The format for notification to an affected Party of a proposed activity under article 3 of the Convention was adopted by the Meeting of the Parties to the Convention on Environmental Impact Assessment in a Transboundary Context by

<u>Decision 1/4</u> at its first meeting held in Oslo from 18 to 20 May 1998.

This document contains excerpt from Annex to Decision 1/4 (Table 1) and can only be used in conjunction with the full text

of Decision I/4 and not as a stand-alone document.

Notification to an affected Party of a proposed activity under article 3 of the Convention

1. INFORMATION ON THE PROPOSED ACTIVITY			
	(i) Information on the nature of the proposed activity		
Type of activity proposed	Renewable energy resource activity - construction and operation of a Wind Power Plant at the location "Mavrodasos" with the power of 34,5 MW.		
Is the proposed activity listed in appendix I to the Convention?	Yes X No		
Scope of proposed activity (e.g. main activity and any/all peripheral activities requiring assessment)	The main activity of the project is the construction and operation of a Wind Power Plant at the location "Mavrodasos" consisting of eight (8) wind turbines of indicative type V136-4,50MW, with a power of 4,50MW each. The project under consideration aims to create a wind power plant to produce electricity in compliance with the legislation in force, the exploitation of the wind potential of the region and the decoupling from conventional fuels that not only increase the price of electricity but also emit polluting and harmful substances into the environment. Greece has a high production potential due to the prevailing climatic conditions. Due to the sunshine that prevails during most days of the year, it has a strong wind capacity (significantly exploitable wind speeds of 7-10m/s). Therefore, all this untapped production potential can be exploited and enhance the energy mix of the country and the EU in general. The wind power plant under study meets the requirements, in terms of wind potential, for the development of a sustainable investment, while helping to achieve the national target for RES, beneficially offsetting the small-scale impacts of its construction and operation. The project has been designed with environmental protection and optimal use of the available wind potential of the site in mind. The wind farm will be an independent producer of electricity and will be interconnected to the grid of the (Hellenic Electricity Distribution Network Operator) which all production will be exclusively allocated in accordance with the applicable legislation. The supply of the electricity produced by the wind farm is guaranteed through a specific contract with the RES & Guarantees of Origin Manager S.A.		

Scale of proposed activity (e.g. size, production capacity)	a) The project falls under Group 10 (Renewable Energy Sources - a/a 1a: Electricity generation from onshore wind energy) and based on the Joint Ministerial Decision YΠΕΝ/ΔΙΠΑ/63951/4418/2024 (Government Gazette 3867/B/3-7-2024), is classified in Subcategory A2 (5 MW < P \leq 50 MW and L < 20 km) since its total capacity is 34.5 MW. As the whole project falls within a Natura 2000 site, which is a Special Protection Area and has the code GR1110010 with the name Oreinos Evros – Koilada Dereiou, the maximum categorisation threshold is 35 MW (5 MW < P \leq 35 MW and L < 20 km) and therefore the project under consideration remains in Subcategory A2. It is also a critical area for birds (IBA) with the code GR003, called Dadia - Dereio - Aisymi forest. b) The road network construction is associated works and follows the category of the main project. Therefore, it is included in Subcategory A2. (c) The route of interconnection line is also ancillary works and follows the
	category of the main project. Therefore, it is included in Subcategory A2.
Description of proposed activity (e.g. technology used)	 Main Project: Installation of a Wind Power Plant within a land area of total area: 688.279,88 sq.m. consisting of eight (8) wind turbines, with a rotor diameter of 136m, with a power of 4,50MW each, i.e. a total power of 34,5MW. Configuration of eight (8) wind turbine construction squares with a total occupied area equal to 65.873,12 m². Wind turbine foundations - construction of pylon bases with the excavation of eight foundations. Construction of an internal underground medium voltage network for the transmission of electricity generated by the wind turbines to the control house (coupling house), with a total length of 8.155,13 m. Construction of a control house with an area of 31.50 m² on the site of wind turbine 5. Construction of 33kV underground transmission interconnection from the control house to the 33/150KV (Medium Voltage/High Voltage) elevation Patriarchis Substation, total length 33.900,22 m, of which 2.751,11 m overlapped by the internal network. Accompanying works: Construction of roads for access to the project site and internal road connections of the wind turbines of the "Mavrodasos" wind farm, consisting of forest roads of category C with a total length of 4.298,92 m, of which 935,31 m are new roads and 3.363,61 m are improvements to existing roads. Construction of storm water drainage works.
Description of purpose of proposed activity	The project under consideration aims at the construction and operation of a Renewable Energy Sources project and specifically a wind power plant to produce wind energy, in compliance with the legislation in force, the exploitation of the wind potential of the region and the decoupling from conventional fuels that not only increase the price of electricity but also emit polluting and harmful substances into the environment. Renewable energy sources are known as clean forms of energy because their use does not require any energy input (e.g. combustion), as they use a form of energy

	generated by natural processes. They have been used since ancient times to meet energy needs and, unlike fossil fuels, are inexhaustible. Renewable energy sources have a zero-energy footprint. The energy footprint is the amount of carbon dioxide (CO ₂) emitted into the atmosphere.
Rationale for proposed activity (e.g. socio-economic basis, physical geographic basis)	The proposed activity belongs to the Wind Priority Areas (WPA) ¹ according to the Joint Ministerial Decision 49828/2008/Government Gazette 2464/3.12.2008 «Special Spatial Planning Framework for Renewable Energy Resources (RES)». Based on the spatial plan, the wind turbines were examined regarding their compatibility according to Article 7 of the Joint Ministerial Decision (Special criteria for the positioning of wind turbines on the mainland). The main advantages of renewable energy sources are summarized below: • They are inexhaustible sources of energy and help to reduce countries' dependence on depletable energy resources, giving countries the ability to: • To improve their energy independence • To strengthen their trade balance by reducing energy imports. • To create strategic reserves in domestic mineral resources for the security of the country and future generations. • They lead to decentralization of the energy system, due to their geographical dispersion, resulting in the ability to meet energy needs at the local and regional level and the consequent relief of infrastructure systems and limiting losses from energy transmission. • They have relatively low operating costs independent of fluctuations in the international economy and in the price of conventional fuels. • They offer the possibility of rational use of energy resources, covering a wide range of users' energy needs. • Contribute to the regeneration of economically and socially deprived areas by creating new jobs and attracting investment. • They are environmentally and human friendly.
Additional information/comments	
(ii) Informat	ion on the spatial and temporal boundaries of the proposed activity
Location	The proposed activity falls within the Municipal Unit of Orfeas, the Municipality of Soufli, the Regional Unit of Evros, the Region of Eastern Macedonia and Thrace.
Description of the location (e.g. physical-geographic characteristics, socio-	The area of the installation of the proposed WPP falls within the Evros Mountains - Deirio Valley, which is a Special Protection Area and has the code "GR1110010". The area is in southern Evros, on the border with Bulgaria. It is also an important area for birds, code "GR003", called "Forest of Dadia-Dereio-Dereio-Aisymi".

¹ Wind Priority Areas (WPAs): They are the areas of the mainland, identified in the form of a table in Annex I and illustrated as set out in Annex I and illustrated in Figure 1 of this Decision (Joint Ministerial Decision 49828/2008 /Government Gazette 2464/3.12.2008), which have comparative advantages for the establishment of wind farms, while at the same time offering the achievement of the spatial objectives. In these areas, the maximum potential for siting wind farms, is estimated (carrying capacity capacity), as specified in the Annex III of the Joint Ministerial Decision 49828/2008 /Government Gazette 2464/3.12.2008.

economic characteristics)

The area is located between the Dadia Forest National Park and the Filiouris Valley at the western end of Evros Prefecture.

It is not located within declared archaeological sites and monuments and is in line with all relevant guidelines and restrictions set out in the spatial and urban planning.

The proposed activity is located on an E-W axis at an altitude of \sim 300 m and around the perimeter there are hill ranges of similar altitude (300 m). In the study area and in the wider project area a road network is located which consists of agroforestry roads, provincial roads, and local roads. The nearest road to the project study area is the National Road Alexandroupolis - Mikrou Deriou which is located at 6 km.

The site of the proposed project in the location 'Lefki' within the Municipal Unit of Soufli, Municipality of Orpheus is located north of the settlement of Roussa at 2,6 km, north-east of the settlement of Goniko 4,8 km, and north-west of the settlement of Mikro Deriou, in a hilly - semi-mountainous area (average altitude up to 300 m) with a relatively mild terrain with moderate slopes and varying orientation.

It is also important to note that the study area of the station under consideration also falls within the protected area Byala Reka with the code "BG0002019". This protected area is classified as a Special Protection Area (SPA) and is located north of the power plant at an average distance (straight line) of less than 500 m.

The traditional agricultural activities of the local inhabitants (e.g. nomadic livestock farming, small-scale agriculture) have played a key role in the conservation of the ecosystems, maintaining sparse oak forests in part of the area.

The mature oak trees that remain are used for pruning, i.e. collecting branches with leaves for goats to feed on in winter. The oak forests are also used for firewood production, while the beech forests and pine plantations are used for commercial timber.

The proposed project concerns the construction and operation of a wind farm with a total capacity of 34.50 MW which is in the Municipal Community of Derio, of the Municipal Unit Orfeas of the Municipality of Soufli, of the Regional Unit of Evros, Region of Eastern Macedonia and Thrace.

The project under consideration is located outside the General Urban Plan, outside the plan of a residential area and outside the established boundaries of settlements. The nearest settlements in the study area are the following:

A/A	Name of Settlement	Population at census during the year 2021	Distance from the nearest wind turbine (km)
1	Roussa	383	3,4
2	Goniko	300	7,3
3	Miko Dereio	91	3,9

Details of settlements in the vicinity of the projects

In the area of the Municipality of Soufli, where the project is located, no general urban plans have been established, nor have any plans for the spatial and residential

organization of the open city (S.R.O.O.C.). The substation to which the project is to be connected is in the Municipality of Arrianon, where there are no general planning and urban development plans. In the Rhodope Region, where the Municipality of Arrianon is located, there is an area of Specially Regulated Urban Development, in which the substation is in spatial unit 4 (mountainous area). In the wider area, however, the General Plan of the Municipality of Alexandroupolis is being developed, which was initially approved by Government Gazette 9D/14-1-1988, then as amended by Government Gazette 844 D/25-11-1999 and is now in stage B1 (02/2021) during which the spatial development model is being evaluated.

The wind turbine installation sites are compatible with social infrastructure and utilities as they are not to be affected. The nearest airport in the area is the airport "Demokritos" of Alexandroupolis, located 52 km to the south-east.

There are no social welfare facilities close to the study area, e.g. health care, education, sports facilities, urban infrastructure (e.g. recycling, waste treatment facilities, etc.) water supply facilities, livestock units, and other Areas of Organised Development of Productive Activities in the tertiary sector, theme parks, tourist ports and other statutory or designated tourist areas.

Near the project site, there is an adequate road network, consisting of forest roads, country roads and local roads.

East of the WPP, at 10.249 m through the road construction, there is the Provincial Road Mandra - Mikrou Deriou. For access to the wind turbines of the project, existing roads will be improved and a new forest road of category C' will be constructed with a total length of 4.298,92 m.

The routing of the medium voltage cable that will connect the power plant to the substation will not affect technical works. The two station installation poles themselves as well as the accompanying project of interconnecting the power plant with the substation are remote from major technical utilities. As far as the road network is concerned, neither national roads nor major road junctions are expected to be affected.

Regarding water supply and sewerage networks, these are not expected to be affected either. The sewerage pipes are located approximately 2 m below ground level. Therefore, the Medium Voltage cable laid at 1m is not expected to affect the sewerage pipes. If a water main is identified during the excavation of the channels for the cable crossing, an alternative solution and route will be considered with the local water utility company.

Water supply pipelines do not normally run through major roads, highways, or country roads. However, even if they must go through there, their installation is done in parallel.

In addition, three telecommunication infrastructures (antennas) are located within 5 km southeast of the power plant. Under the Special Spatial Framework for Renewable Energy Resources (RES) there is no specific restriction concerning the minimum distance of the installation from the wind turbine, but it is defined on a case-by-case basis after an opinion of the competent body. In the case of the projects under consideration and according to the opinions of the authorities for the

installation of wind farms, there is no restriction relating to the specific incompatible use.

The area in which the project is to be constructed does not fall within any declared World Heritage Sites and other sites of major importance.

The nearest archaeological sites and monuments identified in the vicinity of the study area are listed below:

- 10 Megalithic monuments (Dolmen): at the location of Ammohorafa (Koum Tarla) next to the road from Mikro Derio to Roussa, 4km before Roussa, ten megalithic monuments are located. The first of the 10 monuments is located 30m SE (southeast) of the road, while the others extend over an area 2.200m SE of the first monument and are located successively at the sites: "Koum Tarla" or "Skopia" the first one, and the rest at the Baluk Kaya and Muslim cemetery sites of the now abandoned village of Mylopetres. The site of the monuments is 1,3 km from the nearest wind turbine (W/T 2).
- The fortress enclosure, on the hill of Mesimler Kale: It is located west of the ruined village of Mesimeri. The enclosure is 497 m long. The western and southern sides are built according to the Cyclopean system with slate. Inside there are foundations of about 50 circular and quadrilateral buildings, as well as slab-roofed tombs. On the NW and NW side of the hill, parts of a second enclosure are preserved. The monument is 6,7 km from the nearest wind turbine (W/T 2).
- To the south of the project is the onshore archaeological site of Koum-Tarla, which is a religious burial site of the Neolithic period and is 3,3 Km away from the nearest wind turbine (W/T 2).

Finally, based on the Evros Antiquities Ephorate, which studied the project and conducted an autopsy in the area where the project will be installed, two archaeological sites were found in the vicinity of the wind turbine installation. More specifically, one is an ancient cemetery, and the other is a tepee of ancient times, where the dervishes used to gather.

Rationale for location of proposed activity (e.g. socio-economic basis, physical-geographic basis).

The area under study belongs to the Wind Priority Areas (WPA) according to the Joint Ministerial Decision 49828/2008 (Government Gazette "Special Spatial Planning Framework for RES").

Based on the spatial plan, the wind turbines were examined regarding their compatibility, according to Article 7 of the Joint Ministerial Decision (Special criteria for the siting of wind turbines on the mainland).

Time frame for proposed activity
(e.g. start and duration of construction and operation)

Once the production licenses are issued for the project, it will take approximately 18 months to conduct the studies, construct the power plant infrastructure works and connect it to the grid. Also, once the required permits are secured, the ordering of the wind turbines is conducted.

The time required to deliver the wind turbines depends on the construction company and varies from 18-24 months. The time required for the transport from the port to the installation site and for the assembly of the turbines is 7-8 days per turbine, considering a period of 3-4 days for the assembly and disassembly of the crane and 3 days for the lifting of the tower and the installation of the wind turbine.

Maps and other pictorial documents connected

*Attached to the form (Topographic map, Orientation map, Map of the wider area, map of land use).

with the information on	
the proposed activity	
Additional information/comments	
(iii) Information	on expected environmental impacts and proposed mitigation measures
Scope of assessment (e.g. consideration of cumulative impacts, evaluation of alternatives, sustainable development issues, impact of peripheral activities)	Environmental impact is defined as the change in environmental conditions or, respectively, the change in environmental parameters (natural and man-made) prevailing in an area because of one or more activities. This change may be positive or negative (i.e. upgrading or downgrading the quality of the environment), long or short term, permanent or temporary, indirect, or direct. The establishment of Environmental Impact Assessment is one of the key tools of environmental planning. The purpose of the procedure is to assess the future adverse effects on the environment that may result from activities on the site, with a view to minimizing or redesigning them. The potentially significant impacts that the project or activity may cause to the environment using natural resources, the emission of pollutants, the creation of nuisances and the disposal of waste are assessed and evaluated. It shall also provide the data set, and a description of the methods used to predict and assess the effects on the environment, with reference to the reliability of the methods and an indication of any difficulties or lack of appropriate information encountered in gathering the required information. This means that their effects should be considered as a whole and not in isolation. Therefore, the impacts arising from the construction and operation of the studied WPP relate to the whole of the main and accompanying projects. The most important positive element from the development - exploitation of wind energy is the reduction of anthropogenic impacts (because of air pollution) by replacing the combustion of conventional fuels for electricity generation, which has not been adequately assessed so far. The main environmental parameters associated with the construction and operation of wind farms relate to the natural environment (flora and fauna), topography and landscape. Factors such as the size of the wind turbine, the type and size of the wind turbine, the size of road works and the characteristics of the site (e.g. installation ne
Expected environmental impacts of proposed activity. (E.g. types, locations, magnitudes)	*Attached to the form – Chapter 9
	Construction phase
Inputs (e.g. raw material, power sources)	The materials for the construction of the project are excavation, paving and cable duct products. The Necessary construction materials and raw materials for the construction of the proposed project, except for the support bases and the assembled wind turbine components, include concrete (C12/15, C20/25, C30/37, C35/45) and metal, which will be procured from local traders, steel reinforcement, sand, cables, and grounding and excavation materials for the re-foundation of the foundations. In addition, steel construction materials, structural mesh, sand, gravel, bricks, tiles, lime, marble dust, insulating materials, tiles, paints, etc. will be used. During the construction phase of the project, earthworks raw materials such as sand

or gravel 3A will be required. Finally, around 21 m³ of water per day is necessary both for washing the machinery and for spraying the sites.

During the construction phase of the project, a staff of 100-150 people will be employed.

The water will be supplied by private companies or municipal services or by the municipal water supply networks of the area. After agreement and payment of the relevant price, the water will be supplied by tankers and stored in plastic tanks exclusively within the intervention area of the project under study.

Regarding the trench channels for the passage of cables, before laying the M.T. (33KV) transmission cables, the trench for laying them shall be laid for a thickness of 0.05m with earthen material. Then the M.T. cables are placed in the centre of the trench and filled with crushed quarry sand, then the earthing cable, optical fibre is placed, and the filling continues for a new layer of sand, 0.1 m thick. Then the cable marking plate is placed, and the trench is filled with excavated screened material for a layer thickness of 0.3 m and then the cable marking tape is placed.

Operation phase

The nature of the project does not require the consumption of significant amounts of materials, energy, and water. Only the basic needs of the staff (consisting of 1-2 persons) who will work on the project are related to the use of resources of such inputs as well as the maintenance works of the WPP. The needs of the staff include stationery, spare parts in electrical (switches, transformers, fuses, cables) or mechanical components (gears, motors, cables, fuses) and other types of equipment for their own use (e.g. furniture, supplies).

The water use during the operation of the project under study concerns the personal use by the staff for consumption and hygiene (cleaning uses). Finally, the energy inputs during the operation of the project concern the consumption of fuel for the movement of vehicles, which is small in quantity since the number of staff is small due to the automated operation of the wind turbines and does not require the daily presence of staff on site.

Construction phase

a) Liquid waste

During the construction phase of the overall project (WPP and its accompanying works), no toxic waste, sludge or any other form of hazardous liquid waste requiring particular care and attention will be produced and generated.

Liquid waste is limited to that which will come from the construction site, which will be installed in the project area and will be:

- mineral oils from the maintenance of excavation vehicles and machinery,
- oil or petrol from the maintenance of excavation vehicles and machinery,
- liquid waste from the washing of concrete vehicles
- municipal wastewater from the hygiene of the personnel manning the site.

b) Solid waste

During the construction of the project, quantities of Excavation and Demolition Waste will be generated which will be managed according to Law 4819/2021. Specifically, the generated waste will be classified under the European waste code (EWC) 17 05 04 "soils and stones other than those listed in 17 05 03*".

They will be temporarily deposited on site and then used for later use for backfilling required for the square and road construction. In addition, the concrete left over

Outputs
(e.g. amounts and types
of emissions into the
atmosphere, discharges
into the water system,
solid waste)

after the completion of the paving and foundation of the eight wind turbines will be taken to approved WECD recycling companies.

Furthermore, the waste resulting from the hygiene of the personnel as well as from the maintenance materials and their packaging will be collected in suitable closed-type bins and transported to the waste collection points of the Municipality.

For specific categories of solid waste, separate collection and temporary storage systems will be provided for. Once filled, they will be delivered to authorized companies.

c) Air emissions impacts

The air pollutants that will be created by the construction of the project are mainly dust emissions into the atmosphere caused by the earthworks and the movement of vehicles (cars, trucks, cranes) and a small amount of pollutants (exhaust gases) from the vehicles through which the construction of the project will be carried out, which will be emitted for the specific period of time that the construction will last.

The air pollution during the construction phase of the project is due to the dust caused by the excavation work for the construction of the wind turbine squares and the interconnection roads.

However, to minimize these pollutants, the speed limit of vehicles and the number of vehicles and machinery used will be reduced. In addition, the materials will be wetted to avoid dust dispersion and the handling of machinery at the construction sites will be as careful as possible.

d) Noise impacts

During the construction phase of the proposed project, limited noise will be generated by the operation of machinery and vehicles used for the transportation and construction of the foundations (blades, tower, etc.) of the project and for the necessary excavations for the improvement and opening of access roads, trenching and the construction site.

The assessment of the noise generated at the construction site and at the individual locations where construction machinery will be operating is carried out in accordance with the methodology proposed by British Standard BS 5228 (Noise control on construction and open sites, BSI-1984), which refers to the need to protect people living and working near such areas from noise. At this stage, it is not possible to formulate an accurate record of site operating data (types of machinery, actual operating times etc.), therefore an approximate assessment of impacts will be conducted.

We consider a mobile construction site of 12-hour operation with the following composition:

- 1 excavator
- 1 loader
- 1 leveller
- Trucks
- 1 road roller

The results of the prediction of the noise level Leq (12) for a receiver located at distances of 15 to 400 m from the source are presented in the following table.

Receiver distance (m)	15	30	50	100	200	400	
-----------------------	----	----	----	-----	-----	-----	--

Leq (12) dBa (rural area)	81	75	71	65	59	53
Leq (12) dBa (urban area)	84	78	74	68	62	56

Operation phase

a) Liquid waste

The liquid waste associated with the operation of the WPP is limited and is separated into urban type wastewater from the project operating personnel and lubricating oils used in the mechanical parts.

The maintenance of the mechanical parts generates liquid waste that falls under the European Waste List (EWL) (Decision 2014/955/EU "amending Decision 2000/532/EC as regards the list of wastes in accordance with Directive 2008/98/EC of the European Parliament and of the Council") and will be managed in accordance with the provisions of Joint Ministerial Decision 13588/725/2006 (Government Gazette 383 B'/28-03-2006).

However, none of the oils used in the operation of the project contain toxic and hazardous substances such as PCBs. They consist of used mineral oils, or semi-synthetic oils or synthetic oils, from use in lubrication of gears and other moving parts and in cooling systems, from used oils of step-up transformer oils and from used hydraulic oils from use in hydraulic pressure transmission units for braking systems (brakes), pitch systems, blade rotation systems, blade tips, etc.

The recycling of waste from mechanical parts will be done in accordance with Law 2939/2001 (Government Gazette 179 A'/06-08-2001), as in force, and Decree 82/2004 (Government Gazette 64 A'/02-03-2004) in cooperation with an appropriately licensed company or directly with an Individual Alternative Management System or Collective Alternative Management Systems. During the operation of the project, appropriate measures (recycling, removal) will be taken to ensure that waste generation is kept to a minimum and that no risks are created for the soil, air, fauna and flora and the forested agricultural and livestock area in general. Appropriate measures shall also be taken to avoid noise nuisance and to avoid any risk to public health. For the temporary storage of hazardous waste on the holder's premises until collection, suitable watertight plastic collection containers (containers) of appropriate specifications shall be used, located in an area with appropriate signage and adequate ventilation and lighting. They shall also be in such a place and in such a way that they do not interfere with other activities of the installation.

b) Solid waste

The solid type of waste from the operation of the WPP is related to waste from operating personnel and solid materials such as rubber or metal waste resulting from replacement or maintenance operations of mechanical parts, however, these quantities are not considered to be significant.

The main solid wastes that require special management in the operation of wind farms arise from the basic maintenance of mainly mechanical parts and consist of:

- Empty packaging of the above-mentioned oils: metal drums and plastic containers
- Used filters impregnated with the above-mentioned oils (usually paper and metal filters)
- Empty packaging of lubricating greases based on mineral oils and special additives.
- Empty metal containers and sprays containing adhesives, pastes, lubricants, mild solvents, and cleaners (15 01 02 and 15 01 04 and 15 01 07 and 15 01 10)
- cloths used for cleaning surfaces and therefore impregnated with the above materials (oils, greases, detergents, etc.) (15 02 02)
- Low-capacity accumulators (batteries) for use in automatic gear cutting machines and general small automation (16 06 01 and 16 06 04)

 Higher capacity batteries for use in UPS systems (16 06 01) The above materials are covered by hazardous waste legislation.
- Waste of mechanical, electrical, and electronic equipment. The above materials are not considered as hazardous waste.

The classification, storage and management of waste generated by the operation of Wind Power Plants are subject to the provisions of Greek legislation, from which the obligations of the owner of the Wind Power Plant (Holder of hazardous waste), namely the Joint Ministerial Decision 13588/725/2006 (Government Gazette 383 B½8-03-2006) and the Law 4819/2021 (Government Gazette 129 A½3-07-2021).

The project promoter will conclude contracts with certified companies for the transport and management of the waste to be produced. In particular, the municipal type of waste will be disposed of in agreement with the relevant local authority. A table with the relevant ESW codes of the solid waste likely to be generated during the operation phase of the project is provided below:

Waste codes/Waste type.

07 02 13 / plastic waste

15 01 01/ paper and cardboard packaging

15 01 02/ Plastic packaging

15 01 04/ metal packaging

15 01 05/ synthetic packaging

15 01 06/ mixed packaging

15 01 07/ glass packaging

15 01 10*/ packaging containing residues of or contaminated with dangerous substances.

15 02 02*/ absorbent materials, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated with dangerous substances.

15 02 03/ absorbent materials, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02.

 $16\ 02\ 16$ /components removed from discarded equipment other than those mentioned in $16\ 02\ 15$.

16 06 01*/ lead-acid batteries

16 06 04/ alkaline batteries (except 16 06 03)

17 02 02/ Glass

20 01 36/discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35.

20 02 01/ biodegradable wastes

20 03 04/septic tank sludge

c) Air Emissions impacts

The emissions of pollutants and dust associated with road traffic are estimated to be extremely limited to negligible even though the roads are planned to be paved, as they will be used exclusively for the approach to the WPP under consideration. Furthermore, not only are no greenhouse gases produced, but on the contrary, the production of greenhouse gases and other harmful pollutants is reduced because of the operation of the project.

d) Noise emissions

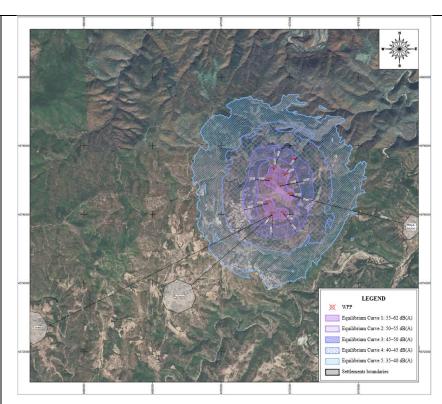
The exploitation of wind energy, despite its environmental friendliness, may cause acoustic disturbances. The proposed project, given its location and the specifications of the type of wind turbines to be used, will not cause acoustic disturbance in the area.

According to the noise study (attached in the appendices to this document), which was conducted as part of this EIS, the following conclusions were reached:

- The noise curves that exceed the maximum permissible noise limit of 45dB(A), as set in the Special Spatial Plan for RES and in the Decree 1180/81 (Government Gazette 293/A/6-10-1981), extend to radius of less than 939 m from the wind turbine centers.
- The nearest settlements to the wind farm are Roussas, Goniko and Mikro Dereio where the noise generated by the wind turbines is below the maximum permissible limit.

It should be stressed that this is the worst-case scenario and that in reality this noise, will only be for high wind speeds (>8 m/s), a few days during the year mainly in the summer period. In this case, the ambient noise will overwhelm the noise of the W/T and therefore, the sound emissions caused by the source alone will not be perceived.

The following is the noise curve plan of the project.



Equilibrium Curve Drawing (for noise)

The table below presents the results of the noise study in the nearest project area.

Points of interest	Closest W/T	Distance (m)	Noise Level dB(A)
Settlement – Roussa	W/T 2	3.174 m	30,26
Settlement – Mikro Dereio	W/T 4	3.404 m	29,05
Settlement – Goniko	W/T 2	7.293 m	19,64

Summary table of noise study results

Transboundary impacts (e.g. types, locations, magnitudes)

There are no transboundary impacts. More information about transboundary impacts for the protected Natura area "Byala Reka" is recorded in the Special Ecological Assessment (SEA) document that is attached to this form.

Proposed mitigation
measures
(e.g. if known,
mitigation measures to
prevent, eliminate,
minimize, compensate
for environmental
effects)

Mitigation measures to address impacts to vegetation, flora, and fauna during construction of the project are summarized as follows:

- The extent of the project occupation zone to be limited to the extent strictly necessary for the construction of the project.
- The spatial planning of the project should be as clear and detailed as possible to minimize the impact on woodland. The felling and uprooting of bushes and trees and the disposal of the products must be conducted in accordance with the provisions of forestry legislation and the instructions of the competent forestry department.

- Provision will be made for all necessary measures to protect workers or visitors to the forest area. In this connection, it is necessary to place elegant signs warning of the possible risks involved at appropriate distances.
- Fire protection measures will be taken to protect the vegetation in the vicinity of the works to be constructed, which will be maintained to provide fire protection during its operation.
- No uncontrolled dumping of rubble, lubricants and other wastes or refuse will be allowed at any location within or outside the two polygons of the power plant site, nor within the immediate sitting areas of the other parts of the project under study.
- The extent of roadway excavation to be limited to the extent of roadway excavation. The extent of clearing for the installation of the wind turbines shall be limited to the area of each wind turbine considering the necessary size of the plazas. In general, the areas where existing vegetation will be cleared will be limited to those necessary. For this reason, the construction works will be preceded by a precise delimitation of these areas by a team of surveyors. A special tape will be placed on these boundaries so that the deforestation area is clearly identifiable.
- The width of the road network will not exceed the width specified in the relevant road construction study.
- The installation in the project promoter, since it is a forested area under the classification acts, will be conducted in accordance with the legislation in force, with the issue of an installation protocol by the competent forestry department and under its supervision and instructions.

It is also proposed to implement horticultural interventions which will have as a main objective:

- The restoration of the natural environment from the alterations that will be caused to the natural vegetation due to the construction of the project and the harmonious integration of the roads into the landscape.
- The restoration of the vegetation to be removed during the excavation works. In the event of the removal of trees or dense stands of shrubs, it is proposed to replace them, possibly in the form of tree planting on the boundaries of the intervention area
- Protection against erosion of the soil surface of the embankments, which is mainly caused by the effect of rainwater, with the drifting of various particles from the embankment body, the maximum percentage of which (around 75 %) usually takes place in the first autumn and winter period after the end of earthworks.
- To this end, earthworks will be followed by erosion control works, which will prevent the loss of valuable soil and the creation of furrow erosion before sufficient vegetation has developed. Vegetable land existing in the area where the project is to be conducted will be collected and stored for use during the restoration work.
- The planting of the embankment slopes and deposits will be conducted in a single layer of lightly compacted vegetated soil with a minimum thickness of 0.20 0.30 m.
- The direct covering of the vegetative soil will have the effect of slowing down the evaporation of water used in the construction of the embankments. The presence of moisture in the embankments will aid rapid natural regeneration and thus both the sparse vegetation, which will emerge immediately, and the root system of the plants, which will grow later, will exert a stabilizing effect on the surface of the embankments.
- Regarding to the planned plantings, it is proposed to prepare a study on the horticultural restoration of the intervention areas, which will be submitted in accordance with the procedure provided for in Ministerial Decision 15277/2012 (Government Gazette 1077 B'/09-04-2012), considering any relevant recommendations of the competent Forestry Authority.
- Any planting work shall commence immediately on each section of the project where earthworks are completed, and final surfaces are formed. The planting work will include the preparation of the sites for the plants (final shaping of the ground

surface, coating of planting soil) and the supply, installation, and maintenance of the plants.

- Planting soil existing in the project area will be collected and stored for use in the restoration works. In the event of excess plant land in one area, quantities may be transferred from one area or part of the project to another.
- The proposed landscaping is intended to provide plantings on the surfaces of embankments and road slopes to protect against surface erosion, reduce surface moisture, and water evaporation.
- As regards the species to be used for planting, they must meet the following requirements:
- 1. They must be species which are adapted to the climatic conditions of the area.
- 2. They must meet the requirements of the intended purpose.

The selected final species (and the way of restoration) will be finalized in cooperation with the competent Forestry Department and with the preparation of a relevant study. In general, the purpose of the restorations is as follows:

- 1. Restoration of disturbed natural surfaces.
- 2. To restore (to the maximum extent possible) the landscape and vegetation balance to their original state.
- 3. To better harmonize and adapt the new road network to the natural environment.
- 4. To protect the soil from leaching, surface water runoff by creating woodland.
- Any vegetation damage to be limited to the minimum possible and always in accordance with the instructions of the competent Forestry Department.
- During the earthworks, reduce dust dispersion by wetting the soil in the event of adverse weather conditions.
- Any natural vegetation that may be altered and not covered by infrastructure will be restored after completion of the works. An appropriate restoration program will be implemented after approval by the competent Forestry Department and preference will be given to native species of the area. Plant care will be continued for at least 2 years after planting.
- Once the wind farms and their accompanying works have been completed, all construction sites will be removed. The site will be landscaped and restored to its previous condition, where possible, by planting.
- Prior to the granting of the operating license, a Vegetation Restoration Study shall be submitted to the competent Forestry Department, both for the areas where the access roads cross and interconnect to the trenches and their embankments, and for the landscaped construction squares.

During the operational phase of the project, all measures should be taken to maintain the plantations, as they contribute to the improvement of the landscape of the area. In the first year after planting, any gaps that may occur due to the death of seedlings will be filled in.

The project design already incorporates measures and precautions to ensure that any impact on the area's birdlife is minimized.

Few of the main points are briefly highlighted:

- The total area occupied by the wind turbines is small. The area within the boundary of the wind farm that will eventually be left unused after the works are completed will clearly be re-used by the birds and other fauna of the area, thus ensuring minimal change to the existing habitats in the area.
- The electricity generated will be transported entirely by underground medium-voltage lines.
- It is proposed to establish a mandatory post-construction monitoring programme and assessment of vulture mortality and displacement from the project by applying a specific methodology/establishing it as an Environmental Condition (in Decision

of Approval Environmental Conditions of electricity generation and transmission projects, e.g. power plants)

- Regarding waste (solid and liquid, hazardous or non-hazardous) resulting from the site activities during construction and operation of the works, appropriate management should be applied to avoid pollution of the area (soil, subsoil, surface, and groundwater) from uncontrolled disposal or spills. When restoring the vegetation in the installation area, the possible attraction or repulsion of bird species should be considered.

For example, it is important that there is no large area of bare ground on ridges, as this creates strong thermal updrafts and encourages predator hunting, thus attracting more species to exploit these currents or for foraging. Removal of dead animals given the presence of livestock activity in the area, dead animals (dogs, sheep, goats, horses, cows, etc.) found within 400 m of the base of the W/T should be removed. In general, to protect the natural environment of the study area.

- The proposed environmental conditions of the project under study should be strictly observed, provide detailed information to workers involved in both the construction and operation phases, so that all environmental conditions, particularly those relating to the natural environment, are respected.

10.4.1. Addressing Fauna - Bird Mortality

incidents of W/T shutdown.

Bird mortality is one of the key ecological concerns in the development of power plants, raising concerns particularly regarding bird impacts on the W/T.

In the context of legal compliance with both domestic law and EU Directives and ecological awareness in general, the obligation to protect wild birds and habitats with the help of technology, thus preventing birds from colliding with the W/Ts, has arisen. One way of meeting this obligation is to install systems to prevent birds from colliding with aircraft. Thus, it was decided to use such a system, namely the Bird Monitoring System (BMS) using Artificial Neural Networks and Machine Learning, owned by DIGISEC SA, which consists of both hardware and software, and will be installed on the pylons of the W/Ts.

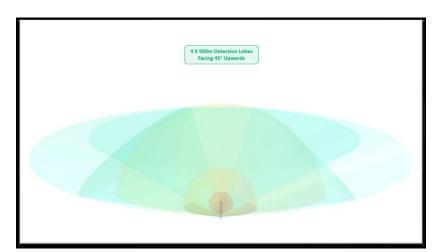
Therefore, special high-resolution cameras and reflection horns (speakers) will be installed on the outside of the aircraft, on the tower, at a height of approximately 10 m, to prevent birds heading towards the aircraft.

This Bird Monitoring System uses high-tech cameras that continuously scan the covered area, detect birds far enough away and decide, with unprecedented accuracy, whether they are on a collision course. The high-tech cameras continuously scan the covered area for birds. The bird detection system uses advanced artificial intelligence and a Machine Learning algorithm to identify birds and other objects. The bird detection system could continuously improve its detection capabilities using Machine Learning video content analysis algorithms. It uses advanced classifiers and large databases to achieve its performance. Also, in this system images and video sequences can also be recorded and further use. Thus, after birds are detected flying in the high-risk collision area, they receive acoustic warnings through special sounds. The behaviour of the birds is monitored during and after the warning and if their flight direction is not adequately diverted, the sound is applied again until the birds leave the protected area. If this is not successful, the system automatically switches off the W/T to protect the birds from a possible fatal collision. However, advanced detection technology minimises the

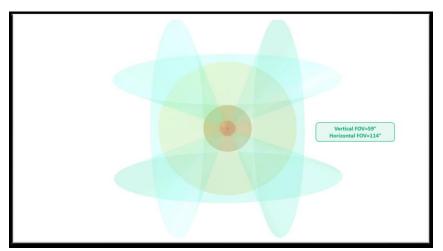
Additional information/comments



 ${\it Installation of a Bird\ Monitoring\ System\ at\ the\ Jasper\ Energy\ Wind\ Farm\ in\ Stavros\ Evia}$



Detection field of view lobes



Vertical and horizontal field of view

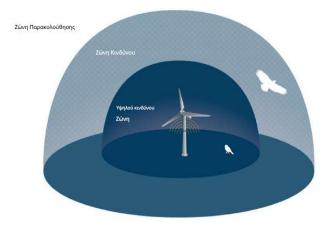
For the aforementioned system, a team of the Faculty of Engineering of the University of Western Macedonia carried out a research of this system, which was

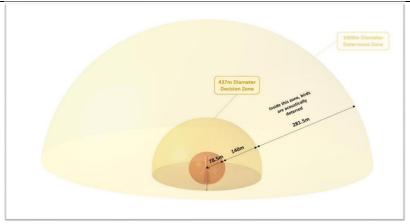
carried out for six months in the period between July 1 and December 31, 2021 in a specific location (Power Plant "Orpheus - Eptaendros" in Alexandroupolis), and prepared a relevant Research Report for the investigation, evaluation, reliability and effectiveness of the system for the prevention of bird collision in W/T using Artificial Neural Networks and Machine Learning. This Research Report is attached in the Annex of the EIA.

According to the conclusions of the research, the effectiveness of the system to be used by DIGISEC SA was found to be satisfactory in terms of detecting and deterring birds to reduce their risk of collision, with expected deviations in its performance depending on weather conditions, but not significant. Also, as regards the shutdown of the W/T as a last resort to deter bird impact, it was found to be effective.

It is worth noting that the BMS technology to be used has the following operating principles:

- 1. Surveillance phase where high resolution cameras continuously scan the covered area for the presence of birds. The BMS uses advanced Starlight Cameras/Thermal Cameras configuration combined with Artificial Intelligence to identify them. It can distinguish the differences between birds and other flying or moving objects. The BMS can continuously improve detection capabilities using the Machine Learning Algorithm and Video Content Analysis Algorithm Learning Engine. Uses classifiers and large databases to achieve its performance. Images and video sequences can also be captured and stored for future use.
- 2. Deterrence phase where birds flying in high-risk areas are detected. The collision area receives audible warnings via directional speakers with the behavior of the 'treated' birds monitored during and after the warning. If the direction of the flight path is not diverted sufficiently to avoid a collision, the sound is reapplied until the birds leave the protected area.
- 3. Shutdown phase where further actions are taken, and the System automatically shuts down the turbine to protect the bird from a potentially fatal collision. However, advanced detection technology minimizes the occurrence of Wind Turbine shutdown.





Schematic representation of Deterrence and Detection Zones

In conclusion, the BMS system in use is an effective means of reducing the risk of birds colliding with the W/Ts.

It is worth noting that the BMS technology to be used has the following operating principles:

Software engine

Use of state-of-the-art Artificial Intelligence algorithms to detect birds in danger zones. This system can continuously improve its detection and has capabilities that use Machine Learning technology.

Deterrence module

Based on the detection and classification process, advanced acoustic driver module is used to deter birds from entering the danger zone of the turbine. This system uses adjustable directional sound emission, minimizing noise pollution.

Detection unit

Use of Ultra High-Definition cameras combined with thermal imaging technology to achieve 24-hour all-weather detection and operation. The system can detect birds from distances up to 1 Km.

Stop Turbine Unit

In the extreme scenario where a bird enters the critical zone, the turbine receives signals in various forms to stop its operation and thus prevent a collision.

The advantages offered by this system are set out below:

- Artificial intelligence detection algorithm
- Computer Vision & Machine Learning technology
- Minimum sound pollution Adjustable directional sound
- Operation in all weather conditions
- Operation in all weather conditions
- Bird classification
- Zero false positives
- Minimum downtime Maximum turbine operation
- Advanced Cloud monitoring, reporting and management platform.
- Support GPS/GIS Geofencing, for tagged birds
- Integrated CCTV surveillance

Thus, from the above bird monitoring system, the following services are discharged.

Reporting of bird/bat incidents

Generate a report on bird and bat activity which can be submitted at any time to the local environmental authorities and any other relevant authority. Reports include raw data events, statistics, graphs, and tool tables.

System health status report

Report health status reports, thus indicating the availability of systems at the selected period, documenting the final submitted report in the most effective way.

System health status monitoring

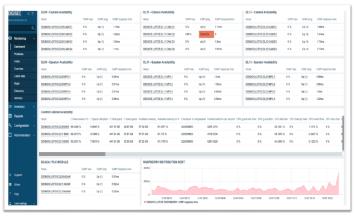
Use of advanced software to continuously monitor system health status. Also, alarms and alerts are received automatically, thus enabling remote troubleshooting of any problems as well as restoring functionality.

Service level agreement.

A service level agreement may take place, focusing on the day-to-day operations and support processes to ensure efficient and reliable services for the operation of the system.



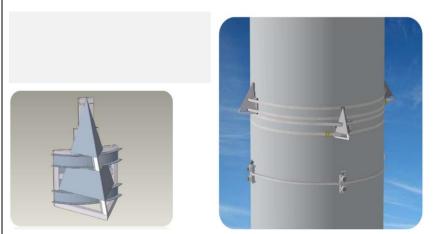
Software of the bird monitoring system





Real-time and graphical system monitoring

Finally, to protect the external bird monitoring system during the winter months, ice deflectors will be installed, as shown in the image below:



Installation of ice deflectors

In addition, it should be mentioned that the proposed system also considers the species conservation objectives set by the Decree of the Ministry of Environment/ $\Delta\Delta\Phi\Pi B/50146/1786/2023$ (Government Gazette 3118 B'/10-05-2023) for the examined areas SPA GR1110010, SPA GR1130011 and SPA GR1110002.

In conclusion, the proposed system is very effective both in terms of detecting and preventing the risk of collision with the W/Ts of the study and in terms of reporting correct monitoring and understanding results.

Additional measures conditions and restrictions are presented below and are also discussed in detail in the SEA Document, i.e.:

A) Measures proposed for implementation

Installation of an optical system for automated wind turbine shutdown. In this project it is proposed that the installation of the optical system is mandatory from the start of the project due to the importance of the area. The system is proposed to be set up in such a way that it will operate without bird deterrence (sound repulsion)

during the breeding and chick fledging periods but only by stopping the wind turbines so that there is no possibility of disturbance to the species and displacement of the species from the study area. Given the morphology of the terrain and the possibility of the passage of species of interest perpendicular to the axis of the project from a low height (presence of a 'blind spot'), it is compulsory to draw up a preliminary study for the correct positioning of the camera angles. For those turbines where this cannot be covered by the installation of four cameras mounted on each turbine, it is proposed that a second set of cameras (eight tracking cameras on each turbine instead of four) should be mandatory to fully cover the detection of the object of interest from all directions of the horizon and from all possible heights. During the periodic or permanent shutdown of any wind turbine(s) for any reason, the operation of the automated systems will also be interrupted to avoid any disturbance and displacement of species due to the emission of repulsion sounds. The system shall also cover at least the activity of medium-sized and large birds of prey and scavengers at more than 500 m and enough cameras to detect birds on the ascent from locations at lower altitudes than the W/Ts. Other important parameters to be adjusted are the correct parameterization according to the biometric characteristics of the species in the area and the short response time from species detection to the complete stop of the turbine, data that are subject to modifications some of the commercial models of automated wind turbine shutdown systems. It is also proposed that the installation of the above system should be measured by at least three ground observers who will also stop the turbine if dangerous flight of species of interest is detected, until such time as the above automated stopping system is properly configured.

- Rest or supervision places. Any installation of any penned structures that allow birds to sit and congregate will be prohibited.
- Shutdown of the project during conditions of limited visibility due to cloud cover and extremely adverse weather conditions. In the event of severe weather events such as intense foggy conditions or extreme weather events (thunderstorms), incidents of impacts have been observed as visibility is significantly reduced. Shutting down the turbines in this case will help to reduce the risk of birds colliding with the turbines. Consideration will also be given to implementing a measure with appropriate programming of the software of the automated systems while keeping records that will be communicated to the Evros and Dadia Delta National Park Management Unit. Semiannual reports will also be made with the prevailing climatic conditions and the corresponding shutdown periods of the W/Ts.
- ♣ Avoidance of constant lighting of wind turbines to reduce the risk of bird strikes. Consider using white strobe flashing lighting which will be less attractive to birds.
- Undergrounding cables to avoid the risk of electrocution and birds colliding with them. Electricity transmission infrastructure (in general, but also in the case of wind farms) should be underground. The wind farm in question is proposed to be connected to the grid underground.

- Removal of dead animals such as mammals, dogs, sheep, goats, horses, cows, etc. found within a radius of at least 500 m from the base of the wind turbines. These dead animals should be transported to safe locations away from the wind farm, while remaining available for scavenging birds and carnivorous omnivores. This will reduce the risk of scavenging species colliding with the wind turbines when they spot each dead animal and will not affect the availability of their food. The responsibility for the collection, transport and removal of dead animals will be the responsibility of our company, as the project proponent, and in particular the personnel hired during the operational phase of the project who will have been trained and informed on environmental protection issues (fire protection, waste management, dead animal management) and on the detection of dead or injured animals. It is also proposed to place signs for other users or visitors to inform them of the above situations and to provide useful contact numbers for the relevant bodies.
- In the event of a dead animal being found, the company, as the project proponent, should dispose of them at existing licensed raptor feeding sites (in cooperation with the Management Unit after checking that they are not poisoned). If the dead animals are checked and found to be poisoned, then the poisoned bait detection team should be notified and managed appropriately. Any animal species found (hand-fly, bird) will be recorded on a special form (protocol for recording the checks conducted).
- 4 Along with the above actions, the competent forestry authority and the Management Unit must be notified. For the correct recording of the data of the finding, the dead animal should not be moved, to reliably assess the actual date, its condition, the exact weather conditions and the correlation or not with the operation of the W/Ts. If an injured bird is found and cannot fly, the competent authority shall be notified immediately so that the appropriate procedure can be followed, and the bird can be provided as soon as possible.
- In addition, construction work shall not be conducted during critical periods for the fauna of the area (breeding season for fauna species or nesting and rearing of bird chicks). Investigate incidents of bird or bat collisions. It is important to note that in addition to the search for dead animals, bird and bat collision surveys will also be conducted. For best results (in case the terrain and/or vegetation cover of the field survey area makes the search task difficult), it will be conducted with the help of a specially trained dog. It is proposed to estimate mortality by applying mathematical models such as Genest to better estimate impacts and to record the results in relevant annual reports/reports. Furthermore, actions to inform residents as well as other supporting actions to deal with poisoned baits will be supported in cooperation with the Management Unit and/or as part of the implementation of the local action plan.
- ♣ In case of detection of nests of species listed in Annex I of Directive 2009/147/EU, it is recommended that W/Ts located at a distance < 1 km from a nesting site should remain out of operation half an hour before sunrise to half an hour after sunset from 15 March to 15 July. To assess nests in the project area and implement the measure, field</p>

- surveys will be conducted weekly in the second half of March and April.
- Restoration of the surrounding area. After the construction phase, it is proposed that all roads and encroachments that have been made will be restored to return the area to its former condition and reduce disturbance. The quantities of surplus materials resulting from road widening will not remain in the project area but will be collected and transported to a specially licensed site. It is also proposed that upon completion of the project construction, a barrier be placed at the beginning of the sections of the new openings, and that only the personnel responsible with the maintenance and operation of the project and of course the relevant agencies that have the study area as their area of responsibility will have access. In addition, it is important that the road deck width be kept to a minimum for postconstruction maintenance needs only, given that the needs of the project after construction are much less than during the construction phase, it is proposed that the width of the road deck after construction be kept to the minimum required for the maintenance and operation needs of the project.
- Providence to limit mortality of herpetofauna during the construction phase. In the wider construction area of the project under study, individuals of the Greek tortoise (Testudo graeca) and the Hermann's tortoise (Testudo hermanni), which are species listed in Annex II of Directive 92/43/EEC and at the same time species with a limited ability to avoid anthropogenic hazards due to their low speed of movement, were observed. To protect these species, it is proposed that during the construction phase of the project and its accompanying works, a specialist should carry out daily monitoring of the areas likely to be affected by earthworks (e.g. new sections of openings) and that individuals of the above species likely to be found should be moved outside the area occupied by the above works. This will also prevent the accidental mortality of individuals of the above species during the construction phase of the project.
- Monitoring of possible impacts on avifauna fauna. Our company, as the project proponent, will be required to monitor the impacts on avifauna and other terrestrial fauna after construction, and during the pre-construction and construction period, for a minimum period of at least four (4) years (monitoring program) in total. The monitoring will be carried out by a team of expert scientists, following a specific monitoring protocol so that there is a continuous acquisition of data which will be available to all stakeholders and interested parties.
- ♣ Monitoring will be applied during the preparatory and construction phases as well as during the first two years of operation of the project:

In detail, the monitoring program will include

Regular recordings (proposed every 15 days (twice a month) of the critical periods and every 20 days (3 times every 2 months) the rest of the time) related to the risk of collision and the detection of nests in the area. Project site use data logging program and recording of flights of important species in the project area and their interaction with wind turbines (potential disturbance and

displacement from specific feeding area or nesting sites, assessment of impacts related to displacement, barrier, and impact). The monitoring program for the recordings will also apply to the type of handlers by qualified scientists to ensure proper selection of methods - monitoring, based on the standards of corresponding international - research programs, proper assessment of impacts and, by extension, proper selection of mitigation measures.

- ♣ Map illustration of the above to assess the situation.
- ♣ Monitoring and recording of potential mortality in a special protocol to be maintained by the company and available to the relevant agencies for the control of impact incidents in the area.
- ♣ Training of the employees of the power plant to deal with incidents of injured birds and immediate notification of the competent services agencies.
- ♣ Training of the employees of the power plant for the sweeping of the area
- ♣ of the wind turbines to find dead birds and check the correct application of the procedure by means of inspections.
- ♣ Assess the situation based on the information gathered.

B) Measures whose feasibility will be examined in the subsequent monitoring stages

If during the subsequent monitoring stages, a change in the frequency of passage of important bird species is observed and it is considered that, based on the new data obtained, the risk of collision or accident is increased, the following measures are proposed and, after documenting them, the most effective ones may be proposed.

- ♣ After the construction of the wind farm, it is possible to actively manage the habitats in and around the wind farm so that birds are not attracted to the zone of influence of the wind turbines and move to places that do not provide impact sites. The responsibility for the design and implementation of the management actions will be the responsibility of the wind farm operator.
- ♣ Active management of habitats under the wind turbines.
- ♣ In cases where certain impacts (increased concentration or mobility of species on the site, incidents of impact of specific species) on specific wind turbines are identified after construction, it is proposed to design active management actions for the areas underneath them (creation of undesirable habitats for birds) after appropriate studies.
- ♣ Active management of habitats around the wind farm. In cases where the wind farm is in an area where there is a need for bird protection measures, habitat management will take place around the periphery of the project to create suitable habitats to attract birds away from the turbines.
- ♣ Increasing the starting speed of wind turbines. If the installation and operation of the proposed wind turbine will have an impact on chimpanzees (considerable number of chimpanzees killed by the operation of the wind turbine), it is proposed to apply the measure of increasing the starting speed of the wind turbines. When implementing this measure, it is suggested, to avoid the wind conditions with the highest bat activity, to increase the wind turbine start-up speed and blade rotation to avoid rotation of the wind turbine rotor at low wind speeds of 3.5 m/sec (Fric et al. 2018). Wind turbines "spin freely" at wind speeds lower than the wind activation speed (i.e., the minimum speed at which wind turbines produce energy). The unnecessary activity of wind turbines described above can be reduced in three ways: a) by sweeping the blades (so that they are parallel to the direction of the prevailing wind, effectively reducing their surface area), b) by increasing the activation wind

- speed, and c) by implementing methods that prevent the blades from rotating at lower wind speeds (Rodrigues et al. 2015, Arnett 2017). Evidence from Europe and North America suggests that trimming and increasing wind activation speed are the only proven ways to reduce bat mortality due to impact (Rodrigues et al. 2015, Behr et al. 2017).
- ♣ Monitoring possible impacts on handrails. If there is an impact on mammals from the installation of the proposed WPP once it is identified, it is proposed to monitor the potential impacts on birds and other terrestrial fauna in parallel with the monitoring of impacts on chiral mammals. This monitoring should be carried out by experts in order to ensure the correct selection of monitoring methods based on the standards of relevant international/national research programs, the correct assessment of impacts and, consequently, the correct selection of additional mitigation measures (if any), e.g. even avoiding activities during periods when bats are most sensitive to disturbance (e.g. breeding, hibernation), as well as during transits and foraging based on local knowledge, etc. (Fric et al. 2018).
- ♣ Wind turbine blade base in black. A recent study has shown that painting wind turbine blade part with black or red paint will help reduce the mortality rate compared to wind turbines where this activity does not take place, specifically for raptor species that are considered species of interest in the Special Ecological Assessment as they have been shown to have high visual acuity and sharp vision at long distances.
- ♣ Full shutdown of the power plant during sensitive periods. If the processing of the monitoring system recording data after the installation of the project under study indicates that the risk of bird impact is high and cannot be reduced through periodic shutdowns, then a full shutdown of the project may be proposed for as long as necessary.

C) Interventions to mitigate potential future cumulative impacts

- ♣ In accordance with the Special Ecological Assessment (SEA), this section presents a proposal for mitigation measures for possible future cumulative impacts, based on the proposals of the European Action Plans, which are based on the following actions that could be adopted in case of installation of all the planned WPP within the protected areas under study.
- ♣ In the Special Ecological Assessment (SEA), potential significant impacts have been assessed in the case of the construction of all the WPPs currently under license within the protected areas under consideration, however the contribution of the power plant under consideration is assessed as minor.
- ♣ However, for both this and the other projects under licensing to mitigate any negative impact on the ecologically sensitive area under consideration, it is proposed that they contribute to a broader action plan of cumulative impact mitigation interventions in line with the recommendations of the National Scavenger Species Action Plan (Xirouhakis 2019).

The European (EuroSaps) Action Plans have been extensively analyzed in Chapter 5 and in the Special Ecological Assessment, which list the threats faced by the species, the targets, and proposed measures to address them by country, as well as the (2) National Action Plans for Birds, which set out specific targets and measures for threatened species.

The following tables detail the proposed measures of the two (2) National Action Plans in relation to the existing threats.

Aims	Measures/Actions	Relevance to existing threats
	Implementation of a	
	uniform information	
	collection system with	
	specific protocols for the	
	recording of poisoning	
	incidents and collection of	
	dead animals by public	
	services (Directorate of	
	Veterinary Services	
	Ministry of Rural	
	Development and	
Improvement of	Food/Ministry of	
Improvement of	Environment & Energy).	
knowledge and documentation of the	Issue of a relevant circular.	
	Development of an easy to	
effects of the use of	use, standardized and	
pesticides and other	seamless system for the	
banned toxic substances	storage and transport of	
in poison baits on the	dead vulture tissue/organ	
viability of vultures	samples through the	
	competent services and	
	certified procedures for	
	toxicological analyses.	
	Reinforcement and	
	operation of a Veterinary	Illegal use of
	Centre in Athens.	poison baits
	Conducting necropsies,	
	histopathological	
	examinations, and	
	toxicological analyses on	
	poisoned/dead vultures	
	Amendment and	
	implementation of the Joint	
	Ministerial Decision	
	"Local Action Plan to	
	prevent the illegal use of	
	poisoned baits"	
	(Government Gazette	
Reduction of vulture	3793/B/3-9-2018) and	
mortality due to	development of a new	
consumption of	relevant Joint Ministerial	
poisoned baits.	Decision in cooperation	
	with the Ministry of Rural	
	Development and Food to	
	cover errors and legislative	
	gaps that have already been	
	identified in its	
	implementation. Adoption	
	of a Strategy/Roadmap and	

1			1
		establishment of a working	
		group for the collective	
		implementation of	
		measures in local action	
		plans	
		Establishment and	
		operation of seven regional	
		teams of dogs specially	
		trained in the detection of	
		poison baits/ Systematic	
		patrols/inspections in	
		critical high-risk areas by	
		the Forestry Services (or	
		other relevant services).	
		Implementation of loss	
		•	
	Dadaatian af	prevention methods to	
	Reduction of	reduce losses in crop and	
	interactions/competition	livestock production (e.g.	
	between carnivorous	subsidies for electric	
	mammals and human	fencing, etc.) and pilot	
	activities	application of new	
		techniques (e.g. fladry	
		technique)	
		Improvement of the	
		compensation scheme of	
		the Hellenic Organization	
		of Agricultural Insurances	
		(simplification of the	
		declaration and inspection	
		procedure for	
		compensation, reduction of	
		the minimum number of	1. Illegal use of
		animals required, reduction	poison baits
		of the payment time,	1
		compensation of 100% of	
	Reduction of	the value of the damage,	
	interactions/competition	etc.) and linking	
	between carnivorous	compensation schemes to	
	mammals and human	preventive measures in	
	activities	areas of high risk of attacks	
	activities	and high risk of livestock	
		losses.	
		Maintenance of high	
		densities of wild ungulates	1 711 1
		(mainly chamois, deer) to	1. Illegal use of
		ensure food supply for wild	poison baits
		carnivores through	2. Food
		appropriate management	insufficiency
		(e.g. reintroduction,	3. Degradation of
		strengthening of small	foraging habitat.
		populations, regulation of	
		livestock grazing, ensuring	
			

Investigation and monitoring of the use/approval of veterinary formulations of non-steroidal anti-inflammatory drugs (NSAIDS) that are harmful to vultures in their critical areas/inform users of their harmful effects through vulture population management seminars. Assessment of mortality due to electrocution and collision with electricity generation and transmission infrastructure Establishment of monitoring (recording of dead birds) in existing electricity transmission networks in the vicinity of breeding and roosting sites of vultures. Establishment of mandatory post-construction monitoring programs and assessment of vulture mortality and displacement from power generation and generation and generation generation generation and generation gener	eterinary	Investigation and monitoring of the use/approval of veterinary formulations of non- steroidal anti-inflammatory drugs (NSAIDS) that are	
monitoring of the use/approval of veterinary formulations of non-steroidal anti-inflammatory drugs (NSAIDS) that are harmful to vultures in their critical areas/inform users of their harmful effects through vulture population management seminars. Assessment of mortality due to electrocution and collision with electricity generation and transmission infrastructure Basebala in monitoring of the use/approval of veterinary formulations of non-steroidal anti-inflammatory drugs (NSAIDS) that are harmful to vultures in their critical areas/inform users of their harmful effects through vulture population management seminars. Establishment of protocols and composition of guidelines on systematic monitoring (recording of dead birds) in existing electricity transmission networks in the vicinity of breeding and roosting sites of vultures. Establishment of mandatory post-construction monitoring programs and assessment of vulture mortality and displacement from power	eterinary	monitoring of the use/approval of veterinary formulations of non- steroidal anti-inflammatory drugs (NSAIDS) that are	
Minimization of vulture mortality due to NSAID consumption. Assessment of mortality due to electrocution and transmission infrastructure infrastructure Establishment of mandatory generation and transmission infrastructure Establishment of mandatory gorgams and assessment of mandatory post-construction monitoring programs and assessment of vulture mortality and displacement from power	eterinary	use/approval of veterinary formulations of non- steroidal anti-inflammatory drugs (NSAIDS) that are	
Minimization of vulture mortality due to NSAID consumption. Assessment of mortality due to electrocution and transmission infrastructure Establishment of infrastructure Establishment of mandatory derugs (NSAIDS) that are harmful to vultures in their critical areas/inform users of their harmful effects through vulture population management seminars. Establishment of protocols and composition of guidelines on systematic monitoring (recording of dead birds) in existing electricity transmission networks in the vicinity of breeding and roosting sites of vultures. Establishment of mandatory post-construction monitoring programs and assessment of vulture mortality and displacement from power	eterinary	formulations of non- steroidal anti-inflammatory drugs (NSAIDS) that are	
Minimization of vulture mortality due to NSAID consumption. Assessment of mortality due to electrocution and collision with electricity generation and transmission infrastructure Establishment of infrastructure Establishment of montality of breeding and roosting sites of vultures. Establishment of monitoring programs and assessment of wulture monitoring programs and assessment of vulture mortality and displacement from power	eterinary	steroidal anti-inflammatory drugs (NSAIDS) that are	
mortality due to NSAID consumption. drugs (NSAIDS) that are harmful to vultures in their critical areas/inform users of their harmful effects through vulture population management seminars. Establishment of protocols and composition of guidelines on systematic monitoring (recording of dead birds) in existing electricity transmission networks in the vicinity of breeding and roosting sites of vultures. Establishment of mandatory post-construction monitoring programs and assessment of vulture mortality and displacement from power	eterinary	drugs (NSAIDS) that are	
mortality due to NSAID consumption. drugs (NSAIDS) that are harmful to vultures in their critical areas/inform users of their harmful effects through vulture population management seminars. Establishment of protocols and composition of guidelines on systematic monitoring (recording of dead birds) in existing electricity transmission networks in the vicinity of breeding and roosting sites of vultures. Establishment of mandatory post-construction monitoring programs and assessment of vulture mortality and displacement from power	-	drugs (NSAIDS) that are	Minimization of vulture
consumption. harmful to vultures in their critical areas/inform users of their harmful effects through vulture population management seminars. Establishment of protocols and composition of guidelines on systematic electrocution and collision with electricity generation and transmission networks in the vicinity of breeding and roosting sites of vultures. Establishment of monitoring programs and assessment of vulture mortality and displacement from power	-		mortality due to NSAID
critical areas/inform users of their harmful effects through vulture population management seminars. Establishment of protocols and composition of guidelines on systematic electrocution and collision with electricity generation and transmission infrastructure electricity transmission networks in the vicinity of breeding and roosting sites of vultures. Establishment of mandatory post- construction monitoring programs and assessment of vulture mortality and displacement from power			
of their harmful effects through vulture population management seminars. Establishment of protocols and composition of guidelines on systematic electrocution and collision with electricity generation and transmission infrastructure Establishment of electricity transmission networks in the vicinity of breeding and roosting sites of vultures. Establishment of mandatory post- construction monitoring programs and assessment of vulture mortality and displacement from power			
through vulture population management seminars. Establishment of protocols and composition of guidelines on systematic monitoring (recording of dead birds) in existing electricity transmission networks in the vicinity of breeding and roosting sites of vultures. Establishment of mandatory post-construction monitoring programs and assessment of vulture mortality and displacement from power			
Assessment of mortality due to electrocution and collision with electricity generation and transmission infrastructure infrast			
Assessment of mortality due to electrocution and collision with electricity generation and transmission infrastructure electrocutire Establishment of protocols and composition of guidelines on systematic monitoring (recording of dead birds) in existing electricity transmission networks in the vicinity of breeding and roosting sites of vultures. Establishment of mandatory post-construction monitoring programs and assessment of vulture mortality and displacement from power			
Assessment of mortality due to electrocution and collision with electricity generation and transmission infrastructure breeding and roosting sites of vultures. Establishment of mandatory post-construction monitoring programs and assessment of vulture mortality and displacement from power			
mortality due to electrocution and collision with electricity generation and transmission infrastructure Establishment of mandatory post- construction monitoring programs and assessment of vulture mortality and displacement from power			
electrocution and collision with electricity generation and transmission infrastructure breeding and roosting sites of vultures. Establishment of mandatory post-construction monitoring programs and assessment of vulture mortality and displacement from power		-	
collision with electricity generation and transmission infrastructure Establishment of mandatory post- construction monitoring programs and assessment of vulture mortality and displacement from power		1	•
generation and transmission networks in the vicinity of breeding and roosting sites of vultures. Establishment of mandatory post-construction monitoring programs and assessment of vulture mortality and displacement from power		_	
transmission networks in the vicinity of breeding and roosting sites of vultures. Establishment of mandatory post-construction monitoring programs and assessment of vulture mortality and displacement from power			
infrastructure breeding and roosting sites of vultures. Establishment of mandatory post- construction monitoring programs and assessment of vulture mortality and displacement from power		-	•
of vultures. Establishment of mandatory post- construction monitoring programs and assessment of vulture mortality and displacement from power		- I	transmission
Establishment of mandatory post-construction monitoring programs and assessment of vulture mortality and displacement from power		breeding and roosting sites	infrastructure
mandatory post- construction monitoring programs and assessment of vulture mortality and displacement from power		of vultures.	
construction monitoring programs and assessment of vulture mortality and displacement from power		Establishment of	
construction monitoring programs and assessment of vulture mortality and displacement from power		mandatory post-	
programs and assessment of vulture mortality and displacement from power			
of vulture mortality and displacement from power		_	
displacement from power			
		1	
		generation and	
transmission infrastructure		C	
using a specific			
methodology. Electrocution &	ctrocution		
Establishment of an Impact on man-	act on ma		
Environmental Condition made structures &	structures	l m:	
(in approvals of infrastructure.	rastructure		
environmental terms and			
conditions of power			
generation and			
transmission projects, e.g.			
WPPs) of free access to			
information and			
implementation of a		_	
uniform information			
collection system with			
specific protocols for the			
recording of incidents of		_	
collisions and collection of			
dead animals by the		dead animals by the	
forestry services.		forestry services.	
Assessment of Mapping and assessment		Manning and accessment	Assessment of
mortality due to of the effects of		Mapping and assessment	
electrocution and electrocution and impact			mortanty due to

impact on electricity	(and their cumulative	
generation and	effects) on power	
transmission	generation and	
infrastructure	transmission infrastructure	
	in relation to the flight	
	behavior and biology of	
	vultures	
	Application of techniques	
	to reduce mortality due to	
	electrocution or collision	
	with W/T or power cables	
	(poles insulation,	
	undergrounding of cables	
	and/or use of twisted	
	insulated wires, marking of	
	cables, selective W/T	
	disconnection).	
	Integration of sensitivity	
	maps in the new spatial	
	plan for RES for proper	
	zoning generation	
	infrastructure and	
	electricity production and	
	transmission	
	Implementation of	
	mitigation measures in	
	WPPs where at least one	
	vulture collision incident	
	has been recorded.	
	Mandatory introduction of	
	a condition in the AETCs	
Reduction of vulture	(Approvals of	
mortality due to	Environmental Terms and	
collision with power	Conditions) to implement	
generation	an immediate shutdown	
infrastructure	system, in line with best	
	international practice, which includes the	Electrocution &
	employment of field	Impact on man-
	ornithologists on a	made structures &
	permanent basis to alert in	infrastructure.
	case of approach of	
	vultures - raptors (Aquila	
	spp., Haliaeetus albicilla,	
	Clanga spp.); and	
	shutdown of W/Ts based	
	on a specific protocol.	
	Permanent cessation of	
	wind turbines in the event	
	of repeated incidents of	
	collision and whereas	
	1	

	mitigation measures have	
	not been effective	
	Increased patrols in areas	Direct
Zero mortality due to	with recorded cases of	
poaching	poaching of	pursuit/killing by
	Vultures/Raptors	man
	Recording of illegal	
	trafficking incidents and	
	investigation of e-	
Minimization of illegal	commerce (embalmed	Tr., 1, 1
trade and trafficking of	vultures, live specimens,	Trade and
vulture samples	eggs) and assessment of	Embalming
-	the problem / Cooperation	
	with the Cybercrime Unit	
	for criminal prosecution	
	Mapping of dangerous	
	reservoirs in island and	
Zero drowning	continental	
mortality in artificial	areas/Development of	Other causes
reservoirs	guidelines for safe	2
	construction for wildlife in	
	artificial water bodies	
	Elaboration of technical	
	and sanitary specifications	
	for the establishment and	
	operation of Raptors'	
	Supplementary Feeding	
	Stations (RSFS)at a	
	national level / Proposed	
	siting with assessment of	
	existing food abundance	
	and availability in vulture	
	distribution zones and	
	assessment of potential	
	feeding of regional RSFSs	
	in critical areas for vulture	
Optimization of	conservation	
artificial feeding	Establishment and	Food insufficiency
practices		
	operation of a network of	
	RSFSs at a regional level,	
	with the development of	
	cooperation between public	
	services, Protected Area	
	Management Bodies, and	
	their successor Protected	
	Area Management Units of	
	Natural Environment &	
	Climate Change Agency	
	(NECCA), NGOs and	
	social partners (e.g.	
	producers) in optimizing	
	the disposal of the dead	

		1
	biomass produced in	
	RSFSs / Promotion of	
	cross-border cooperation in	
	border areas and their	
	parallel monitoring with	
	simultaneous counts	
	Monitor the use of RSFSs	
	and study the behavior of	
	scavenging species for	
	potential negative effects	
	of their operation (e.g.	
Optimization of	interspecific competition,	
artificial feeding	low juvenile distribution,	
practices	etc.) and the interactions	
	between pets (dog) and	
	vulture populations and the	
	risk of transmission of	
	zoonoses through the	
	operation of RSFSs	
	Harmonization with Union	
	legislation and	
	development of the	
	appropriate legislative	
	framework for the	
	implementation of EU	
	regulations on the free	
	disposal of dead animals	
	within the SPAs.	
	Promotion (informational	Food insufficiency
	campaign, introduction of	1 ood mounteioney
	incentives such as the	
Adaptation to European	exemption of the payment	
directives/regulations	of a fee for the collection	
on the disposal of dead	of dead animals for	
animals in the field	compulsory cremation) of	
	all traditional vulture-	
	friendly practices for the	
	disposal of dead animals	
	and their	
	institutionalization within	
	SPAs at local level	
	Pilot planning and	
	operation of small,	
	scattered feed depots,	
	cooperation with livestock	
	farms, transport of dead	
	animals, informing	
Promotion of	Promotion of agri-	
traditional/extensive	environmental policies for	
forms of livestock	the development of	
farming	extensive/nomadic	
	livestock farming	

Т Т		T	<u> </u>
		(implementation of union	
		regulations, sustainable	
		management of mountain	
		pastures, management	
		plans for	
		grazing/improvement of	
		products from free range	
		animals)	
		Renewal and updating of	
		the legislative framework	
		for the licensing and	
		operation of Care Centers	
		and the establishment of	
		breeding programs in	
		captivity in their facilities	
		by Ministries of	
		Environment and	
		Energy/Rural Development	
		and Food.	
		Establishment and	
		institutionalization of a	
		supervisory authority at the	
		Ministries of Environment	
		and Energy/Rural	
		Development and Food	
	Increase in genetic	(along the CITES	
	diversity of vulture	Committee lines) with	
	populations and	specific responsibilities in	
	reduction of the effects	enrichment programs with	Small population
	of inbreeding	the coordination of the	size - Low genetic
		Ministry of Environment	diversity
		and Energy and the	
		cooperation of public	
		bodies and NGOs/	
		Development of	
		memoranda of	
		understanding between the	
		Supervisory Authority,	
		Protected Area	
		Management Bodies and	
		Conservation Centers	
		Support and	
		participation/cooperation	
		with existing European	
		captive breeding programs	
		(EASA, LIFE, breeding	
		centers, etc.)	
	Restoration of the	Establishment and support	
		of appropriate	
	vulture population	infrastructure per region	
	locally by repopulating critical areas	for state-supervised vulture	
	critical areas	reintegration and	
L L		•	

	r		
		empowerment programs	
		(e.g. acclimatization cages,	
		vulture maintenance) in	
		SPAs and protected areas	
		with their management	
		bodies with small or	
		isolated vulture	
		populations/ Release of	
		individuals from Care	
		Centers in Greece	
		Develop telemetry and	
		individual ringing	
		programs to identify	
		feeding and distribution	
		areas of juveniles and	
		combine the data with	
	Facilitation of	mapping of critical vulture	Small population
	communication and	conservation priority areas.	size - Low genetic
	linking of vulture	Establishment of	diversity
	metapopulations	"connectivity corridors"	
		between vulture	
		metapopulations by	
		managing foraging habitat	
		and siting and operation of	
		RSFSs.	
		Delineation of sensitivity zones near colonies and	
		nesting territories/	
		Proposals to adopt HRM	
		(Human Resources	
		Management) regulations	Disturbance at
		and restrictions (spatial and	breeding sites
		temporal) on human	
		activities (climbing, aerial	
		flying, hunting, logging,	
		rock lighting, etc.) in the	
		vicinity of vulture critical	
	Increase of the	areas	
	reproductive success of	Promotion of silvicultural	
	populations	management in selected	
		forest stands / maintenance	
		and increase of suitable	
		nesting sites for Cinereus	
		Vulture / reduction of	
		accumulated biomass in	Destruction of
		selected stands by	breeding habitat
		mechanical means, cutting	
		and crushing / dispersal of	
		riparian and shrub	
		vegetation to shield	
		Cinereus Vulture nesting	
		sites	
•			

	Maintenance of vulture	
	accessibility to natural	
	water bodies and streams	
	by halting horizontal	
	spread of forest in small	
	areas along streams.	
	Implementation/application	
	of other specific	
	protection/management	
	measures for Cinereus	
	Vulture in accordance with	
	the Joint Ministerial	
	Decision 35633/13-10-	
	2006, the 10-year Special	
	Management Plan for Zone	
	A of the Forest of Dadia	
	National Park that is	
	already being implemented	
	and the proposed actions of	
	the Special Environmental	
	Study of the area	
	Construction of suitable	
	water reservoirs (including	
Increasing the viability	the installation of metal	
and productivity of the	structures where there is no	Degradation of
vulture breeding	other option) for use by	foraging habitat
population	vultures during periods of	
1 1	maximum water shortage	
	in critical island areas.	
	Establishment and	
	updating of the National	
	Database on Vultures	
	regarding their distribution	
Improving our	and population status /	Gaps in knowledge
knowledge on the	simultaneous recording of	on distribution,
distribution and	all mortality events	status, productivity,
population status of	Establishment of a	and mortality of
vultures	uniform, standardized	vultures in Greece
	protocol for fieldwork to	
	record and monitor vulture	
	populations	
	r - r	

	Implementation of a national vulture census program (3 times in 6 years, to assess population trends) - Mapping of all active and historical colonies / Annual fieldwork in selected colonies/ territories and assessment of vulture breeding success	
Improving our knowledge on the effects of lead use on vulture populations	Application of direct and reliable techniques for the detection of molybdenum in laboratory analyses (in certified public laboratories); / Lead sampling in scavenging predators in care centers; / Quantification of the incidence of lead poisoning in vulture populations through sampling. Research on infectious disease mortality/development and implementation of a biomedical protocol for the collection and preservation of dead scavenging birds of prey	Lack of knowledge about the level of exposure of vultures to toxic substances and the degree of their bioaccumulation
Evaluation/assessment of the cumulative impact of the operation of the WPP on vulture populations.	An assessment study to evaluate the cumulative impacts of operational and under development WPPs (habitat degradation/displacement/impact on vulture populations) on vulture populations.	Lack of assessment of the cumulative impact of electrocution and energy infrastructure impacts on vulture populations.
Development of a species recovery plan on a national or regional scale	Feasibility study for the enhancement of the natural populations of vultures in Greece/ Preparation of a release plan release strategy on a national or regional scale. Development of models of habitat suitability and	Lack of a restoration plan vulture populations for reintroduction or enrichment.

 Г		
	potential spread of vultures	
	(habitat suitability)	
	Rationalization of the	Mortality due to
	criminal framework for	exposure to toxic
	dealing with the problem	substances.
	Promotion of legislation to	
	ban the use of lead and	
	lead-based paint reducing	
	the risks of lead exposure	
	to wildlife and public	
	health / Extend the	
	implementation of the Joint	
	Ministerial Decision on the	
	prohibition of lead pits in	
	wetlands throughout the	
	country.	
	Promotion of legislation to	
In amaging the second !!'	reduce the use of	
Increasing the viability	dangerous NSAIDs in	
and productivity of the	wildlife from the	
vulture breeding	veterinary market	
population	Implementation of	
	legislation on	
	environmental	Mortality due to
	liability/damage in cases of	electrocution or
	vulture killing (addressing	impact with
	complaints, speeding up	infrastructure
	procedures, investigating	
	incidents, penalties)	
	Establishment and legal	
	consolidation of the RSFS	
	operation for scavenging	
	species at a national level.	E 1: cc::
	Necessity for	Food insufficiency
	institutionalization of a	
	study for RSFS	
	specifications	
	Integration of provisions of	
	the vulture conservation	Total office
	action plan into the	Lack of integration
Integration of the	management plans of	of vulture
National Action Plan	protected areas and	conservation in the
into regional policies	monitoring	national
	Monitoring and evaluation	environmental
	of the implementation of	policy.
	the action plan	
Prioritizing	Conduct at least 4 local	4 T
conservation of vultures	seminars for the employees	1. Low priority in
in the daily	of the forestry and	the implementation
agenda of	veterinary services, the	of vulture
responsibilities/ actions	environmental sectors of	conservation
of public services	the regions, the	actions by the
1	<i>y</i> ,	

	gamekeepers of hunting	responsible public
	organizations and the	agencies
	supervisors of the	2. Electrocution &
	Protected Area	Impact on man-
	Management Bodies	made structures &
	(PAMBs) on issues related	infrastructure
	to the management of	3. Lack of
	vulture populations	information/training
	(population monitoring	of the competent
	methods, management	public services in
	tools, vulture ecosystem	vulture
	services, illegal use of	conservation
	poison baits, administrative	actions in Greece
	issues regarding the	
	implementation of	
	infrastructure mitigation	
	techniques	
	Awareness-	
	raising/sensitization of land	
	users and stakeholders	
	(farmers, beekeepers,	
	hunters, tourism operators,	
	etc.) and the general public	
	in areas critical for vultures	
	on issues related to the	
	management of their	Lack of information
Reduction of negative	populations (ecosystem	to stakeholders/land
impact of human	services provided by	users on the
activities on vulture	vultures, effects of the use	conservation status
populations	of poisoned baits,	and threats to
	alternative methods of	vultures.
	mitigating and controlling	
	damage to livestock by	
	carnivorous mammals,	
	etc.)/provision of	
	information material on the	
	conservation and	
	ecological value of	
	vultures.	
	Special topics on the	
	ecological value and the	Low dissemination
Dissemination of	need for conservation of	of information
information on the need		regarding the
to preserve the	Centers of the	conservation of
vulture population	Management Agencies	vultures in Greece.
1 1		
1 1	(Protected Areas where vulture species occur).	

Measures and actions in line with the objectives of the National Action Plan for the three scavenging species of ornithofauna (vultures): vulture (Gypaetus barbatus), hornet (Gyps Fulvus), black vulture (Aegypius monachus).

Parameters	Target	Measures/Actions
		Intensification of
		patrols/controls
		Recording of poisoning
		incidents and creation of
	Reducing the risk of	risk maps
	poisoning due to the	Provision of electric
	illegal use of poison baits	fencing to land users
		operating within the
		areas where the
		Egyptian vulture occurs
		Creation of risk
	Reducing the risk of	sensitivity maps and
	collision with wind	exclusion zones from
	turbines	wind turbines around
	turomes	nests and roosting sites
	Reducing the risk of	
Population	electric shock and	Insulation of dangerous
preservation	collision with power	pylons and marking of
preser vacion	transmission and	electricity cables around
	distribution network	nests, roosting sites, and
	cables	migratory constrictions
	Cucios	Establishment and
	Increased availability of	operation of a network
	food	of feeding areas for birds
		of prey
		Establishment of
		protection zones around
		nests
		Seasonal (March-
	Reduction of disturbance	September) exemption
	during nesting	for sports & activities
		through IACS
		Ban on lighting of cliffs
		with Meteora nests
	G	Monitoring using
	Systematic	standardized protocol.
	Monitoring	monitoring
		Bird ringing
Improvement		Chick telemetry and
monitoring and		where appropriate and
research of		where feasible adult
population		individuals and spatial
Egyptian	Research on	mapping of habitat use
Vulture	Mortality	and migration routes
in Greece		Creation and
		implementation of a
		biomedical

-		
	Study of the viability of the species Evaluation of the	Development of suitability models habitat suitability/species distribution Development of analysis models Population Viability Analysis (PVA)
	risk assessment of the bioaccumulation of lead in the food chain	Lead sampling tests. on large birds of prey in the centers care centres
	Research on the strengthening the Population	Feasibility study for reintroduction-enhancement of the natural population in Greece
Legislation and	Reducing the risk of poisoning due to the illegal use of poisoned baits.	Elaboration of the project "National Action Plan for Poisoned Food Lures"
Policy	Reduction of risk of poisoning.	Use of alternatives to diclofenac with comparable results, which proven not to harm scavenging birds.
Communication and education	Training of stakeholders to improve the response to poisoned bait incidents	Conducting information and training seminars for officials of the Forestry Services, the environmental sectors of the regions, game wardens of hunting organizations and supervisors of protected area management bodies. Conducting training seminars for the employees of the Veterinary Services
	Information and awareness-raising of interest groups.	Awareness of land users (farmers, hunters, beekeepers) for the protection of the Egyptian Vulture and the problem of poisoned baits

	Raising awareness of
	development
	stakeholders in sensitive
	breeding areas by
	providing them with
	information on the
	protection of vultures
	Public information and
	awareness campaign on
	poisons in the
Public information	application areas
	Provision of Program
	information material to
	target locations.

Measures and targets of the National Action Plan for the Egyptian Vulture Joint Ministerial Decision 43236/1053/3760B/25.10.2017.

Following the approval of the 2021 Action Plan for scavengers, a report was published in January 2023 by the Hellenic Ornithological Society entitled "Identification of critical habitats (mapping of sensitivity) of the Vulture in Greece Determination of management guidelines" in the framework of the implementation of action C.1 "Pilot implementation of Action Plans for species and habitat types" of the project "LIFE-IP 4 NATURA.

The report lists some measures to mitigate the impacts of the various threats to the Ornithus species, but the measures are proposed and have not yet been adopted.

From the Joint Ministerial Decision 68086/2149/2021 and the Joint Ministerial Decision 43236/1053/ (Government Gazette 3760B/) 25.10.2017), measures have been proposed to address the impacts of the (wind turbines) W/T on endangered species which are partly in line with the proposed measures of the existing Environmental Impact Assessment and the Special Ecological Assessment. However, no exclusion zones and/or sensitivity zones have yet been established as the Ministerial Decision in question refers to their inclusion in the Renewable Energy Land Use Plan under review, while references to post-construction monitoring of the wind farms project with protocols for recording collision incidents and recovery of dead animals.

It is also important to note that the consultation of the Special Environmental Study of the Evros and Rhodope Region has been completed.

According to Article 47 of Law 4685/2020, the Special Environmental Study is the "scientific study to document the Presidential Decree of one or more protected areas and the Management Plan of each protected area". In particular, it focuses on the characterization of protected areas, the zones defined within them, the necessity or not of establishing regional zones, ecological corridors, as well as the proposal for the regulation of activities and functions and the provision of appropriate measures and actions for the preservation of the protected object of each protected area, which, however, must first be established in order to be implemented as such. However, Management Plans have not been prepared and therefore no relevant Legislative Decree (e.g., Presidential Decree) has been adopted.

Considering the above data, the field observations of the Special Ecological Assessment (July 2020 - June 2021) and the conditions for the implementation of all the mitigation measures mentioned in detail above, it is estimated that the project under consideration. 4
conservation objectives of the Natura 2000 sites concerned. Not likely to impede the achievement or maintenance of the objectives for the bird species of par. 1 and 2 of Article 4 of Directive 2009/147/EC on Special Protection Areas (SPAs) of the national ecological network under consideration NATURA 2000 of Greece were established by the Decision of the Deputy Minister of Environment and Energy No. 50146/1786 (Government)
consideration NATURA 2000 of Greece were established by the Decision of the Deputy Minister of Environment and Energy No. 50146/1786 (Governmen
Minister of Environment and Energy No. 50146/1786 (Governmen
Gazette 3118/B'/10-05-2023).
It is not likely to reduce the area or fragment habitat types of Natura 2000 sites or affect the representativeness and degree of conservation of their structure and functions.
It is not likely to reduce the size of the population of species or affect the degree of conservation of their habitats or fragment them or affect the balance between species or affect the degree of isolation.
Not likely to cause changes to vital parameters (e.g. nutrient balance, soi degradation from potential erosion, dynamics of relationships between biotic and abiotic parameters) that determine how Natura 2000 home sites function.
Not likely to have interactions with predicted or expected natural changes in Natura 2000 residential sites.
(iv) Proponent/developer
Name: ALIKI ENERGY SINGLE MEMBER P.C., Address: Dimitriou Gounari 96, PC 15125, Marousi, Greece Telephone: 6972942248, Email: alikienergy@gmail.com

(v) EIA documentation		
Is the EIA documentation (e.g. EIA report or EIS) included in the notification?	Yes □ No □ Partially ✓	
If the answer to the above is no or partially, description of additional documentation to be forwarded and (approximate) date(s)	When requested	

when documentation will be available			
Additional information/comments			
2. POINTS OF CONTACT			
(i) Points of contact for the possible affected Party or Parties			
Authority responsible for coordinating activities relating to the EIA (refer to decision I/3, appendix) - Name, address, telephone, and fax numbers	BULGARIA Ministry of Environment and Water 22 Maria-Luisa Blvd. 1000 SOFIA Telephone: + 359 2 988 25 77 E-mails: g.alieva@moew.government.bg; edno_gishe@moew.government.bg		
List of affected Parties to which notification is being sent	Republic of Bulgaria		
(ii) Points of contact for the Party of origin			
Authority responsible for coordinating activities relating to the EIA (refer to decision I/3, appendix) - Name, address, telephone, and fax numbers	Name: Decentralized Administration of Eastern Macedonia and Thrace Address: 3rd km Komotini- Alexandroupolis, P.C 69100, Komotini Tourantzidou Polixeni Telephone: 2313309044, e-mail: xeniat@m-t.gov.gr		
Decision-making authority if different than authority responsible for coordinating activities relating to the EIA Name, address, telephone, and fax numbers	-		
3. INFORMATION ON THE EIA PROCESS IN THE COUNTRY WHERE THE PROPOSED ACTIVITY IS LOCATED			
(i) Information on the EIA process that will be applied to the proposed activity			

Time schedule	

Opportunities for the affected Party or Parties to be	During the public participation procedure			
involved in the EIA process				
Opportunities for the affected Party or Parties to review and comment on the notification and the EIA	During the public participation procedure			
documentation				
Nature and timing of the possible decision				
Process for approval of the proposed activity				
Additional information/comments				
4. INFORMATION ON THE PUBLIC PARTICIPATION PROCESS IN THE COUNTRY OF ORIGIN				
ORI				
Public participation procedures				
Public participation procedures Expected start and duration of public consultation	GIN			