



AYEN OSTİM ENERJİ ÜRETİM A.Ş.

Hülya Sokak No:37 067000

G.O.P. / ANKARA

Mobile: 0 (312) 445 0464

Fax : 0 (312) 445 0502

ÇAYPINAR HYBRID SOLAR POWER PLANT (SPP) PROJECT

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN



DOKAY-ÇED Çevre Mühendisliği Ltd. Şti.
Ata Mah. Kabil Cad. 140/A
06460 Çankaya/ANKARA
Tel: 0 (312) 475 7131
Faks: 0 (312) 475 7130

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Prepared by	Deniz Çağlar (Environmental Engineer and OHS Expert) Dr. Oltan Evcimen (Erciyes University, Faculty of Literature, Sociology Department) Pelin Bekri (Sociologist) İlhan Altıntaş (Cartographer) İlknur Dinçer (Expert Biologist) Berat Batuhan Kaplangı (Environmental Engineer)			
Reviewed by	Deniz Çağlar			
Director	Prof. Dr. Coşkun Yurteri			

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LIST OF ABBREVIATIONS

CHC	: Central Hunting Commission
DSTP	: Data Service of Turkey's Plants
EHS	: Environment Health and Safety
EIA	: Environmental Impact Assessment
EMRA	: Electricity Generation Licence granted by Energy Market Regulatory
ESMP	: Environmental and Social Management Plan
ETL	: Energy Transmission Line
GHG	: Greenhouse Gas Emission
IFC	: International Finance Corporation
ILO	: International Labor Organization
KPI	: Key Performance Indicator
OHS	: Occupational Health and Safety
PIR	: Project Information Report
PPE	: Personnel Protective Equipment
PS	: Performance Standards
RAMAQ	: Regulation on Assessment and Management of Air Quality
RAMEN	: Regulation on the Assessment and Management of Environmental Noise
RCIAP	: Regulation on Control of Industrial Air Pollution
SEP	: Stakeholder Engagement Plan
SPP	: Solar Power Plant
STRCT	: Scientific and Technological Research Council of Turkey
UNESCO	: United Nations Educational, Scientific and Cultural Organization
WHO	: World Health Organization
WPP	: Wind Power Plant

1 PURPOSE AND SCOPE

This Environmental and Social Management Plan (“ESMP”), which is prepared for the Çaypınar Hybrid Solar Power Plant Project (“Project”), includes mitigation measures that should be taken for the management of environmental and social risks determined for the Project’s construction and operation phase as per (i) national legislation, (ii) credit standards of Development Investment Bank of Turkey, (iii) International Finance Corporation (“IFC”) Performance Standards (“PSs”).

Applicable national legislation and international standards in the scope of the Project were determined and listed within the ESMP. In addition, roles and responsibilities regarding mitigation measures were also assigned and a general frame was formed for the organizational structure.

In order to assess the efficiency of the ESMP, it is important to perform monitoring studies during the Project construction and operation phase. In this context, Key Performance Indicators (“KPIs”) were specified and Monitoring Plan was formed in the scope of the ESMP.

Specifics that are related to stakeholder engagement processes to be conducted in the scope of the Project and Grievance Redress Mechanism were presented in Stakeholder Engagement Plan (“SEP”) as an individual document.

Waste Management Plan (“WMP”), Environmental Noise Management Plan (“ENMP”), Occupational Health and Safety Management Plan (“OHSMP”), Biodiversity Management Plan (“BMP”) will be prepared for creating a comprehensive management system for mitigating the environmental and social risks that are mentioned in this Report.

2 PROJECT DESCRIPTION AND CHARACTERISTICS OF THE PROJECT AREA

2.1 Project Definition

Ayen Ostim Enerji Üretim A.Ş. ("Ayen Ostim") is planning to construct and operate Çaypınar Hybrid Solar Power Plant Project ("Project") in addition to the existing Çaypınar Wind Power Plant in order to increase the energy production capacity 25.2 MWm / 24 Mwe to 30,7 MWm / 24 MWe in Balıkesir Province Kepsut District. The site location map of the Project Area is presented in Figure- 2.1 and a satellite map belonging to the Project Area is given in Annex-1.

In the scope of the Project, 13,752 solar panels will be established. Existing switchyard and energy transmission line ("ETL") will be used for energy transfer. Annual additional electricity generation of the solar power plant is foreseen as 8,974,100 kWh with the completion of the Project.

As per Environmental Impact Assessment ("EIA") Regulation, Project Information Report ("PIR") was prepared in October 2021 for the Project. In this regard, 14.10.2021 dated and E-2021111 numbered "EIA is not Required" Decision was granted by Balıkesir Provincial Directorate of Ministry of Environment and Urbanization (see Annex-2 for the subject decision).

In accordance with the Electricity Market Law (Law No: 6446) and relevant legislation, 19.03.2020 dated and EÜ/9249-14/04467 numbered Electricity Generation Licence had been granted by Energy Market Regulatory Authority ("EMRA") for existing WPP and this license is valid for 48 years 10 months 4 days. Regarding the Project, the scope of the license is extended for covering the Project. The license that includes the Hybrid Solar Power Plant is presented in Annex-3.

Project construction phase will start on January 2022 and construction works are planning to be completed within March 2022.

2.2. Technical Specification of the Project

Si-Mono-Crystalline ALFA Solar Model A3S72M 400 1.500 V, 400 Wp type was chosen as solar panel. There will be 13,752 solar panels, with 15 serial and 920 parallel strings. Each panel has a power of 400 W, and its dimensions are 1984*1008*42 mm. The total surface area is 28,385 m². Each panel weight is 24 kg, and its surface is covered with tempered glass. The layout of the solar panels is given in Figure-2.2.

The voltage produced in the panels has DC characteristics and is converted to AC voltage by the Inverter. Inverters are connected to DC power on one side and AC load on the other side. It makes the voltage suitable for the network usage characteristics and gives it to the network. Huawei SUN2000-100KTL-M1/100 KW inverters will be used as inverters. 46 Huawei inverters will be used within the scope of the Project.

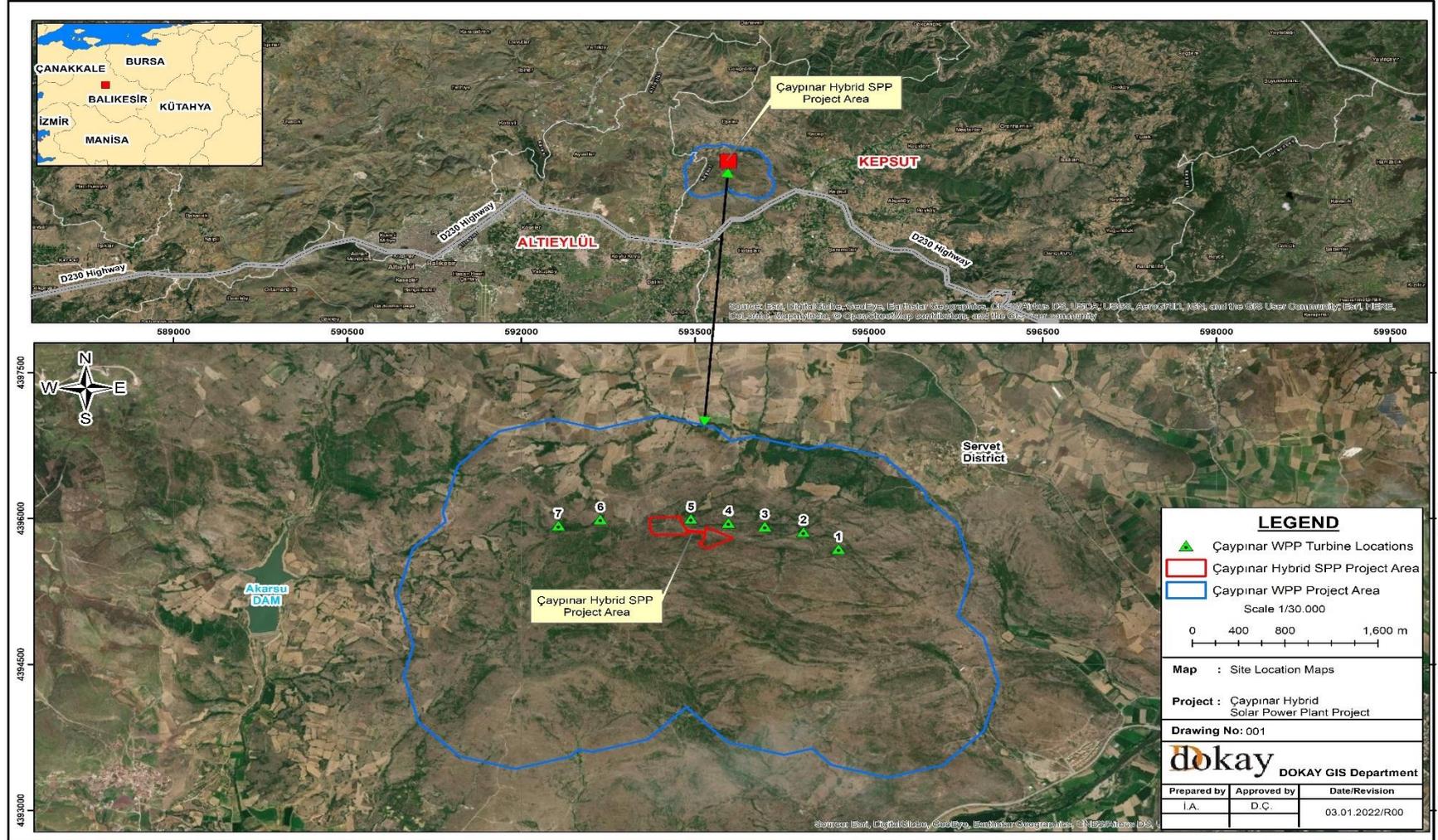


Figure-2.1: Site Location Map

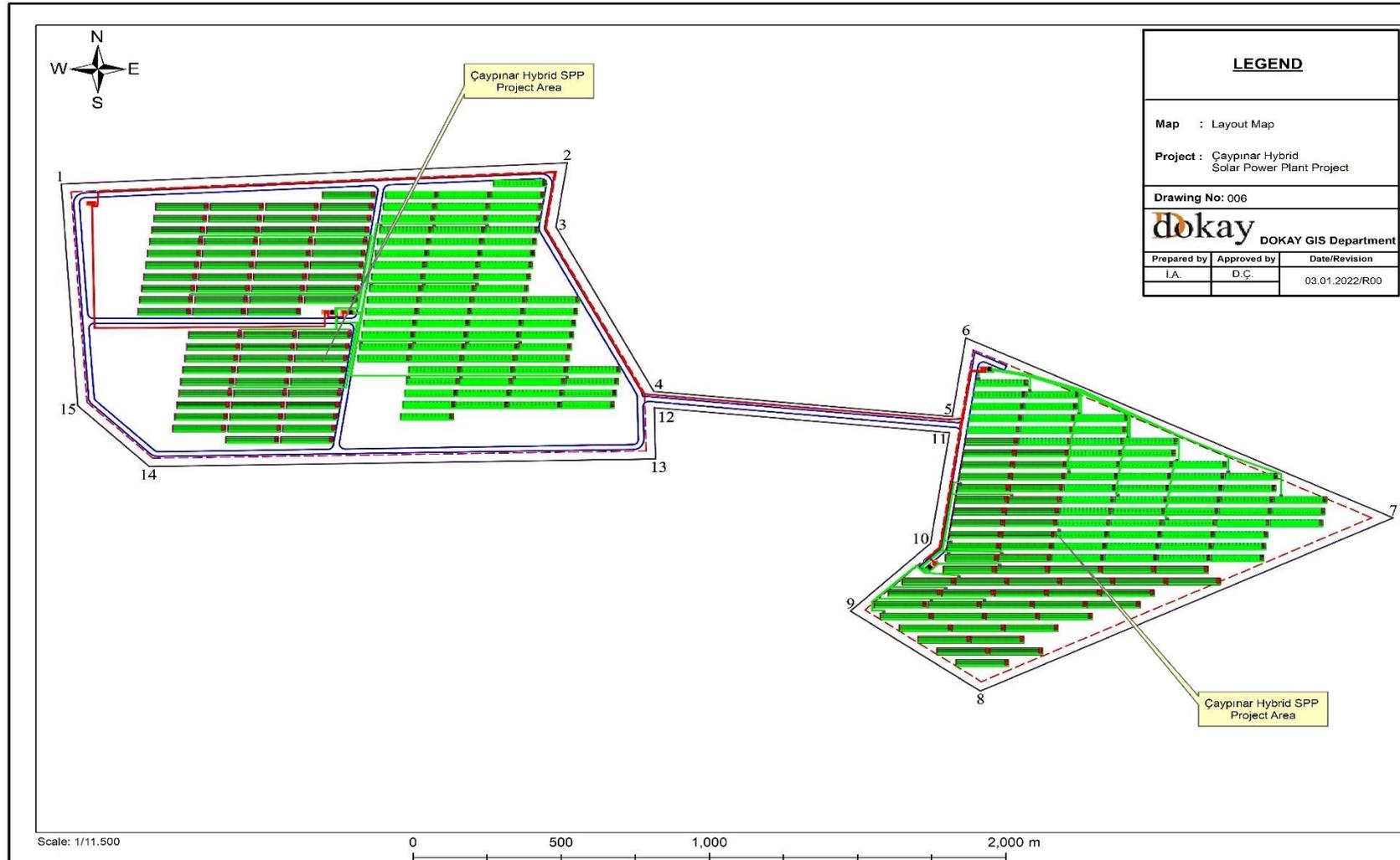


Figure-2.2: Layout of the Solar Panels

Galvanized steel structures are used for panel stabilization. Their contact with the ground will be made by the direct hammering method in the field. First of all, ground correction, drainage system, and access roads will be completed in the field. In total, 300 tons of material will be used, 250 tons of normally galvanized steel, and 50 tons of aluminium steel (sitting frames of the panels).

Within the scope of the project, 4 hermetic transformers with a capacity of 2 units of 1.600 KVA and 2 units of 1.250 KVA will be used. The transformers will increase the 400 V AC voltage coming from the inverter outputs to 34.5 kV, which is the distribution system voltage. The transformers will be in the same closed concrete kiosk with the switchgear equipment. There will be AC connection switchgears on one side of the kiosk in use and 34.5 kV MV switchgears on the other side. Transformer outputs will be combined in an intermediate switchgear and connected directly to the existing Çaypınar WPP MV busbar via the MV underground cable via the MV feeder to be added.

A grounding system will be installed in order to ensure system security.

A SCADA system will be established, which ensures that the entire system works in harmony with each other, and the necessary information is collected and sent as well.

2.3. Land Use

The area of the Project is located in a public property - pasture area which has an area of 82,500.02 m² (8.25 ha) on block 198, parcel number 98. Deed information is given in Annex-4.

Regarding the zoning status of the project area, the opinion was received from the Kepsut Municipality dated 02.07.2021. In the correspondences, the following statements are included.

“As a result of the research and examination; It has been determined that the Solar Power Plant project area is located in an unplanned area outside the “Planned Areas and Village Settled Area” within the boundaries of Balıkesir Province, Kepsut District, İhsaniye Merkez Mahallesi, Saraç and Eşeler Rural Neighborhoods and that it has a pasture quality in the area. In line with the Zoning Law No. 3194 and related legislation, there is no objection to our Municipality in making a Master and Implementation Zoning Plan as WPP and SPP area.”

Afterward, confirmation for the construction and operation of the Project is obtained from the Kepsut Municipality dated 21.09.2021. The mentioned correspondences are given in Annex-5.

2.4. Protected Areas

In the 21.09.2021 dated opinion letter of Balıkesir Province Cultural Assets Conservation Regional Board Directorate, it was stated that there is not any Cultural Immovable Property within the Project area and its vicinity as per Law on the Conservation of Cultural and Natural Property (Law No: 2863). In addition, it is also stated that any registered archaeological site or protected area does not exist within the Project Area (see Annex-6 for the official letter).

In accordance with the opinion letter of Balıkesir Province Directorate of Environment, Urbanization and Climate Change dated 21.09.2021, there is not any natural sites and natural assets within the borders of the Project. This letter is given in Annex-7.

In light of this information, it is concluded that there are no national parks, nature parks, wetlands, natural monuments, nature protection areas, wildlife protection and development areas, cultural assets, natural assets, biogenetic reserve areas, biosphere reserves, special environmental protection regions, tourism regions and other areas under protection within the Project Area and its immediate vicinity.

The closest protected areas are presented in Figure-2.3. As can be seen in figure, the nearest natural parks are Değirmen Boğazı Natural Park and Suuçtu Natural Park with 8 km and 31 km distances, respectively.

In case of chance find, construction works in and around the site where chance find is encountered will be ceased and Balıkesir Provincial Directorate of Culture and Tourism will be informed immediately. In addition, Chance Find Procedure will be prepared in accordance with IFC PSs for the Project.

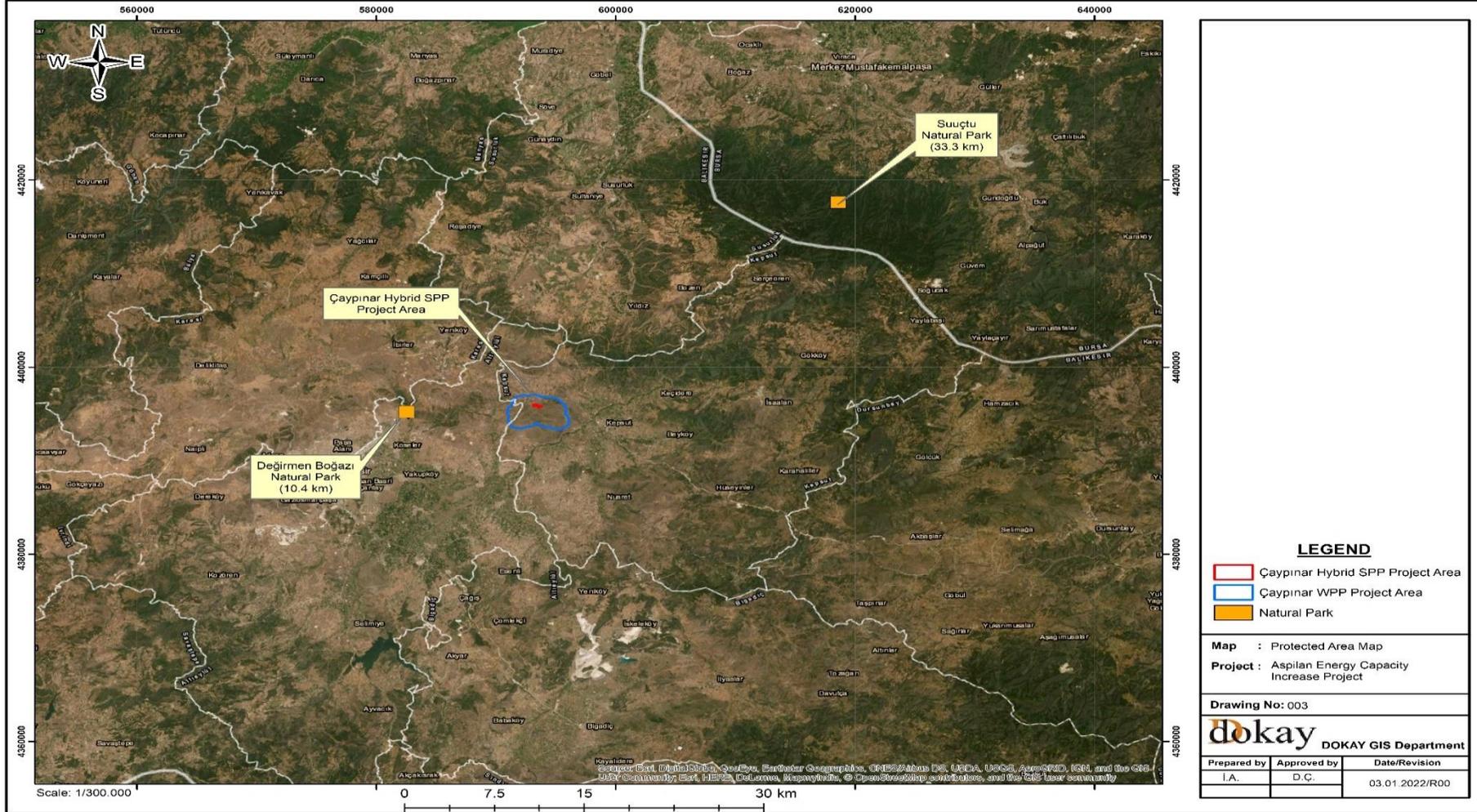


Figure-2.3: Distance between Protected Areas and Project Area

2.5. Biodiversity Properties

2.5.1. Flora and Fauna Species Detected in the Project Area

Inventory of flora species that are located in the immediate vicinity of the Project Site and likely to be found due to their habitat feature was created by conducting office works. During the preparation of flora inventory based on the literature data of Project Field, mainly Data Service of Turkey's Plants ("TUBIVES") prepared by Scientific and Technological Research Council of Turkey ("TUBITAK") was used. Besides, publications such as thesis, research report, article, technical report, brief report etc. that were prepared in the past years for the area that Project Site is also located were investigated. The status of all detected plant species was examined according to the IUCN Red List and the Bern Convention. By using the updated version of the Plants of Turkey Red Book (PTRB) which was prepared by Ekim et al. (2000) and contains changes for 366 species, the most current danger category available for plant species has been identified. As a result of the literature studies, while listing the plant species identified in the area, whether the IUCN categories included in the international protection status are included in the Bern Convention Annex-I and CITES or not, and their endemism status is also indicated.

As a result of the literature studies, it was determined that there are 14 plant species belonging to seven families in the area (see Table-2.1). Among the plant species identified in the area, there is no endemic, rare, endangered plant species that should be protected under the BERN Convention Annex-I and IUCN.

Table-2.1: Flora Species Detected in the Project Site and Impact Area

Family and Specie Name	Phytogeographical Region	Endemism	IUCN	Habitat
Apiaceae				
<i>Daucus carota</i>	-	-	-	Meadows, slopes, sandy sands, fields
<i>Smyrnium creticum</i>	-	-	-	Sea cliffs and rocky places, riverbeds and fields
Aquifoliaceae	-	-	-	
<i>Ilex aquifolium</i>	-	-	-	Slopes
Asteraceae	-	-	-	
<i>Centaurea thracica</i>	-	-	-	Groves, thickets, steppes
<i>Inula germanica</i>	Europe-Siberia	-	-	Fieldside, roadside ditches
<i>Inula graveolens</i>	-	-	-	Field and water's side, sandy or gravelly soil

Family and Specie Name	Phytogeographical Region	Endemism	IUCN	Habitat
<i>Inula viscosa</i>	Mediterranean	-	-	Hill sides, free space and swamp areas
<i>Jurinea consanguinea</i>	-	-	-	Steppe, fallow field, cultivated field, rocks, forest
Boraginaceae				
<i>Heliotropium dolosum</i>				Fields, roadsides, sandy places, steppe
Brassicaceae				
<i>Alyssum minus var. collinum</i>	-	-	-	Roadsides
<i>Thlaspi perfoliatum</i>	-	-	-	Cultivated field, free space
Dipsacaceae				
<i>Scabiosa columbaria subsp. Ochroleuca var. ochroleuca</i>	-	-	-	Fields, rocky slopes
Poaceae				
<i>Bromus intermedius</i>	-	-	-	Fields, frigana opening, coarse pebbles on the shore, barren places
<i>Nigella elata</i>	-	-	-	Rocky, field, bushes, roadside

Fauna

Amphibian, reptile, bird and mammal species in the Project Site and its immediate surroundings have been identified through office work. In the creation of fauna inventory list based on the literature data of the area, thesis, research report, article, technical report, brief report, etc. publications that were prepared in the past years in the region have been investigated by using Google Earth, satellite photos and land use maps.

According to the data obtained as a result of the literature studies, the endemism states, danger categories and protection statuses stated in the national and international conventions for the species were revealed. In national degree examinations, the decisions determined by the Central Hunting Commission ("CHC") for the 2019-2020 hunting period were evaluated for all fauna groups. The IUCN red list, information on CITES and Bern Conventions from the international Conventions, as well as descriptions of CHC decisions are given below.

Risk Classes Related to IUCN Endangered Species Red List Criteria

EX (EXTINCT)	: Extinct
EW (EXTINCT IN THE WILD)	: " <i>Extinct in the Wild</i> " These species are either protected under the protection of humans by botanical gardens, zoos, or in a narrow area.
CR (CRITICALLY ENDANGERED)	: " <i>Critically endangered</i> " species with very high risk of extinction in natural life in the near future.
EN (ENDANGERED)	: " <i>Endangered</i> " species that are not yet seriously endangered in natural life but can become very high risk in the near future.
VU (VULNERABLE)	: " <i>Vulnerable</i> " Species that are not yet seriously endangered but will face the risk of disappearing in the mid-range.
NT (NEAR THREATENED)	: " <i>Near threatened</i> " Candidate species that are not dependent on conservation but do not fall into the (VU) category.
LR (LOWER RISK)	: " <i>Lower risk</i> " Species that do not fall into the above risk classes and are not yet exposed to any risk. They are separated to 3: Lc (Least concern) : " <i>The least concern</i> " species that are not dependent on protection or are not at risk in the near future. (cd) : " <i>Low risk but dependent on protection</i> " If the species is not protected under a particular program, it may be included in one of the above risk classes over the next 5 years. Nt (Near threatened) : " <i>Low-risk but near threatened</i> " species that are not dependent on protection but are candidates for entry into the (VU) category.
NE (NOT EVALUATED)	: Not Evaluated
DD (DATA DEFICIENT)	: Data Deficient

Bern Convention (European Convention for the Protection of Wildlife and Surrounding Environments)

Annex II: The list containing the fauna species that should definitely be taken under protection is included in Annex-II. Contracting parties will take the necessary legal and administrative measures to specifically protect the wild fauna species specified in Annex II. The following situations related to these species will be specifically forbidden:

- a) All kinds of deliberate capture and detention, deliberate killing patterns,
- b) Deliberate damage or destruction of breeding and resting places,
- c) Deliberately disturbing the wild fauna, especially in the reproduction, development and hibernation periods, contrary to the purpose of this contract,
- d) Collecting or deliberately destroying eggs from the wild environment or retaining these eggs even if they are empty,

e) Living and non-living international trade of these animals, including stuffed animals and their recognizable parts or derivatives, in order to contribute to the effective execution of this contract.

Annex III: It contains a list of protected fauna species. Each party that concludes the contract will take appropriate and necessary legal and administrative measures to ensure the protection of the wild fauna species specified in Annex III. The issue of exploiting wild fauna species mentioned in Annex-II will be regulated to keep populations out of danger, taking into account the conditions set forth in Article 2. Measures for this will include:

- a) Closed hunting seasons and / or other principles governing the operation,
- b) Temporary or regional prohibition, when appropriate, to bring wild fauna to sufficient population levels,
- c) Selling wild animals as living and non-living, keeping and transporting or selling for sale will be arranged properly.

Annex IV: Prohibited Hunting Methods and Tools and Other Forbidden Business Forms

CITES Convention

It regulates the procedures and principles for controlling international trade in order to ensure the sustainable use of animal and plant species within the scope of the international trade of endangered wild animals and plant species (CITES), by coordinating with the relevant institutions and organizations.

Annex I: Among the plant and animal species listed in CITES Convention, species that are highly endangered.

Annex II: Species that are not at risk of extinction at the moment but may disappear if trade is not taken under control

Annex III: Species that are already listed at the request of the member state controlling its trade

According to the 2019-2020 Hunting Period Central Hunting Commission Decision of the Central Hunting Commission of the Ministry of Agriculture and Forestry, which was published in the Official Gazette dated 21/06/2019 and numbered 30808.

Annex I: The species in the list are under protection by the Central Hunting Commission, among the hunting animals determined by the Ministry of Agriculture and Forestry.

Annex II: The species in the list are the hunting animals which are allowed by the Central Hunting Commission to be hunted for a specified time.

Vertebrate fauna is basically studied under four classes. These classes are.

- Amphibia- Amphibians,
- Reptilia- Reptiles,
- Aves- Birds,

- Mammalia-Mammals

Amphibians (Amphibia)

Amphibians are in the Caudata and Anura teams. There are salamanders and frogs in the amphibians.

As a result of the data obtained by gathering the literature information, it was determined that there are three amphibian species belonging to two families in the Project Site and its impact area (see Table-2.2). According to the Bern Convention, one species showing distribution in the area is in Annex-III list and two species are in Annex-II list. According to the IUCN Red List, all three species identified in the area are in the LC category. In addition to these protection lists that are being used on an international scale, the amphibian species are not included in the protection lists prepared by CHC, which we use on a national scale, and updated every year. No endemic species was found in the amphibians detected in the project area and impact area.

Table-2.2: Amphibian Species Identified in the Project Area and the Impact Area

Family Name	Scientific Name	Turkish Name	Endemism	IUCN	BERN	CITES
Bufonidae	<i>Bufo bufo</i>	Kara Kurbağası	-	LC	Annex-III	-
	<i>Bufo viridis</i>	Gece Kurbağası	-	LC	Annex -II	-
Pelobatidae	<i>Pelobates syriacus</i>	Toprak Kurbağası	-	LC	Annex -II	-

Reptiles (Reptilia)

There are turtles, lizards and snakes in the reptile's class. Reptile species are species belonging to the 2 teams of the Reptilia class which are Testudines and Squamata.

As a result of the literature studies, it was detected that the reptile species belonging to four families may show distribution in the Project Area and its impact area (see Table-2.3). According to Bern Convention, one specie is in Annex II list, and the rest three are in the Annex III list. According to the IUCN Red List, one specie is in VU category while one specie in the LC category. There are no endemic species among the reptiles identified in the project area and impact area. According to CITES Lists, one specie is included in Annex-II list. In addition to these protection lists that are being used on an international scale, the reptile species are not included in the protection lists prepared by CHC, which we use on a national scale, and updated every year. No endemic species was found in the amphibians detected in the project area and impact area.

Table-2.3: Reptile Species Identified in the Project Area and the Impact Area

Family Name	Scientific Name	Turkish Name	Endemism	IUCN	BERN	CITES
Scincidae	<i>Mabuya aurata</i>	Tıknaz Kertenkele	-	DD	Annex-III	-
Colubridae	<i>Coluber ravergeri nummifer</i>	Sikkeli Yılan	-	DD	Annex -III	-
Typhlopidae	<i>Xerotyphlops vermicularis</i>	Kör Yılan	-	LC	Annex -III	-
Testudinidae	<i>Testudo graeca</i>	Tosbağa	-	VU	Annex -II	Annex -II

Birds (Aves)

In addition to the literature studies, a comprehensive field study was carried out by the Ornithologist Prof. Dr. Salih Levent Turan who is one of the academicians of Hacettepe University for the birds in the fall period of 2019 in the Project Site and its immediate surroundings. As a result of these studies, it was determined that 59 bird species spread in the area.

Detailed information on bird species spreading in the area, the IUCN red list of these bird species and information on CITES and Bern Conventions from international Conventions, their status in CHC decisions, for what purposes they used the area, migration mobility, which target species used the site, reproductive status and risk assessments are given in the Ornithological Evaluation Report. The most recent ornithological report will be assessed, and information will be shared in "Biodiversity Management Plan".

Mammals (Mammalia)

In Turkey, there are approximately 161 mammal species which belong to the mammal teams Carnivora, Artiodactyla and Cetace after Eulypotyphla, Chiroptera, Lagomorpha and Rodentia. Turkey has a different mammalian fauna as different geographic regions.

Six mammal species belonging to five families in the Project Site and in the impact area which are likely to be found due to their habitat feature were identified (see Table-2.4). Two of the six mammal species identified in the area are in Bern Annex-III and two are in Bern Annex-II list. There are no mammal species on the CITES lists. According to CHC, there are two species in Annex-III, two species in Annex-I and one species in Annex-II list. Among the mammalian species, five species detected in the field are in LC category and one species is in the VU category according to IUCN. There are no endemic species among mammals identified in the project area and impact area.

2.5.2. General Evaluation for Flora and Fauna Species Detected in the Project Area

As a result of the literature studies, a total of 14 flora species and 72 fauna species which are 3 amphibians, 4 reptiles, 6 mammals and 59 bird species have been identified in the area.

Among the flora species identified, there is no endemic, rare and endangered species. Therefore, plant species that spread in the area are not under any threat. These species are cosmopolitan species that are likely to be encountered in and around the Project Site and are widespread.

Table-2.4: Mammal Species Identified in the Project Area and the Impact Area

Family Name	Scientific Name	Turkish Name	Endemism	IUCN	BERN	CITES	CHC
Canidae	<i>Canis lupus</i>	Kurt	-	LC	Annex-II	-	Annex -I
Canidae	<i>Vulpes vulpes</i>	Kızıl Tilki	-	LC	-	-	Annex -III
Leporidae	<i>Lepus europaeus</i>	Yabani Tavşan	-	LC	Annex -III	-	Annex -III
Mustelidae	<i>Mustela nivalis</i>	Gelincik	-	LC	Annex -III	-	Annex -II
Cricetidae	<i>Cricetulus migratorius</i>	Cüce avurtlak	-	LC	-	-	-
Sciuridae	<i>Citellus xanthophrymnus</i>	Tarla Sincabı	-	VU	Annex -II	-	Annex -I

Therefore, it is considered that there is no such thing as the plant species in the area are damaged by the activity and their generations are compromised.

Among the detected fauna species, there is no endemic, rare and endangered species. In addition to this, among the species spreading in the area there are no fauna species included in IUCN Red List and Bern Convention. As there is no commercial concern about the activity on the fauna species that are protected by the IUCN Red List and the BERN Convention among the fauna species that spread at the Project Site due to the planned activity in the area, there will be no adverse effects such as hunting, deliberate killing or detention, damage to their eggs.

Besides, since the fauna species that spread in the area do not show special habitat needs and have a wide distribution area throughout our country, there is no such situation that their species are endangered due to the activity to be carried out in the area. In addition, fauna species will be abandoned to the appropriate alternative habitats in the environment by leaving their habitats due to the noise and mobility that will arise due to the activity to be carried out in the Project Site and its immediate surroundings.

As a result of the ornithological assessment studies conducted in the Project Site and its immediate surroundings by Ornithologist Prof. Dr. Salih Levent Turan, no habitat that could be important for the birds was detected. In addition, in the area there is no wetland mentioned in the scope of "Regulation on Protection of Wetlands" which was published in the Official Gazette dated 04.04.2014 and numbered 28962.

As a result of the bird migration routes assessment made by Prof. Dr. Salih Levent Turan regarding the area where Çaypınar-WPP Project is located, it has been determined that the area is not remain directly on the bird migration routes (see Figure-2.5). Therefore, activities to be carried out in the area are not expected to have a negative impact on birds.

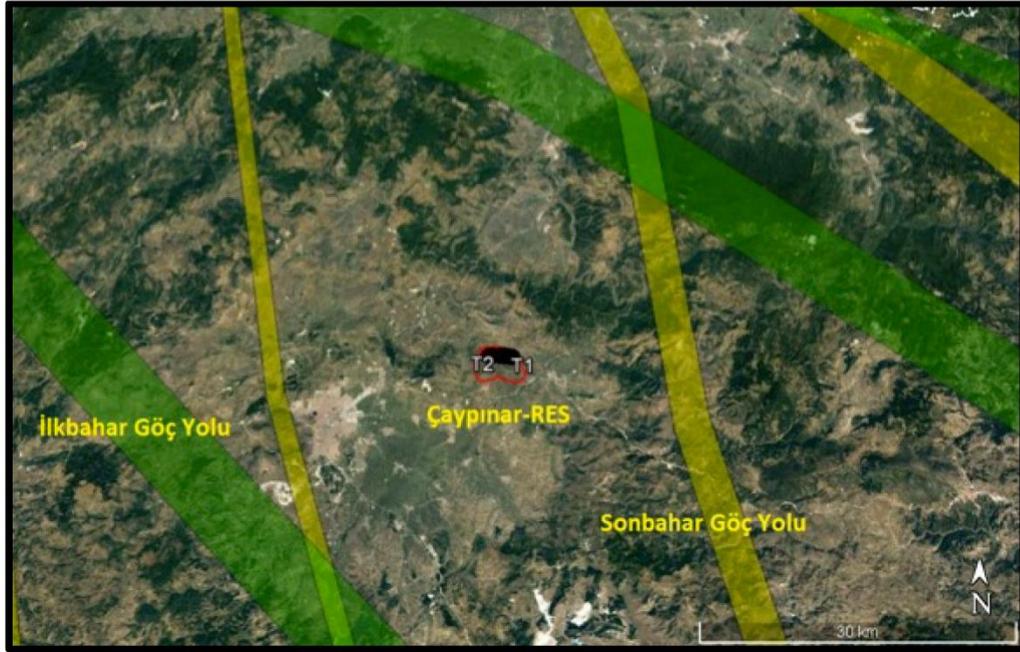


Figure-2.4: Bird Mitigation Routes Passing Through the Çaypınar WPP Project Site and the Impact Area
(Yellow lines: fall period, green lines; spring period)

Besides, in the remark given by the General Directorate of Nature Conservation and National Parks with the letter dated 02.05.2019 and numbered E.1379729 regarding the ornithological evaluation studies carried out in the area; it was stated that the project settlement was located approximately 20 km (west) and 17 km (east) from the nearest bird routes and did not remain directly on migration routes that constitute critical bottlenecks.

Both the operation and construction phases, the National Parks Law Numbered 2873, the Land Hunting Law Numbered 4915 and Regulations, and the provisions of the Bern and CITES Conventions to which we are parties will be complied with. In addition, since the Çaypınar-WPP Project Site is not within the boundaries of any area that needs to be protected, it is not expected that there will be any negative impacts arising from the implementation of the Project on the protected areas.

Within the scope of the project, investments will be made with an environmentally conscious approach, and the measures to be taken during construction and operation phases will be followed and cooperation will be established with relevant institutions. At all stages of the mentioned activity, the Environment Law Numbered 2872 and the Regulations issued accordingly should be followed.

2.6. Socio-economic Structure

Settlements located in the immediate surrounding of the Project Area and distance between Çaypınar Hybrid SPP Project Area and these settlements are as follows: Servet Neighbourhood (500 m); Saraçköy Neighbourhood (790 m); İhsaniye Neighbourhood (900 m); Eşeler Neighbourhood (1300 m); Akarsu Neighbourhood (2500 m); Recepköy

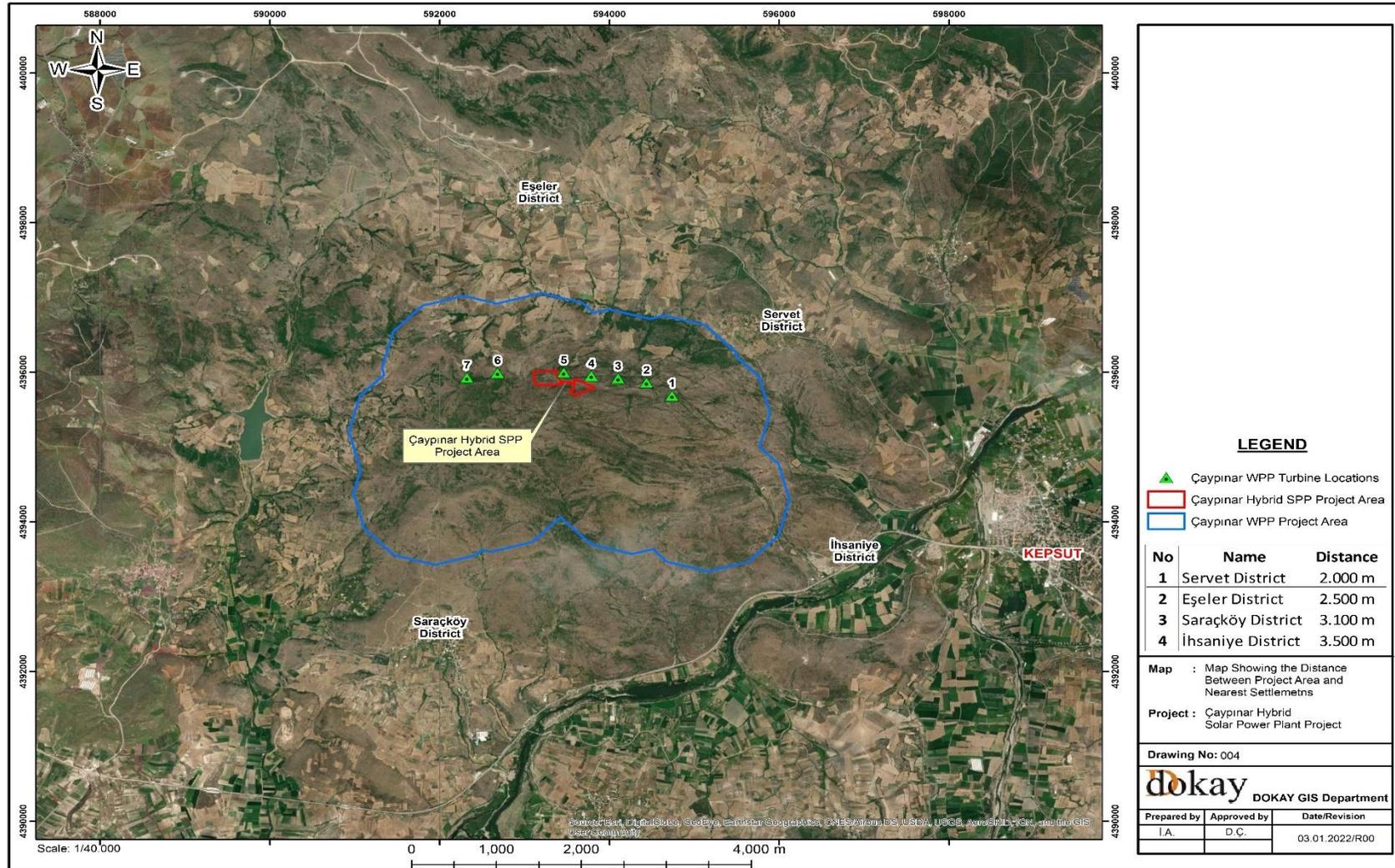


Figure-2.5: Project Area and Nearest Settlements

Neighbourhood (2750 m); and Karakaya Neighbourhood (4350 m). Nearest settlements are presented in Figure-2.5.

The population of Balıkesir Province is 1,240,285 according to Address-Based Population Census of Turkish Statistical Institute for the year 2020. Additionally, population of Kepsut District where Project Area is located is 23.017 in 2020¹.

Balıkesir is becoming the new address of investments with its proximity to developed provinces such as İstanbul, İzmir and Bursa, its developing transportation infrastructure, multi alternative logistics opportunities and young population. Presence of lands suitable for investments, regional incentives and supports which create significant advantages to enterprises, low cost of lands and inter-agency coordination makes Balıkesir even more attractive for investments.

Balıkesir hosts over 1,200 enterprises operating a wide variety of industry branches. Main manufacture branches are food products, feed manufacture, mining, forestry products and trees, chemicals and plastic, metal products, machinery and equipment, electrical, electronic motor vehicle parts manufacture.

Balıkesir has businesses that produce turbines, generators, and blades used in renewable energy production. Additionally, these businesses benefit from incentives for their investments in the province (South Marmara Development Agency).

Total of 1,445,000 hectares lands in Balıkesir are broken down into 625,000 hectares of forestry, 413,000 hectares of farmlands, 325,000 non-farmlands and 82,000 hectares of meadows.

Balıkesir is an agricultural province with its geographical structure and climate conditions. With its fertile agricultural lands, Balıkesir has the strategic location for easily marketing agricultural products. Inspection of the distribution of investments reveals that the dominant sector is agriculture and husbandry with a share of 64%. Total fruit production of Balıkesir amounts to 230,000 tons. The largest share of this production belongs to olives and other nuts with 160,000 tons. Fruits widely grown in the province are grapes, peaches, tangerines, and cherries. Vegetable production amounted to 830,000 tons with tomatoes taking the lead with 420,000 tons.

Balıkesir has 3.4% of bovine breeding in Turkey. The province has approximately 500,000 bovines and majority of these are beef cattle. Balıkesir also boasts ovine breeding activities. In terms of the number of ovine animals, province has 2.2% of all sheep and goats in Turkey. Balıkesir has 177,000 sheep (merino), 604,000 sheep (domestic), 196,000 goats (hair)

Animal husbandry is one of the important sources of income in Kepsut District where Project Area is located.

¹ **Source:** Address Based Population Census, TUIK, 2019 <https://biruni.tuik.gov.tr/medas/?kn=95&locale=tr>

3. NATIONAL AND INTERNATIONAL REGULATIONS AND LEGISLATIVE FRAMEWORK

National legislation, international standards and international agreements were taken into consideration while determining management techniques and mitigation measures regarding environmental and social impacts that may occur during the activities to be carried out in construction and operation phase of the Project.

Ayen Ostim Enerji is obliged to comply with the national legislation, international standards, implementation fundamentals and all legal necessities. Therefore, all activities to be performed during Project's construction and operation phase and implementation of ESMP will be conducted in accordance with the legislation in force and international standards mentioned in the following subtitles.

3.1. National Legislation

In order to ensure environmental protection in accordance with the principles of sustainable environment and sustainable development, Environment Law (Law No. 2872), which came into force with the Official Gazette dated 11.08.1983 and numbered 18132, provides a general framework for the environmental protection and improvement, and environmental pollution prevention. Several amendments have been made in the Environmental Law as of acceptance date and the latest legislation that brought bylaw and provisional article to the Environmental Law entered into force on 22 February 2019 with the Official Gazette numbered 30694.

Fundamental arrangements have been made for the national environmental regulations in the scope of Environmental Law in order to ensure consistency in between the requirements of national environmental legislation in force and European Union ("EU") environmental acquis.

In addition to the Environmental Law and related regulations, there are also complementary laws and regulations in force including the issues such as environmental protection, occupational health and safety, cultural heritage, biodiversity and community health and safety. The laws and the regulations enacted under the relevant laws to be considered within the scope of the Çaypınar Hybrid SPP Project are listed below:

Laws:

- Environmental Law (Law No: 2872)
- Labor Law (Law No: 4857)
- Law on Utilization of Renewable Energy Resources for Electricity Generation (Law No: 5346)
- Occupational Health and Safety Law (Law No: 6331)
- Law on Conservation of Cultural and Natural Assets (Law No: 2863)
- Electricity Market Law (Law No: 6446)
- Forestry Law (Law No: 6831)
- Pasture Law (Law No: 4342)

- Law on Soil Protection and Land Use (Law No: 5403)

Regulations:

- Environmental Impact Assessment Regulation (25.11.2014 dated and 29186 numbered Official Gazette; Last Amendment: 28.11.2019 dated and 30962 numbered Official Gazette)
- Environmental Permitting and Licence Regulation (10.09.2014 dated and 29115 numbered Official Gazette; Last Amendment: 08.07.2019 dated and 30825 numbered Official Gazette)
- Regulation on Waste Management (02.04.2015 dated and 29314 numbered Official Gazette; Last Amendment: 23.03.2017 dated and 30016 numbered Official Gazette)
- Regulation on Zero-Waste Management (12.07.2019 dated and 30829 numbered Official Gazette)
- Regulation on Control of Excavation, Construction and Demolition Waste (18.03.2004 dated and 25406 numbered Official Gazette)
- Regulation on Control of Oil Wastes (21.12.2019 dated 30985 numbered Official Gazette)
- Regulation on Control of Packaging Waste (27.12.2017 dated and 30283 numbered Official Gazette; Last Amendment: 13.03.2020 dated and 31067 numbered Official Gazette)
- Regulation on Control of Waste Batteries and Accumulators (31.08.2004 dated and 25569 numbered Official Gazette; Last Amendment: 23.12.2014 dated and 29214 numbered Official Gazette)
- Regulation on Control of Waste Tires (25.11.2006 dated and 26357 numbered Official Gazette; Last Amendment: 11.03.2015 dated and 29292 numbered Official Gazette)
- Regulation on Control of Medical Waste (25.01.2017 dated and 29959 numbered Official Gazette)
- Water Pollution Control Regulation (31.12.2004 dated and 25687 numbered Official Gazette; Last Amendment: 14.02.2018 dated and 30332 numbered Official Gazette)
- Regulation on Pit Opening Where Sewer System Construction is not Applicable (19.03.1971 dated and 13783 numbered Official Gazette)
- Regulation on Control of Industrial Air Pollution (03.07.2009 dated and 27277 numbered Official Gazette; Last Amendment: 20.12.2014 dated and 29211 numbered Official Gazette)
- Regulation on Assessment and Management of Air Quality (06.06.2008 dated and 26898 numbered Official Gazette)

- Regulation on Soil Pollution Control and Contaminated Sites by Point Source (08.06.2010 dated and 27605 numbered Official Gazette; Last Amendment: 11.07.2013 dated and 28704 numbered Official Gazette)
- Regulation on Assessment and Management of Environmental Noise (04.06.2010 dated and 27601 numbered Official Gazette; Last Amendment: 18.11.2015 dated and 29536 numbered Official Gazette)
- Pasture Regulation (31.07.1998 dated and 23419 numbered Official Gazette; Last Amendment: 29.11.2013 dated and 28836 numbered Official Gazette)
- Regulation on Highway Traffic (18.07.1997 dated and 23053 numbered Official Gazette; last Amendment: 03.08.2019 dated and 30851 numbered Official Gazette)
- Regulation on Occupational Health and Safety (09.12.2003 dated and 25311 numbered Official Gazette)
- Regulation on Emergency Situations in Workplaces (18.06.2013 dated and 28681 numbered Official Gazette)
- Regulation on Occupational Health and Safety at Construction Works (05.10.2013 dated and 28786 numbered Official Gazette; Last Amendment: 31.12.2018 dated and 30642 numbered Official Gazette)
- Regulation on Health and Safety Signs (11.09.2013 dated and 28762 numbered Official Gazette)
- Regulation on Personal Protection Equipment (01.05.2019 dated and 30761 numbered Official Gazette)
- Regulation on Protection of Workers from Risks Related to Noise (28.07.2013 dated and 28721 numbered Official Gazette)
- Regulation on Occupational Health and Safety Risk Assessment (29.12.2012 dated and 28512 numbered Official Gazette)
- Regulation on Subcontractors (27.09.2008 dated and 27010 numbered Official Gazette; Last Amendment: 25.08.2017 dated and 30165 numbered Official Gazette)

3.2. International Standards and Guidelines

IFC PSs were taken into consideration while preparing an effective ESMP that is commensurate with the Project scope and Project's environmental and social risks and impacts. In this regard, IFC PSs which are applicable to the Çaypınar Hybrid SPP Project are listed and summarized as follow:

PS 1: Assessment and Management of Environmental and Social Risks and Impacts

PS 1 underscores the importance of managing environmental and social performance throughout the life of a project. In addition, this standard supports the use of an effective

grievance mechanism that can facilitate early indication of, and prompt remediation for those who believe that they have been harmed by a client's actions.

Objectives of the PS 1 are: (i) to identify and evaluate environmental and social risks and impacts of the project; (ii) to adopt a mitigation hierarchy to anticipate and avoid, or where avoidance is not possible, minimize, and, where residual impacts remain, compensate/offset for risks and impacts to workers, Affected Communities, and the environment; (iii) to promote improved environmental and social performance of clients through the effective use of management systems; (iv) to ensure that grievances from Affected Communities and external communications from other stakeholders are responded to and managed appropriately; (v) to promote and provide means for adequate engagement with Affected Communities throughout the project cycle on issues that could potentially affect them and to ensure that relevant environmental and social information is disclosed and disseminated.

PS 2: Labor and Working Conditions

PS 2 recognizes that the pursuit of economic growth through employment creation and income generation should be accompanied by protection of the fundamental rights of workers.

Objectives of the PS 2 are: (i) to promote the fair treatment, non-discrimination, and equal opportunity of workers; (ii) to establish, maintain, and improve the worker-management relationship; (iii) to promote compliance with national employment and labor laws; (iv) to protect workers, including vulnerable categories of workers such as children, migrant workers, workers engaged by third parties, and workers in the client's supply chain; (v) to promote safe and healthy working conditions, and the health of workers; (vi) to avoid the use of forced labor.

PS 3: Resource Efficiency and Pollution Prevention

PS 3 recognizes that increased economic activity and urbanization often generate increased levels of pollution to air, water, and land, and consume finite resources in a manner that may threaten people and the environment at the local, regional, and global levels. This standard outlines a project-level approach to resource efficiency and pollution prevention and control in line with internationally disseminated technologies and practices. In addition, this standard promotes the ability of private sector companies to adopt such technologies and practices as far as their use is feasible in the context of a project that relies on commercially available skills and resources.

Objectives of the PS 3 are: (i) to avoid or minimize adverse impacts on human health and the environment by avoiding or minimizing pollution from project activities; (ii) to promote more sustainable use of resources, including energy and water; (iii) to reduce project-related greenhouse gas ("GHG") emissions.

PS 4: Community Health, Safety and Security

PS 4 recognizes that project activities, equipment, and infrastructure can increase community exposure to risks and impacts. While acknowledging the public authorities' role in promoting

the health, safety, and security of the public, this standard addresses the client's responsibility to avoid or minimize the risks and impacts to community health, safety, and security that may arise from project related activities, with particular attention to vulnerable groups.

Objectives of the PS 4 are: (i) to anticipate and avoid adverse impacts on the health and safety of the Affected Community during the project life from both routine and non-routine circumstances; (ii) to ensure that the safeguarding of personnel and property is carried out in accordance with relevant human rights principles and in a manner that avoids or minimizes risks to the Affected Communities.

PS 5: Land Acquisition and Involuntary Resettlement

PS 5 recognizes that project-related land acquisition and restrictions on land use can have adverse impacts on communities and persons that use this land. To help avoid expropriation and eliminate the need to use governmental authority to enforce relocation, clients are encouraged to use negotiated settlements meeting the requirements of this standard, even if they have the legal means to acquire land without the seller's consent.

Objectives of the PS 5 are: (i) to avoid, and when avoidance is not possible, minimize displacement by exploring alternative project designs; (ii) to avoid forced eviction; (iii) To anticipate and avoid, or where avoidance is not possible, minimize adverse social and economic impacts from the land acquisition or restrictions on land use by providing compensation for loss of assets at replacement cost and ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected; (iv) to improve, or restore, the livelihoods and standards of living of displaced persons; (v) to improve living conditions among physically displaced persons through the provision of adequate housing with security of tenure at resettlement sites.

PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources

PS 6 recognizes that protecting and conserving biodiversity, maintaining ecosystem services, and sustainably managing living natural resources are fundamental to sustainable development.

Objectives of the PS 6 are: (i) to protect and conserve biodiversity; (ii) to maintain the benefits from ecosystem services; (iii) to promote the sustainable management of living natural resources through the adoption of practices that integrate conservation needs and development priorities.

PS 8: Cultural Heritage

PS 8 recognizes the importance of cultural heritage for current and future generations. Consistent with the Convention Concerning the Protection of the World Cultural and Natural Heritage, this standard aims to ensure that clients protect cultural heritage in the course of their project activities.

Objectives of the PS 8 are: (i) to protect cultural heritage from the adverse impacts of project activities and support its preservation; (ii) to promote the equitable sharing of benefits from the use of cultural heritage.

IFC has in place a comprehensive set of Environmental Health and Safety (“EHS”) Guidelines, aimed to provide a technical information source for projects during appraisal activities. In addition to the General EHS Guidelines, relevant sectoral guidelines should also be consulted for the projects. In this context, the World Bank Group guidelines applicable to the Çaypınar Hybrid SPP Project are listed as follows:

- General EHS Guidelines, (2007).
- Good Practice Note: Managing Contractors' Environmental and Social Performance, (2017).
- Environmental, Health and Safety Guidelines for Electric Power Transmission and Distribution, (2007).

3.3. International Agreements

Turkey has become party to a number of conventions and protocols to contribute to the management of environmental resources, biodiversity and cultural heritage at global and regional scales. In addition to these, Turkey became a member of the International Labour Organization (“ILO”), a specialized United Nations (“UN”) agency, in 1932. There are 59 ILO conventions ratified by Turkey.

International conventions and protocols on environment, biodiversity and cultural heritage as well as labor subjects that are directly related to the Çaypınar Hybrid SPP Project are presented in Table-3.1.

Table-3.1: International Conventions and Protocols

No	International Conventions / Protocols	Enforcement Date	Date of Ratification by Turkey
1	Bern Convention on the Conservation of European Wildlife and Natural Habitats	01.06.1982	02.05.1984
2	Convention on Biological Diversity	29.12.1993	21.11.1996
3	Convention Concerning the Protection of the World Cultural and Natural Heritage	17.12.1975	14.02.1983
4	ILO Safety and Health in Construction Convention	11.01.1991	23.03.2015
5	ILO Occupational Safety and Health Convention	11.08.1983	22.04.2005
6	ILO Forced Labor Convention	01.05.1932	30.10.1998
7	ILO Minimum Age Convention	19.06.1976	30.10.1998
8	ILO Employment Policy Convention	15.07.1966	13.12.1977
9	ILO Social Security Convention	17.04.1955	29.01.1975
10	ILO Equal Remuneration Convention	23.05.1953	19.07.1967
11	ILO Abolition of Forced Labor Convention	17.01.1959	29.03.1961

4. ROLES AND RESPONSIBILITIES

Ayen Ostim is obliged to take the necessary precautions specified in the ESMP, to monitor and inspect the implementations within the Project Area as well as to perform regulative activities in case any grievance is received from stakeholders. In addition, Ayen Ostim is responsible for interviews and organizations to be held with other parties (i.e., subcontractors, state institutions, and organizations) that will be involved in the Project's construction and operation phases. Responsible parties for the issues such as environment, social and occupational health, and safety should be identified for the Project, and consulting services should be received on these subjects when necessary. In addition, ESMP requirements should be included in the tender documents and/or contracts to ensure the subcontractor's activities are in line with the national legislation and provisions stated in the ESMP. Responsible parties and responsibilities for the implementation of ESMP are outlined below:

Project Manager will be responsible for:

- Providing necessary resources and technical support for the implementation of ESMP.
- Monitoring the implementation, revision and update processes of ESMP and ensuring implementation of corrective and preventive actions
- Implementation of workforce management practices in accordance with national legislation and international standards.
- Management of stakeholder engagement processes.
- Implementation of the necessary regulative activities regarding received grievances.

OHS Specialist and/or Environmental Engineer:

- Ensuring that all protective measures to minimize the environmental and social risk and impacts identified in the ESMP are conducted in the field effectively and safely.
- Inspection of the environmental and OHS issues at certain intervals while implementation, review, updating and monitoring of ESMP.
- Ensuring that all activities within the scope of the Project are performed in accordance with national legislation and international standards as specified in the ESMP.
- The control of whether requirements stated in the permits granted by state institutions and organization are fulfilled or not.
- Preparing regular reports on environmental and OHS issues to the Project Manager.
- Providing trainings on environmental and OHS issues to the fieldworkers and subcontractors.

Subcontractor:

- Providing necessary resources to their employees for the implementation of ESMP.
- Providing inspection data and reports to the Ayen Ostim and carrying out compliant with the ESMP as stated in the subcontractor contracts.

- In order to perform mitigation measures and management practices identified within the ESMP effectively, Ayen Ostim should make institutional arrangements regarding the issues listed below throughout Project's construction and operation phases:
- Implementation of ESMP prepared for Çaypınar Hybrid SPP Project.
- Monitoring and auditing of the Project Site regarding environmental, social and OHS issues at regular intervals and reporting the findings acquired.
- Organizing trainings for employees and subcontractors on environmental, social and OHS issues.
- Ensuring coordination in between Ayen Ostim and Development Investment Bank of Turkey, state institutions and organizations and communication with stakeholders.

In order to monitor efficiency and performance of the ESMP, field inspections should be carried out. In addition, grievance records received from employees and/or stakeholders should be examined, and these grievances should be redressed through corrective actions. The aim and scope of the monitoring studies to be performed at certain intervals can be summarized as below:

- To control and ensure the conformity of activities conducted during Project construction and operation phase with the ESMP.
- To ensure compliance with national legislation, international standards and Project standards, continuously.

ESMP will be reviewed and updated in case of a possible change in the national legislation and international standards and detection of nonconformity in the environmental, social and OHS issues. OHS Specialist and environmental engineer will be responsible for the improvement, review and updating of the ESMP factors.

In case of any non-compliance with the Project standards, or any measurement detected above the limits stipulated by the relevant legislation or standard during the monitoring of environmental, OHS, and community health and safety performance indicators; such non-compliance should be recorded.

In the scope of ESMP, awareness raising training should be provided for fieldworkers and subcontractors. Period of these training are planned as follows: semi-annually during the Project construction phase and annually during Project operation phase. Training will be arranged by including the following issues:

- Air Quality.
- Environmental Noise.
- Wastewater and Waste Management.
- Biodiversity.
- Occupational Health and Safety.
- Emergency Response.
- Community Health and Safety.
- Traffic Management.
- Stakeholder Engagement and Grievance Redress Mechanism.

5. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN AND MITIGATION MEASURES

In this section, detailed assessments were carried out about environmental and social impacts likely to occur in the Project construction and operation phase, and precaution that should be taken to prevent and/or mitigate these impacts. Environmental and Social Management Plan of the Project construction and operation activities are summarized at the end of the section in Table-5.5 and Table-5.6.

5.1. Construction Phase

5.1.1. Air Quality

Main emission sources during construction phase consist of land preparation works, arrangement of site access roads, excavation, solar panels and the other equipment installations. In addition, exhaust emissions such as PM₁₀, NO_x, CO, SO₂ and TOC will be emitted due to use of construction machinery and equipment.

In the scope of national legislation, provision and limit values stipulated by Regulation on Control of Industrial Air Pollution ("RCIAP") (03.07.2009 dated and 27277 numbered Official Gazette; Last Amendment: 20.12.2014 dated and 29211 numbered Official Gazette) and Regulation on Assessment and Management of Air Quality ("RAMAQ") (06.06.2008 dated and 26898 numbered Official Gazette) should be followed. Related parameters and limit values are presented in Table-5.1.

Table-5.1: Limit Values of RAMAQ and RCIAP

Parameter	RAMAQ		RCIAP	
	Duration	Limit Value	Duration	Limit Value
SO ₂	Hourly (To protect human health)	350 µg/m ³ (cannot be exceeded more than 24 times a year)	Hourly (cannot be exceeded more than 24 times a year)	350 µg/m ³
	24 hours (To protect human health)	125 µg/m ³ (Cannot be exceeded more than three times a year)	24 hours	125 µg/m ³
	Annual and winter season (October 1 – March 31) (To protect ecosystem)	20 µg/m ³	UVS	60 µg/m ³
Annual and winter season (October 1 – March 31)			20 µg/m ³	
CO	8-hour daily maximum (to protect human health)	10 mg/m ³	8-hour daily maximum	10 mg/m ³
NO ₂	Hourly (To protect human health)	200 µg/m ³ (Cannot be exceeded more than 18 times a year)	Hourly (Cannot be exceeded more than 18 times a year)	250 µg/m ³
	Annual (To protect human health)	40 µg/m ³	Annual	40 µg/m ³

Parameter	RAMAQ		RCIAP	
	Duration	Limit Value	Duration	Limit Value
TOC	-	-	Hourly	280 µg/m ³
	-	-	STS	70 µg/m ³
Settled Dust	-	-	LTS	390 mg/m ² -day
	-	-	LTS	210 mg/m ² -day
PM ₁₀	24 hours (cannot be exceeded more than 35 times a year)	50 µg/m ³	24 hours (cannot be exceeded more than 35 times a year)	50 µg/m ³
	Annual	40 µg/m ³	Annual	40 µg/m ³

IFC General EHS Guideline for Air Emissions and Air Quality refers to the limit values recommended by the World Health Organization (“WHO”) Ambient Air Quality Guidelines. These limit values are provided in Table-5.2.

Table-5.2: WHO Ambient Air Quality Guidelines

Parameter	Averaging Period	Guideline Value (µg/m ³)
SO ₂	24 hours	20
	10 minutes	500
NO ₂	Hourly	200
	Annual	40
PM ₁₀	Annual	20
	Hourly	50
PM _{2,5}	Annual	10
	Hourly	25

In order to minimize the possible impacts of dust and exhaust gas emissions to be generated in the Project construction phase on sensitive receptors located in the vicinity of Project Area, settlements located in the immediate surrounding of access roads and flora-fauna species; the following mitigation measures should be ensured:

- In order to prevent dust emissions, dust suppression methods such as watering should be applied during excavation and filling works.
- Loading and unloading of material should be carried out without scattering.
- Access roads and internal roads should be stabilized.
- Speed limitations should be applied within the Project Site and on the unstabilized roads. The currently applied speed limitation on the access roads is presented in Photo-1 in Annex-8.
- In order to prevent wind-borne, excavation and backfill materials should be kept moist and compressed in the designated storage area.
- Adequate number of vehicles should be used, and regular maintenance of these vehicles should be ensured.
- Construction vehicles/equipment should not be run unnecessarily.
- In the scope of air quality monitoring works, PM₁₀ measurements should be conducted in the Project construction phase.
- Project-specific Grievance Redress Mechanism should be prepared and implemented to receive any air quality-related grievance from stakeholders, where necessary. All received grievances should be recorded and responded.
- In case of nonconformity is detected during inspections performed by OHS Specialist and/or environmental engineer, required corrective actions should be applied.

The impact on air quality will be short term and reversible for the construction phase.

During the construction phase of the Project, the emission calculations should be done during the stripping of the vegetative soil with an average thickness of 10 cm in the area, loading on trucks, transportation, and unloading of the materials.

Air quality monitoring should be conducted at the Project Site and nearest settlements, during the construction works are proceeding at full capacity. Measurement results will be compared with limit values presented in Table-5.1 and Table-5.2.

The Project construction activities will not cause any impact on air quality as long as mitigation measures are implemented.

5.1.2. Environmental Noise

Construction machines and equipment to be used during land preparation, transportation and installation of the solar panels and other materials will cause environmental noise in the Project construction phase.

In the management of environmental noise to be generated in the Project construction phase, limit values and mitigation measures stipulated by Regulation on the Assessment and Management of Environmental Noise (“RAMEN”) (04.06.2010 dated and 27601 numbered Official Gazette; Last Amendment: 18.11.2015 dated and 29536 numbered Official Gazette) and IFC General EHS Guideline Environmental Noise Management will be considered.

Environmental noise limit values for construction sites stated in the RAMEN Annex-VIII Table-5 are presented in Table-5.3 whereas environmental noise limit values stated in the IFC General EHS Guideline Environmental Noise Management are provided in Table-5.4.

Table-5.3: Noise Limit Values Stated in RAMEN

Parameter	L _{day-time} (07:00-19:00)	L _{evening-time} (19:00-23:00)	L _{night-time} (23:00-07:00)
Noise Limit Value for Construction Site (dBA)	70	-	-

Table-5.4: Noise Limit Values Stated in IFC General EHS Guideline Environmental Noise Management

Parameter	L _{day-time} (07:00-22:00)	L _{night-time} (22:00-07:00)
Noise Limit Value for Settlements (dBA)	55	45

In the Project construction phase, following mitigation measures should be taken to control environmental noise:

- Construction activities to be carried out in the region closes to the sensitive receptors should be performed at the daytime (07:00-19:00). In addition, construction works to cause high environmental noise should be conducted during the daytime.
- Equipment/machinery should regularly be maintained to ensure whether it is in good condition or not.
- Noise measurements should be carried out at Project Area and closest settlements such as Saraçköy, İhsaniye, Servet and Eşeler Neighbourhoods. Monitoring periods are presented in Table-6.1.
- Equipment that generates lower sound should tried to be selected.
- Speed limits should be complied during transportation of construction materials/equipment.
- While construction vehicles and equipment wait on site, engines should be turned off.
- In case of nonconformity is detected during inspections performed by OHS Specialist and/or environmental engineer, required corrective actions that are mentioned in this section, should be applied.
- Grievance redress mechanism will be prepared and implemented to receive the related grievances and/or comments and stakeholders will be informed about Grievance Redress Mechanism.
- All received grievances should be recorded and responded.
- As a result of monitoring and based on grievances, construction activities may need to be rescheduled to ensure compliance with set limits for daytime and nigh-time work.
- Personal protective equipment should be provided to the employees in order to prevent them from negative impacts of noise during the construction period.

Considering the distance between Project Area and nearest settlements, it is anticipated that the regulatory limits will be complied with at the closest receptors. To verify compliance with Project standards, noise monitoring will be conducted once at the peak period of construction works and also in case of receipt of noise-related grievances.

The detailed information regarding the noise management during the construction and operation phases of the Project will be given in “Environmental Noise Management Report”.

5.1.3. Waste Management

Waste to be generated during the construction phase of the Project include municipal (domestic) solid waste, non-hazardous waste, and hazardous waste.

Implementations regarding waste management will be monitored at certain intervals by OHS Specialist and Environmental Expert. It is essential that wastes are managed in ways that wastes will not damage to the environment and public health and will not cause visual impacts. Waste should not be disposed at the Project Area.

5.1.3.1. Waste Types and Management Practices

Waste types during the construction phase and the practices to be followed for the waste management are presented as follows:

Domestic Solid Wastes:

There will be 20 personnel working at the Project Site in the scope of construction works. Considering average daily municipal solid waste generation rate is 1.16 kg/capita² for Balıkesir Province, it is expected that about 23,2 kg (33 capita x 1.16 kg/capita-day) domestic solid waste will be generated on a daily basis.

Domestic solid wastes to be generated during Project construction phase will be collected in closed and leak-proof sanitary waste bins or containers. Domestic solid wastes will be stored temporarily within the Project Area as per Waste Management Regulation. Waste should be taken to the containers of the municipality or collected by the municipality from the construction area periodically.

Construction and Demolition Wastes:

The only land arrangement will be carried out within the scope of the construction operations of the Project. No excavation work will be carried out and no excavation waste will be generated.

Possible wastes that may occur during construction processes are iron, cement bags, concrete pieces, wire, steel, etc. These types of wastes should be stored separately and collected by licensed firms for recycling or reusing.

Regarding excavation and construction waste management, the provisions of Regulation on Control of Excavation, Construction and Demolition Waste (18.03.2004 dated and 25406 numbered Official Gazette) should be followed.

² Average municipal solid waste generation rate per person (kg/capita-day), TUIK, 2018

Packaging Wastes:

Within the scope of the activity, packaging wastes such as paper, glass, plastic, metal may occur, except for domestic solid wastes.

In the Project Information Report, it is assumed that the packaging waste portion in the total waste composition is 30% of the domestic solid wastes. Therefore, the expected amount of packaging waste during the construction phase is.

$$23,2 \text{ kg/day} \times 0.30 = 6,96 \text{ kg/day.}$$

In case of packaging waste generation, the provisions of Regulation on Control of Packaging Waste (27.12.2017 dated and 30283 numbered Official Gazette; Last Amendment: 13.03.2020 dated and 31067 numbered Official Gazette) should be complied with. Packaging wastes should be collected separately in accordance with their types and collected by licensed firms or municipality.

Hazardous and Other Special Wastes:

Food requirements of the employees will be met through catering firm. Therefore, waste vegetable oil will not be generated.

Subcontractors will be responsible for disposal of waste oils to be generated in case of maintenance, repair and oil change works for construction machinery and equipment are performed within the Project Site.

Hazardous wastes generated in the Project Site will be collected separately in undamaged, leak-proof, safe and proper containers and will be sent to the licenced firms to be recovered and/or disposed of.

5.1.3.2. Temporary Storage of Wastes

Wastes generated in the Project Site should be stored safely at the temporary storage area before transferred to the waste processing facilities. After wastes are collected separately according to waste types, they should be stored in temporary storage area by classifying according to their characteristics. In addition, labels indicating waste types, waste code, waste amount and waste storage date should be placed on temporary storage area. Wastes should be stored in a way that they do not react with each other.

As per Article 13 of Waste Management Regulation, hazardous wastes are stored in temporary storage area for six months at most whereas non-hazardous wastes for a maximum of one-year. In case of waste generation less than 1000 kg monthly, there is no need to obtain temporary storage permission for areas and/or container in which hazardous wastes should be stored temporarily. However, if monthly hazardous waste generation is reached more than 1000 kg, temporarily storage permission should be obtained from Balıkesir Provincial Directorate of Environment and Urbanization for the temporary storage areas and/or containers. Temporary storage permission should be renewed in case of any changes occurred in the storage area.

Temporary storage permission is not required for municipal solid waste storage equipment/containers, and for temporary storage area/containers of packaging and non-hazardous waste.

As per Article 16 of Waste management Regulation, Hazardous Materials and Hazardous Waste Compulsory Liability Insurance is required for the hazardous waste temporary storage areas/containers regardless of waste amount.

Temporary waste storage area should have the following properties:

- The top of the temporary storage area should be covered, and it should be established in a way that it will protect the wastes from all kinds of external factors such as animals and wind.
- Impermeable materials such as reinforced concrete should be used on the floors of temporary storage area.
- Absorbents should be present at temporary storage area for immediate response in case of spills and/or leakage.
- Sides of the temporary storage area should be surrounded with screens against leakages and/or spills. Liquids accumulated within the screens should be collected and recovered/disposed appropriately and should not be discharged into any receiving environment.
- Security measures against all kind of emergency such as fire should be taken in the temporary storage area.
- Temporary waste storage area should be kept locked to prevent unauthorized access.
- Appropriate classification should be made according to the hazard specifications of the wastes and wastes should be stored separately regarding waste codes.
- When container is used as a temporary storage area; the container should be placed on an impermeable ground, the sides of the container should be surrounded by a screen, and absorbent material should be present against leakage and spill.

Photos of the temporary waste storage containers are given in Annex-8 (Photo-2 and Photo-3). Detailed information regarding waste management of the Project during the construction and operation phases will be given in “Waste Management Plan” Report.

5.1.4. Wastewater

In the land preparation and construction phase of the Project, water will be used by employees as utility and potable water and also will be utilized to prevent dust emissions. Utility water will be supplied by means of tankers (from the nearby settlements). In addition, potable water requirements of the personnel will be supplied as bottled water to be purchased from the local market.

In the Project construction phase, domestic wastewater will be generated as a result of daily personnel activities. Approximately 20 personnel will work during construction period and

daily wastewater generation amount is calculated as 3,78 m³ (20-person x 189 L/person-day³ x 1 m³/ 1000 L).

Generated wastewater will be collected in leak-proof septic tanks. Therefore, wastewater will not be discharged to the receiving environment. Collected wastewater will be regularly removed by means of sewage trucks of the Kepsut Municipality in line with the protocol to be made with the municipality.

Photos of the existing septic tanks in the Project Area are given in Annex-8 (Photo-4 and Photo-5). The document of the last wastewater collection from septic tanks (by Balıkesir Municipality) of the existing Çaypınar WPP is given in Annex-9.

5.1.5. Biodiversity

Within the scope of the project, investments will be made with an environmentally conscious approach, the measures to be taken during construction and operation phases will be followed and cooperation will be established with relevant institutions.

In order to minimize the possible impacts on flora and fauna species due to land reparation and construction work required precautions will be taken as per national legislation, international standards, and international conventions.

Existing topsoil will be removed carefully. This stripped topsoil will be stored at designated sites in a way that stripped soil will preserve its vegetative properties and then it will be used in landscaping.

In order not to cause a net loss on biodiversity within the Project Area and to minimize possible impacts, the following precautions should be taken:

- Land clearance of natural vegetation will be kept minimum and restricted to designated sites.
- Tree cutting will not be conducted except planned and permitted areas.
- Tree planting protocol should be initiated.
- All destructed habitats will be stabilized and rehabilitated as early as possible (if required).
- In case of nesting area is detected within the Project Area, field personnel will be informed, and location of the nests will not be displaced without an expert opinion.
- Temporary waste storage area will be positioned away from the area where natural habitats are located.
- Construction machinery and equipment will be prevented from damaging fauna species.
- Species encountered within the Project Site during construction works will be carefully moved outside of the site.

Detailed information regarding biodiversity and mitigation of the risks on the biodiversity will be given in the “Biodiversity Management Plan” Report.

³ Rate of daily wastewater discharge to the municipalities per person (L/capita-day), TUIK, 2018

5.1.6. Subcontractor Management

In the scope of the Project, it is essential to present a systematic approximation for selection, evaluation, and management of subcontractors.

In the subcontractor selection and assessment processes, following issues will be considered: (i) existing management systems of subcontractors about environment, OHS and labor; (ii) conformity to Project Standards; (iii) work experiences and completed works of subcontractors.

In order to guarantee the compliance of Project Standards, it will be ensured that selected subcontractor/supplier also has an appropriate subcontractor and supplier selection process.

Main criteria regarding subcontractor selection are as follows:

- Past environmental, social and OHS performances including health and safety records.
- Punishment and enforcements imposed by governmental institutions and organizations about environmental, social and OHS issues (if any).
- Environmental, social and OHS records for completed works.
- Grievances and /or media news about environmental, social and OHS issues (if any).

Compliance with the requirements of Project Standards will be guaranteed through contracts to be signed up with subcontractors. The issues to be included into subcontractor contracts are listed as below:

- Project specific environmental and social requirements.
- Employees in charge of environmental, social and OHS issues.
- Health, safety and environment training and monitoring requirements.
- Commitment letter stating compliance with Project Standards.
- Penal sanctions.
- Required work and processed in case of non-compliance about environmental, social and OHS issues.

The compliance of subcontractors with the Project Standards will be monitored by periodic monitoring reports prepared by subcontractors on labor, OHS, community health and safety and environmental issues, and by field inspections.

Essential subcontractor management requirements are presented below:

- Subcontractors should comply with Project Standards and implement mitigations measures/ actions set by ESMP.
- Subcontractors should be warned when non-compliance is detected in the subcontractor activities. In case these non-compliances persist after warning, contract should be abolished.
- Subcontractors should set out a system to identify and assess risks associated with the materials, equipment, environment, OHS and labor force considering the Project Standards,
- All hazardous substances to be used by subcontractors should be registered. Material Safety Data Sheet should be kept available.

- In case of any deviation from the Project Standards, required corrective and preventive actions should be implemented by the subcontractors.

5.1.7. Occupational Health and Safety

Risks that may affect occupational health and safety in the scope of activities conducted during Çaypınar Hybrid SPP Project construction phase and required precautions and management practices to be taken for these risks are listed below:

- OHS measures to be taken in the scope of the Project should correspond to provisions of national legislation and international standards. Relevant implementations should be relayed to the employees.
- Emergency Action Plan prepared by Ayen Ostim should be implemented.
- OHS management system should be built for the Project construction phase.
- OHS Specialist(s) should be appointed considering risk degree of field construction works.
- Risk assessment should be performed on health, safety and environment issues and identified precautions will be applied to prevent and/or minimize risks.
- Trainings including OHS and emergency situation should be provided to employees.
- Periodical medical checks should be conducted for employees.
- Internal Grievance Redress Mechanism should be developed for the personnel to receive grievances and/or suggestions.
- Appropriate personnel protective equipment (“PPE”) should be provided to personnel and use of related PPEs by employees should be ensured.
- Heavy equipment should be used by trained and competent personnel.
- Subcontractors should be inspected by Ayen Ostim about OHS practices.
- In case of working at height, personnel should be provided with protective and fall arresting devices.
- Speed limits for the site access roads should be defined.
- First aid kit should be placed within the Project Site.
- Signboards indicating danger and warning signs should be placed within the Project Site.
- Fire detection and fire alarm systems should be established, and their maintenance should be conducted periodically.

In the scope of ongoing worldwide pandemic of coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), a section included in the Emergency Action Plan which was prepared on March 2021 by Ayen Ostim for existing Çaypınar WPP. The objective of the COVID-19 Emergency Action Plan is to: minimize loss of life as much as possible before-during-after the pandemic emergency situation; premeditate the requirements to minimize the possible impacts on environment; define roles and responsibilities for efficient emergency response; develop a plan to make the right and quick decision in case of pandemic. In addition, this plan covers all personnel, subcontractors, suppliers, visitors, buildings, facilities, and materials within the Project. In addition to the plan, risk assessment has also been conducted for the COVID-19 pandemic.

As stated in the risk assessment form, following measures will be taken to prevent/minimize risks arising from pandemic:

- Trainings about pandemic, hand washing and precautions to be taken should be provided to all personnel.
- Personnel having chronic diseases, pregnant employees, employees over 65 years old should be provided to work from home or should not be allowed to work if possible.
- Necessary arrangement should be applied for workplaces considering sanitary requirements and working conditions.
- It should be ensured that the number of exposed employees is kept as minimum as possible.
- Surfaces, equipment, workplaces and other shared spaces such as sink, bathroom, tap, stair rail, cafeteria, changing room, doors and turnstile will be cleaned and disinfected regularly.
- Keyboards and other devices should also be cleaned regularly. As far as possible, workers should be prevented from using other employees' phones, desks, offices or other work tools and equipment, and controls and inspections should be ensured.
- Employees should be informed about personal hygiene rules.
- After contact, hands should be washed with water and soap at regular intervals for at least 20 seconds.
- Employees should pay attention to the hygiene of work uniforms. Clothes should be washed at least 60 degrees every day, work uniforms and protective equipment should be removed before leaving the work area and employees will be informed about ventilation of these.
- Since the viruses can hold on to beards and hair, employees should get shaved frequently.
- Employees should cut their nails regularly.
- Posters and/or signboards indicating directions about hygienic measurements should be placed at appropriate area.
- Clean water and soap which are necessary for hand hygiene should be kept in sinks and soap should be used in equipment with sensors.
- Masks, alcohol-based disinfectants, and other materials necessary for hygiene should be supplied to personnel.
- Disposable masks in accordance with the standards should be delivered to the employees in order to prevent the dispersion of particles from the mouth and nose.
- In cases of coughing and sneezing, the mouth and nose should be covered with a disposable wipe, and in cases where wipes are not used, the inside of the elbow should be used. Hands should not be in contact with the face.
- If there is a workplace doctor, the person with suspected disease should wear a mask and visit the workplace doctor, and if the suspect COVID-19 condition is found, the affected person should be isolated from other employees and kept in a closed area that was previously determined and that would prevent the spread of the infection. Then, personnel should be sent to the relevant health institution of Ministry of Health.

- In order to ensure the social distance of the employees throughout the workplace, a suitable working model should be developed, and arrangements should be made to be 1.5-2 meters among the employees.
- Meeting will be held as teleconference.
- Working and social areas should be frequently ventilated. Artificial ventilation should not be preferred in places where natural ventilation is possible.
- Wastes with the risk of transmitting diseases should be disposed only in designated areas.
- Equipment used for food & beverage should be washed at least 60 degrees in the machine.
- Disposable plates, glasses and cutlery should be used if possible.
- Employees should be checked with a contactless thermometer before starting work and those with fever should be directed to the workplace doctor.

Detailed information regarding the occupational health and safety management during the construction and operation phases of Çaypınar Hybrid SPP will be given in “Occupational Health and Safety Management Plan”.

5.1.8. Community Health and Safety

Issues that may have an impact on community health and safety during construction works within the scope of the Project and related management / mitigation practices are provided below as sub-titles. It has an importance to develop Stakeholder Engagement Plan and establish Grievance Redress Mechanism in minimizing potential impacts on community health and safety.

Abnormal Load Transportation and Traffic:

- One of the challenges with respect to solar energy facilities lies with the transportation of the multiple components (c. 13,000 panels). As these components are in very huge amount, transportation presents risks for all of the communities located on the transport routes, other users of the roads, and the local communities. In order to minimize these possible impacts following precautions should be taken:
- Abnormal load transportations should be scheduled at hours where traffic load is lower.
- Coordination with local authorities should be ensured during abnormal load transportation.
- Abnormal load transportation should be conducted with escort vehicles.
- Drivers will be informed about working hours.
- All the operators and vehicle drivers should have valid licenses and competency to use heavy machineries.
- Speed limits to be followed within the Project Site should be determined and personnel should be ensured to comply with these speed limits.
- Unauthorized access to the Project Site should be prevented.
- Mobility of visitors in the construction site should be limited.
- Periodical vehicle maintenance should be conducted.
- Medical checks for drivers should be conducted periodically.

- Safety and traffic signs should be placed visibly on access roads located in the Project Site and its vicinity.

Considering abnormal road transportation works to be conducted in the construction phase, an Access Road Survey Report for the Çaypınar WPP Project was prepared by Magdenli Transport and Trade Co. on July 16th, 2019. As stated in the report, following studies were conducted for the assessment: basic maps were taken from Google Maps; Project Area and transportation routes were identified; Project Site was visited; transportation route was checked and obstacles on the transportation route were determined. In addition, some critical turning points, bridges, motorway overpasses and pedestrian overpasses were also pictured and defined since the Road Survey Report aims to help as a guide for the route definition. Outputs and recommendations stated in the Road Survey report are as follows:

There are several critical sections on the route which are valid for the Çaypınar Hybrid SPP as well, where abnormal transportation to be conducted.

- Every electricity and phone cables on the road have to be at least 6, 00 m high.
- The access and site road longitudinal gradient must be a maximum of 8° (14%). However, a pulling unit is required the carry-out transportation above the gradient of 14%.
- Minimum transverse inclination of the road is 2 % to one or both sides in Project site.
- The load bearing capacity of all site roads are provided to have compaction of 95%.

Emergency Preparedness and Response:

Hazards such as emergency, fire and natural disaster that might be occurred in the project construction phase may cause impacts on local community in case they are not managed effectively. In order to minimize the possible impacts of these hazards following measures should be taken:

- Ayen Ostim should ensure that Emergency Action Plan is implemented.
- In case local communities are at risk due to an emergency; notify the communities by means of alarms/sirens, contacting authorities and select community members by using formerly prepared, up to date contact lists, etc.
- Cooperation with related authorities should be achieved. (Both for prevention of emergencies and during emergency situations).
- In order to prohibit forest fire in the event of fire, fire-protection water system should be established.
- Communication tools should always be in place and distributed throughout the site.
- Maintenance of fire detection systems should be carried out regularly.

Where applicable, Ayen Ostim should also assist and collaborate with the potentially affected communities and the local government agencies in their preparations to respond effectively to emergency situations, especially when their participation and collaboration are necessary to ensure effective response. If local government agencies have little or no capacity to respond effectively, Ayen Ostim will play an active role in preparing for and responding to emergencies associated with the Project. Ayen Ostim will document its emergency

preparedness and response activities, resources, and responsibilities, and will provide appropriate information to potentially affected community and relevant government agencies.

Visual Impact:

Excavation works to be conducted during Project construction phase will cause temporary visual impacts. In the scope of the Project, tree-cutting will not be applied since the Project Area consists of bushes. In order to minimize these possible impacts, following measures should be taken:

- Excavated materials and wastes should be stocked in a way that will not cause visual impact.
- Project Site should be kept as small as possible, and the site should be kept clean and well-maintained.
- Equipment used in the construction works should be stored on a regular basis.
- Dust suppression should be carried out to prevent dust generation.
- In line with the grievances received from stakeholder regarding visual impacts, preventive and regulatory actions will be implemented as soon as possible and grievances will be redressed.

Community Exposure to Disease:

Ayen Ostim should avoid or minimize the potential for community exposure to water-borne, water-based, water-related, and vector-borne diseases, and communicable diseases that could result from Project activities, taking into consideration differentiated exposure to and higher sensitivity of vulnerable groups. In addition, transmission of diseases that may be associated with the influx of temporary or permanent project labor should be avoided or minimized. In this scope, following measures should be taken:

- Periodic medical checks for personnel should be performed.
- Personnel should be vaccinated if required.

Public Access:

In order to prevent damage to local communities and public access to the Project Site, the following measures should be taken:

- Adequate signs should be placed at the Project Site and its vicinity.
- Third party access to site should be monitored through security personnel.

Security Personnel:

Relations of the security personnel to be employed for the Project and the local community present risks in terms of social conduct and conflict since the security personnel have a certain degree of authority. The security personnel should be trained adequately in the use of force and appropriate conduct toward workers and affected communities; and should be ensured to act within the applicable law. Ayen Ostim should not sanction any use of force except when used for preventive and defensive purposes in proportion to the nature and extent of the threat. All allegations of unlawful or abusive acts of security personnel should

be considered and investigated. Psychotechnic Certification should be obtained from an institution authorized by Ministry of Health for the security personnel. This document should be kept together with other environmental and social monitoring documents.

5.1.9. Cultural Heritage

As defined in the IFC PS 8, cultural heritage refers to (i) tangible forms of cultural heritage, such as tangible moveable or immovable objects, property, sites, structures, or groups of structures, having archaeological (prehistoric), paleontological, historical, cultural, artistic, and religious values; (ii) unique natural features or tangible objects that embody cultural values, such as sacred groves, rocks, lakes, and waterfalls; and (iii) certain instances of intangible forms of culture that are proposed to be used for commercial purposes, such as cultural knowledge, innovations, and practices of communities embodying traditional lifestyles.

Tangible Cultural Heritage:

In the 11.03.2019 dated and E.215407 numbered opinion letter of Balıkesir Province Cultural Assets Conservation Regional Board Directorate, it was stated that there is not any Cultural Immovable Property within the Project area and its vicinity as per Law on the Conservation of Cultural and Natural Property (Law No: 2863). In addition, it is also stated that any registered archaeological site or protected area does not exist within the Project Area (see Annex-6 for the official letter).

In case of chance-find situation is encountered in the Project construction phase, following steps should be obeyed.

- In case of chance-find, the construction works should be ceased in and around the site where chance find is encountered.
- Project Manager and OHS Specialist should be informed about chance-find.
- Project Manager should inform Balıkesir Provincial Directorate of Culture and Tourism, immediately.
- All employees found in the Project Site should be informed about chance find.
- Photographs belonging to chance find should be taken.
- Ensure that the chance-find area is protected by signs, barriers and flags and chance finds should not be moved, disturbed and/or replaced.
- A form including information and photographs regarding chance find should be prepared and submitted to the Balıkesir Provincial Directorate of Culture and Tourism via official letter.
- Construction works should not be restarted unless approval is not obtained from Balıkesir Provincial Directorate of Culture and Tourism.

Intangible Cultural Heritage:

As United Nations Educational, Scientific and Cultural Organization (“UNESCO”) defines intangible cultural heritage refers to the practices, representations, expressions, knowledge and know-how, transmitted from generation to generation within communities, created and

transformed continuously by them, depending on the environment and their interaction with nature and history.

At the 32nd General Conference of UNESCO, “Convention for the Safeguarding of the Intangible Cultural Heritage” was acknowledged. Turkey has completed the process of becoming a party to the Convention on March 27, 2006.

As per Convention for the Safeguarding of the Intangible Cultural Heritage, contracting countries prepare and update intangible cultural heritage inventory on their territory in accordance with the situation to protect their intangible cultural heritage. Turkey has two types of national inventory such as The Living Human Treasures National Inventory of Turkey and The Intangible Cultural Heritage National Inventory of Turkey. Provincial inventories form a basis of national inventories of intangible cultural heritage. Inventory studies are conducted with the coordination of Provincial Directorate of Culture and Tourism.

According to the Balıkesir Province Intangible Cultural Heritage Inventory published by Balıkesir Provincial Directorate of Culture and Tourism, rug weaving tradition⁴ (“kilim dokuma” in Turkish) is an intangible cultural heritage element for the Kepsut District where Project Area is located.

The activities to be conducted during Project construction phase are not expected to have any negative impact on the cultural heritage of the region.

5.2. Operation Phase

5.2.1. Air Quality

Emissions will be occurred during the ground leveling works to be carried out during the construction phase and during the use of construction equipment. However, insignificant emissions are expected during the operation phase of the Çaypınar Hybrid SPP Plant.

In addition, air quality monitoring studies will not be conducted during Project operation phase. However, if any grievance regarding air quality is received, the source of the grievance will be investigated, and additional air quality monitoring studies will be conducted if deemed necessary.

5.2.2. Environmental Noise

During the operation phase of the project, there is no operation that may cause noise except instant noises due to the maintenance operations of the solar panels. In such cases, personal protective equipment should be provided to the employees. Detailed information on this topic will be given in “Environmental Noise Management Plan” Report.

5.2.3. Waste Management

Domestic solid waste will be generated due to personnel to be employed in the Project operation period. It is anticipated that there will be 3 personnel during operation period.

⁴ **Source:** <https://balikesir.ktb.gov.tr/TR-131336/somut-olmayan-kulturel-miras-unsur-listesi.html>, Balıkesir Provincial Directorate of Culture and Tourism

Considering average daily municipal solid waste generation rate is 1.16 kg/capita⁵ for Balıkesir Province, it is expected that about 3,48 kg (3 capita x 1.16 kg/capita-day) domestic solid waste will be generated on a daily basis.

Domestic solid wastes to be generated during Project operation phase will be collected in closed and leak-proof sanitary waste bins or containers. Domestic solid wastes will be stored temporarily within the Project Area as per Waste Management Regulation and a protocol will be signed with relevant municipality to ensure generated domestic wastes are collected daily.

In addition to the domestic solid wastes, hazardous wastes such as waste oil and dye will be generated as a result of maintenance and repair of solar panels and transformer station. Waste oil and similar hazardous wastes to be generated during the operation period will be collected separately at the source and sent to the licensed disposal or recovery facilities.

Detailed information regarding the waste management of the Project will be given in “Waste Management Plan” Report.

5.2.4. Wastewater

In the Project operation phase, domestic wastewater will be generated as a result of daily personnel activities. Approximately 3 personnel will work during operation period and daily wastewater generation amount is calculated as 0.57 m³ (3-person x 189 L/person-day⁶ x 1 m³/ 1000 L).

As in the construction phase, generated wastewater will be collected in leak-proof septic tanks. Therefore, wastewater will not be discharged to the receiving environment. Collected wastewater will be regularly removed by means of sewage trucks of the Balıkesir Municipality in line with the protocol to be made with the municipality.

5.2.5. Biodiversity

Detailed information regarding biodiversity and mitigation of the risks on the biodiversity will be given in the “Biodiversity Management Plan” Report.

5.2.6. Subcontractor Management

During the operation period, the practices specified for the construction period in Section 5.1.6 will be followed during subcontractor selection, evaluation and management processes.

5.2.7. Occupational and Community Health and Safety

Risks that may affect occupational health and safety in the scope of activities conducted during Çaypınar Hybrid SPP Project operation phase, required precautions to be taken for these risks and management practices are listed below:

- OHS measures to be taken in the scope of the Project should correspond to provisions of national legislation and international standards. Relevant implementations should be relayed to the employees.

⁵ Average municipal solid waste generation rate per person (kg/capita-day), TUIK, 2018

⁶ Rate of daily wastewater discharge to the municipalities per person (L/capita-day), TUIK, 2018

- Emergency Action Plan prepared by Ayen Ostim should be implemented.
- OHS management system should be established for the Project operation phase.
- OHS Specialist(s) should be appointed considering risk degree of field operation works.
- Risk assessment should be performed on health, safety and environment issues and identified precautions will be applied to prevent and/or minimize risks.
- Trainings including OHS and emergency should be provided to employees.
- Periodical medical checks should be conducted for employees.
- Internal Grievance Redress Mechanism will be developed for the personnel to receive grievances and/or suggestions.
- Appropriate personnel protective equipment (“PPE”) should be provided to personnel and use of related PPEs by employees should be ensured.
- Subcontractors should be inspected by Ayen Ostim about OHS practices.
- First aid kit should be placed within the Project Site.
- Signboards indicating danger and warning signs should be placed within the Project Site.
- Fire detection and fire alarm systems should be established, and their maintenance should be conducted periodically.

In case of COVID-19 pandemic continues in the Project operation phase, measurements stated in the Section 5.1.7 should be applied.

Issues that may have an impact on occupational and community health and safety during operation period are provided below as sub-titles. Within this period, Stakeholder Engagement Plan will be implemented effectively, and grievances will be obtained and answered through Grievance Redress Mechanism.

Lockout/Tagout:

“Lockout/Tagout (LOTO)” refers to specific practices and procedures to safeguard employees from the unexpected energization or start-up of machinery and equipment, or the release of hazardous energy during service or maintenance activities.

Solar energy equipment can generate electrical energy and may be connected to electrical circuits. Workers may be exposed to electrical hazards from solar panels and from electrical circuits. While installing or servicing solar panels, employers should assure that workers cover the solar panels, in addition to protecting workers from electrical circuits. Workers performing servicing or maintenance of solar panels may be exposed to injuries from the unexpected energization or release of stored energy in the equipment.

The following are some of the significant requirements of a Lockout/Tagout procedure

- Only authorized employees may lockout or tagout machines or equipment in order to perform servicing or maintenance.
- Lockout devices (locks) and tagout devices (tags) shall not be used for any other purposes and must be used only for controlling energy.
- Lockout and Tagout devices (locks and tags) must identify the name of the worker applying the device.
- All energy sources to equipment must be identified and isolated.

- After the energy is isolated from the machine or equipment, the isolating device(s) must be locked out or tagged out in safe or off position only by the authorized employees.

Electrical

Solar energy workers are exposed to potential electrical hazards present in their work environment, which makes them more vulnerable to the danger of electrocution and arc flash hazards. Workers may be exposed to electric shocks and burns when hooking up the solar panels to an electric circuit.

Workers should pay attention to overhead power lines and stay at least 10 m away from them because they carry extremely high voltage. Fatal electrocution is the main hazard, but burns can occur while installing solar panels. Another hazard is from using tools and equipment that can contact power lines.

Heat/Cold Stress

Solar energy workers often work in very hot weather where hazards include dehydration, heat exhaustion, heat stroke, and death. Employers should monitor employees and workers should be trained to identify and report early symptoms of any heat-related illness. Workers may also be exposed to extreme cold weather conditions and should be protected from such conditions.

Personal Protective Equipment

Using personal protective equipment is often essential, but it is generally the last line of defense after engineering controls, work practices, and administrative controls. Solar energy employers must assess their workplace to determine if hazards are present that require the use of protective equipment. Solar energy workers can be exposed to many hazards that may require the use of safety glasses, hard hats, gloves, respirators, or other personal protective equipment used to protect against injuries and illnesses. Workers exposed to potential electrical hazards must be provided with appropriate electrical protective equipment, and workers must use them. Electrical protective equipment must be maintained in a safe and reliable condition. They must be periodically inspected or tested.

Public Access:

Public access to the solar panels and transformer station should be prevented. The Project area will be surrounded by wire fences. Post information boards about public safety hazards and emergency contact information should be placed within the area and stakeholders should be informed about risks.

The Photo that shows the current situation of the area that should be surrounded by the fences is given in Annex-8 (Photo-6)

Emergency Preparedness and Response:

In the management of hazards such as emergency, fire and natural disaster that might be occurred in the project operation phase, practices and mitigation measures stated for the project construction phase will be valid (see Section 5.1.8).

Security Personnel:

The points to be considered about the security personnel will be the same as the practices determined for the Project construction phase (see Section 5.1.8).

Detailed information regarding occupational health and safety procedures during the construction and operation phases of the Project will be shared in “Occupational Health and Safety Management” Report.

Table-5.5: Çaypınar Hybrid SPP Project Construction Phase Environmental and Social Management Plan

Impact Description	National Legislation and International Standards	Key Performance Indicators / Monitoring Criteria	Responsibility
Air Quality	<ul style="list-style-type: none"> - Regulation on Control of Industrial Air Pollution - Regulation on Assessment and Management of Air Quality - IFC PS 1; PS 3; PS4; PS6 - IFC EHS Guideline on Air Emissions and Ambient Air Quality - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Dust (PM₁₀) measurement results - Grievance records obtained from stakeholders regarding air quality (if any) 	<ul style="list-style-type: none"> - Contractor - OHS Specialist - Environmental Engineer
Environmental Noise	<ul style="list-style-type: none"> - Regulation on Assessment and Management of Environmental Noise - IFC EHS Guideline on Noise Management - IFC PS 1; PS 3; PS4; PS6 - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Environmental noise measurement results - Grievance records obtained from stakeholders regarding environmental noise (if any) - Implementation of Environmental Noise Management 	<ul style="list-style-type: none"> - Contractor - OHS Specialist - Environmental Engineer
Waste Management	<ul style="list-style-type: none"> - Regulation on Waste Management - Regulation on Control of Excavation, Construction and Demolition Waste - Regulation on Control of Oil Wastes - IFC PS3; PS4 - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Generated domestic solid waste collection by municipality regularly - Waste oils collection and disposal in accordance with the provisions of the Regulation on Waste Management and Regulation on Control of Waste Oil. - Implementation of Waste Management 	<ul style="list-style-type: none"> - Contractor - OHS Specialist - Environmental Engineer
Wastewater	<ul style="list-style-type: none"> - Water Pollution Control Regulation - Regulation on Pit Opening Where Sewer System Construction is not Applicable - IFC PS1; PS3; PS4 - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Septic tank periodic control, and overflow prevention by discharging the tank by vacuum trucks. - Necessary analysis for potable water to be utilized by personnel is conducted. 	<ul style="list-style-type: none"> - Contractor - OHS Specialist - Environmental Engineer
Biodiversity	<ul style="list-style-type: none"> - BERN Convention - IFC PS1, PS3 - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Ornithology Report for the Project - Habitat and population losses in the areas where the Project construction works are carried out. - Implementation of Biodiversity Management Plan 	<ul style="list-style-type: none"> - Contractor - Specialist who will conduct works on biodiversity
Subcontractor Management	<ul style="list-style-type: none"> - Labor Law - IFC PS2 - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Compliance issues with Project standards and national legislation in the subcontractor contracts. 	<ul style="list-style-type: none"> - Contractor

Impact Description	National Legislation and International Standards	Key Performance Indicators / Monitoring Criteria	Responsibility
Occupational Health and Safety	<ul style="list-style-type: none"> - Labor Law - Occupational Health and Safety Law - Regulation on Occupational Health and Safety - Regulation on Emergency Situations in Workplaces - Regulation on Health and Safety Signs - Regulation on Occupational Health and Safety Risk Assessment - Regulation on Personal Protection Equipment - IFC PS2 - ILO Conventions - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Records belonging to work accident and near miss - Appropriate PPE for employees - Emergency Action Plan - Implementation of OHS Management Plan 	<ul style="list-style-type: none"> - Contractor - OHS Specialist
Labor and Working Condition	<ul style="list-style-type: none"> - IFC PS2 - ILO Conventions - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Employment Contracts - Dismissal processes in compliance with IFC PS2 - Working conditions 	<ul style="list-style-type: none"> - Contractor
Community Health and Safety	<ul style="list-style-type: none"> - Regulation on Assessment and Management of Air Quality - Regulation on Assessment and Management of Environmental Noise - IFC PS4 - IFC EHS Guideline on Community Health and Safety - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Implementation of SEP and Grievance Redress Mechanism - Grievance Redress Mechanism informational meetings - Informational meetings for the construction - Danger and warning signs - Measures for prevention of public access to construction sites 	<ul style="list-style-type: none"> - Contractor - OHS Specialist - Environmental Engineer
Cultural Heritage	<ul style="list-style-type: none"> - Law on Conservation of Cultural and Natural Assets - IFC PS8 - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Chance Find Records - Identification of cultural heritage in the region 	<ul style="list-style-type: none"> - Contractor - Subcontractor
Social Impacts	<ul style="list-style-type: none"> - IFC PS1 - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Implementation of SEP and Grievance Redress Mechanism - Stakeholder engagement meetings - Recruitment of local people - Use of local resources 	<ul style="list-style-type: none"> - Contractor

Table-5.6: Çaypınar Hybrid SPP Project Operation Phase Environmental and Social Management Plan

Impact Description	National Legislation and International Standards	Key Performance Indicators / Monitoring Criteria	Responsibility
Environmental Noise	<ul style="list-style-type: none"> - Regulation on Assessment and Management of Environmental Noise - IFC EHS Guideline on Noise Management - IFC PS 1; PS 3; PS4; PS6 - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Environmental noise measurement results - Grievance records obtained from stakeholders regarding environmental noise (if any) - Implementation of Environmental Noise Management 	<ul style="list-style-type: none"> - Contractor - OHS Specialist - Environmental Engineer
Waste Management	<ul style="list-style-type: none"> - Regulation on Waste Management - Regulation on Control of Oil Wastes - IFC PS3; PS4 - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Generated domestic solid waste collection by municipality regularly - Waste oils collection and disposal in accordance with the provisions of the Regulation on Waste Management and Regulation on Control of Waste Oil. - Implementation of Waste Management 	<ul style="list-style-type: none"> - Contractor - OHS Specialist - Environmental Engineer
Wastewater	<ul style="list-style-type: none"> - Water Pollution Control Regulation - Regulation on Pit Opening Where Sewer System Construction is not Applicable - IFC PS1; PS3; PS4 - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Septic tank periodic control, and overflow prevention by discharging the tank by vacuum trucks. - Necessary analysis for potable water to be utilized by personnel is conducted. 	<ul style="list-style-type: none"> - Contractor - OHS Specialist - Environmental Engineer
Biodiversity	<ul style="list-style-type: none"> - BERN Convention - Central Hunting Commission Decision - Law on Land Hunting - IFC PS1, PS3 - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Ornithology Report for the Project - Habitat and population losses in the areas where the Project construction works are carried out. - Implementation of Biodiversity Management Plan 	<ul style="list-style-type: none"> - Contractor - Specialist who will conduct works on biodiversity
Subcontractor Management	<ul style="list-style-type: none"> - Labor Law - IFC PS2 - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Compliance issues with Project standards and national legislation in the subcontractor contracts. 	<ul style="list-style-type: none"> - Contractor

Impact Description	National Legislation and International Standards	Key Performance Indicators / Monitoring Criteria	Responsibility
Occupational Health and Safety	<ul style="list-style-type: none"> - Labor Law - Occupational Health and Safety Law - Regulation on Occupational Health and Safety - Regulation on Emergency Situations in Workplaces - Regulation on Health and Safety Signs - Regulation on Occupational Health and Safety Risk Assessment - Regulation on Personal Protection Equipment - IFC PS2 - ILO Conventions - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Records belonging to work accident and near miss - Appropriate PPE for employees - Emergency Action Plan - Implementation of OHS Management Plan 	<ul style="list-style-type: none"> - Contractor - OHS Specialist
Labor and Working Condition	<ul style="list-style-type: none"> - IFC PS2 - ILO Conventions - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Employment Contracts - Dismissal processes in compliance with IFC PS2 - Working conditions 	<ul style="list-style-type: none"> - Contractor
Community Health and Safety	<ul style="list-style-type: none"> - Regulation on Assessment and Management of Air Quality - Regulation on Assessment and Management of Environmental Noise - IFC PS4 - IFC EHS Guideline on Community Health and Safety - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Implementation of SEP and Grievance Redress Mechanism - Grievance Redress Mechanism informational meetings - Informational meetings for the construction - Danger and warning signs - Measures for prevention of public access to construction sites 	<ul style="list-style-type: none"> - Contractor - OHS Specialist - Environmental Engineer
Social Impacts	<ul style="list-style-type: none"> - IFC PS1 - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Implementation of SEP and Grievance Redress Mechanism - Stakeholder engagement meetings - Recruitment of local people - Use of local resources 	<ul style="list-style-type: none"> - Contractor

6. MONITORING PLAN

It is essential to create a Monitoring Plan in order to assess the efficiency of management practices stated in the ESMP and the Project's impacts on environmental, social, biodiversity, and OHS issues. It will be possible to control the efficiency of ESMP and to conduct required adaptations with the help of the Monitoring Plan. There is a continuous review, observation, and improvement system in a good monitoring process. In addition, Project Management receives reports from authorized personnel and subcontractors about progress regarding environmental and social performances. What matters in the monitoring studies is the determination of key performance indicators ("KPIs"). Fundamental components of monitoring studies are constituted by field observations, inspections, interviews, measurements, and document reviews.

In case of non-conformance with Project Standards, or any measurement above the limits stipulated by relevant legislation or standard during monitoring of environmental, OHS, and community health and safety performance indicators, such non-compliance will be recorded and reported. Monitoring records will be kept and preserved by OHS Specialist and/or environmental engineer. At every stage of the Project, compliance with national legislation and international standards will be ensured and monitoring activities will be carried out by independent experts when necessary.

Monitoring studies to be conducted during the construction and operation phase of the Çaypınar Hybrid SPP Project and details regarding monitoring methods and frequencies are presented in Table-6.1 and Table-6.2.

Table-6.1: Çaypınar Hybrid SPP Project Construction Phase Monitoring Plan

Monitoring Parameter	Where the parameter is to be monitored?	Monitoring Methodology	Monitoring Period	Responsibility
Air Quality (PM ₁₀)	- Project Area - Saraçköy, İhsaniye, Servet and Eşeler Neighbourhoods	- Dust (PM ₁₀) measurement - Grievance Redress Mechanism	- Air quality measurements to be conducted for once only at the peak period of construction phase - In case grievance is received	- Contractor - OHS Specialist - Environmental Engineer - Institutions having competence certificate to measure air quality
Environmental Noise	- Project Area - Saraçköy, İhsaniye, Servet and Eşeler Neighbourhoods	- Noise measurement - Grievance Redress Mechanism	- Air quality measurements to be conducted for once only at the peak period of construction phase - In case grievance is received	- Contractor - OHS Specialist - Environmental Engineer - Institutions having competence certificate to measure environmental noise
Waste	- Project Area - Temporary Storage Waste Area	Field Observations and Inspections	- Weekly	- OHS Specialist - Environmental Engineer
Wastewater	- Project Area	Field Observations and Inspections	Septic tanks will be emptied regularly, and it will be ensured that there is no wastewater discharge to the receiving environment	- OHS Specialist - Environmental Engineer
Biodiversity	- Project Area and its vicinity	- Visual Observations at the Field	Two or three times per year	- Contractor - Specialist to conduct studies
Subcontractor Management	- Project Area	- Field inspections - Grievance Redress Mechanism	-Constantly	- Contractor
Occupational Health and	- All working area	- Field Observations and Inspections	-Daily	- OHS Specialist

Monitoring Parameter	Where the parameter is to be monitored?	Monitoring Methodology	Monitoring Period	Responsibility
Safety		- Grievance Redress Mechanism		
Community Health and Safety	- Saraçköy, İhsaniye, Servet and Eşeler Neighbourhoods - Local communities using route which are used in the scope of Project construction works or local communities located in these routes	- Grievance Redress Mechanism	- Stakeholder Engagement Meetings - In case grievance is received	- Contractor - OHS Specialist - Environmental Engineer
Cultural Heritage	- Project Area	- Field Observations and Inspections	- In case Chance Find is encountered	- Contractor
Social Impacts	- All interacted settlements in the scope of Project	- Grievance Redress Mechanism - Stakeholder Engagement Meetings	- Stakeholder Engagement Meetings - In case grievance is received	- Contractor
Cumulative Impact	- Project Area - All interacted settlements in the scope of Project	- Meeting and interview with Project Company - Grievance Redress Mechanism	- In case of new project, that may cause cumulative effect, is planned in the region where the Project Site is located.	- Contractor - OHS Specialist - Environmental Engineer

Table-6.2: Çaypınar Hybrid SPP Project Operation Phase Monitoring Plan

Monitoring Parameter	Where the parameter is to be monitored?	Monitoring Methodology	Monitoring Period	Responsibility
Air Quality (PM ₁₀)	- Çaypınar SPP Site - Saraçköy, İhsaniye, Servet and Eşeler Neighbourhoods	- Dust (PM ₁₀) measurement - Grievance Redress Mechanism	- In case grievance is received	- Contractor - OHS Specialist - Environmental Engineer - Institutions having competence certificate to measure air quality
Environmental Noise	- Çaypınar SPP Site - Saraçköy, İhsaniye, Servet and Eşeler Neighbourhoods	- Noise measurement - Grievance Redress Mechanism	- In case grievance is received	- Contractor - OHS Specialist - Environmental Engineer - Institutions having competence certificate to measure environmental noise
Waste	- Çaypınar SPP Site	Field Observations and Inspections	- Weekly	- OHS Specialist - Environmental Engineer
Wastewater	- Çaypınar SPP Site	Field Observations and Inspections	Septic tanks will be emptied regularly, and it will be ensured that there is no wastewater discharge to the receiving environment	- OHS Specialist - Environmental Engineer
Biodiversity	- Çaypınar SPP Site and its vicinity	- Visual Observations at the Field	Two or three times per year	- Contractor - Specialist to conduct studies
Subcontractor Management	- Project Area	- Field inspections - Grievance Redress Mechanism	-Constantly	- Contractor
Occupational Health and Safety	- All operational area	- Field Observations and Inspections - Grievance Redress Mechanism	-Daily	- OHS Specialist

Monitoring Parameter	Where the parameter is to be monitored?	Monitoring Methodology	Monitoring Period	Responsibility
Community Health and Safety	<ul style="list-style-type: none"> - Saraçköy, İhsaniye, Servet and Eşeler Neighbourhoods - Local communities using route which are used in the scope of Project or local communities located in these routes 	<ul style="list-style-type: none"> - Grievance Redress Mechanism 	<ul style="list-style-type: none"> - Stakeholder Engagement Meetings - In case grievance is received 	<ul style="list-style-type: none"> - Contractor - OHS Specialist - Environmental Engineer
Social Impacts	<ul style="list-style-type: none"> - All interacted settlements in the scope of Project 	<ul style="list-style-type: none"> - Grievance Redress Mechanism - Stakeholder Engagement Meetings 	<ul style="list-style-type: none"> - Stakeholder Engagement Meetings - In case grievance is received 	<ul style="list-style-type: none"> - Contractor
Cumulative Impact	<ul style="list-style-type: none"> - Project Area - All interacted settlements in the scope of Project 	<ul style="list-style-type: none"> - Meeting and interview with Project Company - Grievance Redress Mechanism 	<ul style="list-style-type: none"> - In case of new project that may cause cumulative effect is planned in the region where the Çaypınar SPP Site is located. 	<ul style="list-style-type: none"> - Contractor - OHS Specialist - Environmental Engineer

7. STAKEHOLDER ENGAGEMENT AND MANEGEMENT

In the scope of the Project, SEP will be prepared by force of the Environmental and Social Management System and this SEP will be submitted as a separate document. The scope and main objectives of the SEP are listed below:

- Identification of the main and strategic stakeholders of the Project.
- Definition of the necessary approaches required to ensure effective communication with identified stakeholders.
- Establishing mutually fiduciary relations between Ayen Ostim and the local people.
- Ensuring that stakeholders have timely information about the investments made, construction works and operational activities, and the possible environmental and social risks and impacts that may arise at these stages.
- Ensuring that the information and/or documents that are shared with the stakeholders are correct and clear.
- Identifying the methods and program related to enlightenment and consultation processes that will be conducted with the stakeholders and especially with the sensitive groups during the construction and operation phases of the Project.
- Ensuring that all interested parties are involves in the process.
- Helping the stakeholders by recording and resolving the concerns and grievances about the Project in case they have any.

Stakeholder engagement meetings will be held during the construction and operation phases of the Project, and the exact dates and times of the meeting will be announced to the stakeholders at least ten days before the meeting date via local media and mukhtars. Meeting places and dates will be arranged in such a way that stakeholder participation will be high. If necessary, transportation support will be provided by the Project owner to increase participation.

7.1. Identification of Stakeholders

Individuals, groups, and institutions/organizations that are affected by the project activities and performance or can affect these processes or have a legal relationship with the Project are considered as stakeholders.

Identifying stakeholders in the early stages of the Project is a key step in the stakeholder engagement process. The main purpose of identifying stakeholders is giving priority to the people, groups and institutions by defining those people, groups and institutions that may be directly or indirectly affected by the Project and may be related to the Project. In this framework, individuals and groups that may be affected by the Project have a special importance due to their disadvantage and/or vulnerability.

Stakeholders determined within the scope of the Project are presented in Table-7.1. Among these stakeholders, stakeholders except the Company Group are evaluated as External Stakeholders. In addition, within the scope of the Project, Civil Society Organizations, Universities and Media are defined as indirect stakeholders; while, Local Communities,

Government Institutions and Organizations, Local Government Organizations, Credit Institutions and Company Group are determined as primary stakeholders (direct stakeholders).

Table-7.1: Stakeholder Groups Determined within the Scope of the Project

Stakeholder Group	Stakeholders	Relation with the Project
Ecosystem	<ul style="list-style-type: none"> • Flora and fauna species in the Project Area and its immediate surroundings 	<ul style="list-style-type: none"> • Protection and monitoring of biodiversity elements in the Project Area and its immediate surroundings during the activities to be carried out during the construction and operation period of the Project.
Districts Near the Project Site and Local Communities	<ul style="list-style-type: none"> • Balıkesir Province, Altıeylül District • Residents of Saraçköy Neighborhood • Residents of İhsaniye Neighborhood • Residents of Servet Neighborhood • Residents of Eşeler Neighborhood 	<ul style="list-style-type: none"> • Environmental and social factors such as noise, air pollution and public health and safety • Socio-economic impacts • Local employment
Government Institutions and Organizations	<ul style="list-style-type: none"> • Energy and Natural Resources Ministry • Energy Market Regulatory Authority • Turkish Electricity Transmission Corporation • Ministry of Environment, Urbanization and Climate Change • Ministry of Agriculture and Forestry • General Directorate of Nature Conservation and National Parks • Ministry of Family, Labor and Social Services • Ministry of Transportation and Infrastructure • Ministry of Health • Ministry of Culture and Tourism • Ministry of Treasury and Finance 	<ul style="list-style-type: none"> • Policy making • Permits and licenses that should be taken within the scope of the project • Protection of the health and safety of employees and their local communities • Protection of the environment • Protection of cultural heritage • Protection of biological diversity • Permits that should be taken regarding the land usage • Obtaining the necessary permissions on issues related to transportation • Operation and maintenance of the Infrastructure Services and Energy Transmission Lines • Prevention of the spread of infectious diseases and protection of public health
Local Government Organizations	<ul style="list-style-type: none"> • Balıkesir Governorship Provincial Directorate of Environment and Urbanization • Balıkesir Regional Directorate of Forestry • 2nd Regional Directorate of Ministry of Agriculture and Forestry (Balıkesir Branch Office) • Balıkesir Governorship Provincial Directorate of Agriculture and Forestry 	<ul style="list-style-type: none"> • Getting the necessary permissions within the scope of the project • Managing project environmental impacts (such as waste and wastewater) and environmental audits • Permits that should be taken regarding the land usage • Prevention of the spread of infectious diseases • Protection of workers health and public health and safety

Stakeholder Group	Stakeholders	Relation with the Project
	<ul style="list-style-type: none"> Balıkesir Cultural Heritage Conservation Regional Board Directorate Balıkesir Provincial Health Directorate Balıkesir Metropolitan Municipality Balıkesir Provincial Gendarmerie Command Kepsut Municipality Balıkesir Governorship Kepsut District Governorship Village Headman Offices 	<ul style="list-style-type: none"> Consultation on the procedures to be done for the protection of cultural assets in case of incidental finding Communication in case of an emergency Safety
University	Ankara University	Getting technical support for the preparation of Ornithology Report
Civil Society Organization (CSO)	<ul style="list-style-type: none"> Nature Association Turkish Environment Foundation 	Negotiations and technical support on environmental and social impacts, economic development and employment issues
Credit Institutions	International financial institutions and private banks (Development Investment Bank of Turkey and international resources associated with Development Investment Bank of Turkey)	Project Finance
Media	<ul style="list-style-type: none"> Local and national newspapers Social Media 	Information sharing and advertising studies about the Project
Company Group	<ul style="list-style-type: none"> Project employees Subcontractors 	<ul style="list-style-type: none"> Project Environmental and Social Management System applications Employment Workforce and management

7.2. Information Tools and Methods

Sharing information regarding the Project helps local communities and other stakeholders understand the opportunities as well as the risks and impacts associated with the project. By this way, stakeholders are ensured to have access to information such as (i) The purpose, feature and scale of the Project; (ii) duration of the project activities; (iii) risks and potential impacts to the communities in question and mitigation measures taken against them; (iv) envisaged Stakeholder Engagement Plan; and (v) Grievance Redress Mechanism.

Ayen Ostim will use communication tools such as media, corporate web site, brochure, and information notes, correspondences, announcements, regular meetings, face to face interviews and other informative activities in order to make consistent and transparent and timely informing to the local communities, company employees and other stakeholders. In this context, Ayen Ostim shares up-to-date information and documents related to the Project on its corporate website (see: <http://www.ayen.com.tr>).

Documents such as Environmental and Social Action Plan, Environmental and Social Management Plan, SEP, Grievance Redress Mechanism, etc. which are prepared within the scope of the project will be kept on the website and in the headman offices. In addition, the Ayen Ostim corporate website contains materials that provide information about the different stages of the Project, and stakeholders are constantly informed about the Project on the corporate website.

When stakeholders are exposed to risk and negative impacts due to the activities under the Project, a consultation process will be carried out to ensure that stakeholders express their grievances, and the Project Owner can respond by evaluating these grievances. The consultation process will be commensurate with the project risks, negative impacts, and concerns raised by the stakeholders. The issues listed below will be considered for an effective consultation process:

- The consultation process will be initiated during the construction period of the Project where environmental and social risks and impacts are determined and will be repeated as risks and impacts occur.
- The information shared during the consultation process will be transparent, objective, meaningful and easily accessible in a simplified, appropriate format that local communities can understand.
- The consultation process will focus on groups directly affected by the Project rather than indirectly affected stakeholders.
- To manage the process well, it will be ensured that there is no external orientation, intervention and compelling.
- Outputs related to this process will be recorded.

In case of any grievances from stakeholders, Ayen Ostim will respond to the demands, comments, and questions of local communities in time, as well as implement the Grievance Redress Mechanism. All requests will be responded to in respect. When it is not possible to fulfill a specific request, stakeholders will be given a detailed explanation of why this is not possible, by means of the social plans.

7.3. Grievance Redress Mechanism

A Grievance Redress Mechanism has been established within the scope of the existing Çaypınar WPP Project in order to learn about the concerns and grievances of employees and external stakeholders regarding the environmental and social performance of the Project and to help them eliminate them. In this process, possible risks and possible negative impacts of the Project were taken into consideration. This Grievance Redress Mechanism will be applied to the Çaypınar Hybrid SPP Project.

The Grievance Redress Mechanism aims to promptly address the concerns that stakeholders may have, using a culturally appropriate, transparent, and understandable consultation process. The party expressing its concern or grievance will not face any cost or sanction.

The Grievance Redress Mechanism does not constitute an obstacle to resorting to legal or administrative remedies. Stakeholders and affected communities will be informed about the Grievance Redress Mechanism during the stakeholder engagement process.

In order to effectively implement the Grievance Redress Mechanism, the steps given below are necessary to be followed:

- Grievance Redress Mechanism has been prepared Çaypınar WPP by taking into consideration the environmental and social risks and possible impacts of the Project.
- The process should be design in a way that it is easily understandable, accessible, confidential, and appropriate in cultural manners
- Employees and external stakeholders should be provided with information about where, to whom and how to deliver their grievances.
- A response time related to incoming grievances should be determined (for example 15 days) and this time should be adhered to.
- By giving feedback to local communities, employees and other stakeholders, the actions taken regarding their concerns and grievances and the results of these actions will be explained.
- Necessary records will be kept regarding all transactions and reported annually to Development Investment Bank of Turkey.

Internal and external grievances will be collected, recorded, and evaluated as the way it is stated below:

- Upon the receipt of the grievances, the process will be initiated by the Project Manager, OHS Expert or Environmental Engineer, depending on the type of grievance.
- Incoming grievances will be recorded in the database and reported annually to Development Investment Bank of Turkey.
- The grievance will be directed to the relevant department and a preliminary assessment will be made on the subject.
- Actions and measures necessary for the resolution of the grievance will be determined and implemented.
- If the grievance owner has indicated the name and contact information in the grievance forms, he/she will be informed within five workdays after the start of the process. Likewise, if the grievance is resolved, the owner of the grievance will be informed within maximum 15 workdays.
- After the grievances are resolved by reaching an agreement with the grievance owner, the grievance will be closed by the responsible person.
- If the grievances cannot be resolved within a specified time for a reason, the parties will be answered and information about the time extension will be shared.

In connection with the subject of the grievance, the responsible will be Ayen Ostim Project Manager, OHS Specialist and Environmental Engineer. If necessary, the grievance can be dealt with by all responsible parties.

Employees and external stakeholders should know who and how to contact in case of suggestions, requests and grievances. In this context, responsible parties should also have detailed information about the Grievance Redress Mechanism's operation and related procedures.

Internal grievances that will possibly come from employees will be received as the way summarized below:

- All Project employee and field workers (including subcontractors) will be informed about the Grievance Redress Mechanism.
- The operation of the Grievance Redress Mechanism and the stakeholder engagement process will be included in the OHS trainings that will be repeated periodically during the construction and operation periods of the Project.
- In order to receive internal grievances, grievance/suggestion boxes will be placed at the Project Site where employees can easily reach. In areas where there are grievance/suggestion boxes, no image should be taken with the camera.

The following practices will be implemented in order to receive grievances and/or suggestions from local communities and other external stakeholders:

- Detailed information about the Grievance Redress Mechanism will be given at the stakeholder engagement meetings.
- Grievance/suggestion boxes will be placed in the mukhtar office and/or village cafes in the nearest settlements.
- With the external grievance form, applications through the website should be received.
- Information about the locations of the grievance/suggestion boxes and how to convey their grievances will be provided to stakeholders.

The Grievance Redress Mechanism flow chart is shown in Figure-7.1.

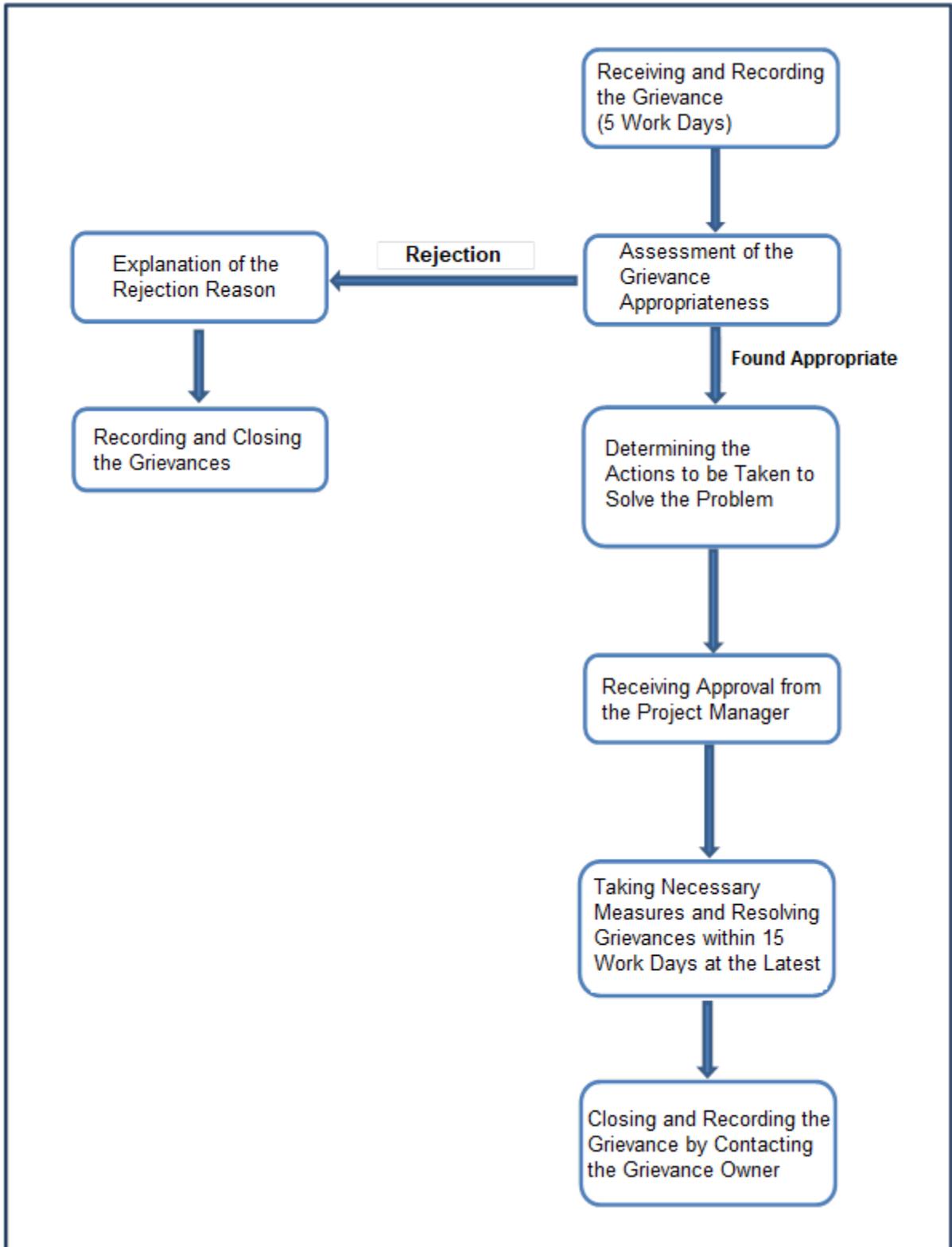


Figure-7.1: Flow Chart of the Grievance Redress Mechanism

8. SITE STUDY, STAKEHOLDER MEETINGS AND CONCLUDING REMARKS

On 6-7 January 2022, the Site Study and stakeholder meetings will be held by DOKAY Team.

The Site Study Team members of DOKAY are introduced in Table-8.1.

Table-8.1: Site Study Team Members

Name	Title
Deniz Çağlar	Environmental Engineer and OHS Expert (Class-C)
Berat Batuhan Kaplangı	Environmental Engineer
Pelin Bekri	Sociologist

During the Site Study, the Project Area that the construction and operation of the solar panels will be held on were investigated.

The following points of the Project were photographed during the site visit in order to show the existing environmental and social management applications of the Project. The photographs are presented in Annex-8.

- Sign and warnings on the access roads,
- Environment of the existing wind turbines,
- Construction area of the solar panels,

Afterward, stakeholder meetings were held in order to share information on the environmental and social management of the Project as well as stakeholder management and grievance redress mechanism. The list of the internal and external stakeholders that are interviewed during the meetings is given in Table-8.2. The photographs during the interviews are presented in Annex-8.

The detailed assessment regarding the stakeholder meetings will be given in “Stakeholder Engagement Plan and Grievance Redress Mechanism” Report. The following reports will be prepared for the Project as well. These reports will be integrated with the ESMP of the Project and will establish a comprehensive environmental and social management system for the Project.

- Stakeholder Engagement Plan and Grievance Redress Mechanism
- Environmental Noise Management Plan
- Waste Management Plan
- Occupational Health and Safety Management Plan
- Biodiversity Management Plan
- Environmental and Social Monitoring Plan

Table-8.2: Interviewed Stakeholders During the Meetings

Name	Title
Emre Koç	Ayen Energy Mechanical Engineer
Ercan Kara	Manager Representative
Gökhan Pala	Control Operator
Erdem Kaya	Officer
Mustafa Şen	Security Guard
Göksel Demirdağ	Mukhtar of Saraç Neighborhood
Dursun Çakmak	Mukhtar of Eşeler Neighborhood
Emin Eşsiz	Mukhtar of Servet Neighborhood

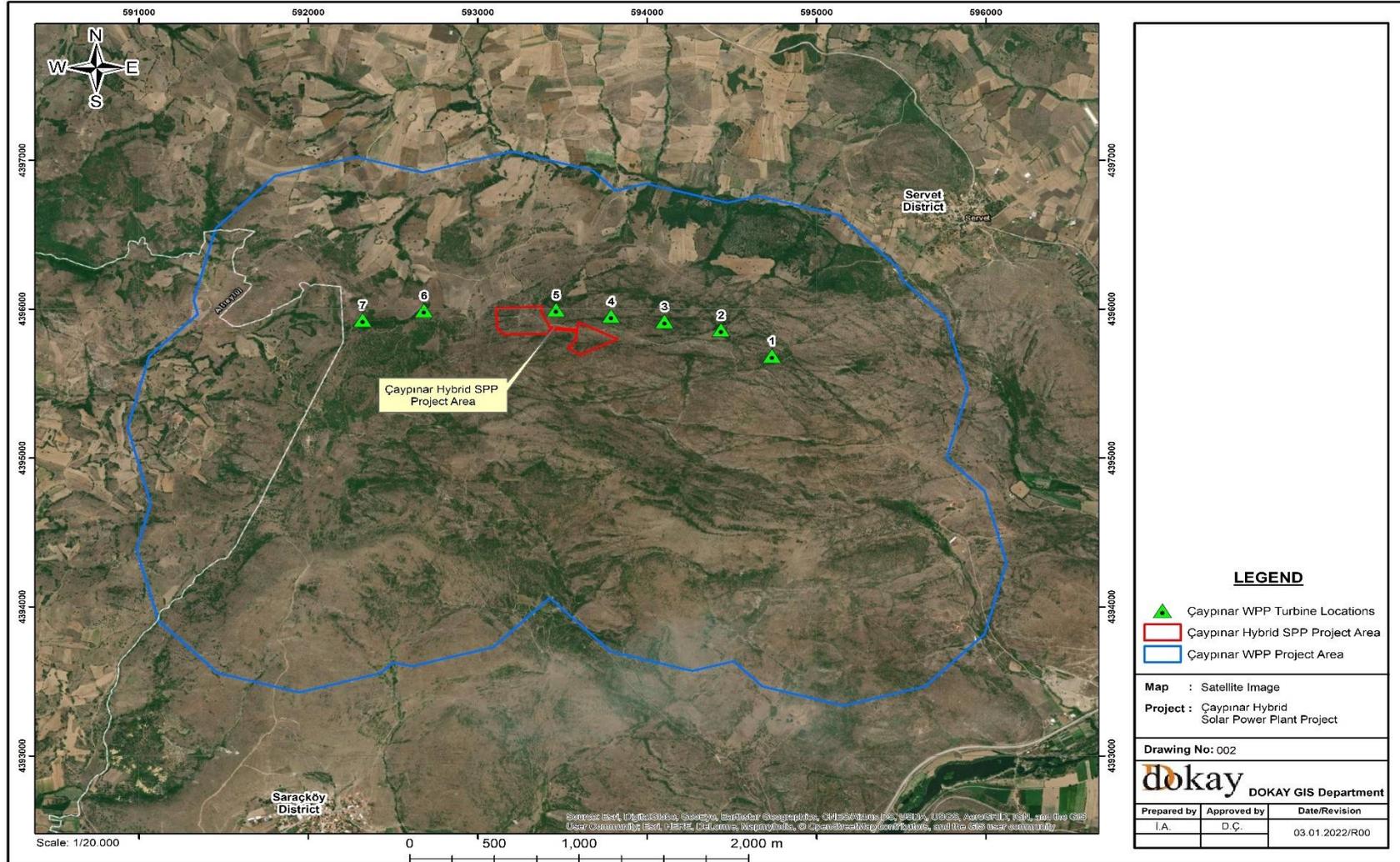
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ANNEXES

ANNEX-1: Satellite Map



ANNEX-2: "EIA is not Required" Decision of Balıkesir Provincial Directorate of Ministry of Environment and Urbanization





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



T.C.
BALIKESİR VALİLİĞİ
ÇEVRE ve ŞEHİRCİLİK İL MÜDÜRLÜĞÜ

Karar Tarihi : 14-10-2021
Karar No : 92416932 220-02 B-2021111

ÇEVRESEL ETKİ DEĞERLENDİRME BELGESİ

25.11.2014 tarih ve 29186 sayılı Resmî Gazete’de yayımlanarak yürürlüğe giren Çevresel Etki Değerlendirmesi Yönetmeliği’nin Ek-II listesinde yer alan **‘BİRDEN ÇOK KAYNAKLI ELEKTRİK ÜRETİM TESİSİ (GÜNEŞ ENERJİ SANTRALİ)’** projesi ile ilgili olarak inceleme-değerlendirme yapılmış ve Proje Tanıtım Dosyasında çevresel etkilere karşı alınması öngörülen önlemler yeterli görülmüştür. Ayrıca ÇED Raporu hazırlanmasına gerek bulunmadığı tespit edilmiş olup, söz konusu projeye ÇED Yönetmeliğinin 17. Maddesi gereğince Valiliğimizce **“Çevresel Etki Değerlendirmesi Gerekli Değildir”** kararı verilmiştir.



Mustafa ÇEK
Vali a.
Vali Yardımcısı

Proje Sahibi : AYEN OSTİM ENERJİ ÜRETİM A.Ş.
Proje Yeri : Balıkesir İli, Kepsut İlçesi, İhsaniye Mahallesi
Kapasite : Balıkesir İli, Kepsut İlçesi, İhsaniye Mahallesinde AYEN OSTİM ENERJİ ÜRETİM A.Ş. tarafından ?Birden Çok Kaynaklı Elektrik Üretim Tesisi (Güneş Enerji Santrali Projesi) 5,5009MWm-8.974.100,00kWh/yl

kuruluğunda

ANNEX-3: Electricity Generation Licence of Çaypınar Hybrid SPP



ANNEX-4: Deed Information of the Project Area

TAŞINMAZA AİT TAPU KAYDI (Aktif Malikler için Detaylı - ŞBİ var)			
Zemin Tipi	: Kamu Orta Malı	Ada/Parsel	: 198/98
Zemin No	: 108592382	Yüzölçüm	: 1.020.045,56 m ²
İl / İlçe	: BALIKESİR/KEPSUT	Ana Taş. Nitelik	: MERA
Kurum Adı	: Kepsut TM		
Mahalle / Köy Adı	: İHSANİYE Mah.		
Mevkii	:		
Cilt / Sayfa No	: 10000 / 11327		
Kayıt Durum	: Aktif		

TAŞINMAZ ŞERH / BEYAN / İRTİFAK

ŞBİ	Açıklama	Malik / Lehdar	Tarih - Yevmiye	Terkin Sebebi - Tarih - Yev.
Beyan	Diğer (Konusu: YÖZÜLÇÜM HATALIDIR) Tarih: - Sayı: -	BALIKESİR KADASTRO MÜDÜRLÜĞÜ	01/10/2019 - 3446	-

MÜLKİYET BİLGİLERİ

Sistem No	Malik	Elbirliği No	Hisse Pay/Payda	Metrekare	Edinme Sebebi - Tarih - Yev.	Terkin Sebebi - Tarih - Yev.
514949937	KAMU ORTA MALI		TAM	1.020.045,56	İfraz İşlemi (TSM) - 10/01/2020 - 210- - -	-

* Tesis edilen şerhler ve beyanlar salt elektronik ortamda tutulmaktadır.

Raporlayan: tk36187
Ertan ERKAYA
Kaydına Uygundur
3.09.2021

ANNEX-5: Kepsut Municipality Correspondances



T.C.
KEPSUT BELEDİYE BAŞKANLIĞI
İmar ve Şehircilik Müdürlüğü

Sayı : E-22585093-115.02.01-1975
Konu : İmar Durumu(Kurum Görüşü)

02.07.2021

AYEN OSTİM ENERJİ ÜRETİM ANONİM ŞİRKETİ
(Hülya Sk. nO:37 G.O.P. ANKARA)

İlgi : 02.07.2021 tarih ve 756 sayılı dilekçeniz.

İlgi tarih ve sayılı dilekçe ile, Balıkesir ili, Kepsut ilçesi sınırları dahilinde kalan ve yazınız ekinde koordinatları belirtilen saha içinde, tarafınızca yapılması planlanan “ Güneş Enerji Santrali” projesi hakkında Belediyemiz görüşü talep edilmektedir.

Yapılan araştırma ve inceleme sonucunda; Kurulması planlanan “Güneş Enerji Santrali” proje alanının Balıkesir ili, Kepsut ilçesi, İhsaniye merkez mahallesi, Saraç ve Eşeler kırsal mahallesi sınırları dahilinde Planlı Alanlar ve Köy yerleşik alanı sınırları dışında plansız alanda kaldığı, alanında mera niteliğinde olduğu tespit edilmiş olup, söz konusu alan için; 3194 sayılı İmar Kanunu ve ilgili mevzuatları doğrultusunda RES ve GES alanı olarak Nazım ve Uygulama İmar Planı yapılmasında Belediyemizce bir sakınca bulunmamaktadır.

Bilgilerinize rica ederim.

Feyzullah UYGUR
Belediye Başkan Yardımcısı

EK :
1- Planlama Bölgesi Haritası.
2- Tapu Kayıt Bilgisi(1 Sayfa).

Bu evrakın 5070 Sayılı Kanun gereğince E-İMZA
ile imzalandığı tasdik olunur. 02/07/2021

Erdar DEMİROĞLU
İmar Personeli



T.C.
KEPSUT BELEDİYE BAŞKANLIĞI
İmar ve Şehircilik Müdürlüğü

Sayı : E-22585093-000-2819
Konu : Proje Tanıtım Dosyası

29.09.2021

BALIKESİR ÇEVRE VE ŞEHİRCİLİK İL MÜDÜRLÜĞÜNE

İlgi : 21.09.2021 tarihli ve E-92416932-220.02-1780054 sayılı yazınız

İlgi tarih ve sayılı yazınızda belirtilen, İlçemizin İhsaniye Mahallesinde Ayen Ostim Enerji Üretim A.Ş tarafından planlanan 'Birden Çok Kaynaklı Elektrik Üretim Tesisi (Güneş Enerji Santrali)' faaliyeti yapılması için hazırlanan proje Belediyemizce uygun görülmüştür.

Bilgilerinize arz/rica ederim.

Fezullah UYGUR
Belediye Başkan Yardımcısı

Bu belge, güvenli elektronik imza ile imzalanmıştır.
Doğrulama Kodu: EcdGQ-PHoQOK-zKJDh9-A5jKyV-ycZoxOhi Doğrulama Linki: <https://www.turkiye.gov.tr/icisleri-belediye-ebys>

Cumhuriyet Meydanı No 2 Kepsut Balıkesir
Telefon No: (266)576 10 08 Dahili: 40 Faks No: (266)576 13 28
e-Posta: imar@kepsut.bel.tr İnternet Adresi: <http://www.kepsut.bel.tr>
Kep Adresi: kepsutbd@hs01.kep.tr

Bilgi için: Emine NİSAN
Tekniker
Telefon No:



1/1

ANNEX-6: Opinion Letter of Balıkesir Province Cultural Assets Conservation Regional Board Directorate



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



Sayı : E-59672249-165.02.04-1778606
Konu : Balıkesir İli, Kepsut İlçesi, İhsaniye İlçesi,
Güneş Enerji Santrali hakkında (10.12.98)

BALIKESİR ÇEVRE VE ŞEHİRCİLİK İL MÜDÜRLÜĞÜNE
(Çed Hizmetleri ve Çevre İzinleri Şube Müdürlüğü)

İlgi : 21.09.2021 tarihli ve E-92416932-220.02-1780054 sayılı yazınız.

Balıkesir İli, Kepsut İlçesi, İhsaniye Mahallesi sınırları içerisinde Ayen OSTİM Enerji Üretim şirketi tarafından "Birden Çok Kaynaklı Elektrik Üretim Tesisi"(Güneş Enerji Santrali) faaliyeti Balıkesir İli, Kepsut İlçesi, İhsaniye Mahallesi sınırları içerisinde Ayen OSTİM Enerji Üretim şirketi tarafından "Birden Çok Kaynaklı Elektrik Üretim Tesisi"(Güneş Enerji Santrali) faaliyeti yapılmasına ilişkin ÇED yönetmeliği gereğince Kurum görüşümüzün bildirilmesi hususundaki ilgi yazı eki incelenmiştir.

E-ÇED sistemi üzerinde koordinatları belirtilen alan üzerinde Müdürlüğümüz uzmanlarınca yerinde yapılan incelemelerde; istem konusu alanın yüzeyinde 2863 Sayılı Yasa kapsamına giren herhangi bir taşınmaz kültür varlığına rastlanılmamış olup, tescili yapılmış herhangi bir sit alanında veya koruma alanında kalmadığı, tescilli olmadığı veya tescilli parsel yakınında yer almadığı tespit edilmiştir. yapılmasında Kurumumuz açısından bir sakınca bulunmamaktadır.

Balıkesir İli, Kepsut İlçesi, İhsaniye Mahallesi sınırları içerisinde Ayen OSTİM Enerji Üretim Şirketi Tarafından "Birden Çok Kaynaklı Elektrik Üretim Tesisi"(Güneş Enerji Santrali) faaliyeti yapılmasında Kurumumuz mevzuatı açısından sakınca bulunmamaktadır.

Ancak taşınmaz üzerinde yapılacak çalışmalarda herhangi bir kültür varlığına rastlandığı takdirde çalışmanın derhal durdurulup, konunun 2863 sayılı kanunun 4. Maddesi gereği en yakın Müze Müdürlüğüne veya köyde muhtara veya diğer yerlerde mülki idare Amirlerine bildirilmesi gerekmektedir.

Bilgilerinizi ve Gereğini arz ederim

Salih ÇAKAN
Koruma Bölge Kurulu Müdür V.

Bu belge, güvenli elektronik imza ile imzalanmıştır.
Doğrulama Kodu: 45441757-8425-4082-AE83-9777B95293F6

Dumlupınar Mahallesi, Kız Orta Okul Sokak, No:63 10100 KARESİ/BALIKESİR
TEL:(266) 245 73 83 FAKS:(266) 243 17 42 KEP Adresi: balikesirkurul@hs01.kep.tr
e-posta: balikesirkurul@kultur.gov.tr İnternet Adresi: www.kultur.gov.tr

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

Bilgi için:Funda KARAPINAR
Arkeolog



Türkiye

ANNEX-7: Opinion Letter of Balıkesir Province Directorate of Environment, Urbanization and Climate Change



T.C.
BALIKESİR VALİLİĞİ
Çevre ve Şehircilik İl Müdürlüğü



Sayı : E-33508077-220.02-1850021
Konu : Ek-2 Proje Tanıtım Dosyası

29.09.2021

ÇED VE ÇEVRE İZİNLERİNDEN SORUMLU ŞUBE MÜDÜRLÜĞÜNE

İlgi : 21.09.2021 tarihli ve E-92416932-220.02-1780054 sayılı yazınız.

İlgi yazı ile, Balıkesir İli, Kepsut İlçesi, İhsaniye Mahallesi Ayen Ostim Enerji Üretim A.Ş. tarafından "Birden Çok Kaynaklı Elektrik Üretim Tesisi (Güneş Enerji Santrali)" faaliyeti yapılması planlanmakta olduğundan bahsedilerek Bakanlığımızın e-ÇED sistemi üzerinden <http://eced.csb.gov.tr/ced/jsp/bakanlik/infoProje.htm?id=35609> numarası ile ulaşabileceğimiz proje Kurumumuz mevzuatları açısından inceleme ve değerlendirme yapılarak, proje hakkındaki görüşümüzün gönderilmesi talep edilmektedir.

Söz konusu projeye ilişkin olarak, eced portalından 35609 Id numarası ile Proje Tanıtım Dosyasında yapılan incelemede söz konusu alan, 2863 Sayılı Kanunun Kurumumuza verdiği yetkiler kapsamında doğal sit alanında kalmamakta ve tabiat varlığı kaydı bulunmamaktadır.

Bilgilerini ve gereğini rica ederim.

İlyas ÇAKMAK
Çevre ve Şehircilik İl Müdür Yrd.

Ek: Kurum Görüşü Verilen Güneş Enerji Santral Alanı Koordinatları. (1 Sayfa)

Bu belge, güvenli elektronik imza ile imzalanmıştır.

Doğrulama Kodu: 1BDB4E9F-F7BC-41E2-963E-CF453D5344

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

Kuva-i Milliye Mahallesi Karanfil Sokak No:1 10030 BALIKESİR

Santral : 0 266 224 47 15 Faks : 0 266 224 03 19

E-Posta : balikesir@csb.gov.tr KEP : balikesircevresehicilik@hs01.kep.tr

Bilgi için: Fatih GÜNDOĞAN
İdari Büro Görevlisi
(Sözleşmeli)



ANNEX-8: Photographs from the Site Studies



Photo-1: Speed Limit Sign on the Access Road



Photo-2: Temporary Waste Storage Container



Photo-3: Temporary Waste Storage Container (Side View)



Photo-4: Septic Tank



Photo-5: Septic Tank (inside)



Photo-6: Entrance of the Project Site



Photo-6: Environment of the one of the Turbines



Photo-7: Construction Area of the Project



Photo-8: Construction Area of the Project (2)



Photo-9: Interview with Ercan Kara

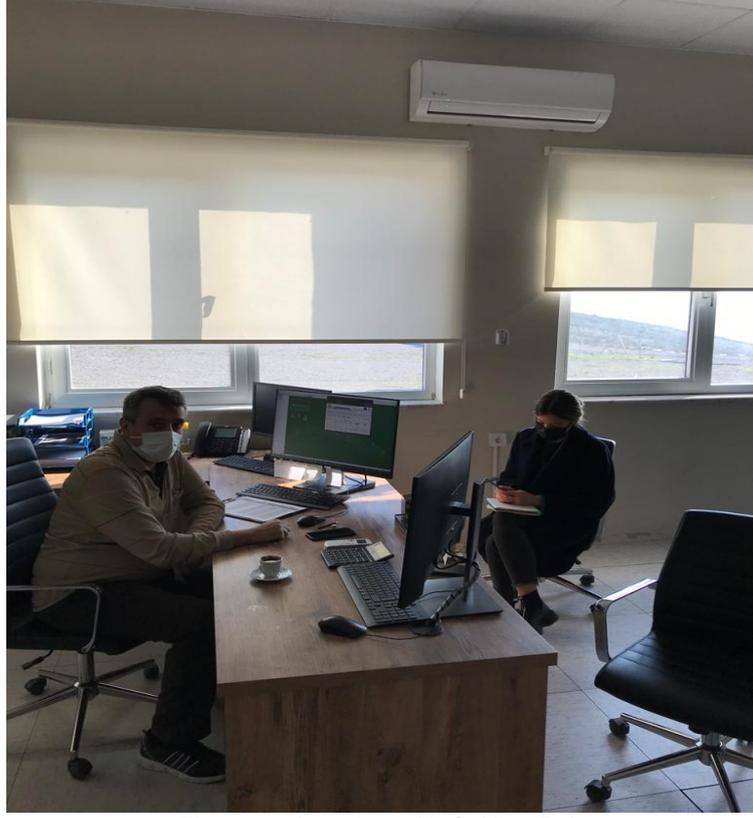


Photo-10: Interview with Gökhan Pala



Photo-11: Interview with Erdem Kaya



Photo-12: Interview with Mustafa Şen



Photo-13: Interview with Göksel Demirdağ and Local People of Saraç Neighbourhood



Photo-14: Interview with Dursun Çakmak



Photo-15: Interview with Emin Eşsiz

ANNEX-9: Septic Tank Discharge Document



T.C.
BALIKESİR BÜYÜKŞEHİR BELEDİYESİ
BASKİ GENEL MÜDÜRLÜĞÜ
KUKA VE VİDANJÖR ARACI ÜCRETLENDİRME FORMU



031668

FİŞ NO :
TARİH : 01.10.2021

EKİP NO : 011

GÖREVLİ PERSONELİN :				ARACIN :		
ADI SOYADI :	/ /			SÜRÜCÜ ADI SOYADI :	i. GENEL	
ÜNVANI :				PLAKASI :	10B2092	
GÖREVİN TÜRÜ :	Vidanjör : <input checked="" type="checkbox"/>	Kuka : <input type="checkbox"/>	AİT OLDUĞU KURULUŞ : BASKİ			
ÇALIŞMA YAPILAN ADRES :	Çaydınar R.E.S			ARACIN ÇALIŞMA SAATLERİ		
				Başlangıç Saati	Bitiş Saati	
ÇALIŞILAN ADRES KİŞİ BİLGİLERİ		İmza		15:00	16:20	
ADI SOYADI :	Leylan KARAA				<input type="checkbox"/> ELDEN ALINAN ÜCRET :	
T.C. KİMLİK NO :					<input checked="" type="checkbox"/> ABONEYE İŞLENEN ABONE NO : S.S.İ	1007392