	ILBANK	28 July 2025	Draft
V9	ILBANK	31 July 2025	Draft
V10	ILBANK	2 September 2025	Final

This document has been prepared by ÇA Engineering Company.

Environmental and Social Management Plan (ESMP) Checklist

Part 1: General Subproject and Site Information

1.a) General	
Associated ILBANK	Türkiye Public and Municipal Renewable Energy Project (PUMREP)
Project	Transity of ability and manistrationable Energy (1990) (1900)
International Financial	The World Bank
Institution (IFI)	THE WORLDANK
` '	
Financing the Project	Madagata
Project's E&S Risk	Moderate
Classification according	
to WB ESF (2018)	0
Subproject Title	Odunpazarı Municipality 639 kWp/596 kWe Solar (Photovoltaic) Power Plant (SPP)
Sub-borrower Name	Odunpazarı Municipality
Responsible ILBANK	Eskişehir Regional Directorate
Regional Directorate	
(RD)	
Subproject's E&S Risk	Moderate
Classification according	
to ILBANK ESMS	
(2023)	
, ,	Province: Eskişehir
Subproject Location	
	District: Odunpazarı Neighborhood: Türkmentokat
	Parcel/Block no: 4695/2 Technology (e.g. Photovoltaic, monocrystalline, polycrystalline, thin film, bi-
Scope of Subproject	facial, tracking system, etc.): monocrystalline
and Activity	Installed power: 639 kWp
	Connection power: 596 kWe
(in case of any changes	Annual electricity generation: 932 MWh/ year
of the subproject please	Construction Duration: 2 months
fill Appendix-12 and	
submit to ILBANK)	Operation Duration (Economic life of the Plant): 25 years
	Number of Construction Workers (at peak, including contractors and
	subcontractors): 10
	Number of Operations Workers (at peak): 2
	Planned accommodation: Off-site (Rented houses in nearby settlements.)
Energy Transmission	Grid connection: There is a solar power plant belonging to Odunpazarı Municipality
Line (ETL)	within the same parcel, and the energy produced within the scope of the sub-project will
	be transferred to the grid by connecting to the existing transformer.
	Status of transformer station: Available transformer
	Energy transmission line (ETL): There will be no ETL construction.
Access Roads	There is an existing access road to the sub-project site. The existing road is sufficient for
	the transportation of equipment to the site and there is no need for new road construction
	or road improvement works. The access road passes through Türkmentokat
	neighborhood. There are no sensitive structures such as school, health center and fire
	departments on the route. The road is sufficient to transport the equipment to the site and
	no road widening or improvement works will be carried out. The access route to the sub-
	project area is given in Figure 1.
	This stabilized road is sufficiently wide for transporting equipment during the construction
	phase. Apart from regular local use, it does not experience heavy vehicle traffic, so no
	significant traffic load is expected.
	The road's condition and route are documented with on-site photographs and Google
	Earth images, provided in Appendix-6. Photographic Log
	Additionally, no negative feedback was received from the municipality or local residents

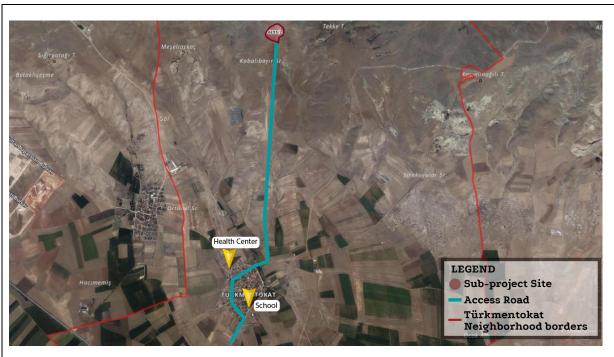






Figure 1. Subproject Access Road

Other Associated Facilities:

Are there any other associated facilities that are not funded as part of the Subproject and are (a) directly and significantly related to the Subproject, (b) carried out, or planned to be carried out, contemporaneously with the Subproject, and (c) necessary for the Subproject to be viable and would not have been constructed, expanded or conducted if the Subproject did not exist?

No

Existing Permits

- The ownership of the sub-project area belongs to Odunpazarı Municipality. The title deed was shared on Appendix-5. Copies of Title Deed
- In accordance with the Turkish EIA Regulation published on 29.07.2022, the Eskişehir Governorship Provincial Directorate of Environment, Urbanization and Climate Change issued an EIA Not Required decision for the subproject, dated 05.03.2025 and numbered 43549071-220-02 E-202584 (See Appendix-2. EIA Not Required Certificate).
- The 1/1000 Scale Zoning Plan for Parcel No. 464 (New parcel number: 4695/2), located in Türkmentokat Neighborhood, Odunpazarı District, Eskişehir Province, was initially approved by the Odunpazarı Municipality Council on 08.01.2019 (Decision No. 2/22), and subsequently ratified by the Eskişehir Metropolitan Municipality Council on 15.01.2019 (Decision No. 39). The plan was later revised and re-approved through the

	<u>, </u>
	 Odunpazarı Municipality Council Decision dated 06.07.2020 (No. 8/124), and the Eskişehir Metropolitan Municipality Council Decision dated 14.07.2020 (No. 227). The sub-project area lies within the boundaries of the 1/1000 Scale Zoning Plan of Odunpazarı District, Türkmentokat Neighborhood, as reflected on Plan Sheet I25-c-1-c, for Parcel No. 4695/2 (formerly 464) (See Appendix-3. Zoning Plan) Additionally, based on the official letter dated 04.10.2016 and numbered 58889913-230.04.02/1234, issued by the Eskişehir Governorship Provincial Directorate of Food, Agriculture and Livestock, and in accordance with Article 19 of Agricultural Reform Law No. 3083, Article 65 of its Implementation Regulation, and Article 11, Clause 4 of the Technical Instruction on the Protection and Evaluation of Agricultural Land, the entire area of 52,800.00 m² has been granted a non-agricultural use permit for the installation of a solar power plant (See Appendix-4. Non-Agricultural Use Permit).
1.b) Site Description	
Subproject Area	The parcel which is lot 2 of block 4695 has an area of 52,800 m² and 8,400 m² will be used for the subproject area. Number of parcels to be used: 1 Total title deed area of the parcel: 52,800 m² Total area to be used by the Subproject (within the fence area): 8,400 m² Appendix-1. Site Map: Site Map Appendix-6. Photographic Log: Photolog
Who owns the land?	Odunpazarı Municipality as of 25.06.2014.
Since when?	
	Appendix-5. Copies of Title Deed: Title Deed
Land Registry Type according to Title Deed (agricultural, pasture, vacant, etc.)	Field
Current Land Use (are there any formal or informal agricultural users, herders, etc.)	There is an existing SPP with a power of 999 kWe established and operated by Odunpazarı Municipality within the same parcel where the sub-project activities will be carried out. Apart from this, no agricultural or animal husbandry activities are carried out in the parcel 4695/2.
Other Nearby Facilities and Activities	A livestock farm locates in Türkmentokat Neighborhood, approximately 2,500 meters away to subproject area. The physical environment is predominantly rural, with agricultural and pasture lands surrounding the site.
Are there other industrial or commercial activities operated/operating or planned by the Subborrower itself or other public or private third-parties in the vicinity of the Subproject or its components/associated facilities?	The cub project is lecated in the Türkmenteket Neighberhood. The cubproject site is
Area of Influence	The sub-project is located in the Türkmentokat Neighborhood. The subproject site is approximately 3,500 meters away from the neighborhood. The access road passes through Türkmentokat Neighborhood. Although there are no critical facilities such as schools as health centers, or fire stations along the route, residential buildings are present near the road. Although no vulnerable or disadvantaged households were formally identified through field visit and consultation with the mukhtar, the proximity of residences along the route has been taken into account in the Area of Influence (AoI) definition. The area of influence was determined as a result of interviews with local people and mukhtars during the site visit on 07.04.2025, based on components such as dust emissions, environmental noise, provision of local employment, local people's opinions about the sub-project, etc. and considering the locations of vulnerable and disadvantaged groups. The nearest sensitive

receptors are the households located on the access route and the animal farm, which is also on the access route and 2500 meters away from the neighborhood. This information has been confirmed through consultations with the mukhtar of Turkmentokat Neighborhood.

As the access road passes through the residential area of Türkmentokat Neighborhood, nearby houses and potentially sensitive groups such as children and the elderly have been considered within the AoI.

Therefore, traffic, dust, and noise impacts are not only assessed for the sub-project site but also along the entire access route. These potential impacts are expected to remain minor; however, due to proximity to households, the route through the neighborhood has been included within the sub-project AoI.

Noise impacts of the subproject are not expected to exceed significant levels beyond a 50-meter radius, The Area of Influence has been determined by considering these two factors.

According to the construction phase dust emissions and environmental noise calculations explained in detail in the Appendix-14. Emissions and Environmental Noise Calculations, the noise levels that will occur at the sub-project site are dampened after a distance of 50 m and remain below the 65 dBA noise level limit value specified in Table 1 of Annex II of the "Environmental Noise Control Regulation" published in the Official Gazette dated 30.11.2022 and numbered 32029. The sub-project area of influence is shared in Figure 2. Although the limit value meets the limits of the relevant national regulation, it is above the limits specified in WBG General EHS guidelines. The calculations were made assuming that all equipment will operate simultaneously. Under field conditions, lower environmental noise levels are expected. In addition, in case of any complaints about noise, measurements will be taken to determine the environmental noise level caused by construction work and if it is high, additional measures such as barriers, arrangement of working hours, etc. will be taken.

Since the dust emission that will occur as a result of the calculations made under controlled conditions for the construction phase remained below the 1.0 kg/hour value given in Annex 2 of the Regulation on Control of Industrial Air Pollution, which was published in the Official Gazette dated 03.07.2009 and numbered 27277 and entered into force, there was no obligation to conduct air quality modeling studies.

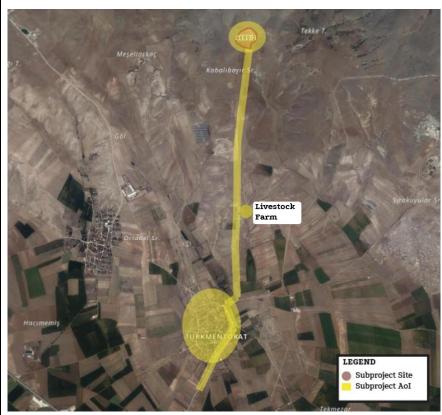


Figure 2. Subproject AoI

Description of geographic and physical characteristics as appropriate. The planned solar power plant will be located in Türkmentokat Neighborhood of Odunpazarı district, Eskişehir province, which is a rural area that benefits from high solar radiation and is a suitable area for solar energy production. Geographically, the region experiences a continental climate with long, sunny periods, particularly in summer, enhancing the efficiency of solar panels. The physical environment is predominantly rural, with agricultural and pasture lands surrounding the site. Additionally, the existing infrastructure, including road connections and electrical networks, supports renewable energy projects, facilitating the integration of solar power into the local grid.

According to the data obtained from the Türkiye Earthquake Hazard Maps Interactive Web Application for the sub-project area, the PGA 475 (g) value was determined as 0.236 g. This value indicates the horizontal peak ground acceleration (PGA) value with a return period of 475 years. The PGA value of 0.236 g indicates that the region has a moderate seismic hazard. In this context, appropriate engineering measures should be taken for construction and infrastructure projects.



Figure 3. Sub-project Seismicity Map (https://tdth.afad.gov.tr/TDTH/)

Description of biological characteristics as appropriate.

Although SPP projects generally have low environmental impact, detailed ecological assessments have been made during site selection in order not to harm biodiversity. The flora and fauna species identified as a result of studies conducted in the sub-project area of influence (AoI) are given in Appendix-13. Biological Characteristics

Literature and field studies were carried out by ÇA Engineering Agricultural Engineer to determine the flora and fauna species present or likely to be present within the area (AoI).

Flora

Literature and field studies were conducted for the determination of flora and fauna species located or likely to be located within the sub-project AoI. Within the scope of the studies conducted in the sub-project AoI, no endangered or endemic plant species were encountered in the sub-project AoI. In this context, the books "Flora of Türkiye and East Aagean Island (1965- 1988)" and "Red Data Book of Turkish Plants" prepared by P. DAVİS were used. In addition, the databases prepared by TUBITAK, "http://bioces.tubitak.gov.tr" and Turkish Plants Data Service – TUBITAK:

"http://wwweski.tubitak.gov.tr/tubives/" were scanned and the literature was supported to check whether there were any endangered species.

There are no rare, endangered or protected plant species in the sub-project AoI according to Annex 1 of the Bern Convention.

<u>Fauna</u>

The fauna list in the immediate vicinity of the sub-project AoI, based on fieldwork and literature review, is given below. In literature studies; Mustafa Kuru's 'Vertebrate Animals', A. Demirsoy's 'Türkiye Vertebrates— Mammals, Amphibians', İbrahim Baran's 'Türkiye's Amphibians and Reptiles', İ. Kiziroğlu's (2008) 'Türkiye Birds Red List' (Species List in Red Data Book) were used.

The species listed in Appendix-13. Biological Characteristics. and protected by the Bern Convention and other wildlife species are not affected by this activity, such as hunting, deliberately killing or detaining these species, or damaging their eggs. The decisions of the Central Hunting Commission of the Ministry of Agriculture and Forestry for 2024-2025 and the provisions of the Bern Convention will be complied with in the activity in question.

As a result of the flora and fauna surveys conducted in the sub-project AoI, the existence of the species given in the tables (Appendix-13. Biological Characteristics)) was encountered. In this context, no species that are definitely protected under the BERN Convention were encountered. Species that are allowed to be hunted for certain periods by the decision of the Central Hunting Commission were identified, but these species are not within the subproject AoI but are in the immediate vicinity. It is not expected that the activities to be carried out within the scope of the filling activity subject to the sub-project will have a negative impact on these species. However, within the scope of the subproject, necessary measures will be taken for the protection of wildlife in accordance with the Land Hunting Law No. 4915 and the decisions of the Central Hunting Commission held every year. In the sub-project AoI; national parks, nature parks, nature monuments, nature conservation areas, wildlife conservation areas, wild animal breeding areas, cultural assets, natural assets, protected areas and protection areas, special environmental protection zones, biogenetic reserve area, biosphere reserve special protection areas, afforested areas, potential erosion and afforestation areas, protection areas related to drinking and utility water resources, densely populated areas, historical, cultural, archaeological and similar areas of importance, tourism regions and other protected areas; were not encountered in the database used as a source and other researches.

There is no nationally protected and internationally recognized high biodiversity value areas in the sub-project AoI. Additionally, there are no World Heritage Natural Protected Areas, Biosphere Reserves, Ramsar Wetlands of International Importance, Important Biodiversity Areas or Important Bird Areas. Furthermore, field surveys and desktop studies have confirmed the absence of any critical habitats, endemic or endangered species, or ecologically sensitive zones within the subproject AoI.

Description of geological and hydrographic characteristics as appropriate. The selected subproject site's geological and hydrographic characteristics play a crucial role in assessing the feasibility and sustainability of the solar power plant. The geological conditions, including soil composition, bedrock stability, and seismic activity, influence the foundation design and construction process. Additionally, hydrographic features such as surface water bodies, groundwater levels, and drainage patterns are evaluated to ensure minimal impact on local water resources. This section provides an overview of the site's geological and hydrographic attributes, highlighting any relevant environmental considerations for the subproject development.

Geological Characteristics

The sub-project area and its surroundings mainly consist of brown soil, brown forest soil and non-calcareous brown forest soil. The basement rocks around Turkmentokat consist of Triassic metamorphic and ophiolitic units and Upper Cretaceous granodiorites cutting these units. Neogene sedimentary rocks unconformably overlie these units. The geological map of the sub-project area is given in Figure 4.

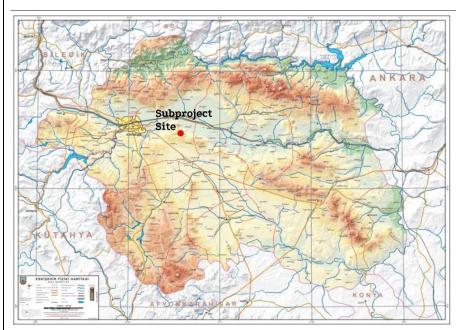
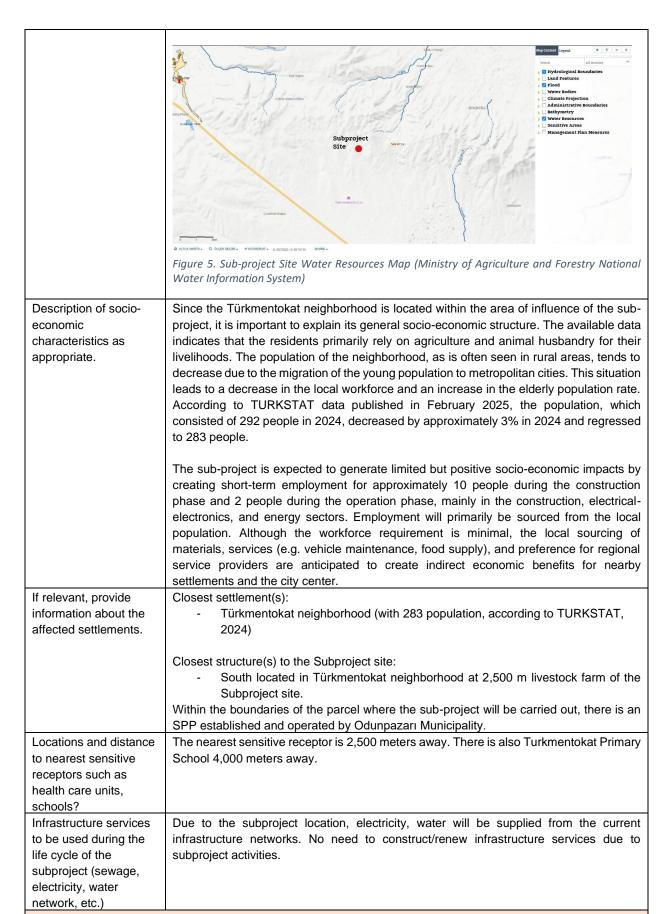


Figure 4. Topography Map

Hydrographic Characteristics

There is no flowing stream in the subproject area. The closest water source to the subproject area is the Aşılık River, which is 2,000 meters away in the northeast direction. According to the National Water Information System; there is no underground water resource in the sub-project area. Considering the seasonal flow changes of the stream bed, there is no risk of flooding, especially during rainy periods. The map showing the closest water source to the sub-project site is shared in Figure 5.



1.c) E&S Requirements applicable to the Subproject

The subproject will be implemented in line with requirements of applicable national legislation and international agreements and conventions to which Türkiye is a party of.

The following international standards will also be followed as applicable:

- WB Environmental and Social Framework (ESF, 2018) and the Environmental and Social Standards (ESSs) forming part of the ESF
- Good International Industry Practices (GIIPs) including but not limited to WB Group (WBG) General and Industry Sector Environmental, Health and Safety Guidelines¹ (EHSGs)
- International Finance Corporation (IFC) ESMS Implementation Handbook
- ILBANK Environmental and Social Management System (ESMS)

In cases where the requirements of the ILBANK ESMS or national legislation differ from those of the WB ESSs or the levels and measures presented outline in the relevant WBG EHS guidelines, the more stringent standard will apply.

Part 2: Implementation Arrangements

2.b) Implementation Responsibility and Resources

The sub-borrower shall implement and cause the contractor to be adopt and implement this ESMP Checklist satisfactory to ILBANK throughout the sub-financing agreement life cycle.

The sub-borrower is responsible for ensuring that adequate financial and human resources are allocated for the effective implementation of this ESMP Checklist.

Roles and Responsibilities are provided in Appendix-10. Roles and Responsibilities

2.c) Organizational Capacity

Sub-borrower:

The sub-borrower shall establish an organizational structure (Project Implementation Unit – PIU) with qualified staff and resources to the satisfaction of ILBANK and maintain it by ensuring that there is qualified staff assigned and serving on the duty throughout the sub-financing agreement life cycle.

The sub-borrower assigns the following personnel to support management and monitoring of subproject E&S risks and impacts and ensure full compliance with the requirements of this ESMP Checklist:

- Environmental Focal Point: Environmental Engineer, 7 years
- Social Focal Point ((who will also act as the Grievance Mechanism (GM) Focal Point): Project Expert, 9 years
- Occupational Health and Safety (OHS) Specialist: OHS Expert, 11 years

Contractors:

The sub-borrower shall obligate awarded contractors to establish and maintain throughout the contract duration an organizational structure with qualified staff and resources.

This shall be achieved through assigning the following personnel under the contractor's organization prior to commencement of works:

- One (1) Environmental Specialist: Please insert name-surname, position/title, length of professional experience
- o One (1) Social Specialist: Please insert name-surname, position/title, length of professional experience
- One (1) Occupational Health and Safety (OHS) Specialist: Please insert name-surname, position/title, length of professional experience, expertise class

The sub-borrower shall in writing notify ILBANK of the assigned contractor personnel prior to commencement of works.

2.d) Monitoring and Reporting

The sub-borrower shall promptly notify ILBANK of any incident or accident related to the subproject which has, or is likely to have, a significant² adverse effect on the environment, the affected communities, the public or workers,

¹ https://www.ifc.org/en/insights-reports/2000/general-environmental-health-and-safety-guidelines

² Any incident or accident relating to the subproject which has, or is likely to have, a significant adverse impact on the environment and/or health and safety of communities or employees (direct or contracted) involved in the subprojects related operations will be considered significant, including, inter alia, chemical and/or hydrocarbon materials spills; fire, explosion or unplanned releases, including during transportation; ecological damage/destruction; traffic or other type of accidents that could result in fatalities or serious injuries affecting employees and/or public complaint or protest; failure of emissions or effluent treatment; legal/administrative notice of violation; penalties, fines, or increase in pollution charges; negative media attention; chance cultural finds; labor unrest or disputes; local community concerns.

including, inter alia, cases of sexual exploitation and abuse (SEA), sexual harassment (SH), and accidents that result in death, serious or multiple injury.

This notification shall be done by using ILBANK's E&S Incident Notification Form template (see **Appendix-8.** E&S Incident Notification Form). Completed E&S Incident Notification Form shall be submitted to ILBANK by the subborrower within **48 hours** of the incident or accident (contractor shall notify the sub-borrower within **24 hours** of the incident or accident).

The periodic E&S monitoring reporting requirements for the subproject is as follows:

- Construction contractor will prepare **monthly** E&S monitoring reports (ESMRs) and submit to supervision consultant ("müşavir").
- During the **construction** phase, the sub-borrower, with support from supervision consultant, will prepare **quarterly** ESMRs and submit to ILBANK.
- During the operation phase (throughout sub-financing agreement lifecycle, until the completion of repayment period), the sub-borrower will prepare annual ESMRs and submit to ILBANK.

ILBANK will provide the sub-borrower with the required template for the periodic ESMRs.

The Roles and Responsibilities are provided in Appendix-10. Roles and Responsibilities

2.f) Public Consultation

Within the scope of the meeting, the environmental expert from the consulting firm presented the environmental and social risks identified in the Environmental and Social Management Plan (ESMP). The expert also described the measures planned to mitigate these risks, the potential impact of the geographical location and climatic conditions, and the assessments conducted regarding possible natural disasters in the sub project area.

The session concluded with a question-and-answer segment, during which participants were given the opportunity to share their opinions, suggestions, and concerns. The meeting lasted approximately one hour. A record of the meeting and participant list is provided in **Hata! Başvuru kaynağı bulunamadı**..

Part 3: ESMP Matrix: Risk and Impacts, Mitigation and Monitoring

As the Sub-project involves both construction and operational activities, the ESMP consist of two components applicable to respective Sub-project phase, as follows:

- Construction ESMP Matrix
- Operation ESMP Matrix

3.a) Construction ESMP Matrix

No.	Risks and Impacts	Receptor(s)	Proposed Mitigation Measure	Responsible Parties
Labor	and Working Conditions			
1.	Working Conditions	Construction workforce Employees	 Conduct daily toolbox talks covering the OHS Plan and labor conditions and record it for display on demand. Develop and implement a subproject-specific simplified Labor Management Procedure (SLMP, see Appendix-9. Simplified Labor Management Procedure) to ensure compliance in recruiting and managing all employees. Enforce strict prohibition of child labor, forced labor, and unregistered labor as per SLMP requirements. Workers will be provided with documented information that is clear and understandable regarding their rights under national labor law, including collective agreements, and their rights related to hours of work, wages, overtime, compensation, and benefits at the start of the working relationship and whenever any material changes occur. Recruitment procedures will comply with national labor legislation and ESS2, and an accessible grievance mechanism for workers will be implemented and maintained. 	Odunpazarı Municipality Supervision Consultant Contractor
2.	General OHS risks	Construction workforce	A comprehensive risk assessment document must be developed for the subproject, identifying specific risks and corresponding mitigation measures. In addition to this general assessment, a task-specific risk assessment must be conducted before starting any non-routine work or activities that fall outside the normal scope.	Odunpazarı Municipality Supervision Consultant Contractor

No.	Risks and Impacts	Receptor(s)	Proposed Mitigation Measure	Responsible Parties
			of operations. In such cases, a work permit procedure must also be applied to ensure all safety precautions are in place. Ensure that all employees, including subcontractors, receive necessary OHS training covering identified risks. Prepare sub-project management plans, including Safe Work Procedures and an Emergency Response Plan. Emergency scenarios should be determined for all possible risks and every employee should receive training on these scenarios. Enforce safety procedures and provide appropriate PPE to all employees. Incorporate job-specific safety procedures and requirements in OHS training programs. Prepare machine and operation specific "Safe Working Procedures" for all safety critic equipment and machinery and notify all workforce by signature. Serious safety issues that may arise with primary suppliers and primary supply workers will be managed as described in the Occupational Health and Safety Sub-Management Plan, which will cover primary supply workers to the extent necessary. Written contracts will be provided to subcontractors, setting out detailed job descriptions, rights and obligations, and a Code of Conduct. In case of OHS accidents resulting in loss of life, loss of limbs or eyes, or temporary incapacity for work lasting more than 72 hours, the Contractor shall immediately notify the Social Security Institution and ILBANK (within 24 hours) and follow up by filling in the Environmental and Social Reporting Template (ESRT) forms in accordance with the instructions of ILBANK. This process shall also include root cause analysis and corrective action plan.	

No.	Risks and Impacts	Receptor(s)	Proposed Mitigation Measure	Responsible Parties
3.	Physical Hazards: Lifting Operations OHS Risks	Construction workforce	 Ensure that lifting area will be enclosed with fence to prevent access to the lifting area during lifting work. Ensure that warning signs will be installed for lifting activities Ensure that safety procedures will be used for lifting operations. Ensure that lifting work will be carried out by well trained, qualified, and certified lifting team and with proper communication means and flag man. Ensure that workers will be provided with all necessary PPE and safety materials. Ensure all equipment used for lifting operations including slings, chains and hooks are checked technically and records are kept according to local safety legislation. Ensure that tools are selected and designed that reduce force requirements and holding times and improve postures. Ensure that user-adjustable workstations are provided. Ensure that rest and stretch breaks are incorporated into work processes and job rotation is in place. Ensure that quality control and maintenance programs are in place to reduce unnecessary forces and effort, and personnel are trained in proper manual handling techniques. Ensure that additional special circumstances, such as left-handed people, are considered. 	Odunpazarı Municipality Supervision Consultant Contractor
4.	Physical Hazards: Rotating and Moving Equipment	Construction workforce	 Design machines to eliminate trap hazards and ensure that extremities are kept out of harm's way under normal operating conditions; i.e. availability of emergency stops dedicated to the machine and placed in strategic locations; If a machine or equipment has an exposed moving part or an exposed pinch point that could endanger the safety of any worker, ensure that the machine or equipment is equipped with and protected by a guard or other device that prevents access to the moving part or pinch point. Guards should be designed and installed in conformance with appropriate machine safety standards; Ensure that machinery with exposed or protected moving parts or in which energy can be stored (e.g. compressed air, electrical components) is turned-off, disconnected, isolated and de-energized (Locked Out and Tagged Out) during service or maintenance; Where possible, ensure that equipment is designed and installed to enable routine servicing, such as lubrication, to be carried out without removing guarding devices or mechanisms. 	Odunpazarı Municipality Supervision Consultant Contractor

No.	Risks and Impacts	Receptor(s)	Proposed Mitigation Measure	Responsible Parties
5.	Physical Hazards: Electrical Hazards	Construction workforce	 No one without a valid certification on vocational training on electricity will be allowed to work on electrical installations. Ensure that all energized electrical devices and lines are marked with warning signs; Ensure that the devices are locked (de-charging and leaving open with a controlled locking device) and labeled (warning sign placed on the lock) during service or maintenance; A "Lockout Tagout" (LOTO) Procedure specific to the subproject should be prepared, personnel should be trained and its implementation should be supervised. If extension cords are to be used, they must be selected based on the required current capacity and the length of the cable. Extension cords are intended for temporary use only. Ensure that all electrical cords, cables, and hand power tools are checked for frayed or exposed cords. Also, ensure that the manufacturer's 	Supervision Consultant Contractor

No.	Risks and Impacts	Receptor(s)	Proposed Mitigation Measure	Responsible Parties
			recommendations for the maximum permitted operating voltage of portable hand tools are followed; Insulating mats should be placed under electrical panels, including portable panels. Ensure that portable electrical appliances are "portable electrical appliance tested (PAT)" Ensure that all electrical equipment used in environments that are or may be wet is double insulated/grounded; use equipment with ground fault interrupter (GFI) protected circuits; All panels will be equipped with a residual current relay. Ensure that power cords and extension cords are protected against damage from traffic by shielding or suspending above traffic areas; If extension cables are to be used, they should be selected according to the current they need to carry and the length of the cable. Extension cables are for temporary use. Outdoor extension cables should be used. Ensure that high-voltage equipment ('electrical hazard') and service rooms where access is controlled or prohibited are properly labeled; Ensure that "No Approach" zones are established around or under high voltage lines; Ensure that construction vehicles or other vehicles with rubber tires that come into direct contact with or arc across high-voltage cables are taken out of service for 48 hours; Ensure that all buried electrical cables are thoroughly identified and marked prior to any excavation work. Ensure that special training programs are organized for employees on electrical hazards and safety precautions. Ensure that rapid response teams and emergency plans are established for electrical accidents. Ensure that regular electrical safety inspections are conducted in the project area. Ensure that periodic inspections are conducted to ensure that employees use appropriate personal protective equipment (PPE).	
6.	Physical Hazards: Welding and Hot Works	Construction workforce	 Ensure that appropriate eye protection, such as welder's goggles and/or a full-face shield, and respiratory protection is provided for all personnel involved in or assisting with welding operations; If welding or hot cutting is performed outside of established welding work stations, ensure that special hot work and fire prevention precautions and Standard Operating Procedures (SOPs) are in place, including "Hot Work Permits, stand-by 	Odunpazarı Municipality Supervision Consultant Contractor

No.	Risks and Impacts	Receptor(s)	Proposed Mitigation Measure	Responsible Parties
			 fire extinguishers, fire blanket, stand-by fire watch and maintaining fire watch for up to one hour after welding or hot cutting is finished"; Ensure that areas where welding or hot work is performed are cleared of flammable materials (e.g. fuel, solvent, spark-ignitable materials) and should be checked regularly. Ensure that all employees are trained and informed about welding operations and the safe management of hot work. Ensure that welding work is only carried out by employees who have the appropriate professional qualification (aluminum, steel, resistance etc.) 	
7.	Fire Safety Prevention Measures and Emergency Response	Construction workforce Flora and fauna Soil, water resources	 Prepare an Emergency Response and Evacuation Plan before the commencement of works. Ensure all employees are trained for their responsibility to report dangers and firefighting measures Ensure that all flammable and hazardous materials are stored in designated, secure areas away from ignition sources. Ensure firefighting systems and equipment are available Ensure fire and emergency drills are conducted regularly. Designate trained fire wardens for each area to lead evacuations and coordinate with emergency responders. Keep an up-to-date list of emergency contacts, including local fire departments and hospitals, for quick access in case of fire. Make sure that there are enough first aiders in the first aid regulations for the workplace hazard class. 	Odunpazarı Municipality Supervision Consultant Contractor
8.	Physical Hazards: Ergonomics, Repetitive Motion, Manual Handling Lifting	Construction workforce	 Establish clear weight limits for manual handling tasks and label heavy loads accordingly; Ensure that mechanical assists are used to eliminate or reduce the effort required to lift materials, hold tools and work objects, and that more than one person is lifting if weights exceed thresholds; Ensure that tools are selected and designed that reduce force requirements and holding times and improve postures; Ensure that user-adjustable workstations are provided; 	Odunpazarı Municipality Supervision Consultant Contractor

No.	Risks and Impacts	Receptor(s)	Proposed Mitigation Measure	Responsible Parties
9.	Physical Hazards: Industrial Vehicle Driving and Site Traffic	Construction workforce		
10.	Physical Hazards: Chemical Hazards	Construction workforce Flora and fauna Soil, water resources	 Ensure that the hazardous substance is replaced with a less hazardous substitute; Ensure that engineering and administrative control measures are in place to prevent or minimize the release of hazardous substances into the working environment, keeping the exposure level below internationally established or recognized limits; Ensure that the number of workers exposed or likely to be exposed is minimal; Ensure that chemical hazards are communicated to workers through labeling and marking according to nationally and internationally recognized requirements and standards, including International Chemical Safety Cards (ICSC), Safety Data Sheets (SDSs) or equivalent. Any means of written communication should be in an 	Odunpazarı Municipality Supervision Consultant Contractor

No.	Risks and Impacts	Receptor(s)	Proposed Mitigation Measure	Responsible Parties
			 easily understood language and be readily available to exposed workers and first-aid personnel; Ensure that employees are trained in the use of available information (such as Safety Data Sheet), safe working practices and proper use of PPE. Ensure workers have access to suitable personal protective equipment (PPE), such as gloves, respirators, goggles, and protective clothing, based on the specific chemical hazards. Store hazardous substances in designated areas with appropriate ventilation, labeling, and secure containment to prevent accidental exposure or spills. Provide chemical overflow pallets and store chemical containers by placing them on them. Develop and implement a spill response plan, as part of the Emergency Response Plan, including containment measures, chemical spill/leak response drills, cleanup procedures, hazardous substance disposal, and emergency contact information. Dispose of chemical waste according to regulations to prevent environmental contamination and worker exposure. Regularly inspect and maintain chemical handling equipment, storage areas, and PPE to prevent leaks or accidental releases. 	
11.	Gender-Based Violence (GBV); Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) on Employees; Gender Inequality	Construction workforce	Ensure all workers receive training on recognizing, preventing, and responding to CRV and SEA/SH incidents.	Odunpazarı Municipality Supervision Consultant Contractor

No.	Risks and Impacts	Receptor(s)	Proposed Mitigation Measure	Responsible Parties		
Resou	esource Efficiency and Pollution Prevention and Management					
12.	Waste Management - General	Communities Construction workforce Flora and fauna Soil, water resources	 Separate waste at the source into waste categories determined in Waste Management Regulation, establish temporary waste storage area Place labeled bins for each type of waste at strategic locations on-site to ensure correct disposal by workers. Implement practices to reduce waste generation by optimizing material use and reusing materials where possible. Contract with local recycling facilities to ensure that recyclable materials (e.g., metals, paper, plastic) are properly processed. Store waste in designated, secured areas to prevent littering, leaching, and environmental contamination. Use leak-proof containers for hazardous or liquid waste and ensure they are adequately labeled. Contract with licensed waste disposal companies to handle non-recyclable and hazardous wastes in accordance with Waste Management Regulation. Track and document the disposal process to ensure compliance and accountability. Conduct regular awareness sessions and training for workers on waste reduction techniques, proper disposal practices, and the importance of waste management. Regularly monitor waste management practices, conduct site inspections, and assess waste volumes to identify areas for improvement. Establish a reporting system to document waste types, quantities, and disposal methods. Develop a comprehensive waste management plan that includes waste reduction targets, disposal methods, monitoring schedules, and assigned responsibilities for effective waste management throughout the project. Use containment systems for waste that poses spill risks, and keep spill kits accessible. Train staff on immediate spill response actions to prevent soil and water contamination. Conduct maintenance tasks, such as oil changes and battery replacements, off-site; 	Odunpazarı Municipality Supervision Consultant Contractor		
13.	Waste Management - Electronic Waste Disposal	Communities Construction workforce Soil and water resources	 Contract with recycling facilities and/or manufacturers to ensure proper disposal or recycling of obsolete equipment; Agreements will be set with e-waste recycling facilities to ensure responsible disposal of electronic waste from solar panels, inverters, batteries, etc. 	Odunpazarı Municipality Supervision Consultant Contractor		
14.	Wastewater Management	Flora and fauna Soil, water resources	 Construct septic tanks for collecting wastewater from site staff; Regularly dispose/vacuum wastewater in the septic tank to prevent overflow, reduce the risk of contamination, and ensure the proper functioning of the system. 	Odunpazarı Municipality Supervision Consultant Contractor		

No.	Risks and Impacts	Receptor(s)	Proposed Mitigation Measure	Responsible Parties
15.	Soil and Groundwater Contamination	Communities Construction workforce Flora and fauna Soil and water resources	 Contain and clean up any oil, chemical, lubricant, or fuel spill immediately to prevent environmental contamination. Implement spill prevention and response measures. Maintain spill containment and clean-up kits on-site. Ensure all spills are contained, cleaned, and disposed of by licensed waste management companies. Conduct routine servicing of construction vehicles and equipment at designated off-site locations to minimize the risk of leaks or spills. Perform refueling in designated areas following strict protocols to prevent accidental spills. Collect and store waste oil securely for recycling or dispose of it through licensed waste vendors to ensure safe handling. Provide adequate sanitary facilities, including toilets and showers, for the construction workforce. Ensure prompt repairs and maintenance in the event of any leaks or spills to maintain hygiene and safety standards. Ensure water used by the personnel is tested and proved suitable regarding National Standards, if not provide appropriate filtration systems. 	Odunpazarı Municipality Supervision Consultant Contractor
16.	Dust and Gaseous Emissions	Communities Construction workforce Flora and fauna Ambient air quality	 Apply water spraying to suppress dust when dusting occurs on roads and construction area. Use water tankers to supply water for this purpose. Inform communities/residential areas nearby about the schedule and nature of construction activities as part of the Stakeholder Engagement Plan (SEP). Carry out loading and unloading of trucks carefully to prevent materials from dispersing or scattering. Cover transport trucks with tarpaulins on public roads when arriving at or leaving the site to minimize dust. Clean truck tires before leaving the site to prevent mud and debris from spreading onto public roads. Enforce a speed limit for trucks to reduce dust and improve site safety. Use modern equipment and vehicles that meet relevant emission standards. Regularly inspect and maintain exhaust systems to ensure emission levels remain within safe limits. Implement good site practices by using low-emission construction equipment and vehicles. Utilize cleaner fuels and technologies to reduce dust and other airborne pollutants. Implement a grievance mechanism to address community concerns. Halt work in case of grievances until corrective measures are in place. 	Odunpazarı Municipality Supervision Consultant Contractor
17.	Environmental Noise	Communities Construction workforce	 Prohibit the operation of construction machinery at night to minimize noise disturbances. Inform communities/residential areas nearby about the timing and nature of construction activities as part of the Stakeholder Engagement Plan (SEP). 	Odunpazarı Municipality Supervision Consultant Contractor

No.	Risks and Impacts	Receptor(s)	Proposed Mitigation Measure	Responsible Parties
			 Ensure that machinery and equipment used during land preparation and construction are distributed evenly throughout the site rather than concentrated in one location. Choose construction machinery and equipment with low noise emissions to minimize noise impact on the surrounding area. Use noise barriers or enclosures for loud equipment. Conduct regular and periodic maintenance of construction machinery and equipment, including daily checks before each shift, to ensure optimal performance and reduce noise levels. Ensure all vehicles used for transportation comply with the speed limits to minimize noise and enhance safety. Establish a grievance mechanism to receive and address complaints related to noise and other nuisances from the community. Halt construction activities in response to grievances until appropriate preventive measures are implemented to address the issues raised. In case of any environmental noise complaints, measurements will be conducted by accredited laboratory to determine the environmental noise level caused by construction work and if it is over the limits, additional measures such as barriers, arrangement of working hours, etc. will be taken. 	

No.	Risks and Impacts	Receptor(s)	Proposed Mitigation Measure	Responsible Parties
18.	Hazardous Substances Management	Construction workforce Communities Flora and fauna Soil and water resources	 Maintain a comprehensive record of the types, quantities, and properties of hazardous materials to be stored on-site. Establish a designated storage area specifically equipped for the safe storage of hazardous and toxic materials. Ensure all storage containers are clearly labelled with appropriate hazard warnings, safety information, and emergency contact details to facilitate proper handling and identification. All chemicals will be managed in accordance with their Material Safety Data Sheets (MSDS). Utilize suitable containers, tanks, and bunding systems to contain hazardous materials and prevent spills, leaks, or releases. Implement secondary containment measures, such as berms, dikes, or containment basins, to capture any accidental releases. Ensure adequate ventilation and venting systems are in place within storage areas to prevent the accumulation of hazardous vapours or gases. Identify and safely remove hazardous materials, including lead-containing components from solar panels and electronic waste from inverters, following proper disposal protocols. Implement appropriate containment and handling procedures to minimize the risk of spills or releases of hazardous substances during storage and handling. Arrange for the proper disposal or recycling of hazardous materials through licensed facilities to ensure safe and compliant waste management. 	
Comn	nunity Health and Safety			
19.	Increased traffic	Communities	 Coordinate traffic management to regulate construction vehicle movement. Schedule construction activities during off-peak hours to minimize traffic congestion. Ensure coordination and develop infrastructure upgrades or expansions in advance of the sub-project, including improvements to roads, utilities, and telecommunications if necessary. Use flagmen and signage to direct traffic safely around construction area. Provide regular updates to the community about construction schedules and traffic impacts. Ensure all construction vehicles comply with speed limits specified in the regulations and are maintained to minimize emissions and noise. Limit vehicle speed on unpaved roads to 30 km/h. 	Odunpazarı Municipality Supervision Consultant Contractor

No.	Risks and Impacts	Receptor(s)	Proposed Mitigation Measure	Responsible Parties
			 Conduct safety training for construction workers on road safety protocols and provide road safety training for all drivers. Use safe traffic control measures, including road warning signs, speed bumps, and flag persons as necessary. Monitor traffic conditions and adjust operations as necessary to ensure safety. Repair any damage to the roads promptly. Establish a grievance mechanism for community members to report traffic concerns. Prepare an emergency response plan and protocols to address potential infrastructure failures, accidents, or natural disasters during construction. Place warning signs, speed bumps and signaling systems on roads passing in front of the school. Restrict construction site vehicles from passing through the area during school entrance and exit hours or determine alternative routes. Before construction work that may cause temporary disturbance, the public and nearby institutions and organizations, hospitals and schools will be informed. Assign direction officers to ensure safe passage of service vehicles and pedestrians The Contractor will prepare a 'Traffic Management Plan' to ensure traffic safety during construction, minimize adverse effects on local people and ensure access continuity and submit it to the relevant administration for approval. This plan will include the following: Vehicle routes, speed limits and working hours, Reducing speed limits and placing warning signs on roads passing through residential areas, Necessary guidance and barrier systems to ensure pedestrian safety, Timing and route optimization to minimize traffic congestion, Emergency response procedures, Communication mechanisms to inform local people. The Contractor will coordinate with the relevant local administration and, if necessary, security units before implementing the plan. The applicability of the plan will be regularly inspected an	
20.	Risks related with Gender Based Violence (GBV) Sexual Exploitation Abuse / Sexual Harassment (SEA/SH)	Communities	 Deliver ethical rules and public communication training to all employees to prevent gender-based violence (GBV), harassment, and abuse in the workplace. Require all workers to sign and adhere to a code of conduct that promotes respectful behaviour. Conduct regular awareness-raising sessions on-site focused on GBV prevention and other relevant social issues. Establish a grievance mechanism to receive and address complaints related to GBV and workplace misconduct. 	Odunpazarı Municipality Supervision Consultant Contractor

No.	Risks and Impacts	Receptor(s)	Proposed Mitigation Measure	Responsible Parties
			Women's complaints of sexual abuse will be handled in a confidential manner and women staff (e.g. Women Social Workers) will be employed within the grievance mechanism to ensure that these complaints are shared.	
21.	Local Economy, Livelihood Sources and Employment	Communities	 Prioritize local hiring for unskilled, semi-skilled, and skilled positions within the scope of the sub-project. Regularly engage with local communities and maintain a grievance mechanism to address community concerns and feedback. 	Odunpazarı Municipality Supervision Consultant Contractor
22.	Impacts on Vulnerable and Disadvantaged Individuals and Groups	Communities	Develop a recruitment policy that includes non-discriminatory hiring practices, tailored training programs for vulnerable groups, and support services such as transportation and childcare to facilitate workforce participation.	Odunpazarı Municipality Supervision Consultant Contractor
Land	Acquisition, Restrictions on L	and Use and Involuntar	y Resettlement	
23.	Impacts on Local Communities using the Site and Its Environs for Grazing or Agriculture	Communities	 Ensure availability of grievance mechanism for stakeholders affected by land use. It will be ensured that construction activities do not restrict/obstruct the social and economic life of the local community. No work will be carried out outside the project area. In case additional land is needed, necessary permits and approvals will be obtained. ILBANK will be notified immediately. If accidental damage to adjacent land, structures or crops/assets occurs, the Contractor shall provide appropriate shall compensate and indemnify 	Odunpazarı Municipality Supervision Consultant Contractor
Biodi	versity Conservation and Sust	ainable Management of	Living Natural Resources	
24.	Disturbance on Biodiversity	Flora and fauna	 Engage qualified biodiversity experts to conduct pre-construction surveys to identify presence and distribution of flora and fauna on the subproject site, if any, with a focus on impact on habitats such as nesting or burrowing sites, to avoid disturbance or destruction during construction activities. Implement a gradual construction approach to allow fauna species such as Testudo graeca time to escape or provide for their relocation to suitable habitats. Schedule construction activities during periods of low wildlife activity, avoiding nesting seasons for birds and hibernation periods for mammals. Minimize vegetation removal by conducting thorough surveys to avoid unnecessary clearing. Restore natural vegetation upon completion of construction activities to enable species to re-inhabit surrounding areas. Install exclusion fencing to prevent animals from entering construction zones, using wildlife-friendly designs that allow small animals to pass through safely. Install barriers around known burrows or nesting sites to protect them from disruption during construction, using temporary or permanent solutions as necessary. 	Odunpazarı Municipality Supervision Consultant Contractor

No.	Risks and Impacts	Receptor(s)	Proposed Mitigation Measure	Responsible Parties
			 Clearly separate subproject construction sites and access roads from other areas with appropriate signage and fencing, limiting personnel and vehicle access to these areas. Reduce habitat degradation by keeping vehicles on designated access roads and minimizing pedestrian traffic in intact areas. 	
Cultu	ral Heritage			
25.	Impacts on Cultural Heritage	Cultural heritage	 Develop and implement the Chance Finds Procedure (see Appendix-11. Chance Find Procedure) to ensure timely identification and appropriate management of any chance findings during sub-project implementation. Include the Chance Finds Procedure as part of toolbox training sessions during construction to raise awareness among workers. Stop construction work immediately if any chance finds are encountered. Inform ILBANK immediately if any chance finds are encountered. Inform the relevant Preservation Board or Museum Directorate immediately, and ensure the security of the area by the contractor. Construction work will not resume until official notification is received. 	Odunpazarı Municipality Supervision Consultant Contractor
Stake	holder Engagement and Infor	mation Disclosure		
26.	Insufficient Stakeholder Engagement Activities and Public Consultation.	Communities Construction workforce	 Create channels for interaction and communication with local communities, ensuring that engagement activities are scheduled at convenient times. Conduct regular consultations with relevant authorities and local communities to discuss project management and gather feedback. All channels of reaching out to the local people will be used to increase participation. Bulk SMS, WhatsApp messages, social media channels, posters and brochures will be prepared and delivered to the local people, especially the brochures will be hung in mukhtar office, mosques, tea houses and coffee houses. In addition, a section will be created for the sub-project on the Odunpazarı Municipality website. All information about the sub-project will be shared here. The support they need will be provided to vulnerable and disadvantaged groups who may have difficulty in participation. Local people and relevant stakeholders will be informed using the "Construction Notice Template (see Appendix-7. Construction Notice Template)" before construction activities. 	Odunpazarı Municipality Supervision Consultant Contractor

3.b) Operation ESMP Matrix

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure		
Labor	abor and Working Conditions					
1.	Improper Working Conditions	Employees	 Conduct daily/weekly toolbox talks covering the OHS Plan and labor conditions. Apply the SLMP to ensure compliance in recruiting and managing all employees. Enforce strict prohibition of child labor, forced labor, and unregistered labor as per SLMP requirements. Provide employees with clear, documented information on their labor rights, including working hours, wages, overtime, compensation, and benefits at the start of employment and whenever material changes occur. Implement and maintain an accessible Grievance Mechanism for workers. Inform all workers at recruitment. Recruitment procedures will comply with national labor legislation and ESS2, and an accessible grievance mechanism for workers will be implemented and maintained. For non-routine work, a risk assessment must be made before the job. A work permit procedure must be implemented. 			
2.	General OHS risks	Employees	 A comprehensive risk assessment document must be developed for the sub-project, identifying specific risks and corresponding mitigation measures. In addition to this general assessment, a task-specific risk assessment must be conducted before starting any non-routine work or activities that fall outside the normal scope of operations. In such cases, a work permit procedure must also be applied to ensure all safety precautions are in place. Ensure that all employees, including subcontractors, receive necessary OHS training covering identified risks. Prepare sub-project management plans, including Safe Work Procedures and an Emergency Response Plan. Emergency scenarios should be determined for all risks and every employee should receive training on these scenarios. Enforce safety procedures and provide appropriate PPE to all employees. Incorporate job-specific safety procedures and requirements in OHS training programs. 	Odunpazarı Municipality		

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure
3.	Physical Hazards: Lifting Operations OHS Risks	Employees	 Ensure that lifting area will be enclosed with fence to prevent access to the lifting area during lifting work. Ensure that warning signs will be installed for lifting activities Ensure that safety procedures will be used for lifting operations. Ensure that lifting work will be carried out by well trained, qualified, and certified lifting team and with proper communication means and flag man. Ensure that workers will be provided with all necessary PPE and safety materials. Ensure all equipment used for lifting operations including slings, chains and hooks are checked technically and records are kept according to local safety legislation. 	Odunpazarı Municipality
4.	Physical Hazards: Electrical Hazards	Employees	 No one without a valid certification on vocational training on electricity will be allowed to work on electrical installations. Ensure that all energized electrical devices and lines are marked with warning signs; Ensure that the devices are locked (de-charging and leaving open with a controlled locking device) and labeled (warning sign placed on the lock) during service or maintenance; A "Lockout Tagout" (LOTO) Procedure specific to the subproject should be prepared, personnel should be trained and its implementation should be supervised. If extension cords are to be used, they must be selected based on the required current capacity and the length of the cable. Extension cords are intended for temporary use only. Ensure that all electrical cords, cables, and hand power tools are checked for frayed or exposed cords. Also, ensure that the 	Odunpazarı Municipality

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure
			 manufacturer's recommendations for the maximum permitted operating voltage of portable hand tools are followed; Damaged electrical cables should be replaced with new ones, and no taping or splicing should be done. Insulating mats should be placed under electrical panels, including portable panels. Ensure that portable electrical appliances are "portable electrical appliance tested (PAT)" Ensure that all electrical equipment used in environments that are or may be wet is double insulated/grounded; use equipment with ground fault interrupter (GFI) protected circuits; All panels will be equipped with a residual current relay. Ensure that power cords and extension cords are protected against damage from traffic by shielding or suspending above traffic areas; Ensure that high-voltage equipment ('electrical hazard') and service rooms where access is controlled or prohibited are properly labeled; Ensure that "No Approach" zones are established around or under high voltage lines; Ensure that construction vehicles or other vehicles with rubber tires that come into direct contact with or arc across high-voltage cables are taken out of service for 48 hours; Ensure that all buried electrical cables are thoroughly identified and marked prior to any excavation work. Ensure that special training programs are organized for employees on electrical hazards and safety precautions. Ensure that rapid response teams and emergency plans are established for electrical accidents. Ensure that periodic inspections are conducted in the project area. Ensure that periodic inspections are conducted to ensure that employees use appropriate personal protective equipment (PPE). 	
5.	Fire Safety Prevention Measures and Emergency Response	Employees Flora and fauna Soil, water resources	 Ensure all employees are trained for their responsibility to report dangers and firefighting measures Ensure that all flammable and hazardous materials are stored in designated, secure areas away from ignition sources. Ensure firefighting systems and equipment are available. Ensure fire and emergency drills are conducted regularly. Designate trained fire wardens for each area to lead evacuations and coordinate with emergency responders. Keep an up-to-date list of emergency contacts, including local fire departments and hospitals, for quick access in case of fire. Ensure an appropriate number of trained first-aiders are present within the subproject area. Make sure that there are enough first aiders in the first aid regulations for the workplace hazard class. 	Odunpazarı Municipality

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure
6.	Physical Hazards: Ergonomics, Repetitive Motion, Manual Handling Lifting	Employees	 Establish clear weight limits for manual handling tasks and label heavy loads accordingly; Ensure that mechanical assists are used to eliminate or reduce the effort required to lift materials, hold tools and work objects, and that more than one person is lifting if weights exceed thresholds; Ensure that tools are selected and designed that reduce force requirements and holding times and improve postures; Ensure that user-adjustable workstations are provided; Ensure that rest and stretch breaks are incorporated into work processes and job rotation is in place; Ensure quality control and maintenance programs are in place that reduce unnecessary forces and effort; Ensure that additional special circumstances, such as left-handed people, are considered. Ergonomics training should be given to personnel at regular intervals. 	Odunpazarı Municipality
7.	Physical Hazards: Chemical Hazards	Employees Flora and fauna Soil, water resources	 Ensure that the hazardous substance is replaced with a less hazardous substitute; Ensure that engineering and administrative control measures are in place to prevent or minimize the release of hazardous substances into the working environment, keeping the exposure level below internationally established or recognized limits; Ensure that the number of workers exposed or likely to be exposed is minimal; Ensure that chemical hazards are communicated to workers through labeling and marking according to nationally and internationally recognized requirements and standards, including International Chemical Safety Cards (ICSC), Safety Data Sheet or equivalent. Any means of written communication should be in an easily understood language and be readily available to exposed workers and first-aid personnel; Ensure that employees are trained in the use of available information (such as Safety Data Sheet), safe working practices and proper use of PPE. Ensure workers have access to suitable personal protective equipment (PPE), such as gloves, respirators, goggles, and protective clothing, based on the specific chemical hazards. Store hazardous substances in designated areas with appropriate ventilation, labeling, and secure containment to prevent accidental exposure or spills. Provide chemical overflow pallets and store chemical containers by placing them on them. Develop and implement a spill response plan, as part of the Emergency Response Plan, including containment measures, chemical spill/leak response drills, cleanup procedures, hazardous substance disposal, and emergency contact information. Dispose of chemical waste according to regulations to prevent environmental contamination and worker exposure. Regularly inspect and maintain chemical handling equipment, storage areas, and PPE to prevent leaks or accidental releases. 	Odunpazarı Municipality

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure
8.	Gender-Based Violence (GBV); Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) on Employees; Gender Inequality	Employees	 Provide GBV and SEA/SH awareness sessions for the management teams of the construction contractor and consultants to promote understanding and accountability. Conduct regular awareness meetings with workers to educate them on GBV and SEA/SH issues and the importance of respectful workplace conduct. Ensure all workers receive training on recognizing, preventing, and responding to GBV and SEA/SH incidents. Require all workers to review, sign, and adhere to a Code of Conduct that explicitly addresses unacceptable behaviors related to GBV and SEA/SH. 	
Resou	ırce Efficiency and I	Pollution Prevention a	nd Management	
9.	Waste Management	Employees Communities Flora and fauna Soil, water resources	 Separate waste at the source into waste categories determined in Waste Management Regulation, establish temporary waste storage area Place labeled bins for each type of waste at strategic locations on-site to ensure correct disposal by workers. Implement practices to reduce waste generation by optimizing material use and reusing materials where possible. Contract with local recycling facilities to ensure that recyclable materials (e.g., metals, paper, plastic) are properly processed. Store waste in designated, secured areas to prevent littering, leaching, and environmental contamination. Use leak-proof containers for hazardous or liquid waste and ensure they are adequately labeled. Contract with licensed waste disposal companies to handle non-recyclable and hazardous wastes in accordance with Waste Management Regulation. Track and document the disposal process to ensure compliance and accountability. Conduct regular awareness sessions and training for workers on waste reduction techniques, proper disposal practices, and the importance of waste management. Regularly monitor waste management practices, conduct site inspections, and assess waste volumes to identify areas for improvement. Establish a reporting system to document waste types, quantities, and disposal methods. Develop a comprehensive waste management plan that includes waste reduction targets, disposal methods, monitoring schedules, and assigned responsibilities for effective waste management throughout the project. Use containment systems for waste that poses spill risks, and keep spill kits accessible. Train staff on immediate spill response actions to prevent soil and water contamination. Conduct maintenance tasks, such as oil changes and battery replacements, off-site; 	

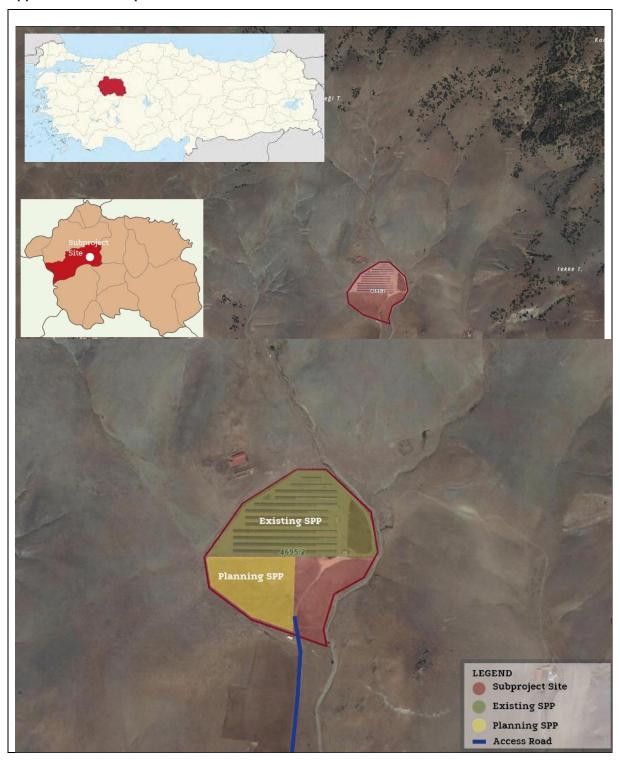
Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure
10.	Electronic Waste Disposal	Employees Communities Flora and fauna Soil, water resources	 Contract with recycling facilities and/or manufacturers to ensure proper disposal or recycling of obsolete equipment; Agreements will be set with e-waste recycling facilities to ensure responsible disposal of electronic waste from solar panels, inverters, batteries, etc. 	Odunpazarı Municipality
11.	Water Use	Employees Flora and fauna Soil, water resources	 Use water efficiently when cleaning solar panels to minimize water consumption and wastewater production. Implement wiper cleaning using rubber blade water sprayers that require minimal water, promoting water conservation practices. Ensure water used by the personnel is tested and proved suitable regarding National Standards, if not provide appropriate filtration systems. 	Odunpazarı Municipality
12.	Wastewater Management	Flora and fauna Soil, water resources	 Utilize septic tanks constructed during the construction stage to collect wastewater from operational staff. Ensure septic tanks are regularly vacuumed to prevent overflow, reduce contamination risk, and maintain system functionality. 	Odunpazarı Municipality
13.	Soil and Groundwater Contamination	Flora and fauna	 Contain and clean up any oil, chemical, lubricant, or fuel spill immediately to prevent environmental contamination. Implement spill prevention and response measures. Maintain spill containment and clean-up kits on-site. Ensure all spills are contained, cleaned, and disposed of by licensed waste management companies. Conduct routine servicing of construction vehicles and equipment at designated off-site locations to minimize the risk of leaks or spills. Collect and store waste oil securely for recycling or dispose of it through licensed waste vendors to ensure safe handling. Provide adequate sanitary facilities, including toilets and showers, for the construction workforce. Ensure prompt repairs and maintenance in the event of any leaks or spills to maintain hygiene and safety standards. 	Odunpazarı Municipality
14.	Hazardous Substances Management	Employees Communities Flora and fauna Soil and water resources	 Maintain a comprehensive record of the types, quantities, and properties of hazardous materials to be stored on-site. Establish a designated storage area specifically equipped for the safe storage of hazardous and toxic materials. Ensure all storage containers are clearly labelled with appropriate hazard warnings, safety information, and emergency contact details to facilitate proper handling and identification. All chemicals will be managed in accordance with their Material Safety Data Sheets (MSDS). Utilize suitable containers, tanks, and bunding systems to contain hazardous materials and prevent spills, leaks, or releases. Implement secondary containment measures, such as berms, dikes, or containment basins, to capture any accidental releases. Ensure adequate ventilation and venting systems are in place within storage areas to prevent the accumulation of hazardous vapours or gases. 	Odunpazarı Municipality

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure			
			 Identify and safely remove hazardous materials, including lead-containing components from solar panels and electronic waste from inverters, following proper disposal protocols. Implement appropriate containment and handling procedures to minimize the risk of spills or releases of hazardous substances during storage and handling. Arrange for the proper disposal or recycling of hazardous materials through licensed facilities to ensure safe and compliant waste management. 				
Comr	Community Health and Safety						
15.	Risk of accidents and injury (e.g. Electric Shock) involving community members (inc. Children)	Communities	 Project are must be fenced and access of the community members (especially children) must be physically restricted by any means. Security surveillance of the area must be maintained 7/24 	Odunpazarı Municipality			
16.	Glare from Solar Panels which can be a Safety Hazard for Drivers, Pedestrians, and Nearby Residents, Particularly if it Impairs Visibility or Causes Discomfort	Communities	 Ensure correct orientation of solar panels to minimize glare and reduce potential impact on road safety near the solar plant. Apply anti-glare coatings to panels where required to further mitigate glare and enhance road safety in the vicinity. 	Odunpazarı Municipality			
17.	Risks Related With Gender Based Violence (GBV) Sexual Exploitation Abuse / Sexual Harassment (SEA/SH)	Communities	 Deliver ethical rules and public communication training to all employees to prevent gender-based violence (GBV), harassment, and abuse in the workplace. Require all workers to sign and adhere to a code of conduct that promotes respectful behaviour. Conduct regular awareness-raising sessions on-site focused on GBV prevention and other relevant social issues. Establish a grievance mechanism to receive and address complaints related to GBV and workplace misconduct. 	Odunpazarı Municipality			

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure			
18.	Impacts on Local Economy, Livelihood Sources and Employment	Communities	Regularly engage with local communities and maintain a grievance mechanism to address community concerns and feedback.	Odunpazarı Municipality			
19.	Impacts on Vulnerable and Disadvantaged Individuals and Groups	Communities	Implement a recruitment policy that promotes non-discriminatory hiring, provides tailored training for vulnerable groups, and offers support services such as transportation or childcare.	Odunpazarı Municipality			
20.	Security Personnel	Communities	 Security personnel will be present on site at all times. The sub-borrower will ensure that the security personnel are not involved in past abuses and have received adequate training. Security personnel will not carry weapons. Force will only be sanctioned in preventive or defensive circumstances proportionate to the threat and security will operate in accordance with the law. In addition, the solar power plant site will be closed with wire mesh. Entry and exit to the power plant area will only be through the security gate. The area surroundings and roads will be illuminated. The site will be monitored 24/7 by a camera system. The grievance mechanism will allow communities and workers to express concerns regarding security issues and behaviour of security personnel. 	Odunpazarı Municipality			
Biodiversity Conservation and Sustainable Management of Living Natural Resources							
21.	Disturbance on Biodiversity	Flora and fauna	 Ensure proper maintenance of exclusion fencing around the site, utilizing wildlife-friendly designs that allow small animals, such as hedgehogs and <i>Testudo graeca</i> (Tortoise), to pass safely. If located in a construction area, safely remove from the area. Implement appropriate signage and fencing to separate project access roads from other areas, limiting personnel and vehicle access to designated zones. 	Odunpazarı Municipality			
Stake	Stakeholder Engagement and Information Disclosure						
22.	Insufficient Stakeholder Engagement Activities and Public Consultation.	Communities Construction workforce	 Create channels for interaction and communication with local communities, ensuring that engagement activities are scheduled at convenient times. Conduct regular consultations with relevant authorities and local communities to discuss project management and gather feedback. 	Odunpazarı Municipality			

Appendices

Appendix-1. Site Map



Appendix-2. EIA Not Required Certificate



T.C. ESKİSEHİR VALİLİĞİ Çevre, Şehircilik ve İklim Değişikliği İl Müdürlüğü



Sayı : E-43549071-220.02-11950367 Konu : ÇED Gerekli Değildir Kararı

DAĞITIM YERLERİNE

İlimiz Odunpazarı İlçesi, Türkmentokat Mahallesi, 5 Pafta, 0 ada, 464 parsel üzerinde Odunpazarı Belediyesi tarafından yapılması planlanan "Güneş Enerji Santrali Kapasite Artışı (1,74 MWm/1,59 MWe)* projesi ile ilgili Müdürlüğümüze sunulan Proje Tanıtım Dosyası ÇED Yönetmeliği'nin 15. maddesi uyarınca incelenmiş ve değerlendirilmiştir.

ÇED Yönetmeliğinin 17. maddesi gereğince bahse konu proje ile ilgili Müdürlüğümüzce "Çevresel Etki Değerlendirmesi Gerekli Değildir" kararı verilmiştir.

Söz konusu projeye ilişkin Proje Tanıtım Dosyasına Müdürlüğümüz internet sitesi ÇED duyuruları kısmından ulaşılabilmekte olup; proje tanıtım dosyası ve eklerinde belirtilen hususlar ile 2872 sayılı Çevre Kanunu ve bağlı Yönetmeliklere uyulması, meri mevzuat uyarınca ilgili kurum/kuruluşlardan gerekli izinlerin alınması, projede yapılacak ÇED Yönetmeliğine tabi değişikliklerin Müdürlüğümüze bildirilmesi gerekmektedir.

Bilgilerinizi ve gereğini arz ve rica ederim.

Hikmet ÇELİK Vali a. Çevre, Şehircilik ve İklim Değişikliği İl Müdürü

Ek: ÇED Gerekli Değildir Kararı (1 Sayfa)

Dağıtım:

ENERJÎ VE TABÎÎ KAYNAKLAR BAKANLIĞINA (Maden ve Petrol İşleri Genel Müdürlüğü)(Ek konulmadı) TARIM VE ORMAN BAKANLIĞI 5. BÖLGE MÜDÜRLÜĞÜNE(Ek konulmadı) DSİ 3. BÖLGE MÜDÜRLÜĞÜNE(Ek konulmadı) ESKİŞEHİR İL TARIM VE ORMAN MÜDÜRLÜĞÜNE(Ek konulmadı) ESKİŞEHİR İL KÜLTÜR VE TURİZM MÜDÜRLÜĞÜNE(Ek konulmadı) ESKİŞEHİR KÜLTÜR VARLIKLARINI KORUMA BÖLGE KURULU MÜDÜRLÜĞÜNE(Ek konulmadı)

enli elektronik imza ile imzalanmış

Bu belge, güvenli elekti Doğrulama Kodu: 4B678DD7-CC71-41B2-B72B-352048E885AF Doğrulama Adresi: https://www.turkiye.gov.tr

Ana Bina: Ertuğrulgazi Mah. Aliya İzzetbegoviç Cad. No:2 Tepebaşı/ESKİŞEHİR Ek Bina: Hoşnudiye Mah. Behiç Erkin Cad.No:10/B Tepebaşı/ESKİŞEHİR Tel.:0(222) 335 88 98 Faks:0(222) 325 00 25 KEP:eskisehireevrevesehireilik@hs01.kep.tr UETS:35890-70984-24678 e-posta:eskisehir@esb.gov.tr Web:eskisehir.esb.gov.tr

GÖKÇE Endüstri Mühendisi Telefon No:(222) 320 95 22









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

T.C. ESKÎŞEHÎR VALÎLÎĞÎ ÇEVRE, SEHÎRCÎLÎK VE ÎKLÎM DEĞÎŞÎKLÎĞÎ ÎL MÛDÛRLÛĞÛ

Karar Tarihi : 05-03-2025 Karar No : 43549071 220-02 E-202584

ÇEVRESEL ETKÎ DEĞERLENDÎRME BELGESÎ

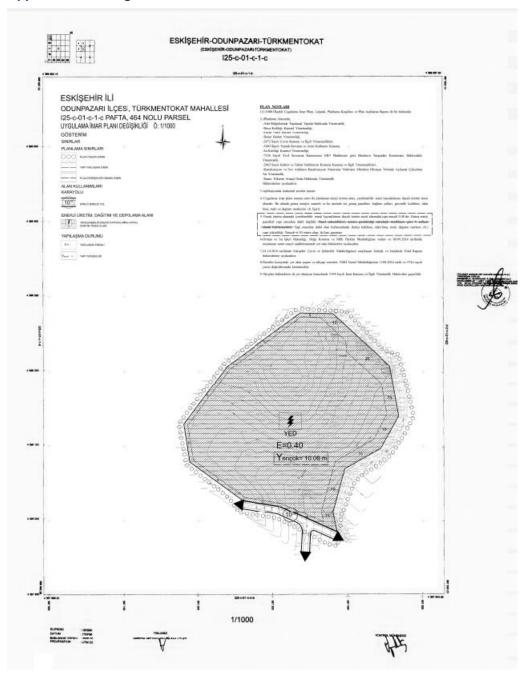
29.07.2022 tarih ve 31907 sayılı Resmi Gazete'de yayımlanarak yürürlüğe giren Çevresel Etkî Değerlendirmesi Yönetmeliği'nin Ek-II listesinde yer alan 'GÜNEŞ ENERJÎ SANTRALÎ KAPASÎTE ARTIŞÎ (1,74 MWm/1,59 MWe)' projesi ile ilgili olarak inceleme-değerlendirme yapılmış ve Proje Tanıtum Dosyasında çevresel etkilere karşı alınması öngörülen önlemler yeterli görülmüştür. Ayrıca ÇED Raporu hazırlanmasına gerek bulanmasdığı teşpit iedilmiş olup, söz konusu projeye ÇED Yönetmeliğinin 17. Maddesi gereğince Valiliğimizce "Çevresel Etkî Değerlendirmesi Gerekli Değildir" karan verilmiştir.

Hjikmet ÇELİK Çevre, Şehircilik ve İklim Değişikliği İl Modura

Proje Sahibi : ODUNPAZARI BELEDİYESİ

Proje Yeri | Eskişehir İli, Odunpazarı İlçesi, Türkmentokat Mahallesi, 0 Ada, 464 Parsel, 5 Pafta Kapasite : 5,2 Hektarlık Alanda, 1,74 MWm/1,59 MWe Kurulu Gücünde

Appendix-3. Zoning Plan



Appendix-4. Non-Agricultural Use Permit



T.C. ESKÎŞEHÎR VALÎLÎĞÎ Îl Gıda Tarım ve Hayvancılık Müdürlüğü



0 4 Ekim 2016 03/10/2016

Sayı

: 58889913-230.04.02 /234

Konur

: 3083 Sayılı Kanuna Göre Tarım Dışı

Amaçlı Kullanım İzni

009354

ODUNPAZARI BELEDİYE BAŞKANLIĞINA (İmar ve Şehircilik Müdürlüğü)

İlgi : 08.08.2015 tarih ve 21158 sayılı yazınız.

İlgi yazı da Eskişehir İli, Odunpazarı İlçesi, Türkmentokat Mahallesi 0 ada 464 sayılı parselde kayıtlı tarla vasıflı, mülkiyeti Odunpazarı Belediye Başkanlığında olan bu alana, bu kurum tarafından güneş enerji santrali tesisi planladığı ve bu parsellerde imar planı yapılması ile arazinin tarım dışı kullanımı talep edilmiştir.

Başvurusu yapılan arazi için hazırlanan rapor ve belgelerin değerlendirilmesi sonucu;

- 1) Müdürlüğümüzce bu parsellerde yürütülecek güneş enerji santrali tesisi ile ilgili hazırlatırılan toprak koruma projeleri ve bu projelere uyulacağına dair onaylı taahhütname alınmış ve söz konusu toprak koruma projesi 1 takım projeyi uygulayan kuruma, hazırlatan ve hazırlayana 1'er takım verilmesi gerekmektedir.
- 2) Başvurusu yapılan arazi için hazırlanan rapor ve belgelerin değerlendirilmesi sonucu, 3083 Sayılı Sulama Alanında Arazi Düzenlemesine Dair Tarım Reformu Kanunun 19. Maddesi, Uygulama Yönetmeliğinin 65. Maddesi ve Tarım Arazisinin Korunması ve Değerlendirilmesi Teknik Talimatının 11. Maddesinin 4. bendine göre toplam 52.800,00 m² yüzölçümlü arazinin tamamının güneş enerji santrali tesisi olarak Müdürlüğümüzce tarım dışı amaçlı kullanım izni verilmiştir.

Bilgilerinize ve gereğini rica ederim.

Odumpazani Belediyesi

BENUTZZR

10/10/2016 - 39972

lehmet Salih S Vali a.

İl Müdürt

EK

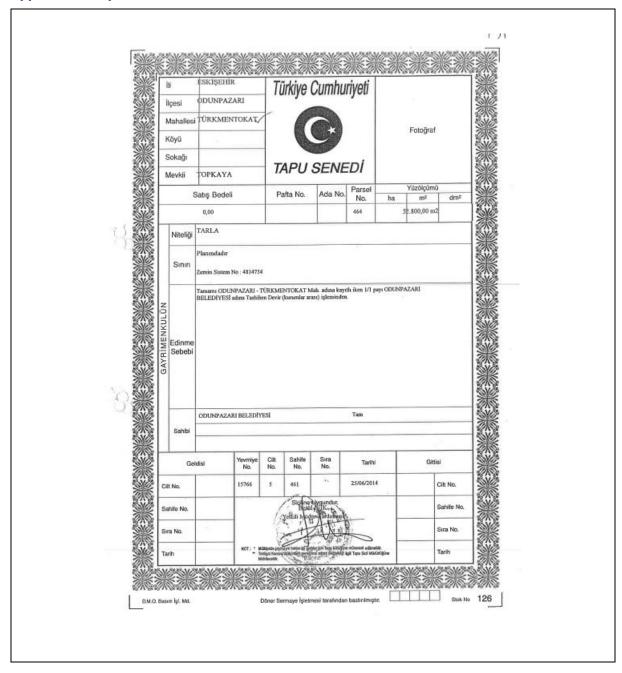
1-Etüt Haritası

(1 sayfa)

2-Toprak koruma projesi

(3 takım)

Appendix-5. Copies of Title Deed



Appendix-6. Photographic Log

Photo No: Refrence map

Date: 07.04.2025

Location: lot 2 of block 4695

Details/Notes:Number s 1 and 2 in the photo show the locations where the photos were taken.



Photo No: 01

Date: 06.05.2025

Location:

lot 2 of block 4695

Details/Notes:

The photo above, showing the sub-project site, was taken facing northeast from Location 2. The site is predominantly covered with steppe vegetation.

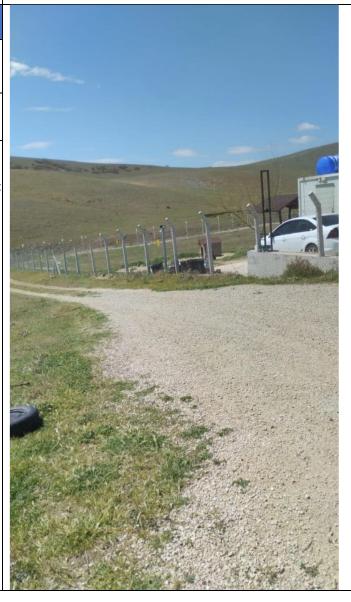


Photo No: 02

Date: 06.05.2025

Location:

lot 2 of block 4695

Details/Notes:

The photo above, showing the sub-project site, was taken facing southwest from Location 1. The site is predominantly covered with steppe vegetation.



Photo No: 03

Date: 06.05.2025

Location: Access Route





Photo No: 04

Date: 06.05.2025

Location: Access Road





















Appendix-7. Construction Notice Template

"Çevreye verdiğimiz rahatsızlıktan dolayı özür dileriz!"

ODUNPAZARI BELEDİYESİ 639 kWp/596 kWe GES ALTPROJESİ YAPIM İŞİ İşin Süresi:

Şikâyet, istek, soru ve yorumlarınız için:

YÜKLENİCİ :

Adres:

ADI

Telefon:

E-posta:

İletişim Formu:

işveren: Adres: Yenidoğan Mahallesi Çamkoru Sokak No:2

Odunpazarı/ESKİŞEHİR

Telefon: +90 222 213 30 30

E-posta: halkmasasi@odunpazari.bel.tr

İletişim Formu:

iller Bankası A.Ş. (İLBANK)

Adres: İller Bankası A.Ş. Emniyet Mahallesi, Hipodrom

Caddesi No:9/21, Yenimahalle/ANKARA

Telefon: 0 (312) 508 79 79

E-posta: bilgiuidb@ilbank.gov.tr

İletişim Formu:

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



Appendix-8. E&S Incident Notification Form

1) Incident Details					
Date of Incident: [Please insert]	Time of Incident: [Please insert]				
Location of the Incident:	[Please insert]				
Sub-borrower Name:	[Please	e insert]			
Date Reported to ILBANK:	Repor	ted to ILBANK by:	Notification Method:		
[Please insert]	_	e insert]	[Please insert]		
Date Reported to WB:	Repor	ted to WB by:	Notification Type:		
Please indicate	[Pleas	e insert]	[Please insert]		
Contractor Name:	[Please	e insert]			
Sub-contractor name	[Please	e insert]			
(please indicate if involved in the incident):		-			
2) Type of incident (please check all that app	oly)				
☐ Fatality		☐ Environmental pollu	ition incident		
☐ Lost time injury		☐ Disease outbreaks			
☐ Child labor		☐ Acts of violence/pro	test		
☐ Forced labor		☐ Other			
3) Description/Narrative of Incident					
4) Actions taken to contain the incident					
For incidents involving a Contractor:					
Name of Contractor:					
5) What support has been provided to affect		ole			
Please briefly describe					
[i loads shelly addenied]					
6) Please provide the supporting documents	for the	incident, victims and	involved persons		
(e.g. copies of the social security registration records, victim and witness statements, notification to authorities, legal investigation reports, training records, photographs, etc.)					

Appendix-9. Simplified Labor Management Procedure



Appendix-10. Roles and Responsibilities

Party	Role	Key Responsibilities
Sub-borrower Sub-borrower	Role Sub-borrower Management	 Key Responsibilities Hold ultimate responsibility for the E&S performance of the subproject to the satisfaction of the ILBANK, including the performance of subproject contractors throughout the sub-financing agreement life cycle. Establish Project Implementation Unit (PIU) following the execution of sub-financing agreements to carry out operational and administrative tasks to oversee the implementation of the E&S instruments and monitoring progress; allocate resources for the recruitment of in-house environmental, social and OHS staff under the PIU Ensure that E&S instruments and procedures required by ILBANK is prepared within the timeframes agreed with ILBANK and allocate adequate financial and human resources – either from the Sub-borrower's own resources or from the Subproject loan and implement. Cooperate with the ILBANK representatives to discuss and agree on the ESAP and other E&S covenants for incorporation into sub-financing agreements to be executed between the ILBANK and the sub-borrower (with support from RD E&S team as necessary) Ensure that EHSS requirements of ILBANK are incorporated into relevant contractor tender and agreement documents to be prepared in collaboration with the construction supervision consultant
		 with the construction supervision consultant Hold and use the authority and responsibility to stop any subproject related work activity if it poses an imminent danger to health, safety, or the environment. Allocate resource to ensure monitoring of subproject E&S performance and reporting to ILBANK at IFI standards in line with the sub-financing agreement conditions Facilitate monitoring visits and audits by ILBANK and their consultants Notify the ILBANK RD – E&S Teams of any significant E&S incident or accident within maximum 24 hours of the accident/incident; contractually require the supervision consultants and/or contractors to promptly report such incident and accidents (timeframe to be defined by ILBANK) Prepare and submit a detailed E&S Incident Investigation Form, supplemented by an RCA to be conducted pursuant to GIIPs, to ILBANK within 15 days of the accident/incident date for significant accidents or incidents (in line with the template presented in the E&S Supervision, Monitoring and Reporting Procedure). The investigation will be supplemented by a Root Cause Analysis (RCA). Prepare and submit semiannual E&S monitoring reports to ILBANK.
	E&S Team - Environmental staff - Social staff - OHS staff	 Participate in the training to be organized by ILBANK as part of ILBANK ESMS Training Procedure implementation Ensure that E&S documentation required by ILBANK is prepared by qualified independent specialists and submitted to ILBANK for appraisal and credit. Provide ILBANK with relevant adequate information to undertake the E&S due diligence in accordance with the ESMS (e.g. duly completed subborrower questionnaire and supporting documentation to be requested by ILBANK in accordance with the E&S Screening and Risk Classification and ESDD procedures) Support the sub-borrower management as required in the review and evaluation of ESAP and other E&S covenants for incorporation into subfinancing agreements to be executed between the ILBANK and the subborrower Ensure compliance of subprojects operations (including contractor activities on site) with national legislation and E&S requirements of the lending WB as included in the sub-financing agreements, ESAP and subproject-specific E&S documentation.

Party	Role	Key Responsibilities
		 Undertake monitoring of subproject E&S performance and reporting to ILBANK at WB standards in line with the sub-financing agreement conditions Ensure implementation of corrective actions in case of E&S non-compliances in coordination and agreement with ILBANK DG and RD E&S teams over reasonable timeframes Coordinate the construction supervision consultants, contractors and/or external E&S consultants for collection of the monitoring data and compilation of or providing input to periodic monitoring reports as necessary
		 and appropriate Allow ILBANK representatives (including individual consultants) to access subproject facilities and records
Construction Supervision Consultants ("Müsavir")	Management and E&S staff	Carry out the following tasks on behalf of the sub-borrowers: Participate in the training sessions to be organized by sub-borrowers in line with the requirements of ILBANK ESMS Training Procedure Supervise the construction works of contractors on-site, including implementation of subproject-specific E&S requirements by contractors on a daily basis Ensure sufficient E&S capacity for implementation of E&S requirements as set out in the sub-financing agreements between the sub-borrower and ILBANK Support the sub-borrowers for the supervision and review of E&S management documentation prepared by construction contractors and submit them to sub-borrowers upon finalization Review monthly self-monitoring reports prepared by the construction contractors for early identification of E&S issues and/or non-compliances and submit them to municipalities/municipal utilities upon finalization Prepare and submit regular monthly reports to Sub-borrower on the environmental, social and OHS issues of the Sub-Project during the construction phase Identify E&S non-compliances on site and enforce construction contractors to undertake corrective actions within defined and agreed timeframes Jupport the sub-borrowers (as requested) in the preparation of periodic E&S monitoring reports to be submitted to ILBANK in line with the ILBANK E&S Supervision, Monitoring and Reporting Procedure Notify the sub-borrower of any significant E&S incident or accident that have taken place in subproject related operations within 24 hours.
Construction	Management and E&S staff	 Ensure sufficient E&S capacity for implementation of E&S requirements as set out in the construction contracts Participate in the training sessions to be organized by sub-borrowers in line with the requirements of ILBANK ESMS Training Procedure Prepare subproject-specific E&S management plans and procedures prior to start of construction works as required by the construction contracts Comply with the requirements of national legislation and implement the E&S requirements as set out in the sub-financing agreements (executed between ILBANK and the sub-borrowers) and construction contracts Submit periodic (in frequencies to be set by ESAP) E&S self-monitoring reports to the municipalities/municipal utilities through construction supervision consultants ("müşavir") – in line with the format provided by ILBANK. Fill in monthly occupational health and safety (OHS) forms – reviewed by construction supervision consultants. Implement corrective actions in case of E&S non-compliances under the supervision of sub-borrower's construction supervision consultant Promptly notify the sub-borrower of any significant E&S incident or accident that have taken place in subproject related operations (timeframe to be defined by ILBANK no later than 24 hours).

Appendix-11. Chance Find Procedure

Introduction

This document describes the Chance Find Procedure for subproject, outlining the procedures that will be followed in case of chance finds occur during the construction activities associated with the subproject.

Scope

This Chance Find Procedure (CFP) will be implemented for Municipality 639 kWp/596 kWe SPP subproject in order to manage any chance finds that may be encountered during the construction activities. The purpose of the CFP document is to:

- outline the applicable legislation and standards relevant to this procedure;
- define roles and responsibilities;
- define project commitments, operational procedures, training requirements and guidance relevant to this procedure; and
- · define monitoring and reporting procedures.

Although there are no known archaeological sites or remains within the subproject area, it is considered that there may be a potential to encounter archaeological findings during the construction of the subproject. Activities which have high potential to lead to discover or adversely affect the archeological resources are;

- topsoil stripping
- excavation and earthworks

This CFP is prepared in order to provide information to the contractors and employees regarding the actions to be taken in case of an archaeological chance find discovery.

Legislation and Standards

Legislation and standards that apply to the project comprise the following:

- Word Bank Environmental and Social Standard (ESS) 8: Cultural Heritage
- applicable Turkish laws and national standards
- other commitments to and requirements of Turkish government authorities
- other industry guidelines with which the project has committed to comply

In Türkiye, movable and immovable cultural and natural assets are protected and preserved by the Law on Preservation of Cultural and Natural Assets (Law No. 2863) published in the Official Gazette dated 23.07.1983 and numbered 18113. Law 2863 establishes legal protection for the following:

- all natural assets and immovable cultural assets constructed up until the end of the 19th century,
- any immovable cultural asset from after the end of the 19th century, identified by the Ministry of Culture and Tourism as an important asset worthy of preservation,
- all immoveable cultural assets located within archeological sites,
- buildings/areas that have witnessed significant historical events during the National War and the foundation of the Turkish Republic and dwellings that have been used by Mustafa Kemal ATATÜRK, regardless of time and registration.

The Ministry of Culture and Tourism is the responsible body to take decisions for protection of cultural heritage in Turkey at the national level. As part of the Ministry, the High Commission for the Protection of Cultural Assets is responsible for protecting and restoring immovable cultural assets. Implementation of the decisions and regulations issued by the Ministry are undertaken by local administrations. At local level, there are Cultural Assets Protection Regional Boards defined by the Ministry of Culture and

Tourism, which are responsible for preservation, registration and classification of cultural heritage within their respective jurisdictions. The relevant Regional Board for the project is the Eskişehir Cultural Heritage Protection Regional Board Directorate." According to Law 2863, all the natural and cultural assets qualified for legal preservation are properties of the State. Therefore, regional boards have the power and authority to provide legal protection to the preservation sites and to approve or reject all the activities, which have potential negative impacts on the preservation sites such as construction, demolition and excavation activities.

Roles and Responsibilities

Principal roles and responsibilities for the implementation of this procedure are outlined below.

Role	Responsibilities
Contractor - Project Manager	 Overall responsibility for the development, review, approval and coordination of the numerous activities required to initiate, conduct and complete construction. Ensure that this procedure is prepared, and updated as required, based on the activities undertaken as part of the project. Ensure that adequate resources are made available to implement the procedures and guidelines outlined in this procedure.
Contractor - Environmental and Social (E&S) Expert	 Initiation, development, implementation and coordination of the CFP during construction. Ensure that adequate training is given to all site personnel and subcontractors, covering the procedures and guidelines outlined in this procedure. Establish appropriate control procedures and conduct audits as necessary. Consultation with and reporting to relevant government bodies in case of potential archeological chance finds. Record all confirmed chance finds by filling up the "Chance Find Reporting Form" and maintain copies in a log-book. Ensure that the chance finds logbook is up to date.
Contractor - Site Manager	 Day-to-day implementation of the provisions of the CFP in the field during construction. Notify the E&S Expert regarding potential chance finds during construction.
Employees	 Understand and comply with archeological chance finds procedures and guidelines outlined in this procedure. Reporting of the potential chance finds to the Site Manager.

Impact Avoidance and Mitigation

In the event of an archaeological discovery, the following actions will be implemented:

- All staff involved in land clearance and excavation activities will take the responsibility for managing archaeological protection and will be trained in these aspects by the E&S Expert.
- In case any potential chance find is encountered, all construction activities will cease immediately in the vicinity of the chance find.
- The Site Manager will be contacted immediately. The discovered site location, the characteristics of the potential archaeological material and photos will be recorded by the Site Manager, who in turn will inform the E&S Expert.
- Eskişehir Museum Directorate will be notified at the latest within three days after the chance find is encountered. Contact details of the Eskişehir Museum Directorate are given below: Address: Akarbaşı Mahallesi, Atatürk Bulvarı No:64 Odunpazarı/ESKİŞEHİR Telephone: (0222) 230 13 71

E-mail: muze2603@ktb.gov.tr

- The site and its vicinity will be secured 24 hours a day against damage or loss, until inspection by the authority.
- The E&S Expert will fill up a "Chance Find Report Form" for each confirmed chance find and inform the Project Manager about the date that the construction work can resume, which is determined by the authorities concerning the conservation of the heritage.
- Further steps to be followed and proper plan to be implemented for the management of the finds (Changes in the layout, conservation, preservation, restoration and salvage) will be decided and reported in writing by the authorities in charge.
- Photographs of the potential artifacts that are likely to be encountered in the construction site are presented in the following pages to be used during the training of the relevant staff.

Verification and Monitoring

E&S Expert/s will record all cases of archaeological chance finds. He/she will fill up a "Chance Find Reporting Form" for each chance find confirmed by the authority and maintain copies in a logbook. A sample of a reporting form which can be used to record chance finds is included below. The chance find logbook will be summarized on an annual basis and records included in semi-annual monitoring reports to verify that correct management procedures have been followed. Action items will be taken in cases of non-adherence to this CFP.

Reporting

Contractor will comply with reporting requirements including chance finds defined in site-specific ESMP (contractor will develop monthly and quarterly monitoring reports and submit to Odunpazarı Municipality through supervision consultant; Odunpazarı Municipality will examine submit the reports to ILBANK quarterly (and monthly if requested by ILBANK); ILBANK will inform the World Bank by providing regular semi-annual monitoring reports.

Odunpazarı Municipality 639 kWp/ 596 kWe Subproject Chance Find Reporting Form				
REGISTRATION				
Name of recorder:				
Date and time of discovery:				
Site Name:		Coord	inates	
	Х			Υ
Description of find:				
Photograph:				
Estimated weight and dimens	ions:			
CONTACT PERSON				
Name/Title/Duty:				
Date and Time:				
Contact information:				
Details of conversation:				
DECISIONS				
Any protection measures to b				
Movable or immovable: If mov	ved, please specify the	new location.		
Further actions required:				
Recommence date and time:				
Notes:				
SUBMISSION				
Name:		Date:		

Appendix-12. Change Notification Form

Change Notification Form	
Subproject Name	
Subproject Location	
	Pre-construction
Subproject Phase	Construction
	Operation
Name of the Institution Notifying the Change	
Date	
Category of the Change (please select all that apply)	Legislative Change
(please select all trial apply)	Design Change
	Schedule Change due to E&S factors
	Project Schedule Changes due to technical, financial, legal or administrative factors
	Changes due to E&S issues encountered at subproject implementation
	Contractor or Construction Supervision Consultant Change
	Other (please specify below)
Detailed Description of the Change(s)	
Documents Submitted with Change Notification Form	
Name of the Staff Notifying the Change	
Position of the Staff Notifying the Change	
Signature	

Appendix-13. Biological Characteristics

Flora

Family/Species	Endemism	IUCN	Bern
Aethionema Iberideum			
Fumana Aciphylla	-	-	-
Potentilla Reptans L.	-	-	-
Veronica Hederifolia L.	-	-	-
Ajuga Orientalis L.	-	-	-

Source: http://www.tubitak.gov.tr/ (Türkiye Bitkileri Veri Servisi – TUBİTAK) Baytop T., 1994, Türkçe Bitki Adları Sözlüğü, TDK, Ankara http://www.iucnredlist.org/

Fauna

Species	MAK	IUCN	Bern	
Amphibia				
Bufo bufo	-	LC	ANNEX III	
Bufo viridis	-	LC	ANNEX II	
Hyla arborea arborea	-	LC	ANNEX II	

Source: Demirsoy, A., 2003, Türkiye Omurgalıları 'Amfibiler', Çevre Bakanlığı Çevre Koruma Genel Müdürlüğü, Proje No: 90-K-1000-90. Ankara., Baran, İ, 2005, 'Türkiye Amfibi ve Sürüngenleri', Ankara

Species	MAK	IUCN	BERN			
Reptilia	Reptilia					
Testudo graeca	1	VU	ANNEX II			
Hemidactylus tucicus turcicus	1	LC	ANNEX III			
Anguis fragilis	1	-	ANNEX III			
Mabuya aurata	-	-	-			
Blanusstrauchiaporus		LC				
Coluber najadum	1	LC	ANNEX II			

Species	RDB	MAK	IUCN	BERN
Aves				
Muscicapa striata	A.3	ANNEX-2	LC	ANNEX II
Emberiza cirlus	A.3	ANNEX-2	LC	ANNEX II
Sturnus roseus	A.5	ANNEX-2	LC	ANNEX II
Coturnix Coturnix	A.5	ANNEX-2	LC	ANNEX II

Source: Kiziroğlu, İ., 2008, 'Türkiye Kuşları' (SpeciesList in Red Data Book), Ankara

Species	AYK	MAK	IUCN	BERN
Mammalia				
Lepus europaeus	-	-	LC	ANNEX III
Sciurus vulgaris	-	-	LC	ANNEX III
Martes foina	-	-	LC	ANNEX III
Erinaceus europaeus	-	-	LC	ANNEX III
Sus scrofa	-	-	LC	ANNEX III
Mustela nivalis	-	-	LC	-
Nannospalax leucodon	-	-	LC	ANNEX II

Source: Demirsoy, A., 2003, Türkiye Omurgalıları 'Memeliler', Çevre Bakanlığı Çevre Koruma Genel Müdürlüğü, Proje No: 90-K-1000-90. Ankara.

AYK (Decision on the List of Game and Wild Animal Species Determined by the Ministry of Forestry and Water Affairs, published in the Official Gazette dated April 29, 2015 and numbered 29341):

- (I) The species indicated with are the wild animal species determined by the Ministry.
- (II) The species indicated with are the game animal species determined by the Ministry.
- (III) The species indicated with are the wild animal species protected by the Ministry.

MAK (National Parks Game-Wildlife 2024-2025 Central Hunting Commission Decision):

- (I) The species indicated with are the game animal species protected by MAK.
- (II) The species indicated with are the game animal species permitted to be hunted by MAK.

These are:

Fauna species are protected under two of the annexes of the Bern Convention.

Annex-II: Species of fauna that are strictly protected

- a) All kinds of deliberate capture and detention, deliberate killing,
- b) Intentionally damaging or destroying breeding or resting places,
- c) Intentionally disturbing wild fauna, especially during breeding, development and hibernation periods, in a manner contrary to the purpose of this agreement,
- d) Collecting eggs from the wild environment or deliberately destroying them or keeping these eggs, even if they are empty,
- e) Keeping and domestic trade of fauna species, whether alive or dead, is prohibited.

Annex-III: Protected Fauna Species

a) Temporary or regional bans in appropriate cases in order to bring wild fauna to sufficient population levels. Closed hunting seasons and other national principles.

According to IUCN, fauna species that are protected are classified as follows.

EX: Extinct

EW: Extinct in the Wild CR: Critically Endangered

EN: Endangered
DD: Insufficient Data
NE: Not Evaluated
VU: Vulnerable
LR: Less Threatened

a-(cd): Requiring Conservation Measures

b-(nt): May Be Threatened c-(lc): Least Concern

According to the work titled "Red List of Birds of Türkiye" (Kiziroğlu, 2008), the Red Data Book classification of bird species found and likely to be found in the subproject area and its surroundings and their status in Türkiye are given below.

- I. Birds that incubate in Türkiye; in other words, bird species falling into the "A" category consist of either annual bird species and local; or summer migrants, in other words, migratory species that leave Türkiye after incubating.
 - A.1.1: Species that are undoubtedly satiated and no longer seen in the wild.
 - A.1.2: Species with extinct natural populations continue their lives for human support and protection.
 - A.1.3: Species whose populations have decreased significantly in Türkiye. They are species that must be protected because they are largely under threat.
 - A.2: Species that are under significant threat of extinction.
 - A.3: Species that are at risk of extinction and have a high risk of extinction in natural life.
 - A.3.1: Species that have decreased according to old records in the regions where they are observed.
 - A.4: Species that have a local decrease in their populations and are close to becoming endangered over time.
 - A.5: Species that do not yet have a decrease or threat of extinction in their observed populations.
 - A.6: Species that have not been sufficiently studied and do not have reliable data.
 - A.7: It is not possible to make an assessment about these species at the moment because the records of these species obtained in Türkiye are not fully reliable and sound.

II. Species in Group "B" are either winter visitors or transit migrants. These species are also under significant threat of extinction and will be subject to the same assessment as in Group "A". Therefore, criteria in steps B.1.0-B.7 are used for species in Group "B". The flora and fauna in the subproject's impact area do not include endemic species.

Appendix-14. Emissions and Environmental Noise Calculations

Air Quality/Emission

Air pollution will mainly originate from dust emissions and exhaust emissions as well as Greenhouse Gas (GHG) emissions. Considering the location of the sub-project area, sensitive receptors are not expected to be affected. During the construction phase of the sub-project, the impacts on air quality will mainly originate from dust, exhaust and greenhouse gas emissions:

- Dust emissions during site preparation, excavation, filling and compaction works carried out for construction works.
- Dust emissions from vehicle movements for transporting various construction materials to the project site.
- Exhaust emissions from vehicles used in construction activities.
- · Greenhouse gas emissions from small amounts of vehicles and machinery.

Since a limited number of equipment and machinery will be operating on the sites, these air quality impacts will be limited to the area and in the short term.

Calculation of dust emission topsoil stripping

In the calculation of the dust emissions to be generated, the emission factors given in Table 2.7 of the "Regulation on Control of Industrial Air Pollution" (Amended Table: RG-20.12.2014-29211) published in the Official Gazette dated 03.07.2009 and numbered 27277 were used and the results were evaluated within the framework of the same regulation.

The calculations were made using both "uncontrolled" emission factors, considering that the most adverse conditions could occur during dust formation, and "controlled" emission factors, assuming that the necessary control measures were taken.

The area where the SPP project site will be established is 8.400 m². In this area, 10 cm topsoil stripping will be used to strip 840 m³ of soil.

(Soil Bulk Density is taken as 1.6 tons/m³)³

840 m^{3*} 1.6 tons/m³=1.344 tons

Daily working time is planned as 8 hours. Excavation work is planned as 192 hours in total.

1,344 tons/192hours= 7 tons/h

Table 1. Control of Industrial Air Pollution

Sources	Uncontrolled	Controlled	Unit
Extraction	0.025	0.0125	kg/ton
Loading	0.0100	0.005	

³https://www.soilquality.org.au/factsheets/bulk-density-measurement

Unloading	0.010	0.005	
Transportation	0.7	0.35	kg/km-vehicle
(total round trip			
distance)			
Storage	5.8	2.9	Dust/ha-day

Mass Flow Rate of Dust Emission to Occur During Extraction, Loading and Unloading of topsoil

Uncontrolled; E1 = 7 tons/hour x (0.025+0.01+0.01) kg/ton = 0.315 kg/hour

Controlled; E1 = 7 tons/hour x (0.0125+0.005+0.005) kg/ton= 0.158 kg/hour

Mass Flow Rate of Dust Emission to Occur During the Transportation of Topsoil

Topsoil taken from the field during construction work will be temporarily stored in the topsoil storage area that will also be located within the work area; this distance is an average of 0.5 km round trip. Assuming that each truck used during transportation can carry 25 tons of material and therefore will make 1 trip in approximately 1 working day (25 tons/23.32 tons/hour), the mass flow rate of dust emissions that will occur during transportation is;

Uncontrolled; E2 = (0.7 kg/km.vehicle) x (0.5 km/1 trip/vehicle) x (1 trip/1 hour) = 0.35 kg/hour

Controlled; E2 = (0.35 kg/km.vehicle) x (0.5 km/1 trip/vehicle) x (1 trip/1 hour) = 0.175 kg/hour

Dust Emission Mass Flow Rate to be Formed During the Storage of Vegetal Soil

Uncontrolled; E3 = (5.8 kg/ha-day)x(1 ha/8 weeks/ 6 days/week/8 hours/day)= 0.0035 kg/hour

Controlled; E3 = (2.9 kg/ha-day)x(1 ha/8 week/6 days/week/8 hours/day)= 0.00185 kg/hour

Accordingly, the total mass flow rate of dust emission to be formed from the stripping operations of the vegetal soil to be carried out;

Uncontrolled; ETOTAL-1 = $0.315 \text{ kg/h} + 0.35 \text{ kg/h} + 0.0035 \text{ kg/h} \approx 0.67 \text{ kg/h}$

Controlled; ETOTAL-1 = $0.158 \text{ kg/h} + 0.175 \text{ kg/h} + 0.00185 \text{ kg/h} \approx 0.34 \text{ kg/h}$

When calculating the dust emission to be generated during the vegetative soil stripping operations, it was taken into account that the works would be carried out under the most adverse conditions. As stated in the "Regulation on Control of Industrial Air Pollution; for newly established facilities, "Calculation of the Contribution Value to Air Pollution" is required if the pollutant mass flow rates are exceeded.

Considering that all the works to be carried out within the scope of the vegetal soil stripping operations to be carried out at the construction site will be carried out in the same time period (worst case scenario), the dust emission to be generated has been calculated as 0,67 kg/hour for the uncontrolled case and 0.34 kg/hour for the controlled case. Therefore, as stated in "Regulation on Control of Industrial Air Pollution"; since the specified pollutant mass flow rates are not exceeded for the topsoil stripping operation, it has not been deemed necessary

to calculate the "Contribution Value to Air Pollution" using an internationally accepted distribution model in the facility impact area.

The construction equipment and transportation vehicles in question will be used at different times during the day.

Emission calculation from vehicles

The provisions of the Exhaust Gas Emission Control and Gasoline and Diesel Quality Regulation, which was published in the Official Gazette dated 30.11.2013 and numbered 28837 and entered into force, and the Exhaust Gas Emission Control Regulation, which was published in the Official Gazette dated 11.03.2017 and numbered 30004, shall be complied with.

During construction, the fuel to be spent is only necessary for the work machines to be used, there will be no fuel consumption for heating etc. The usage periods and fuel consumptions of the work machines to be used during the construction phase of the business are shared in Table 2.

Table 2. Usage periods of the work machines to be used in the facility

Machine type	Number	Power (hp/h)	Working Time (h/day)
Crane	1	200	8
Excavator	1	200	8
Truck	1	200	8
Pile Driver	1	90	8
Water Tank	1	120	8

The fuels to be used in the land preparation and construction phase of the sub-project will be diesel fuel to be used during the work of the construction equipment. Apart from this, there is no other type of fuel to be used in the sub-project. Diesel fuel will be preferred as fuel for the construction equipment to be used within the scope of the sub-project. There will be no fuel storage in the sub-project area and the fuel supply to the construction equipment will be made with fuels supplied from authorized stations. The characteristics of diesel fuel are given below:

Table 3. Diesel Properties

Properties	Diesel	Properties	Diesel
Consistency	Very fluid	Carbon Wastes (%)	Trace
Туре	Distilled	Sulfur (%)	0.4-0.7
Color	Amber	Oxygen-Nitrogen (%)	0.2
Density (150c-gr/cm ³)	0.8654	Hydrojen (%)	12.7
Viscosity (380 °C)	2.68	Carbon (%)	86.4
Pour Point (0°C)	-18	Water and Sediment (%)	Trace
Atomization	Atmospheric	Ash (%)	Trace
Temperature (0°C)			
Pumping Temperature (0°C)	Atmospheric	Heat Value	9.387

Source: Air Pollution Control and Supervision, Chamber of Chemical Engineering, May, 1999

The emission factors table determined by the EPA (Environment Protection Agency) was used for the construction equipment to be used within the scope of the sub-project.

Table 4. Emission Factors Used in Calculations

Power	Year	CO (g/kWh)	HC (g/kWh)	NOx (g/kWh)	PM (g/kWh)
56 ≤ kW < 130	2012 and	5,0	0,19	0,40	0,02
(75 ≤ kW <175)	above				
130 ≤ kW < 560	2011 and	3,5	0,19	0,40	0,02
(175 ≤ kW <560	above				

Source: USEPA Standards

Using the data in the table above, exhaust gas emissions that will occur during the construction and operation phases are calculated with the formula below and entered into the tables.

Emission Value (kg/h) = Emission Factor x Engine Power (kW) x Number x kg/1000 gr

Table 5. Emission calculations

Equipment to be used	Piece	Нр	kW		on Factor kWh)	Emission Value (kg/sa)
				СО	3,5	0,52
F	4	000	4.40	HC	0,19	0,03
Excavator	1	200	149	NOx	0,4	0,06
				PM	0,02	0,003
				СО	3,5	0,52
0	4	200	440	HC	0,19	0,03
Crane	1	200 1	149	NOx	0,4	0,06
				PM	0,02	0,003
		90	67.05	CO	5	0,34
Pile Driver	1			HC	0,19	0,013
Pile Driver				NOx	0,4	0,026
				PM	0,02	0,0013
				СО	3,5	0,52
Truck	1	200	140	HC	0,19	0,03
Truck	'	200	149	NOx	0,4	0,06
				PM	0,02	0,003
				CO	5	0,4475
Water	4	120	90 F	HC	0,19	0,017
Tanker	1	120	89.5	NOx	0,4	0,036
				PM	0,02	0,002

¹ Hp = 0.745 kW. ⁴

⁴https://sbsolar.com.tr/1kw-kac-hp-bir-beygir-kackw?srsltid=AfmBOopeJLuU2e08CtSYKdRWghT6TSx7iJDNzzfTjy0U2vio8kOh7QKR

When emissions from all vehicles are added together;

Table 6. Amount of Emission

Pollutant	Amount (kg/h)	Working Time (h)	Total Amount (kg/8 h)	24 hour emissions
СО	2.3475	8	18.78 kg	18.78 kg/24 h= 0.7875 kg/h
HC	0.12	8	0.96 kg	0.96 kg/24 h = 0.04 kg/h
NOx	0.242	8	1.936 kg	1.936 kg/24 h = 0.08 kg/h
PM	0.0123	8	0.0984 kg	0.0984kg/24 h = 0,004 kg/h

The calculation was made assuming that all vehicles were operating at maximum operating time and in the same month.

Pollutant	Amount (kg/h)	Mass flow rate (kg/hour) given in Annex-2 Table 2.1 of the "Regulation on Control of Air Pollution from Industrial Sources"	Evaluation
СО	0.7875	50	Below the limit value
HC	0.04	2	Below the limit value
NOx	0.08	4	Below the limit value
PM	0.004	1	Below the limit value

The calculated exhaust gas emission amounts were calculated cumulatively assuming that all machinery and equipment operate at the same time and are entered in the table above. When the calculated hourly mass flow rate (kg/hour) value was compared with the mass flow rate (kg/hour) values given in Annex-2 Table 2.1 of the "Regulation on Control of Industrial Air Pollution", it was seen that the emission mass flow rates were below the limit values given in the regulation. The calculations were made based on the assumption that all work machines operate simultaneously and continuously in their areas of use, and in reality, such an application is not very possible. Therefore, the emission levels that will occur in reality will be lower than the emission levels found in the calculations.

Where the requirements in Türkiye differ from the levels and measures presented in the EHS Guidelines, the more stringent (such as the most stringent discharge and emission standards) will be applied in the project specification.

Noise

The sub-project activities are planned to be completed in ~2 month. Within the scope of the sub-project, work will be carried out during the daytime, 6 days a week, 8 hours a day.

The sound power levels of the equipment were calculated according to the formulas given below according to the permitted sound power levels defined in the table given in Article 5 of the "Regulation on Noise Emission in the Environment Created by Equipment Used in Open Areas", which was published in the Official Gazette dated

30.12.2006 and numbered 26392 and entered into force, and data from similar activities were also taken into account.

Table 7. Equivalent Noise level to the distances According to Distribution

Distance (m)	40	50	100	200	300	400	500	750	1000
Equivalent noise level (dBA)	64.4	62.3	56.0	49.3	45.3	42.4	40.1	35.8	32.8

Since the closest livestock fam to the sub-project area is 2500 meters away, it has been determined that it will remain below the limit value specified in the Environmental Noise Control Regulation published in the official gazette dated 30.11.2022 and numbered 32029.

Table 8. Environmental Noise Level Limit Values (Environmental Noise Control Regulation)

	Measured	Environmental Noise Level			
Noise Source	Parameter	Daytime (07:00 - 19:00)	Evening (19:00 - 23:00)	Night (23:00 - 07:00)	
Industrial facilities transportation resources	LAeq,5min.	65 dB(A) 60 dB(A)		55 dB(A)	
Workplaces ⁽²⁾	LAeq,5min.	Background + 5 dB(A)		Background + 3 dB(A)	
In case of more than one workplace	LAeq,5min.	Background + 7 dB(A)		Background + 5 dB(A)	
All sources	LCmax	100 dB(C)		:)	

^{(1):} These limit values are valid as of 31.12.2023. These limit values are valid for each 1/3 octave of the specified frequency range band. In the acoustic reports prepared until this date, environmental noise measurement results and measurement results measures identified are included.

Table 9. IFC General EHS Guides Noise Levels

Buyer	Daytime (07:00 - 22:00)	Night (22:00 - 07:00)		
Settlement Areas	55 dB(A)	45 dB(A)		
Commercial/industrial areas	70 dB(A)	70 dB(A)		

The limit value complies with the limits in the relevant national regulations and is also below the limits specified in the World Bank Group General EHS Guidelines. The calculations were made assuming that all equipment will operate simultaneously. In real life, lower environmental noise levels are expected. In addition, in case of any complaints about noise, measurements will be taken to determine the environmental noise level caused by

^{(2):} Each workplace contributing to the background noise level is jointly responsible for meeting this limit value. Each workplace takes necessary measures according to their contribution to noise.

construction work and if it is high, additional	measures such as barriers	, arrangement of working hours,	etc. will
be taken.			

Türkiye Public and Municipal Renewable Energy Project (PUMREP)

ODUNPAZARI MUNICIPALITY SOLAR POWER PLANT PROJECT

Minutes of Stakeholder Consultation Meeting

Meeting Date: 20.08.2025 Meeting Time: 15:30

Meeting Venue: Türkmentokat Neighborhood Coffee House

STAKEHOLDER CONSULTATION MEETING

The Odunpazarı Municipality Solar Power Plant Project is among the subprojects under the Türkiye Public and Municipal Renewable Energy Project (PUMREP), which has been developed to support sustainable development in cities across Turkiye.

Within the scope of the subproject, the Environmental and Social Management Plan Checklist (ESMP-Checklist) and the Stakeholder Engagement Plan (SEP) were prepared in compliance with Turkish environmental and social legislation, the World Bank Environmental and Social Standards, Safeguard Policies, the World Bank General EHS Guidelines, the Industry Sector Guidelines, as well as İLBANK's Environmental and Social Management System (ESMS).

As part of the stakeholder engagement and disclosure process, a Stakeholder Consultation Meeting was held on 20 August 2025 at 15:30 in the Türkmentokat Neighborhood Coffee House. To inform the local community about the meeting, printed materials such as brochures and posters were prepared and displayed, and announcements were made on the Odunpazarı Municipality website, as well as in local and national newspapers. In addition, meeting information was also communicated to the local community via SMS.

Meeting Summary

The Stakeholder Consultation Meeting was initiated with the opening speech of the Deputy Mayor of Odunpazarı Municipality. Subsequently, a representative of the consultant company provided detailed information on the process and content of the reports prepared for the implementation of the sub-project. A presentation was delivered highlighting the benefits that the sub-project would bring to the municipality and the local community. The presentation is shared in Annex-7: Stakeholder Consultation Meeting Presentation.

The meeting was attended by a total of 34 participants, including 5 municipal staff, the mukhtar of Türkmentokat neighborhood, and 26 local residents. Among the participants, 11 were female and 23 were male. Individuals who arrived late or left early were not included in the signature sheet. Those who departed before their turn to sign, or who joined after the signing order had passed, were not recorded.

During the meeting, information was provided regarding the location of the subproject (neighborhood, block, and parcel), sub-project capacity, equipment to be used, technical specifications, and the annual energy production. It was also confirmed that regulatory obligations were fulfilled.

Within the scope of the MoM, the consultant company presented the environmental and social risks identified in the ESMP Control List, the mitigation measures planned to address these risks, the geographical and climatic characteristics of the subproject area and their potential impacts on the subproject, as well as analyses conducted on possible natural disasters.

In addition, participants were informed about the grievance mechanisms that can be used to submit complaints, concerns, suggestions, or opinions during the pre-construction,

construction, and operational phases. Based on the information provided, the meeting concluded with a Q&A session and lasted approximately one hour.

Question and Answer Section

higher on sunny days and lower on cloudy days.

Question 1.				
Tame / Occupation Türkmentokat Neighborhood Resident				
Is production possible even when the weather is cloudy?				
Answer 1.				
Name / Occupation	CA Engineering			
Solar power plants continue to generate electricity even on cloudy days. This means production will still				
continue. However, because the solar radiation reaching the panel surface decreases, production capacity				
will not be as high as it is on sunny days; it will be lower. In other words, electricity production will be				

Question 2.			
Name / Occupation	Türkmentokat Neighborhood Resident		
What is the economic life of the project? Will it still produce when its economic life expires?			
Answer 2.			
Name / Occupation	CA Engineering		

The economic life of solar panels is estimated to be approximately 25–30 years. At the end of this period, the panels do not become completely dysfunctional; they continue to operate at a certain production capacity. However, their efficiency decreases over time. Therefore, by replacing or renewing panels that have reached the end of their economic life, the facility can continue producing at full capacity.

Question 2.				
Name / Occupation	Türkmentokat Neighborhood Resident			
Will there be the same protection as the existing solar power plant? Will unauthorized entry be prevented?				
Answer 2.				
Name / Occupation	CA Engineering			
Yes, like the existing solar power plant, the newly constructed power plant will be surrounded by a wire				
fence and security measures. This will prevent unauthorized entry.				

Meeting Conclusion

The Stakeholder Consultation Meeting, which lasted approximately one hour, included a presentation by representatives of the consulting firm providing information about the subproject. Following the presentation, a question-and-answer session was conducted to gather participants' views and inquiries. During the meeting, information was shared regarding the environmental, social, and economic aspects of the Odunpazarı Municipality PV Project, as well as the next phase of the sub-project. In addition, participants were informed about the grievance mechanism available for submitting complaints, requests, or suggestions throughout the subproject duration. The meeting concluded after collecting participants' feedback and recommendations.

Participant List

		PAYDAŞ KAT	ILIM TOPLANTISI T	UTANAĞI			
TOPLANTI KONUSU	KABYEP Od Toplantisi	KABYEP Odunpazarı Belediyesi (Eskişehir) Güneş Enerji Santrali Projesi Paydaş Katılım					
TOPLANTI YERİ /TARİH VE SAAT							
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ATTACHMENTS

Annex-1: Photo of the Stakeholder Consultation Meeting (20.08.2025)

















Annex-2: National Newspaper Advertisement (Newspaper Announcement Date –Cumhuriyet 04.08.2025)



skacındaki semtin bu kez en gün mahallelerinden biri, Ataköy Kısım, yok olma tehdidiyle karşı

arşıya.
Bölgede yaşayan ve mahallenin
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"Deprem riski" bahanesiyle son dönemde sunulan projeë" diyor.
"Deprem riski" bahanesiyle son dönemde sunulan projekte ranta dayalı bir dönüşümün zeminini hazırlamakta olduğunu söyleyen Kaynar, "Özellikle çocuk yuvası, tiyatro gib amussal alanların imar değişiklikleriyle ette levile vile ralanların dönüştürülmesi bu sürecin en çarpıcı gösterçeler" oldu diyor.
Kray olarak planlanan yesil alanlar, TOKİ tarafından 2007'de turizn fonksiyonuna çevilerek özel turizn fonksiyonuna çevilerek özel sektöre satılmış. Deprem toplanma alanları da yok edilmiş.
Simdi ise saldırı evlere yönelmiş.

firmalardan 'çürük i aldırıyon

irmalardan (çürün İdiriyor, Belediye, 90 gün içinde bina için , Belediye, 90 gün içidendirme ya boşaltıma va da güçlendirme kararı alınmasını talep ediyor. Ano kararı oybirliği gerektiriyor ve karar oybirliği gerektiriyer ve karar oybirliği gerektiriyer ve karar oybirliği gerektiriyer ve karari alinma

sosyal ilişkilerinin, yeşil kültürünün ve komşuluk bağlarının yok oluşu anlamına gelir" diyor.
Ataköy'ün büyük metrekareli ve bahçeli, düşük katlı yapılarının yerine, ne yapılacağı belli olmayan rant projeleri için yıkımı en büyük korku.
Bölge sakinlerinin derdi lüks konutlar, milyon dolarlık evler değil. Bakırköy Belediye Başkamı Ayşegül Ovaloğlu'ndan güçlendirmeye destek vermesini istiyorlar. Ovalıoğlu henüz bu konuda bir açıklama yapımamış. Ataköy açıklama yapmamış. Ataköy sakinleri, CHP'li belediyenin bu tarihi ve kültürel dokuyu koruma için harekete geçmesini bekliyor.

dayandığı bir fant yüzyili neden Av Mark Leonard, 2 Bu teslimiyet yagresif tarzından AB'nin politik ve bu teslimiyette piçinde güçlü bir üretemedi; ihrad finansallaşmış e pazarına aşını bı Trump'nı tarife alımlarıyla illişk yalnızca aske

alırniarıyla ilişki yalınızca asker artı değerini sanayi kompi olduğunu da g AB'nin tutun karşılaştırmak Pekin, ABD'nir toprak elemeni ama etkili bir k zincirlerini sars yol açmadı; kir fakat özde tavi günlerde Avruş gibi konuşurke için, Çin'in kap görmemek ola

Brüksel bu kazamak" oli
"zaman kazar
artik değerin
bir zayriliktır.
ki bu anlaşmı
ilişkilerde, ke
bir kuralı kab
Politikanın ye
müzakerenin
tloaretin yerit
AB'nin "kar
"bir çekim ma
artık ayakları
"çeve" değil
de değil. AB'
hegemonyas
ekonomisine
Bir AB. ABC

dlyordu, Anteneri isolesi islevin imzal. Bu yüzdei gerçekten, cı İngiltere ayrı "kral" olma Avrupa aynı zamanlar di imparatorlu cetvelin aitt Gerçekten bir garantı Avrupa is sermayesit yapı, artık karşı harek in "büyük" in ayrı de çi yapı, artık varşı harek in "büyük" ele yayrı ayrık varşı harek varşı harek varşı harek varşı harek varşı harek veşüvenli v



Asgari ücret ekmek artışına yetişemiyor

UYGULANAN ekonomik politikalar nedeniyle yılda yalnızca bir kez yapılan asgari ücret artışı, ücretleri açlık ve yoksulluk sınırını gerisinde biraktı. Ekonomist İnan Mutlu'nun hesaplamaları, gıda enflasyonunun özellikle dar gelirli izerinde asışı bir başkı yarattığını izerinde nasıl bir baskı yarattığını

üzerinde nasıl bir baskı yarattığını ortaya koydu.
Mutlu'nun paylaştığı verilere göre, son iki yılda ekmek fiyatı yüzde 153 oranında artarken asgari ürcetteki artış yüzde 94'te kaldı. 2025 yılı için ise net 22 bin 104 TL olarak belirlendi.

olarak belirlendi.
Ağustos ayı İtibariyla 200 gram ekmek 15 TL'ye, 270 gram ekmek ise 20 TL'ye yükseldi. Böylece Türkiye genelinde ekmeğin kilogram fiyatı 75 TL oldu. Bu rakam 8 aylık yüzde 20'lik bir artış anlamına geliyor. 73 m önceşinde argarıl ürsetle.

Zam öncesinde asgari ücretle 12TL'den 1.842 adet ekmek alınabilirken yeni fiyatla bu sayı 1.473'e düştü. Artık 369 adet daha az ekmek alabiliyor.

'19 Mart'ın ekonomik maliyeti' önergesine Şimşek'ten 4 ay sonra yanıt

algalanma var, hesap yok

SARP SAĞKAL

SARP SAĞKAI

DÖMER FARIK Gergerlioğlu'nun, gözaltına alınması sonrası piyasalardı ayanan dalgalanmaların ekonomik etkisini sora benefesine, Hazine ve Maliye Bakanı Mehmet Şimşek'ten yaklaşık dört ay sonra gelen yanıt dikkat çekti. Şimşek, dalgalanmaların alikkin doğrudan bir maliyet hesabı paylaşmazken "IL ve döviz likiditesine yönelik tedbirler alındı, proaktif önlemlerle oynaklık sımırlandı" ifadelerin ikullandı.

Gergerlioğlu önergesinde, imamoğlu'nun gözaltı sürecinin ardından döviz ve altın fiyatlarında yaşanan tarihi yükselişi

yaşanan tarihi yükselişi anımsatarak, "Bu dalgalanmaların ülke ekonomisine maliyeti hesaplandı mı? Bakanlık ne tür önlemler alacak? Enflasyonun yükselmesini engellemek için hangi politikalar uygulanacak" sorularını yöneltti.

Simsek: Öncelik fiyat istikrarı Şimşek, önergeye verdiği yanıtta



ekonomi programlarının temel önceliğinin fiyat istikrarı olduğunu belirterek şunları söyledi: "Son dönem gelişmelerinin enflasyon görünümine etkileri değerlendirilmiş, sıkı parasal duruşı destekleyici önlemler alınmıştır. Piyasalardaki onyakiş anışlınmıştır. Piyasalardaki oynakliği sınırlam amaçıyla Ti

estektey Plyasalardaki oynakny Plyasalardaki oynakny Võnelik adımlar atılmıştır." Şimşek ayrıca, "Finansal varlık İlyatlarındaki oynaklığın azalmasına yönelik proaktif önlemlerle, enflasyon üzerindeki yukarl yönlü risklerin sınırlandırılması amaçlanmıştır" dedi. Yanıtın "Ekonomimizin" yonu riskterin sınırlandırılması amaçlanmıştır" dedi, Yanıtın sonunda ise "Ekonomimizin dayanıklılığını ve finansal istikrarı korumak için gerekli adımlar atılmaya devam edilecektir" notuna yer verildi.

'ihracat artıyor ama acı çektiğimiz gerçek'

acı çektiğimiz gerçek
EGE İrracatçı Birlikleri (EİB), 2025
yılı temmuz ayında İrracatını yüzde
8 artırarak 1 milyar 650 milyon
dolara çıkardı. Türkiye'nin genel
İrracatı ise temmuzda yüzde 11
artışla 24.9 milyar dolara ulaştı.
EİB Koordinatör Başkanı
Jak Eskinazi, İırracattaki
artışı yorumlarken "İnracat
rakamlarındaki artış, İrracatçılar
olarak acı çektiğimiz gerçeğini
değiştirmiyor" dedi. Eskinazi şöyle
devam etti.
"Üretim ve ihracatta Türkiye
rakipleriyle rekabette zorlanıyor,
Türk İrracatçılarının rekabetçiliğini
güçlendirmemiz gerekiyor. Ege
İhracatçı Birlikleri'nin yıtlık 7.5
milyar doları aşan tarım ürünleri
İrracatında yüzde 22 payı var. Tarım
sektörlerimizin pozitif ayımıcılığa
intiyacı var. Türk Eximbanık'tan
tarım sektörlerimize özel bir kredi
paketini hayata geçirmesini talep
ediyoruz."

ODUNPAZARI BELEDİYESİ GÜNES ENERJI SANTRALI (GES) PROJESI HALKIN KATILIMI TOPLANTISI DAVETI

Türkiye Kamu ve Belediye Yenilenebilir Enerji Projesi (PUMREP) kapsamında yer alan Eskişehir İli Odunpazarı İlçesi Türkmentokat Mahallesi sınırları içerisinde yapılması planlanan arazi tipi Güneş Enerji Santrali (GES) projesi Odunpazarı Belediyesi tarafından yürütülmektedir. Odunpazarı Belediyesi GES Projesi ile ilgili olarak, paydaşları bilgilendirmek, görüş ve önerilerini almak amacıyla bir Halkın Katılımı Toplantısı düzenlenecektir. Toplantı detayları aşağıda yer almaktadır:

Toplantı Yeri: Türkmentokat Mahallesi

Tarih: 20.08.2025 Saat: 15.30

Proje sahibi: Eskişehir Odunpazarı Belediyesi İletişim Adresi: Yenidoğan Mahallesi Çamkoru Sokak

No: 2 Odunpazarı/ESKİŞEHİR

Telefon: 0222 2133030

E-posta: opozelkalem@gmail.com Alt Proje özelinde hazırlanmış çevresel ve sosyal dokümanlar Türkçe ve İngilizce olarak Odunpazarı Belediyesi'nin resmî web sitesindeki duyurular bölümünde yayımlanmaktadır.

Halkımıza saygıyla duyurulur.

İtfaiyeciler 'meslek' statüsü istiyor

ELIF ÖZGE YALCIN

ELİF ÖZGE YALCIN

TÜRKİYE'DE peş peşe yaşanan yangınlar, itfaiyecilerin yıllardır sürdürdüğü bir talebi yeniden gündeme taşıdı: "İş değil, meslek olalım." Sosyal medyada didestekolmeslekolalım etiketiyle büyüyen kampanyada, itfaiyeciler, yaptıkları yüksek riskli işin karşılığında, yasal tanımlarının ve özük haklarının netleştirilmesini istiyor. Halen Devlet Memurları Kanunu'nda Genel İdari Hizmetler Sınıfı (GİH) içinde değerlendirilen itfaiyecilerin görev tanımları Belediye İtfaiye Yönetmelliği'ne göre yapılıyor. Bir itfaiyeci bu durumu şöyle yorumladı: "Bir yerde tam teçhizatla çalışıyoruz, başka bir yerde eksik ekipmanla. Eğitim, haklar ve kariyer planlamaseşit ve merkezi olmalı. Bu sadece bizim değil, halkın da güvenliğiyle ilgili."



altında yasal bir düzenleme yapılmasını ve merkezi bir yapıyla "İtfaiye Genel Müdür-lüğü" kurulması kurulmasını talep ediyor.

AFAD'a devre tepki

Cumhurbaşkanı Recep ayyip Erdoğan'ın geçtiğimiz ünlerde 51 ildeki itfaiye orumluluğunun AFAD'a evredileceğini açıklaması ia tartışma yarattı. Türkiye tfalye Teşkilatı Platformu, bu açıklamaya, "311 yıllık bir tecrübeyi aşağılamaktır" sözleriyle tepki gösterdi. KESK'e bağlı Tüm Bel-Sen Başkanı Erdal Bozkurt da yıllardır meslek statüsü talebini gündemde rumluluğunun AFAD'a

tuttuklarını hatırlatarak şu

tuttuklarını hatırlatarak şu değerlendirmede bulundu:
"Yönetmelikte yer alan 'b elediye başkanının verdiği diğer görevleri yapmak' ifadesi, keyfi ve politik uygulamalara açık. Liyakatlı, güncel teçhizata sahip, sırırları yasa ile belirlenmiş bir hizmet birimi her zamankinden daha gerekli. CİH sımfi, bu şi herkesii yapabileceği anlamına gelir. İş ve İdari Hukuk Avukatı Sevgi Karaduman ise AB ülkelerinde ve İLO normlarında iffaiyeciliğin özel statüye sahip bir kamu görevi olarak tanımlandığını anımsattı.

Annex-3: Lokal Newspaper Advertisement (Newspaper Advertisement Date – Sakarya Newspaper -04.08.2025)



ANMA ETKINLIGI

23 Temmuz 2025 tarihinde, Seyitgazi ilçesindeki orman yangınını söndürme çalışmaları sırasında alevlerin arasında kalan 5'i orman işçisi ve 5'i AKUT gönüllüsü olan 10 görevli personel şehit olmuştu. Seyitgazi Çarşı Cami'nde gectiğimiz cumartesi günü dua ve anma etkinliği gerçekleştirildi. Duaların



basvuruları artmasıyla yoğunluk yaşayan İlçe Nüfus Müdü personeli. özverili çalışmalarıyl vatandaşları takdirini topla

ODUNPAZARI BELEDİYESİ GÜNEŞ ENERJİ SANTRALİ (GES) PROJESÍ HALKIN KATILIMI TOPLANTISI DAVETI

Türkiye Kamu ve Belediye Yenilenebilir Enerji Projesi (PUMREP) kapsamında yer alan Eskişehir İli Odunpazarı İlçesi Türkmentokat Mahallesi sınırları içerisinde yapılması planlanan arazi tipi Güneş Enerji Santrali (GES) projesi Odunpazarı Belediyesi tarafından yürütülmektedir. Odunpazarı Belediyesi GES Projesi ile ilgili olarak, paydaşları bilgilendirmek, görüş ve önerilerini almak amacıyla bir Halkın Katılımı Toplantısı düzenlenecektir.

Toplantı detayları aşağıda yer almaktadır:

Toplantı Yeri: Türkmentokat Mahallesi

Tarih: 20.08.2025 Saat: 15.30

Proje sahibi: Eskişehir Odunpazarı Belediyesi

İletişim Adresi: Yenidoğan Mahallesi Çamkoru Sokak No:2

Odunpazarı/ESKİŞEHİR Telefon: 0222 2133030

E-posta: opozelkalem@gmail.com

Alt Proje özelinde hazırlanmış çevresel ve sosyal dokümanlar Türkçe ve İngilizce olarak Odunpazarı Belediyesi'nin resmî

web sitesindeki duyurular bölümünde yayımlanmaktadır.

Halkımıza saygıyla duyurulur.

Resmi İlanlar www.ilan.gov.tr'de

Basin: ILN02271894

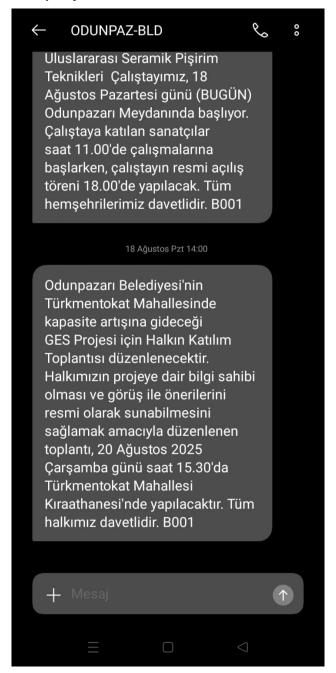


Eskişehir Gençlik ve Spor İl Müdürü Hasan Kalın, Yunus Emre Kız Yurdu'nu ziyaret edere incelemelerde bulundu Müdür Kalın, yaptığı açıklamada "Hedefimiz net:

Annex-4: Odunpazarı Municipality Website, Announcements (07.08.2025)



Annex-5: Odunpazarı Municipality Announcements





Annex-6: Odunpazarı Municipality Stakeholder Consultation Meeting Brochure

PROJECT FINANCE

The Public and Municipal Renewable Energy Project (PUMREP) is one of the sub-projects under the PUMREP Financing Program to support sustainable development in Turkish cities. Financed by the World Bank (WB) through Iller Bankası A.Ş. (ILBANK), the Public and Municipal Renewable Energy Project (PUMREP) represents a significant step toward sustainable energy solutions and increased energy security for the public sector.

PROJECT DESCRIPTION, PURPOSE, AND BENEFITS

The Odunpazarı Municipality Solar Power Plant Sub-Project aims to increase the use of renewable energy in public sector buildings and municipalities, reduce energy bills, and lead the public sector in demonstrating its commitment to climate mitigation through sustainable energy solutions. It will contribute to Türkiye's climate goals while also enhancing <u>Odunpazarı</u> Municipality's energy security.

This renewable energy project, to be implemented by the Odunpazari Municipality, will include the construction of a solar power plant with an installed capacity of 639 kWp / 596 kWe. The plant is expected to produce approximately 932 MWh of electricity annually. This production capacity is sufficient to meet the annual electricity needs of more than 373 households. An "EIA Not Required" decision has been made, and the subproject has been categorized as environmentally low risk.

Therefore, the sub-project will be constructed with a 25year lifespan for the plant.

CONSTRUCTION DURATION AND WORKFORCE

Construction is planned to last approximately five months and all necessary equipment and installation work will be carried out by the contractor. 10 personnel (including two security guards) will be employed during the construction phase and 2 personnel (both serving as security guards) during the operation phase. Priority will be given to local residents in the subproject's hiring pr

Construction of the Solar Power Plant Project is planned to be completed in five (5) months.

SUB-PROJECT AREA



pazarı Municipality Solar Power Plant Sub-Project Area

The sub-project will be constructed on an area of approximately 8,400 square meters on lot 2 of block 4695 in the Türkmentokat neighborhood of the Odunpazarı district of Eskisehir province.





Sub-project Site Location

ENVIRONMENTAL AND SOCIAL IMPACTS

The Environmental and Social Management Plan Checklist (ESMP-Checklist), prepared for the Odunpazarı Municipality Solar Power Plant subproject, defines measures and controls developed to manage environmental and social impacts that may occur during construction and operation. The ESMP Checklist covers not only the subproject area but also the Power Transmission Line route. The measures to be implemented to mitigate risks such as dust, noise, waste management, and occupational health and safety, and the schedule for these measures, are detailed in the ESMP Checklist.

nents are defined in the monitoring tables within the ESMP-Checklist. Accordingly, during the construction phase of the subproject, dust emissions, air pollution, noise generated during construction and from temporary traffic loads, waste generation, and occupational health and safety will be monitored. During the operation phase, chemical storage and use, the power plant's glare and reflection effects, livelihoods, grievances, community conflicts, stakeholder participation, occupational health and safety, and labor parameters will be monitored in accordance with the requirements set out in the ESMP-Checklist and SEP.

3

These prepared documents have been published in the announcements section of the Odunpazarı Municipality's official website and are available to all stakeholders. You can access the document by scanning the QR Code below

2



Environmental Social Management Plan-Checklist and Stakeholder Engagement Plan

The primary institution responsible for implementing this ESMP Checklist is the <u>Odunpazari</u> Municipality, which is responsible for the construction and operation of the subproject. The contractor is responsible for implementing environmental and social measures, the consultant is responsible for monitoring and reporting, and the Project Implementation Unit is responsible for overall coordination and stakeholder communication. As part of the Stakeholder Engagement Plan (SEP), a complaint box has been placed in the municipal building to inform the public and receive and evaluate complaints, and communication channels have been provided via email and phone.

STAKEHOLDER ENGAGEMENT AND GRİEVANCE MECHANISM

will be received, recorded, and responded to in a timely manner in accordance with the Stakeholder Engagement Plan (SEP). The mechanism will be managed by the Odunpazarı Municipality, and if necessary, complaints may also be forwarded to ILBANK's independent grievance mechanism.

Odunpazarı Municipality:

Call Centre: 0222 213 30 30 E-mail: halkmasasi@odunpazari.bel.tr Web Site: https://www.odunpazari.bel.tr/

ILBANK Grievance Mechanism

Web Site: ww.ilbank.gov.tr/form/bilgiedinmeuluslararasi E-mail: <u>uidbbilgi@ilbank.gov.tr</u> osval@ilbank.gov.tr

Telephone: +90 312 508 79 79 / +90 312 508 79 80

All stakeholders may also submit their complaints and feedback regarding the sub-project through alternative channels such as the Presidential Communication Center (CIMER) or the Foreigners Communication Center (YIMER), both of which are accessible to the public.

CIMER

- Web site: www.cimer.gov.tr
- Call Centre: 150
- Telephone: 0312 590 20 00

YIMER

- Web Site: www.yimer.gov.tr
- Call Centre: 157 Telephone: +90 312 515 71 22

TÜRKİYE PUBLIC AND MUNICIPAL RENEWABLE ENERGY PROJECT (PUMREP)

Odunpazarı Municipality Solar Power Plant (596 kW) Project

Public Participation Meeting Information Brochure Date: August 20, 2025 Time: 3:30 PM

Location: Türkmentokat Neighborhood Coffeehouse









Annex-7: Stakeholder Consultation Meeting Presentation













Projenin hayata geçirilmesiyle birlikte; toprak, su, hava kalitesi, flora/fauna, gürültü, yansıma ve trafik gibi çevresel etkiler öngörülmekte ve değerlendirilmektedir. Aynı şekilde yerel halk, geçim kaynakları ve sosyal yapılar üzerindeki etkiler de analiz edilmiştir. Bu etkiler kısa süreli ve geçici olup yerel halkın etkilenmesi beklenmemektedir. Çevresel ve Sosyal Etkiler

Çevresel ve Sosyal Etkiler

Sosyal

Etkiler

- Çevresel ve

Doğru Bilinen Yanlışlar

YANLIŞ: Güneş panelleri kanser yapar ve çevreye mutlaka zarar verir.

DOĞRU: Bazı panel türleri (örneğin kadmiyum tellürid – CdTe) toksik maddeler içerebilir. Ancak bu maddeler panellerin içinde özel malzemelerle kaplanır ve normal kullanımda dışarıya sızmaz. Riskler, yanlış imha veya kazalar gibi olağan dışı durumlarla sınırlıdır.

YANLIŞ: Çiride üretilen paneller insan sağlığı için tehlikelidir.

DOĞRU: Çiriin düşük işçillik maliyetleri ve yüksek üretim kapasitesi fiyat avantajı sağlar. Ancak sağlık riski, üretim sürecindeki çevre standarllarının uygulanma düzeyine bağlıdır. Tüm Çin panelleri için genelleme yapmak doğru değildir.

Doğru Bilinen Yanlışlar

DOĞRU: Kristal silikon üretiminde "silikon tetrachlorür (SICI₄)" gibi zararlı yan ürünler oluşabilir. Ancak çoğu üretici bu maddeleri geri dönüştürerek tekrar kullanır. Uygun şekilde yönetildiğinde çevreye zarar vermez.

YANLIŞ: Silikon tetraklorür (SiCl4) her zaman bitki ve hayvanları öldürür

DOĞRU: Silikon tetraklorür (SiCl₄) suyla temas ettiğinde zararlı hidroklorik asit oluşturur. bu nedenle kontrolsüz dökülmesi çevreye zarar verebilir. Fakat modern tesislerde atık yönetmi sayesinde bu riskler önlenmektedir. Cenellikle geri dönüştürülerek tekrar üretim döngüsüne sokulur, böylece çevreye bırakılmaz

Çevresel ve Sosyal Yönetim Planı (ÇSYP)

Odunpazarı Belediyesi GES Alt Projesi kapsamında hazırlanan Çevresel ve Sosyal Yönetim Planı (ÇSYP), inşaat ve işletme süreçlerinde ortaya çıkabilecek çevresel ve sosyal etkilerin etkin bir şekilde yönetilmesi amacıyla geliştirilmiş önlem ve kontrol mekanizmalarını tanımlar. ÇSYP, yalnızca alt proje sahasını değil, aynı zamanda Enerji Nakil Hattı güzergâhını da kapsamaktadır.

Plan kapsamında, toz emisyonları, gürültü, atık yönetimi, iş sağlığı ve güvenliği gibi risklerin azaltılmasına yönelik uygulanacak tedbirler ile bu tedbirlerin uygulanma takvimi ayrıntılı olarak belirtilmiştir. İzleme gereklilikleri, ÇSYP' de yer alan izleme tablolarında tanımlanmıştır. Buna göre;

- İnşaat aşamasında: toz emisyonları, hava kirliliği, inşaat faaliyetleri ve geçici trafik yükünden kaynaklı gürültü, atık üretimi, iş sağlığı ve güvenliği unsurları izlenecektir.
- sında: kimyasalların depolanması ve kullanımı, santralin y geçim kaynakları üzerindeki etkiler, şikâyetler, topluluk çatışmaları, paydaş katılımı, iş sağlığı ve güvenliği ile is gücü parametreleri, CSYP ve Paydas Katılım Planı'nda (PKP) belirlenen sartlara uygun şekilde izlenecektir.

Şikayet Mekanizması

Paydaş Katılım Planı (PKP) kapsamında halkın bilgilendirilmesi, şikayetlerin alınması ve değerlendirilmesi için belediye binasında şikâyet kutusu yerleştirilmiş; e-posta ve telefonla iletişim imkânı sağlanmıştır.

Şikâyetler, Paydaş Katlım Planı'na (PKP) uygun olarak zamanında alınacak, kaydedilecek ve yanıtlanacaktır. Mekanizmanın yönetimi Bozdyüki Belediyesi tarafından sağlanacak olup, gerekli durunlarda başyurular İLBAHK-ın kurduğu bağımsız şikâyet mekaniz<u>masına da iletile</u>bik©ektir.

Şikayet Kanalları



ILBANK

- CIMER CUMHURBAŞKANLIĞI