

GÖKÇEDAĞ RES BUSINESS BIODIVERSITY ACTION PLAN

1.1 Entrance

Rotor Elektrik Üretim A.Ş. is operating the Gökçedağ Wind Power Plant (WPP) located in the Arıcaklı, Kızlaç, Kaman, Kozdere, Kuşcumustafa, and Gökmustafalı areas within the Bahçe, Hasanbeyli, and Nurdağı districts of the Osmaniye and Gaziantep provinces. The current installation includes a total of 58 turbines with an installed capacity of 150.6 MWm. Additionally, the project plans to incorporate a Solar Power Plant (SPP) as an auxiliary source with a capacity of 9.6088 MWm/8.00 MWe over an area of 12.8716 hectares.

The village of Savranlı is located approximately 1 km away from the project site in a direct line. Furthermore, Fevzipaşa village is about 1.2 km away, Hasanbeyli village is 3 km away, Sarayova village is 4.5 km away, and Zincirlihöyük village is 4 km away from the project site. In addition, the major centers of Bahçe (about 1.3 km away in a direct line), Nurdağı (5 km away), İslahiye (4.5 km away), and Osmaniye (30 km away) are located nearby (Figures 3-4).

There are significant wetlands within the vicinity of the planned area that could attract birds. The Aslantaş Dam is located 30 km away, and the Tahtaköprü Dam is 21 km away from the site in a direct line (Figure 5).

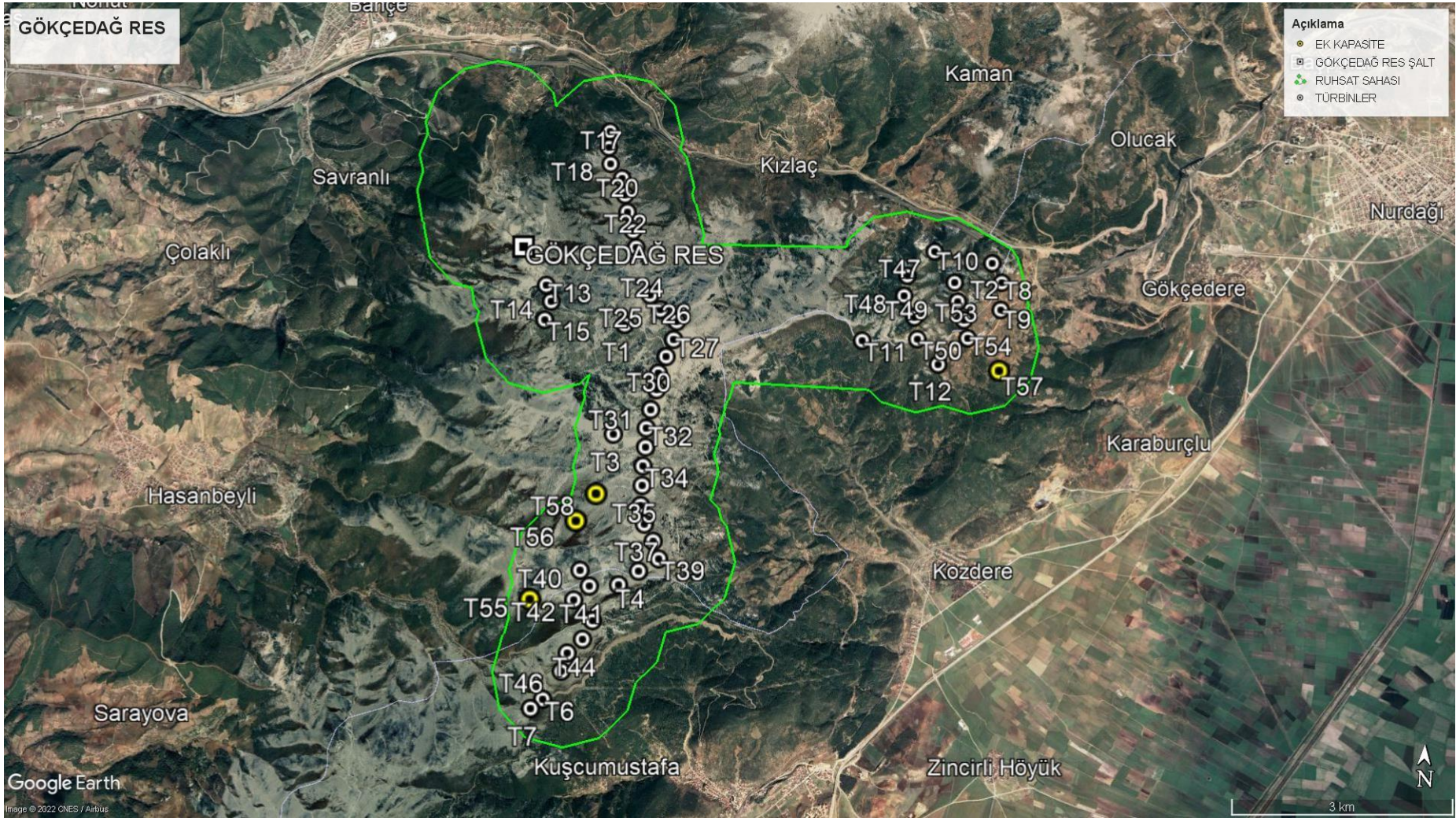


Figure 1: Satellite Image of the Project Site

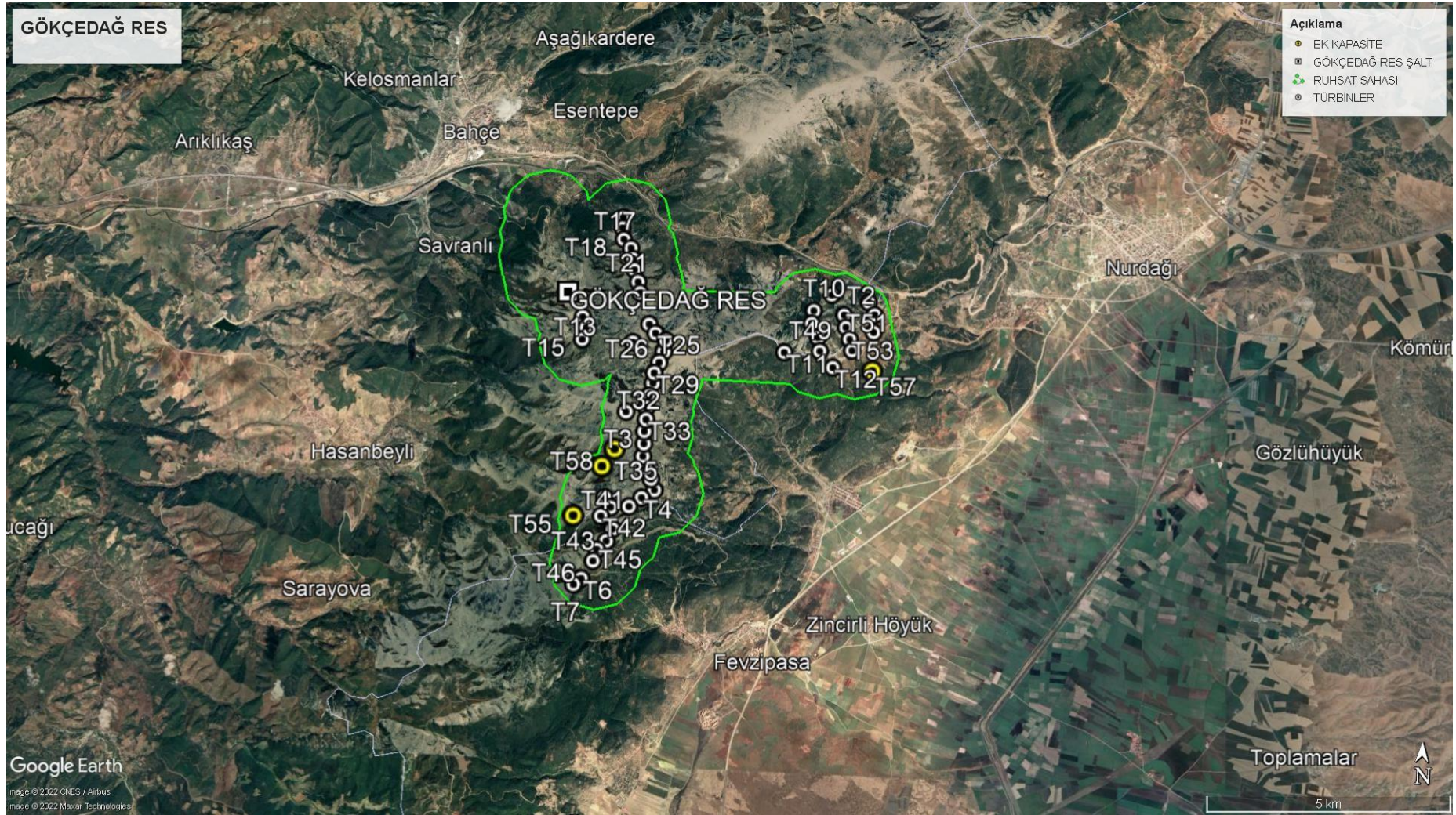


Figure 2: Satellite Image of the Project Site

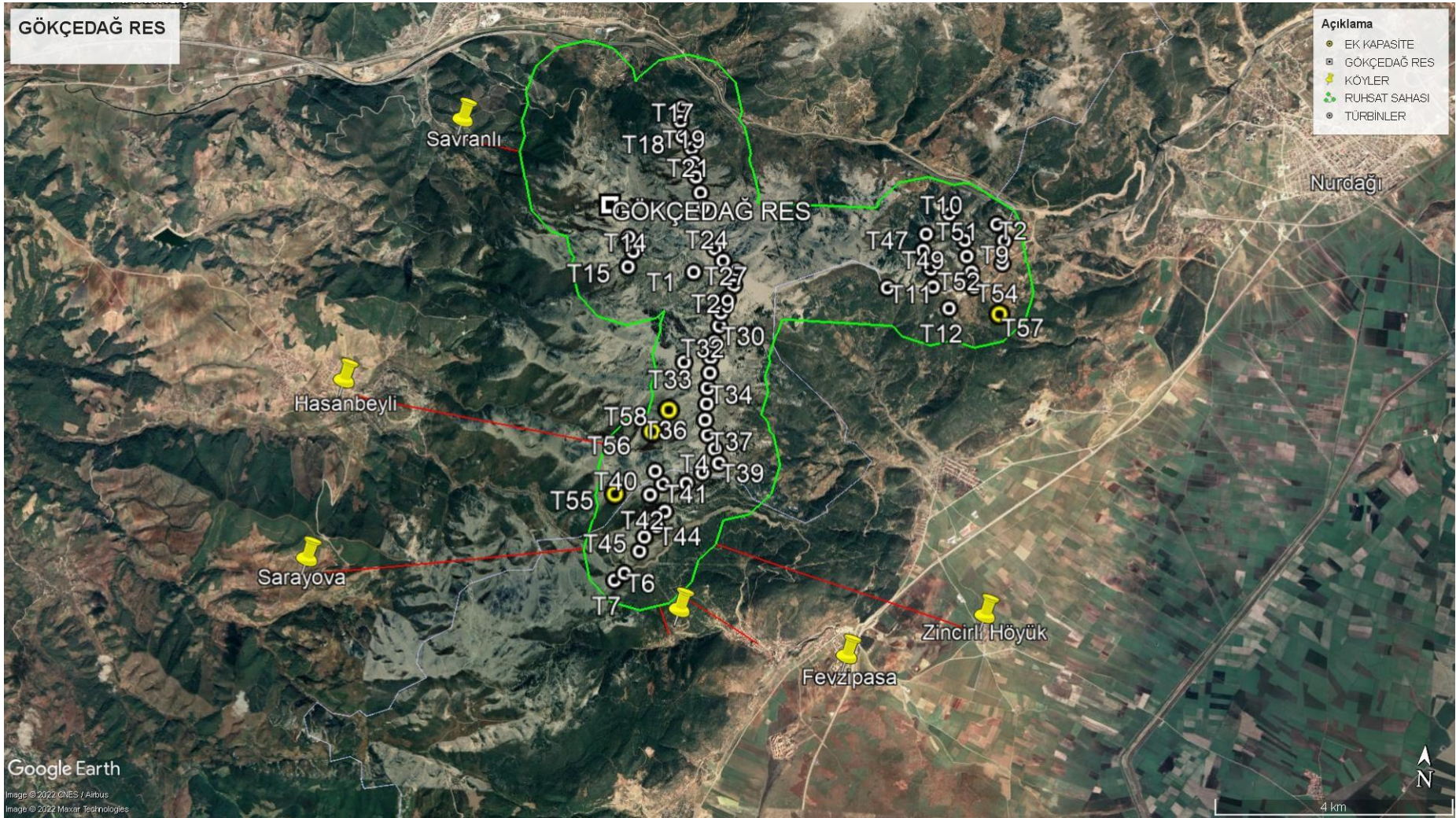


Figure 3: Village (Neighborhood) Settlements Near the Project Site

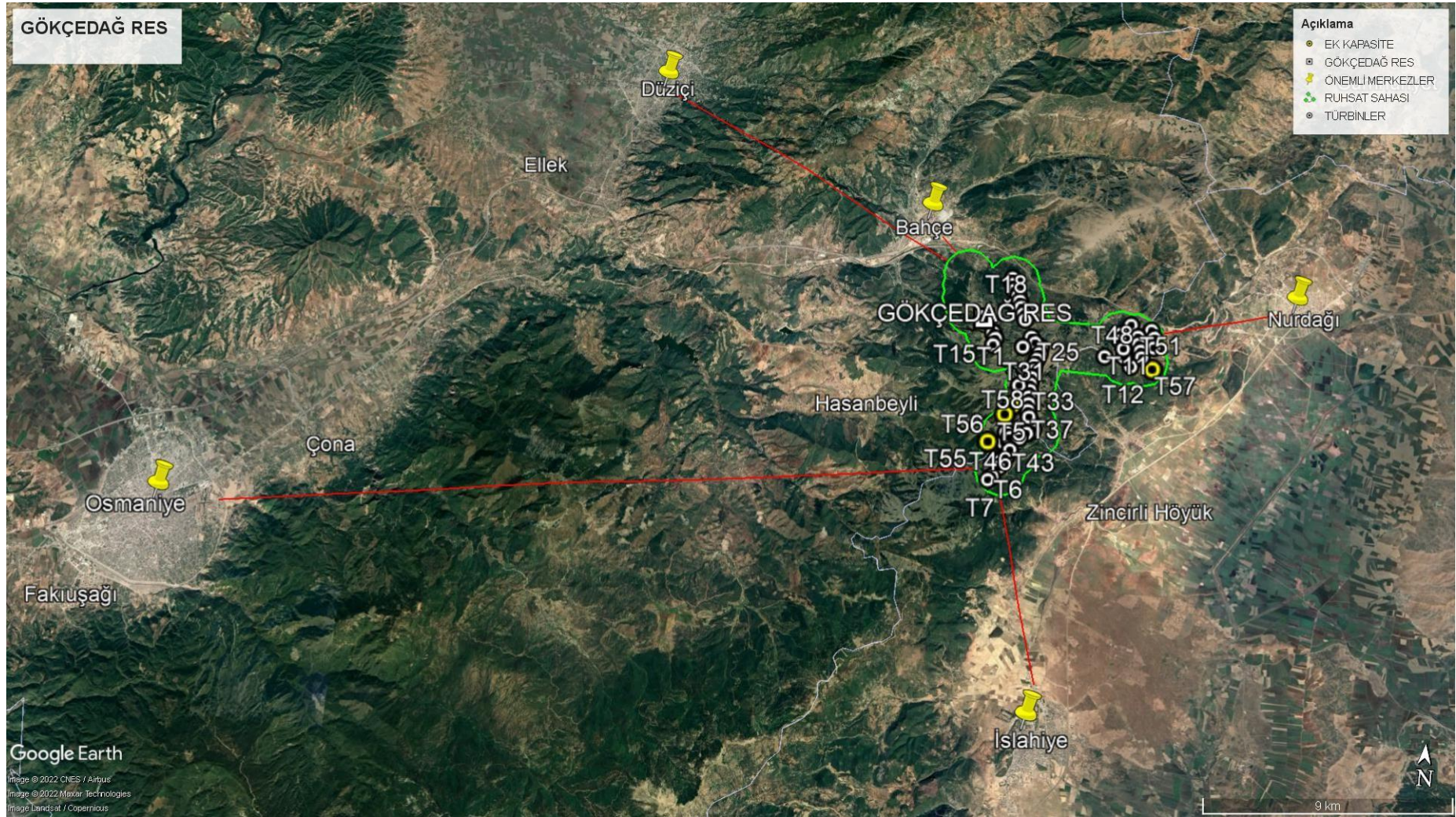


Figure 4: Settlements Near the Project Site



Figure 5: Important Water Bodies Around the Project Area

1.2 Relationship of the Area with Protected and Special Status Areas

Rotor Elektrik Üretim A.Ş. is operating the Gökçedağ Wind Power Plant (WPP) located in the Arıcaklı, Kızlaç, Kaman, Kozdere, Kuşcumustafa, and Gökmustafalı areas within the Bahçe, Hasanbeyli, and Nurdağı districts of the Osmaniye and Gaziantep provinces. The current installation includes a total of 58 turbines with an installed capacity of 150.6 MWm. Additionally, the project plans to incorporate a Solar Power Plant (SPP) as an auxiliary source with a capacity of 9.6088 MWm/8.00 MWe over an area of 12.8716 hectares.

A part of the Gökçedağ WPP licensed area is within the boundaries of the Amanos Mountains Important Natural Area (INA), one of the 305 Important Natural Areas proposed by Eken et al. (2006), which does not provide any official protection status. However, the planned SPP area is outside the boundaries of the Amanos Mountains INA (Figures 6-7).

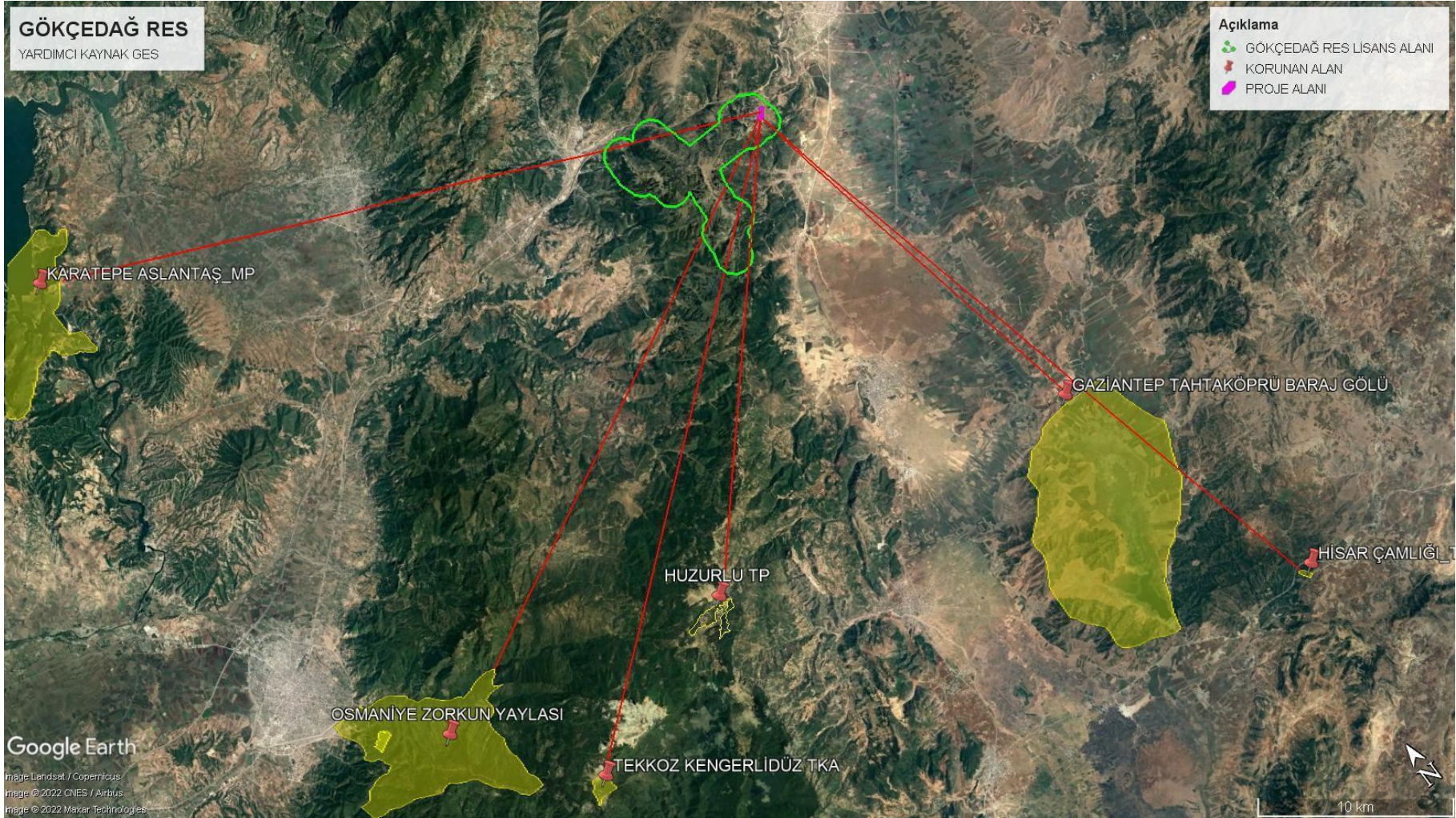


Figure 6: Satellite Image Showing the Relationship Between the Project Site and Protected Areas

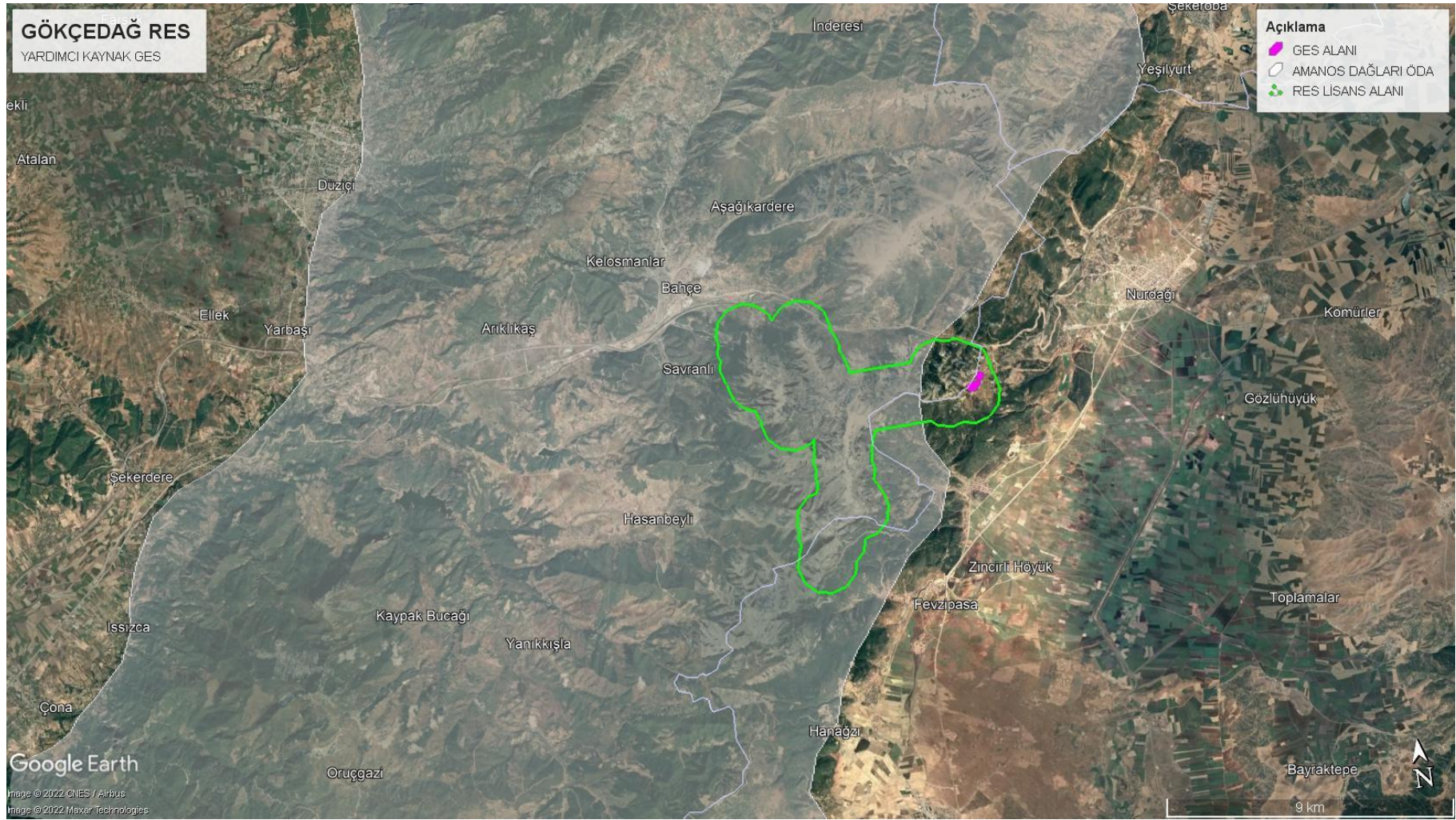
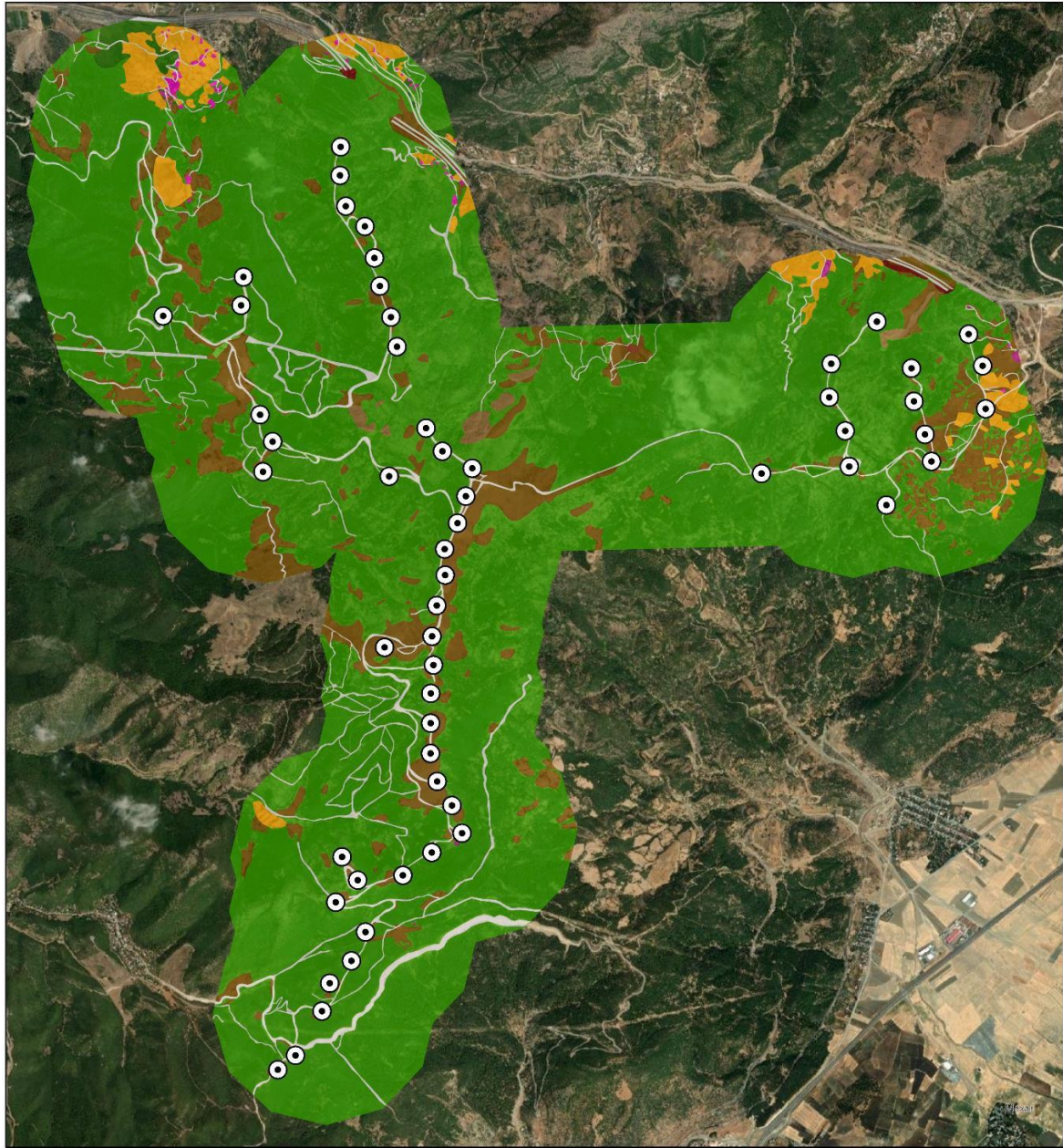


Figure 7: Satellite Image Showing the Relationship Between the Project Site and Protected Areas

1.3 Identification and Classification of Habitats within the Impact Area of Gökçedağ WPP

Rotor Elektrik Üretim A.Ş. is operating the Gökçedağ Wind Power Plant (WPP) located in the Arıcaklı, Kızlaç, Kaman, Kozdere, Kuşcumustafa, and Gökmustafalı areas within the Bahçe, Hasanbeyli, and Nurdağı districts of the Osmaniye and Gaziantep provinces. The current installation includes a total of 58 turbines with an installed capacity of 150.6 MWm.

There are 9 different habitat types within the project area. Four of these habitats are natural, while the remaining five are characterized as modified habitats. The vegetation types developing in natural areas are characterized by their EUNIS Habitat Classification Level 1, 2, and 3 codes, and the species that characterize these vegetation types are provided below (Figure 8).



Gökçedağ RES EUNIS

Habitat Haritası

Ölçek: 1:40,000

0 1000 2000
Meters

- ⊙ Türbinler
- * G: Ormanlık alanlar
- * G5: Antropojenik ormanlar, baltalıklar, ağaç sıraları
- * H3: Sarp yamaçlar, ana kayanın yüzeye çıktığı taşlık alanlar
- * H5: Bitki örtüsü seyrek açık alanlar
- ** I1.3: Yoğun olmayan tarımsal yöntemlerle yetiştirilen ürünlerin ekili olduğu tarım alanları
- ** J2.1: Kırsaldaki aktif kullanılan dağınık binalar
- ** J2.3: Kırsaldaki aktif kullanılan endüstriyel yapılar
- ** J4.2: Yol ağları
- ** J4.6: Kaldırımlar, beton yüzeyler, rekreasyon alanları

Figure 8: Gökçedağ WPP EUNIS Habitat Map

➤ Natural habitats

G Forested Areas

The forest vegetation, which is distributed in the altitude range of 700-1600 m, exhibits a vegetation structure in which larch forest habitats transition between each other as the oak at lower altitudes moves upwards. The plant taxa identified are ; *Juniperus communis* , *Juniperus excelsa* , *Juniperus oxycedrus* , *Pinus brutia* , *Pinus nigra* , *Quercus infectoria* , *Quercus petraea* , *Quercus cerris* , *Pistacia terebinthus* , *Achillea biebersteinii* , *Achillea falcata* , *Anthemis There is kotschyana . kotschyana* , *Centaurea babylonica* , *Pilosella hoppeana* , *Tanacetum aucheri* , *Asyneuma limonifolium* , *Campanula rapunculoides subsp . rapunculoides* , *Hypericum thymifolium* , *Phillyrea latifolia* , *Piptatherum miliaceum* , *Scrophularia scopolii* .



Photograph 1: Black Pine Forest Communities (EUNIS: G)



Photograph 2: Oak Communities (EUNIS: G)

G5 anthropogenic Forests, coppice Forests

They are forested areas whose cover has been broken by human influence, just behind the end points of agricultural activities close to residential areas at lower altitudes. It contains the same species as the plant taxon composition of the forests described with the G EUNIS code .

H3 Steep slopes, bedrock emerge dating Gizzard Fields

That occur intermittently at altitudes of 1500 m and spread in these habitats; *I was onoporum polycephalum* , *Tragopogon longirostis* , *Iberis attica* , *Isatis lusitanica* , *Thlaspi microstylum* , *Saponaria glutinosa* , *Fumana procumbens* , *sedum cepaea* , *sedum sempervivoides* , *Astragalus commagenicus* , *Lamium truncatum* , *Phlomis viscosa* , *Salvia multicaulis* , *Salvia viridis* , *Viola kitaibeliana* .

H5 Herb Cover Rare Openness Fields

wind turbines are installed; *Echinophora tournefortii* , *Tordylium syriacum* , *Turgenia latifolia* , *Anthemis cotula* , *Anthemis kotschyana* , *Anthemis tinctoria* var. *tinctoria* , *Artemisia absinthium* , *carduus nutans* subsp . *nutans*, *crepis sancta*, *helichrysum armenium* subsp . *armenium* , *inula germanica* , *Myosotis lithospermifolia* , *Alyssum minutum* , *Erophila verna* , *Euphorbia macroclada* , *Euphorbia rigida* , *Euphorbia paralias* , *Medicago orbicularis* , *Onobrychis viciifolia* , *Trifolium resupinatum* , *Erodium moschatum* , *Hypericum perforatum* plant taxa were identified.



Photograph 3: Sparse Vegetation Open Areas (EUNIS: H5)



Photograph 4: Sparse Vegetation Open Areas (EUNIS: H5)

➤ **Modified habitats**

Areas with habitat codes J2.1, J2.3, J4.2, J4.6 are concrete and asphalt and do not have floral content. However, cleaning the seeds that germinate in the cracks in these structures is important for the integrity of the system. Care should be taken to ensure that the plants used for landscaping and food purposes in the habitat coded J4.6 and I.1.3 are not invasive species.

1.4 Gokcedag RES facility Effect in the field floristic Defining Biodiversity

Vegetation structure of Gökçedağ WPP site; A large part of it consists of natural deciduous, coniferous or mixed forest areas. In addition, in habitats open to andropogenic effects at lower altitudes close to settlements, the forest cover has been broken and taken on a coppice appearance. In addition, agricultural areas and fruit trees are located close to human settlements. It consists of mountain steppe and rocky area habitats towards higher altitudes, as well as gardens .

IFC PS-6 and Guidance in the facility area CR and EN status, complying with Note 6 criteria No plant taxon was found. Therefore, there is no critical habitat supporting these taxa .

1.5 Gokcedag RES facility Effect in the field faunistic Defining Biodiversity

1.5.1 Amphibian

endangered and/or endemic amphibian species that may be found in the project area .

Criterion 1: Refers to Critically Endangered (CR) and /or Endangered (EN) Species. There are no amphibian species in the CR and/or EN category in the project area.

Criterion 2: Refers to Endemic and/or Narrowly Ranged Species. There are no endemic and/or narrow-range amphibian species in the project area.

Criterion 3: Refers to Migratory and/or Community Concentrated Species. There is no amphibian species in the project area that meets this criterion.

Criterion 4: Refers to Highly Threatened and /or Uniquely Rare Ecosystems. Important habitats for amphibian species in the project area are aquatic habitats. The project has been operating in the area for many years. Life water is released into the stream bed. The river environment is largely composed of natural habitats. is formed. In the current situation, it is not possible to say that the river habitat and its immediate surroundings are under high threat.

1.5.2 Reptiles

There are no endemic reptile species in the project area. According to the IUCN lists, the only reptile species that is vulnerable to extinction is the **Tortoise (*Testudo graeca*)** and is listed in the VU category. Tortoise is also included in the BERN Convention ANNEX-II and CITES ANNEX-II lists. Additionally, the **Amanos Snake (*Rhynchocalamus*)**, an endemic snake species ***barani*** is likely to be widespread in the project area. The IUCN criterion for this species is given as DD because there is not enough data about the species. The Big viper (*Macrovipera*), which is also a poisonous snake species ***lebetina*** is widespread in the project area. The IUCN criterion for this species is LC and it is not an endangered or narrowly distributed species. It is a species that project workers should be aware of and be cautious about, just because it is poisonous.

Since the project is currently in the operational phase, no ongoing negative impact on reptiles in the region is currently anticipated. It will be important to implement only the behaviors and precautions required in human-reptile encounters. These issues are detailed in the Biodiversity Action plan.

In this context, if we make a critical habitat assessment of the project area in line with faunistic data;

Criterion 1: Refers to Critically Endangered (CR) and /or Endangered (EN) Species. There are no reptile species in the CR and/or EN category in the project area .

Criterion 2: Refers to Endemic and/or Narrowly Ranged Species. It refers to Endemic and/or Narrowly Ranged Species. It refers to Endemic and/or Narrowly Ranged Species. **Amanos Snake (*Rhynchocalamus*)**, which is endemic to the project site ***barani*** is widespread. The distribution area of this endemic species is more than 50,000 square kilometers (km²). is too much. Project area This your species spherical population the size of $\geq 10\%$ And One your species reproductive of unit

It is not possible to say that there is an area that regularly hosts ≥ 10 of them. This According to the available information, the project site **does not meet the threshold value for Criterion 2.**

Criterion 3: Refers to Migratory and/or Community Concentrated Species. **There is no** reptile species in the project area that meets this criterion .

Criterion 4: Refers to Highly Threatened and /or Uniquely Rare Ecosystems. The important habitat types for reptile species in the project area are the natural habitats in the region. The project has been operating in the area for many years. Natural habitats in the project area have not been negatively affected by the project. Since the project has been in operation for many years, the negative effects that occurred during the construction phase seem to have largely returned to normal. Currently, no adverse effects **have been observed on the reptile species widespread in the region** .

1.5.3 Mammals

(*Lynx*) is *one* of the species widespread in the region. *lynx*) according to IUCN Mediterranean assessment MOST in the category, **Mountain goat** (*Capra aegagrus*) IUCN Mediterranean It is listed in the VU category according to its evaluation. However, the project area remains outside the IUCN Mediterranean evaluation area, the Mediterranean area is generally Aegean, marmara And Mediterrenian regions It covers. This two type spherical in evaluation It is not listed as endangered. However, in this report, these two species need to be taken into consideration . species is acceptance by here evaluation has been made. Moreover in the region **Gray bear** (*Ursus arctos*) and **Striped hyena** (*Hyaena hyaena*) is likely to spread . According to the Mediterranean assessment of both species, the IUCN criterion is VU and they are vulnerable species in the Mediterranean Region.

Criterion 1: Refers to Critically Endangered (CR) and /or Endangered (EN) Species. **There are no** mammal species in the CR and/or EN category in the project area .

Criterion 2: Refers to Endemic and/or Narrowly Ranged Species. adjacent to the project site high And Cliff in the hills endemic *Dryomys laniger* distribution available. However, it has been evaluated that this species is not present in the project area in terms of habitat structure and altitude. This species is **not affected by the project** .

Criterion 3: Refers to Migratory and/or Community Concentrated Species. **There is no** mammal species in the project area that meets this criterion .

Criterion 4: Refers to Highly Threatened and /or Uniquely Rare Ecosystems. The important habitat types for mammal species in the project area are the natural habitats and stream beds in the region. The project has been operating in the area for many years. Natural habitats in the region have not been negatively affected by the project. Since the project has been in operation for many years, the negative effects that occurred during the construction phase seem to have largely returned to normal. Currently, no adverse effects **have been observed on mammal species distributed in the region** .

Criterion 5: Topography, geology, soil, temperature, vegetation, and combinations of these factors One of the region structural features species local to take shape And ecological features It can affect the evolutionary processes that lead to In some cases, distinctive spatial features form populations or subpopulations of genetically unique plant and animal species. associated with their populations. Physical or spatial features have been identified as spatial catalysts for evolutionary and ecological processes, and such features are often associated with species diversity. Species (or subpopulations of species) that emerge due to the maintenance of basic evolutionary processes inherent in an area have become the main focus in recent years, along with the conservation of biodiversity , especially the process of preserving genetic diversity. By maintaining species diversity in an area, the genetic diversity within species as well as the processes that drive speciation ensure evolutionary resilience in a system, which is especially important in rapidly changing climate conditions.

For illustrative purposes, here are some potential examples of areal features associated with evolutionary processes,

Regions with high spatial heterogeneity are a positive force for speciation , as species are naturally selected for their ability to adapt and diversify .

Gradients, also known as ecotones, produce transitional habitat that is associated with the process of speciation and high species and genetic diversity.

Edaphic interfaces are areas of soil types (e.g. serpentine outcrops, limestone) that lead to the formation of unique plant communities characterized by both rarity and endemism . and gypsum sediments) are special sequences.

Connection between habitats (e.g. biological corridors), especially fragmented It is important in the maintenance of habitats and metapopulations and ensures species migration and gene flow. This connection also extends across elevation and climate gradients and across crest-to- coast to coast)” also includes biological corridors.

Areas with proven importance for adaptation to climate change for both species and ecosystems are also included in this criterion.

The importance of structural features in an area that can influence evolutionary processes will be determined on a case-by-case basis, and the determination of critical habitat will be largely based on scientific knowledge. In many cases, this criterion will apply to areas that have been previously investigated and are known or suspected to be associated with unique evolutionary processes. Although systematic methods exist to measure and prioritize evolutionary processes in a field, these methods are beyond the reasonable conditions of evaluations typically conducted by the private sector.

Criterion 5 was evaluated together for Amphibians, Reptiles and Mammals. Criterion 5 involves evaluating whether the region generally contains significant evolutionary processes. Gokcedag The area where RES is located does not show a special evolutionary process. The region does not have a special geological structure or a special history and therefore does not contain a large number of critical and/or endemic species. In this regard, the area **does not meet** Criterion 5 .

1.5.4 Ornithology

As a result of the studies, a total of 150 bird species were identified in the project area and its immediate surroundings. The list of these species, their global Red List status, and the status of the species in BERN, CITES and MAK decisions of 2022 are given in Table 1 below.

5 of the species found around the Gökçedağ WPP site are under threat on a global scale. According to the most current assessments, these species are classified as "EN", that is, endangered Steppe Eagle (*Aquila nipalensis*) and Little vulture (*Neophron percnopterus*) and the turtledove (*Streptopelia*), whose condition is "VU", meaning sensitive *turtur*), Peregrine falcon (*Falco vespertinus*) and Greater forest eagle (*Clanga clanga*).

Of the species found around the facility, 113 are in BERN Agreement Annex-2, 29 are in BERN Agreement Annex-3, 1 is in CITES Annex-1 and 26 are in CITES Annex-2.

In this context, if we make a critical habitat assessment of the project area in line with faunistic data;

Criterion 1: Habitats Important to Critically Endangered (CR) or Endangered (EN) Species

Aquila) was detected around the facility and its status was evaluated as "EN". *nipalensis*) and Little vulture (*Neophron percnopterus*) is expected during migration in the region (Kirwan et al., 2008). There are important habitats around the facility for the Little Vulture, which has the possibility of breeding in the areas around the facility. The species is expected to be seen in the facility's region during migration and in the spring and summer months corresponding to the breeding season. This your criterion of the evaluation healthy can be done for in the region A lot Scientific studies aimed at making detailed and population size estimates are required (see Biodiversity Action Plan).

Criterion 2: endemic And Narrow widespread Species for Important habitats

Facility These are the birds around criterion It does not trigger.

Criterion 3: Habitats Hosting Globally Significant Numbers of Migratory and Foraging Species

It has been determined that there are migratory birds among the listed species in and around the facility area. Considering the topographic location of the facility, the project is not expected to cause a serious problem for migratory bird populations.

Criterion 4: High at level Threatening under and /Or Unique Rare Ecosystems

None of the habitats around the site are listed as high level or unique ecosystems on the IUCN Red List of Ecosystems and therefore this criterion will not be triggered.

Criterion 5: Important Evolutionary Processes With identified habitats

Gökçedağ RES The site does not differ significantly from the surrounding region in terms of elevation, moisture gradients , or any other geological, ecological, or evolutionary factor that indicates that the region was vital for sustaining unique or distinctive evolutionary processes. Therefore, none of the habitats around the facility trigger Criterion 5.

Table 1: Bird Species Found or Likely to be Found in the Project Area

Scientific Name	English	endemism	IUCN (Spherical)	BERN	MAKK	CITES
<i>Accipiter brevipes</i>	Levant Sparrowhawk	Not Endemic	LC	APPEN DIX- 2	KD	APPEN DIX- 2
<i>Accipiter gentilis</i>	Northern Goshawk	Not Endemic	LC	APPEN DIX- 2	KD	APPEN DIX- 2
<i>Acrocephalus arundinaceus</i>	Great Reed Warbler	Not Endemic	LC	APPEN DIX- 2	KD	APPEN DIX- 2
<i>Acrocephalus palustris</i>	Marsh Warbler	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Acrocephalus scirpaceus</i>	Reed Warbler	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Aegithalos caudatus</i>	Long-tailed Tit	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Alauda arvensis</i>	Skylark	Not Endemic	LC	APPEN DIX- 3	KD	KD
<i>Alectoris chukar</i>	Chukar Partridge	Not Endemic	LC	APPEN DIX- 3	ANNEX 1	KD
<i>Anthus pratensis</i>	Meadow Pipit	Not Endemic	LC	APPEN DIX- 3	APPEND IX- 2	KD
<i>Anthus spinoletta</i>	Water Pipit	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Anthus trivialis</i>	Tree Pipit	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Apus apus</i>	Common Swift	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Apus pallidus</i>	Pallid Swift	Not Endemic	LC	APPEN DIX- 3	KD	KD
<i>Aquila chrysaetos</i>	Golden Eagle	Not Endemic	LC	APPEN DIX- 2	KD	APPEN DIX- 2

<i>Aquila nipalensis</i>	Steppe Eagle	Not Endemic	MOST	APPEN DIX- 2	KD	APPEN DIX- 2
<i>Ardea cinerea</i>	Grey Heron	Not Endemic	LC	APPEN DIX- 3	ANNEX 1	KD
<i>Ardea purpurea</i>	Purple Heron	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Athene noctua</i>	Little Owl	Not Endemic	LC	APPEN DIX- 2	KD	APPEN DIX- 2
<i>Bubulcus ibis</i>	Cattle Egret	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Buteo buteo</i>	Common Buzzard	Not Endemic	LC	APPEN DIX- 2	KD	APPEN DIX- 2
<i>Buteo rufinus</i>	Long-legged Buzzard	Not Endemic	LC	APPEN DIX- 2	KD	APPEN DIX- 2

Scientific Name	English	endemism	IUCN (Spherical)	BERN	MAKK	CITES
<i>Caprimulgus europaeus</i>	European Nightjar	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Carduelis carduelis</i>	European Goldfinch	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Cecropis daurica</i>	Red-rumped Swallow	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Cercotrichas galactotes</i>	Rufous-tailed Scrub Robin	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Acrocephalus scirpaceus</i>	Reed Warbler	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Chlidonias leucopterus</i>	White-winged Tern	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Chloris chloris</i>	European Greenfinch	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Chroicocephalus ridibundus</i>	Black-headed Gull	Not Endemic	LC	APPEN DIX- 3	ANNEX 1	KD
<i>Ciconia ciconia</i>	White Stork	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Ciconia nigra</i>	Black Stork	Not Endemic	LC	APPEN DIX- 2	KD	APPEN DIX- 2
<i>Circaetus gallicus</i>	Short-toed Snake Eagle	Not Endemic	LC	APPEN DIX- 2	KD	APPEN DIX- 2
<i>Circus aeruginosus</i>	Western Marsh Harrier	Not Endemic	LC	APPEN DIX- 2	KD	APPEN DIX- 2
<i>Circus cyaneus</i>	Hen Harrier	Not Endemic	LC	APPEN DIX- 2	KD	APPEN DIX- 2
<i>Circus macrourus</i>	Pallid Harrier	Not Endemic	NT	APPEN DIX- 2	KD	APPEN DIX- 2
<i>Circus pygargus</i>	Montagu's Harrier	Not Endemic	LC	APPEN	KD	APPEN

				DIX- 2		DIX- 2
<i>Clanga clanga</i>	Greater Spotted Eagle	Not Endemic	VU	APPEN DIX- 2	KD	APPEN DIX- 2
<i>Clanga pomarina</i>	Lesser Spotted Eagle	Not Endemic	LC	APPEN DIX- 2	KD	APPEN DIX- 2
<i>Coloeus monedula</i>	Western Jackdaw	Not Endemic	LC	KD	APPEND IX- 2	KD
<i>Columba livia</i>	Rock Dove	Not Endemic	LC	APPEN DIX- 3	APPEND IX- 2	KD
<i>Columba oenas</i>	Stock Dove	Not Endemic	LC	APPEN DIX- 3	ANNEX 1	KD
<i>Columba palumbus</i>	Common Wood Pigeon	Not Endemic	LC	KD	APPEND IX- 2	KD
<i>Coracias garrulus</i>	European Roller	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Corvus corax</i>	Common Raven	Not Endemic	LC	APPEN DIX- 3	ANNEX 1	KD
<i>Corvus cornix</i>	Hooded Crow	Not Endemic	LC	KD	APPEND IX- 2	KD

Scientific Name	English	endemism	IUCN (Spherical)	BERN	MAKK	CITES
<i>Corvus frugilegus</i>	Rook	Not Endemic	LC	KD	APPEND IX- 2	KD
<i>Coturnix coturnix</i>	Common Quail	Not Endemic	LC	APPEN DIX- 3	APPEND IX- 2	KD
<i>Cuculus canorus</i>	Common Cuckoo	Not Endemic	LC	APPEN DIX- 3	KD	KD
<i>Cyanistes caeruleus</i>	Blue Tit	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Delichon urbicum</i>	Common House Martin	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Dendrocopos syriacus</i>	Syrian Woodpecker	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Egretta garzetta</i>	Little Egret	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Emberiza caesia</i>	Cretzschmar's Bunting	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Emberiza calandra</i>	Corn Bunting	Not Endemic	LC	APPEN DIX- 3	ANNEX 1	KD
<i>Emberiza cia</i>	Rock Bunting	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Emberiza cirrus</i>	Cirl Bunting	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Emberiza hortulana</i>	Ortolan Bunting	Not Endemic	LC	APPEN DIX- 3	ANNEX 1	KD
<i>Emberiza melanocephala</i>	Black-headed Bunting	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Erithacus rubecula</i>	European Robin	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Falco naumanni</i>	Lesser Kestrel	Not Endemic	LC	APPEN	KD	APPEN

				DIX- 2		DIX- 2
<i>Falco peregrinus</i>	Peregrine Falcon	Not Endemic	LC	APPEN DIX- 2	KD	ANNEX 1
<i>Falco subbuteo</i>	Eurasian Hobby	Not Endemic	LC	APPEN DIX- 2	KD	APPEN DIX- 2
<i>Falco tinnunculus</i>	Common Kestrel	Not Endemic	LC	APPEN DIX- 2	KD	APPEN DIX- 2
<i>Falco vespertinus</i>	Red-footed Falcon	Not Endemic	VU	APPEN DIX- 2	KD	APPEN DIX- 2
<i>Ficedula albicollis</i>	Collared Flycatcher	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Ficedula parva</i>	Red-breasted Flycatcher	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Fringilla coelebs</i>	Common Chaffinch	Not Endemic	LC	APPEN DIX- 3	ANNEX 1	KD
<i>Fulica atra</i>	Common Coot	Not Endemic	LC	APPEN DIX- 3	APPEND IX- 2	KD
<i>Galerida cristata</i>	Crested Lark	Not Endemic	LC	APPEN DIX- 3	ANNEX 1	KD

Scientific Name	English	endemism	IUCN (Spherical)	BERN	MAKK	CITES
<i>Garrulus glandarius</i>	Eurasian Jay	Not Endemic	LC	KD	APPENDIX- 2	KD
<i>Grus grus</i>	Common Crane	Not Endemic	LC	APPENDIX- 2	KD	APPENDIX- 2
<i>Hieraetus pennatus</i>	Booted Eagle	Not Endemic	LC	APPENDIX- 2	KD	APPENDIX- 2
<i>Hippolais olivetorum</i>	Olive-tree Warbler	Not Endemic	LC	APPENDIX- 2	KD	KD
<i>Hirundo rustica</i>	Barn Swallow	Not Endemic	LC	APPENDIX- 2	KD	KD
<i>Iduna pallida</i>	Eastern Olivaceous Warbler	Not Endemic	LC	APPENDIX- 2	KD	KD
<i>Sylvia communis</i>	Common Whitethroat	Not Endemic	LC	APPENDIX- 2	KD	KD
<i>Sitta europaea</i>	Eurasian Nuthatch	Not Endemic	LC	APPENDIX- 2	KD	KD
<i>Lanius collurio</i>	Red-backed Shrike	Not Endemic	LC	APPENDIX- 2	ANNEX 1	KD
<i>Lanius minor</i>	Lesser Grey Shrike	Not Endemic	LC	APPENDIX- 2	KD	KD
<i>Lanius nubicus</i>	Masked Shrike	Not Endemic	LC	APPENDIX- 2	KD	KD
<i>Lanius senator</i>	Woodchat Shrike	Not Endemic	LC	APPENDIX- 2	KD	KD
<i>Larus armenicus</i>	Armenian Gull	Not Endemic	LC	APPENDIX- 3	ANNEX 1	KD
<i>Larus michahellis</i>	Yellow-legged Gull	Not Endemic	LC	APPENDIX- 3	ANNEX 1	KD
<i>Linaria cannabina</i>	Common Linnet	Not Endemic	LC	APPENDIX- 3	KD	KD

				DIX- 2		
<i>Lullula arborea</i>	Woodlark	Not Endemic	LC	APPEN DIX- 3	ANNEX 1	KD
<i>Luscinia megarhynchos</i>	Common Nightingale	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Luscinia svecica</i>	Bluethroat	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Merops apiaster</i>	European Bee-eater	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Milvus migrans</i>	Black Kite	Not Endemic	LC	APPEN DIX- 2	KD	APPEN DIX- 2
<i>Monticola saxatilis</i>	Common Rock Thrush	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Monticola solitarius</i>	Blue Rock Thrush	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Motacilla alba</i>	White Wagtail	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Motacilla cinerea</i>	Grey Wagtail	Not Endemic	LC	APPEN DIX- 2	KD	KD

Scientific Name	English	endemism	IUCN (Spherical)	BERN	MAKK	CITES
<i>Motacilla citreola</i>	Citrine Wagtail	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Motacilla flava</i>	Yellow Wagtail	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Muscicapa striata</i>	Spotted Flycatcher	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Neophron percnopterus</i>	Egyptian Vulture	Not Endemic	MOST	APPEN DIX- 2	KD	APPEN DIX- 2
<i>Oenanthe hispanica</i>	Black-eared Wheatear	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Oenanthe isabellina</i>	Isabelline Wheatear	Not Endemic	LC	APPEN DIX- 2	ANNEX 1	KD
<i>Oenanthe oenanthe</i>	Northern Wheatear	Not Endemic	LC	APPEN DIX- 2	ANNEX 1	KD
<i>Oenanthe pleschanka</i>	Pied Wheatear	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Oriolus oriolus</i>	Eurasian Golden Oriole	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Parus major</i>	Great Tit	Not Endemic	LC	APPEN DIX- 2	KD	APPEN DIX- 2
<i>Passer domesticus</i>	House Sparrow	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Passer hispaniolensis</i>	Spanish Sparrow	Not Endemic	LC	KD	APPEND IX- 2	KD
<i>Passer montanus</i>	Eurasian Tree Sparrow	Not Endemic	LC	APPEN DIX- 3	ANNEX 1	KD
<i>Pastor roseus</i>	Rosy Starling	Not Endemic	LC	APPEN DIX- 3	ANNEX 1	KD
<i>Pelecanus onocrotalus</i>	Great White Pelican	Not Endemic	LC	APPEN	KD	KD

				DIX- 2		
<i>Motacilla citreola</i>	Citrine Wagtail	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Periparus ater</i>	Coal Tit	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Pernis apivorus</i>	European Honey Buzzard	Not Endemic	LC	APPEN DIX- 2	KD	APPEN DIX- 2
<i>Petronia petronia</i>	Rock Sparrow	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Phalacrocorax carbo</i>	Great Cormorant	Not Endemic	LC	APPEN DIX- 3	APPEND IX- 2	KD
<i>Phoenicurus ochruros</i>	Black Redstart	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Phoenicurus phoenicurus</i>	Common Redstart	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Phylloscopus collybita</i>	Common Chiffchaff	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Phylloscopus orientalis</i>	Eastern Bonelli's Warbler	Not Endemic	LC	APPEN DIX- 2	KD	KD

Scientific Name	English	endemism	IUCN (Spherical)	BERN	MAKK	CITES
<i>Phylloscopus sibilatrix</i>	Wood Warbler	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Phylloscopus trochilus</i>	Willow Warbler	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Pica pica</i>	Eurasian Magpie	Not Endemic	LC	KD	APPEND IX- 2	KD
<i>Picus viridis</i>	European Green Woodpecker	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Poecile lugubris</i>	Sombre Tit	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Prinia gracilis</i>	Graceful Prinia	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Prunella modularis</i>	Dunnock	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Ptyonoprogne rupestris</i>	Eurasian Crag Martin	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Remiz pendulinus</i>	Eurasian Penduline Tit	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Riparia riparia</i>	Sand Martin	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Saxicola rubetra</i>	Whinchat	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Saxicola rubicola</i>	European Stonechat	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Serinus serinus</i>	European Serin	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Sitta neumayer</i>	Western Rock Nuthatch	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Streptopelia decaocto</i>	Eurasian Collared Dove	Not Endemic	LC	APPEN	ANNEX	KD

				DIX- 3	1	
<i>Streptopelia turtur</i>	European Turtle Dove	Not Endemic	VU	APPEN DIX- 3	APPEND IX- 2	KD
<i>Sturnus vulgaris</i>	Common Starling	Not Endemic	LC	KD	ANNEX 1	KD
<i>Sylvia atricapilla</i>	Eurasian Blackcap	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Sylvia communis</i>	Common Whitethroat	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Sylvia crassirostris</i>	Arabian Warbler	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Sylvia curruca</i>	Lesser Whitethroat	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Sylvia melanothorax</i>	Cyprus Warbler	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Sylvia rueppelli</i>	Rüppell's Warbler	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Tachymarptis melba</i>	Alpine Swift	Not Endemic	LC	APPEN DIX- 2	KD	KD

Scientific Name	English	endemism	IUCN (Spherical)	BERN	MAKK	CITES
<i>Troglodytes troglodytes</i>	Eurasian Wren	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Turdus merula</i>	Common Blackbird	Not Endemic	LC	APPEN DIX- 3	APPEND IX- 2	KD
<i>Turdus philomelos</i>	Song Thrush	Not Endemic	LC	APPEN DIX- 3	APPEND IX- 2	KD
<i>Turdus torquatus</i>	Ring Ouzel	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Turdus viscivorus</i>	Mistle Thrush	Not Endemic	LC	APPEN DIX- 3	ANNEX 1	KD
<i>Upupa epops</i>	Eurasian Hoopoe	Not Endemic	LC	APPEN DIX- 2	KD	KD
<i>Vanellus vanellus</i>	Northern Lapwing	Not Endemic	NT	APPEN DIX- 3	ANNEX 1	KD

1.6 Biodiversity Risk Evaluation

1.6.1 Flora

IFC PS-6 and Guidance in the facility area No plant taxon with CR and EN status that complies with Note 6 criteria was found. Therefore, there is no critical habitat hosting these taxa .

➤ Invasive Species

Alien invasive species, either accidentally or intentionally, move beyond their natural geographic range and become problematic. They often arise due to the globalization of the economy through the movement of people and goods, such as ship transportation, shipments of wood products, consignments carrying insects, or transportation of ornamental plants to new regions. The EU developed *Regulation (EU) 1143/2014* to actively deal with alien invasive species .

Alien invasive species (IAS) can cause serious ecological impacts on invaded environments. They may lack natural predators in their new environment, allowing them to increase their abundance and spread rapidly. They can carry diseases, compete with or prey on native species, alter food chains, and even alter ecosystems, for example by altering soil composition or creating habitats that encourage wildfires. These impacts can lead to local or global extinction of native species and ultimately ecological destruction.

IAS can also have significant socio -economic impacts. The European Union (EU) faces losses worth EUR 12 billion annually due to the effects of IAS on human health, infrastructure damage and agricultural damage.

There are more than 12,000 alien species in Europe, 15% of which are invasive. IAS, European threat It is the third most serious threat to the species below. According to a report published in 2015, 354 endangered species (229 animals, 124 plants and 1 fungus) are among all threatened species in Europe. It is clearly affected by IAS, accounting for 19% of the species under it. The newly adopted EU Biodiversity Strategy highlights the importance of tackling this threat by proposing to manage established alien invasive species and reduce the number of Red List species they threaten by 50% by 2030.





In 2013, the European Commission (EC) put forward a proposed law within the framework of an EU Directive on IAS, providing for prevention of their introduction, early warning/rapid response and effective and coordinated management. topics forward It lasted. IUCN, WHITE with made One soap opera service contract And In collaboration with the IUCN Invasive Species Expert Group (ITUG) , it has been providing technical and scientific support to the implementation of the EU IAS Regulation since 2016.

Invasive flora species have been detected in the impact area of the project (Table 2). biodiversity
The Action Plan must be followed.

Energy investment areas are areas shaped by human influence. Construction activities arising from the nature of the investment in these areas have been tried to be rehabilitated through landscape planning around the roads and buildings . The ability of some plant species used here to survive and spread in the area causes them to be called invasive species. Apart from rehabilitation studies, species carried by floods or faunistic sources may also have the same nature. For these reasons, in order to preserve the existence of the natural areas within the energy investment area, the individuals and diaspores (reproductive units) of these plants must be cleared from the area.

Timing: Controlling invasive plant species should be done before the plant goes to seed. If the plant is known for its above-ground parts before flowering, the removal is done in the spring; otherwise, it is removed immediately after flowering.

Table 2: Invasive Species Present or Likely to Be Present in the Project Area

<p><i>Acer negundo</i> (ash tree leafy maple) Areas open to andropogenic influence</p>	
<p><i>Agropyron repens</i> (Separate herb) Field, open area</p>	
<p><i>Ailanthus altissima</i> (Kokarağaç) andropogenic to the effect open spaces</p>	
<p><i>Amaranthus retroflexus</i> (Fox dry) Field, open area</p>	

Boreava orientalis (Sariat) Field, roadside



chenopodium album (While crying) Flood, flood bearings



Cirsium arvense (Köygöçüren) Flood, flood bearings



conyza canadensis (cypress) andropogenic to the effect open fields



conyza bonariensis (Coyote) andropogenic to the effect open fields



conyza albida (Maplewort) andropogenic to the effect open spaces



Cuscuta campestris (Turkish) meadow-pasture habitats



Lepidium draba (Diġnik) andropogenic to the effect open spaces



nasturtium officinale (Suteresi) streamside



Reseda lutea (Love flower) Path edge, field



rumex acetocella (Sorrel) Path edge, field And barren places



Senecio vernalis (Canary herb) Path edge And person Fields shaped by the influence



Sicyos angulatus (Itdolanbacı) Damp fields



Solanum americanum (Push grape) This edge And damp shady places



portulaca oleracea (Purslane) Field, open area



phytolacca americana (Candymaker's paint) Stream beds and moist habitats



Paspalum distichum (This discrete) This communities inside on channels



Robinia pseudoacacia (White flowering liar acacia) roadsides



Xanthium strumarium (Big Pitarak) Flood, flood bearings



Xanthium spinosum (Yellow Pitarak) Flood, flood bearings



Viscum album (Lime herb) to the trees interference



1.6.2 Fauna

IFC PS-6 and Guidance Considering the Note 6 criteria, the "critical species" evaluation and "critical habitat" evaluation were made in section 5 , and there is no Critical species in terms of fauna (Amphibia, Reptile, Mammal) in the region, and accordingly, there is no critical habitat .

Amanus snake (*Rhynchocalamus* Risk Assessment for *barani*) : Currently, no ongoing risk is foreseen for the species during the operation phase. But human-snake encounters are always possible. In these cases, it is very important to recognize the species and never harm it. There is also an Amanos crossing the roads while driving in the area. snake with when encountered definitely to the snake transition priority to give And aware In order not to cause snake crushes, the maximum vehicle speed on the roads should always be 30 It is important to apply it in km/hour.

Tortoise (*Testudo graeca*) : This species has been seen in previous observations around the area. Its presence in the region has been assessed sparsely. Currently, no ongoing risk to the species is foreseen during the operation phase. However human-turtle encounters are always possible. In these cases, recognition of the species and never damage not given A lot It is important. Moreover in the field vehicle on their rides ways passing by When encountering a tortoise, it is important to give priority to the animal and to ensure that the maximum vehicle speed on the roads is always 30 km/h in order to avoid accidentally crushing the tortoise .

Lynx Risk Assessment for *lynx*) : The habitat of the project area and its surroundings seems very suitable for this species. It is difficult to be seen by humans because it prefers to stay away from humans and is very well camouflaged. It is unlikely that the animal will be negatively affected by a RES facility due to its lifestyle. It doesn't seem possible. Although it moved away from the area to some extent due to human activity and noise only during the construction period, the species is expected to use the area again since human mobility and facility-related noise are at a minimum level in the current operation phase. It is probable. However, it is important to increase awareness about your awareness. It would be useful to increase the number of species and take some precautions to prevent harm to the species, especially in human-lynx encounters. These issues are detailed in the Biodiversity Action plan.

Mountain goat (*Capra aegagrus*) : The project area and its surroundings contain very suitable habitats for the species. Available due to the animal's lifestyle and mobility from the facility negative is affected by is It is not expected. However especially with facility Some actions have been suggested in the Biodiversity action plan against the risks of falling into the relevant water channels, frightening the facility's vehicles and people working in the facility.

Brown bear (*Ursus arctos*) : The general structure of the project site seems suitable for the species. It is possible to find bears in the Amanos from time to time, albeit rarely. There is no direct risk to the species during the operation phase.

Striped hyena (*Hyena Risk Assessment for *hyaena)** : Striped hyena in Hatay province It is one of the provinces where it is seen abundantly . The only protected area created for the striped hyena in Turkey is in Hatay province. The species can pass through the Amanos Mountains and reach Adana, Osmaniye and Kahramanmaraş regions. They are likely to use the project site. There is no direct risk to the species during the operation phase.

1.6.3 Ornithology

IFC PS-6 and Guidance Considering the Note 6 criteria, “critical type” evaluation and “critical habitat” assessment in chapter 5 made is, in the region birds in terms of There is a critical species. This species is the Lesser Vulture (*Neophron percnopterus*) . Attention should be paid to the actions provided in the Biodiversity Action Plan for the species in question.

1.6.4 Environmental Risk Analysis

The project is not likely to adversely affect human health or the environment, directly or indirectly. Environmental Risk It is called. Estimating the magnitude of risk in all its activities and Deciding whether the risk can be tolerated is called **Risk Assessment** .

Environmental Risk Assessment, Appropriate methods are used to identify environmental hazards in the working environment, reveal risks and control risks through systematic methods. qualitative and/or It is a set of studies conducted using quantitative methods.

In order to determine the environmental impacts that are likely to occur in the periods determined within the scope of the environmental management and monitoring plan and to minimize the impacts of the project by collecting the relevant data and comparing the compliance of the studies carried out with the legislation ;

- of the business management,
- wastes,
- weather emissions,
- noisy,
- wastewater,

like effects will be monitored.

A Waste Management Plan must be prepared for the wastes generated and likely to be generated within the scope of the project, and it is necessary to continue to act in accordance with the issues specified in the waste plan and the applicable legislation at all stages of the project. Waste Management that should be implemented within the scope of the project is given in Table 3 .

Table 3 Implementation Required Waste Management

STAGE	SUBJECT		PRECAUTION
BUILDING AND BUSINESS PHASE	Noisy And Vibration		During the operation phase of the project, noise generation will arise from vehicles. However, still operating owner by activity any One negative of the effect absence for the purpose of All necessary security measures must be taken and any complaints or suggestions from nearby settlements must be taken into consideration and necessary action must be taken by the activity owner.
	Weather emissions	Vehicle Welding	The vehicles used in the project area were published in the Official Gazette dated 11.03.2017 and numbered 30004. into force entering "Exhaust gas emission Control Regulation with Gasoline And Diesel quality "Regulation" to the provisions to be complied with is required.
	Waste Management	domestic Qualified Thick Wastes	Project in the scope of formed domestic qualified thick wastes smell, insect And negative to the effects It must be collected in sealed containers.
		PACKAGING waste	domestic qualified thick of waste management for 02.04.2015 history And 29314 numbered Official Newspaper' It is necessary to comply with the provisions of the "Waste Management Regulation", which was published and entered into force . Back gain possible non- organic origin domestic qualified thick wastes whereas mouth It should be collected in closed domestic waste bins and delivered to the relevant Municipality. Recyclable wastes (glass, paper/cardboard, metal, etc.) must be collected separately from other wastes, deposited in containers, and recycled by companies licensed by the Ministry of Environment, Urbanization and Climate Change. Regarding the issue dated 26.06.2021 and 31523 numbered Official Newspaper' also by publishing into force entering PACKAGING of waste The provisions of the Control Regulation must be complied with. of waste is accumulated containers continually aspect closed by keeping rodent animal And Pest prevention must be ensured .
		domestic Qualified Waste water	Business in the phase formed wastewater in the scope of 31.12.2004 History And 25687 Numbered In the Official Gazette by publishing into force entering "This pollution Control "Regulation" provisions must be complied with. Business during This pollution Control Regulation, Drinking-Use juice The provisions of the Regulation on the Protection of Basins must be complied with. of the project all in stages 23.12.1960 date and 10688 numbered Official Newspaper' also published "Law on Groundwater No. 167" and "On the Protection of Groundwater Against Pollution and Deterioration" published in the Official Gazette No. 28257 dated 07.04.2012 Regulation" to the provisions respect to be is required.

STAGE	SUBJECT		PRECAUTION
		Waste Battery And Accumulators	process in the scope of formed waste battery And accumulators in the scope of, Waste Battery And In accordance with Article 13 of the Accumulator Control Regulation; By collecting waste batteries separately from household waste, businesses that distribute and sell battery products or by municipalities will be created collection to the points waste batteries delivery After becoming waste, the resulting cells, accumulators and/or accumulators used in transformers should not be kept on a sealed surface within the site for more than ninety days until they are delivered to the manufacturer.31.08.2004 history And 25569 numbered Official in the newspaper by publishing into force entering "Waste Battery It is necessary to ensure that waste is disposed of in accordance with the provisions of the "Regulation on the Control of Batteries and Accumulators".
		Medical Wastes	For medical waste generated within the scope of the activity; waste at the source -most member will download system establishment of waste separate collection, moving And temporary storage with One accident instantly Preparing and complying with an in-unit industrial waste management plan that includes the measures to be taken. Collecting medical, hazardous and domestic wastes and packaging waste separately at the source without mixing with each other, Medical wastes with cutting-piercing waste while collecting technical features In the regulation using specified bags and containers, Separate collected medical And domestic qualified waste Only This work for allocation has been Vehicles with separate transported separately waste temporary to store for the purpose of temporary waste warehouse construction will be or It is required to have a container, Legislation to the provisions to be complied with is required.
		Waste Electronic Things	It is possible that electronic waste will be generated during the process. The electronic waste generated is temporary waste storage on the forehead by accumulating licensed disposal/return earnings to the company must be given. Compliance with the provisions of the Regulation on the Control of Waste Electrical and Electronic Equipment, which came into force after being published in the Official Gazette dated 22.05.2012 and numbered 28300. to be is required.
		Waste oils	Within the scope of waste oils generated at all stages of the project, the "Waste Oils Management Regulation", which came into force after being published in the Official Gazette dated 21.12.2019 and numbered 30985, and the "Waste Management Regulation", which came into force after being published in the Official Gazette dated 02.04.2015 and numbered 29314. "Regulation" to the provisions respect to be is required. Formed waste oils Temporary

STAGE	SUBJECT		PRECAUTION
			It is stored in the Waste Storage Area and collected by the Ministry of Environment, Urbanization and Climate Change. licence given by companies back gain and/or disposal ensuring is required
		Waste Vegetable Waste oils	of the project vegetable waste oil formation in case 06.06.2015 history And 29378 numbered Official It is necessary to comply with the relevant provisions of the "Regulation on the Control of Waste Vegetable Oils", which came into force after being published in the Gazette .
		Tires that Completed its life	Any One for this reason promise subject of waste welding in case your life expired tires, dated 25.11.2006 and numbered 26357 "Control of End-of-Life Tires" Regulation”) to the provisions respect to be is required.
		Dangerous Wastes	In case of fluorescent lamps used in lighting, printing toners from printers used in the administrative building, contaminated waste and other hazardous wastes at any stage of the process, they will be stored in the Temporary Waste Storage Area in accordance with waste codes. Environment urbanism And Climate change ministry by licence given by companies back gain and/or disposal ensuring is required
		Oily Mud mud	of the process any One in the phase or equipment care from his work caused Oily sludges must be sent to licensed companies and disposed of.

The relevant applications within the scope of the Regulation on Amendments to the Zero Waste Regulation of the facility have been completed and it has a zero waste certificate. Waste Management Regulation of the Facility in the scope of prepared Industrial Waste Management plan is available is, It has been determined that it has been approved by the Provincial Directorate of Environment, Urbanization and Climate Change. It has been determined that the packaging waste generated in the facility is separated on site in accordance with its codes and is regularly stored in the Temporary Waste Storage Area. The stored waste is recycled through licensed companies.

At the facility, care should be taken to store waste scrap materials on a concrete floor rather than on a dirt floor.

wastewater generated within the scope of the project was collected in the septic tank and disposed of with a sewage tank. In this context, within the scope of domestic wastewater generated during the operation phase , the provisions of the "Water Pollution Control Regulation", which came into force after being published in the Official Gazette No. 25687 dated 31.12.2004, must be complied with. In addition, the provisions of the Water Pollution Control Regulation and the Regulation on the Protection of Drinking and Domestic Water Basins must be complied with during the operation.

It has been determined that the project is outside the scope of the Environmental Permit and License Regulation, and no exemption certificate has been found. The facility's Environmental Permit Exemption certificate must be kept within the scope of the Environmental Permit and License Regulation.

1.7 Social Responsibility Suggestions

Social responsibility projects are the expression of the investor company's sensitivity to biodiversity . Starting from this point, the cultivation of endemic bulbous plants in Osmaniye province, which are our most important resource values, will be one of the good examples of these sensitivities (Table 4).

Table 4 Sensitive and Rare Endemic Bulbous Plant Recommendations for Gökçedağ WPP in Osmaniye Province

Herb taxon	Turkish First Name	Blooming	habitat
<i>allium gay</i>	small onion	4- 5	Cliff slopes, Sandy Oak and Juniper Fields, Fallow Fields
<i>allium flavum</i> subsp . <i>tauricum</i> there is. <i>pilosum</i>	taurus yellow	6- 6	Dry Top surfaces, Rock Hills, Bushes
<i>allium phaneranthum</i> subsp . <i>deciduum</i>	Kelkörmən	6- 8	Pine, Beech, Oak, Cedar forests, cliffs, calling
<i>allium karamanoglui</i>	Pasasogani	4- 4	Dry slopes, shrubs
<i>fritillaria alfredae</i> subsp . <i>glaucoviridis</i>	agelale	4- 5	Oak bushes, maquis
<i>crocus danfordiae</i> subsp . <i>danfordiae</i>	inceciğdem	2- 3	Top openings, shrubs
<i>crocus adanensis</i>	Adanaçiğdemi	3- 3	of the woods Between, Juniper, Oak Scrubs
<i>crocus leichtlinii</i>	Mardinçiğdemi	3-4	Cliff slopes
<i>gladiolus anatolicus</i>	wildflower	3- 5	Maki, Pine forest, Limestone Places

, the medicinal and aromatic plants mentioned in Table 5 , which have economic value, can be produced in a 50 m ² polyethylene greenhouse (turned from seed to seedling) to be established within the facility site, and a medicinal and aromatic plant garden can be established in the fields of the local people. This action, which has economic returns, will also be an approach compatible with the understanding of sustainable biodiversity . This area can be improved by adding species every year.

Table 5 Production can be done Medical And Aromatic plants

Herb taxon	Turkish First Name
<i>Salvia officinalis</i>	Medical Sage
<i>Echinacia purpurea</i>	echinacea
<i>Echinacia angustifolia</i>	echinacea
<i>Origanum onites</i>	Izmir thyme
<i>Thymus vulgaris</i>	Mountain thyme
<i>Mentha piperita</i>	menthol Mint
<i>achillea millefolium</i>	Civan forelock
<i>calendula officinalis</i>	Same Sefa
<i>Melissa officinalis</i>	Balm
<i>lavandula angustifolia</i>	Lavender
<i>Rosmarinus officinalis</i>	Rosemary
<i>hypericum perforatum</i>	Yellow Centaury
<i>urtica dioica</i>	Nettle
<i>helichrysum Sp.</i>	Gold weed

1.8 biodiversity Action plan

Gokcedag RES facility biodiversity Action plan							
Action Code	Habitat Class	Action Subject	Action Zone	Action Rationale	Action/Application Details	Action Period	Action Duration
GD1	All Habitats	Critical Conservation of Fauna Species	General Area	Endangered Fauna types His research particularly focused on the Lesser Vulture (<i>Neophron Percnopterus</i>) With Steppe Eagle (<i>Aquila nipalensis</i>) Species in the Project Area and Surroundings It should be investigated	Population by Expert Biologists Level Monitoring	During Operation	2 Year Duration: March-November Between
GD2	All Habitats	Critical Conservation of Fauna Species	General Area	Amanus Snake (<i>Rhynchocalamus Barani</i>) Species Should be Investigated in the Project Area and Surroundings About Facility Employees Should Be Provided Training	Population by Expert Biologists Level Monitoring	During Operation	In May-June for 1 Year
GD3	Business	Fauna Conservation of Species	Project Area And surroundings	Tortoise (<i>Testudo</i> Facility Employees Should Be Provided Training About <i>Graeca</i>) Species. Pay Attention to Certain Points of the Project Area Tortoise may come out signs It must be placed.	Biologists who are experts on the subject Training Should Be Provided by	During Operation	April-May 2024 one Times

Gokcedag RES facility biodiversity Action plan							
Action Code	Habitat Class	Action Subject	Action Zone	Action Rationale	Action/Application Details	Action Period	Action Duration
GD4	Business	Fauna Conservation of Species	Project Area And surroundings	tortoises and other animals from being crushed by vehicles while crossing the roads, vehicle speeds should be limited to 30 km/h within the facility. With Limitation, Transition your priority Each Time to animals It must be given .	Company By	During Operation	Continually
GD5	Business	Fauna Conservation of Species	Project Area And surroundings	Lynx <i>About the Lynx</i>) Species Facility To its employees Education should be given	Biologists who are experts on the subject By Education should be given	During Operation	April-May 2024
GD6	Business	Fauna Conservation of Species	Project Area And surroundings	in the region Bear (<i>Ursus Arctos</i>) is available. Human-Bear Encounters Can Sometimes Be Dangerous. bears To the region Garbage containing food should never be left open in the facility to avoid shrinkage. A Garbage Management plan How to Prepare and Store and Remove Garbage That May Attract Bears About APPLICATION It must be reported.	Company By	During Operation	Continually

Gokcedag RES facility biodiversity Action plan							
Action Code	Habitat Class	Action Subject	Action Zone	Action Rationale	Action/Application Details	Action Period	Action Duration
GD7	Business	Fauna Conservation of Species	Project Area And surroundings	Pet Cats Should Never Be Kept in the Facility. Although it is recommended not to have a pet dog, Even Especially at Night Free to their wanderings Permission should not be given	Company By	During Operation	April-May 2024
GD8	All Habitats	Invader Blocking Species	Project Area And surroundings	Investigation of Invasive Species Found in the Project Area and Surroundings Project Area And Around by watching dismantling of your plan Must be prepared	Population by Expert Biologists Level Monitoring	During Operation	one Year Duration in July and August
GD9	Business	Prevention of Environmental Pollution	Project Area	Licensed in accordance with the Waste Codes for Hazardous Wastes Generated within the Business Companies Recycling /Disposal by to its facilities Must be Delivered .	Company By	During Operation	6 on the moon one
GD10	Business	Prevention of Environmental Pollution	Project Area	Licensed in accordance with the Waste Codes for Non-Hazardous Wastes Generated within the Business Companies Recycling /Disposal by to its facilities Must be Delivered .	Company By	During Operation	per year one

GD11	Business	Prevention of Environmental Pollution	Project Area	domestic wastewater Towing with a Sewage Truck	Company by	During Operation	septic tank 80% When You Reach Your Level
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Gokcedag RES facility biodiversity Action plan							
Action Code	Habitat Class	Action Subject	Action Zone	Action Rationale	Action/Application Details	Action Period	Action Duration
GD12	Business	Regulatory Compliance	Project Area	Obtaining Environmental Permit Exemption It is necessary.	Company by	During Operation	2022 December

PROJECT TEAM

Name- Surname /Title	In Report/Study Department He is Assigned to	Sign ature
<i>Specialist Biologist Tariq BATUHAN</i>	Project And Report Coordination Ecological Assessment	
<i>Prof. Dr. Mustafa SÖZEN</i>	Fauna Evaluation	
<i>Prof. Dr. Tahir SHOOTER</i>	hydrobiological Evaluation	
<i>Dr. Lecturer . Member of Karim SOUTH</i>	Flora And Vegetation Evaluation	
<i>Kaan ÖZGENCİL</i>	Ornithological Evaluation And GIS Studies	
<i>Biologist Mehmet Ali YUKSEL</i>	Ecological Studies And Land Coordination	
<i>Experienced Bird Observer Ayhan BATUHAN</i>	Bird observation	