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CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE AND NATURAL HABITATS

Standing Committee

 41^{st} meeting Strasbourg, 30 November – 3 December 2020

New complaint: 2021/1

Alleged threats to marine turtles due to a new coal-fired power plant at Sugözü Beach (Turkey)

- COMPLAINT FORM -

Document prepared by ÇevreveTüketiciyiKorumaDerneği

Convention on the Conservation of European Wildlife and Natural Habitats

Bern Convention Secretariat
Directorate of Democratic Participation
Council of Europe

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ÇevreKorumaDerneği, CAN- Europe, Doğu Akdeniz ÇevrePlatformu,

ErzinÇevreveTarihiVarlıklarıKorumaDerneği, ErzinYeşilkentSulamaKooperatifi, İskenderun ÇevreKorumaDerneği, Mersin ÇevreveDoğaDerneği, SamandağÇevreKorumaveTurizmDerneği,

MEDASSET, Tarsus CevreKorumaKültürveSanatMerkezi and WWF-Turkey

E-mail: drsadun@yahoo.com Date: 20 January 2021 Electronic Signature:

1. Please state the reason of your complaint (refer also the Contracting Party/es involved and the Articles of the Convention which might be violated).

A new coal-fired power plant is being constructed at Sugözü Beach, next to the Yumurtalık Lagoon in Adana, Turkey. The construction, currently ongoing, includes the power plant, port structures, pier and the road connecting the port and the plant. Sugözü Beach, where the EMBA¹power plant project and onshore and offshore structures belonging to the Project are located, is among the major nesting sites of the green sea turtles (*Chelonia mydas*) and loggerhead sea turtles (*Caretta caretta*) in the Mediterranean. Both species are included in the IUCN Red List, where the green sea turtle is categorized as endangered and the loggerhead sea turtle as least concern. The eastern Mediterranean coast of Turkey, including Sugözü beach, are the most important nesting areas for the green sea turtle, where more than 50% of the green sea turtle population within the Mediterranean lay their eggs The number for all sea turtle nests on this beach totaled 213² in 2013. The number of green sea turtle nests documented in 2006 in Sugözü beach, is 198³. However, according to another field study that is made in 2012, the green sea turtle nests found in the Sugözü Beach amounts to 78⁴. Regardless of the nest presence on this beach, protection measures are not implemented for this area, regardless of existing legal framework, namely the Circular no. 2009-10 on the Protection of Sea Turtles issued by the Directorate General of Nature Conservation and National Parks (DKMP). Sea turtles reproduction

Deniz KaplumbağasıYuvalamaKumsallarında (Dalyan, Dalaman, Fethiye, Patara, Belek, Demirtaş, GöksuDeltasıve

Sugözü-Yumurtalık) 2006 YılıYuvalamaSonuçları; Ali Fuat CANBOLAT, Yakup KASKA, Onur CANDAN, KeremYekta ATATUNÇ, DoğanSÖZBİLEN, Burak AKBABA, Murat ÖZAYDINLI, HaydarMETİN

¹ EMBA Electricity Production Co. Inc., as a joint venture company invested by Chinese Shanghai Electric Power Co., Avic-Intl Project Engineering Company, and Turkish local investors

²Hochscheid, S., Kaska, Y. and Panagopoulou, A. (Eds.) (2018). Sea Turtles in the Mediterranean Region: MTSG Annual Regional Report 2018. Draft Report of the IUCNSSC Marine Turtle Specialist Group, 2018. Pp167

³ II. Ulusal Deniz KaplumbağalarıSempozyumu 25-27 Ekim 2007 Dalyan-Muğla,

⁴ Evaluating The Effects of Temperature on Nest Parameters, Weight and Sex of Hatchlings in Green Turtle (Chelonia mydas L., 1758) Nests at Sugözü Beaches (Ceyhan-Adana), ÇağlaKılıçUniversity of Ordu Institute for Graduate Studies in Natural and Technology Department of Biology, 2015

season on these beaches stretches from April to September.

The 1320 MW_e capacity power plants and ash dam are being constructed directly on Sugözü nesting beach, as well as 100,389 m2 concrete filled area along the coast and a 1755 m pier stretching into the sea.⁵

Turkey is in violation of Articles 4 and 6 of the Bern Convention by allowing direct construction along a sea turtle nesting site. The construction has already split the nesting habitat, together with the 1755 km pier stretching into the sea for the port. The project not only poses severe morphological risks to the nesting area due to the construction and coal shipments, but also with the cooling water discharges to the sea. According to the EIA report of the project the total amount of discharge of hot water is expected to reach 15 billion tons per year, possibly raising sea water temperature by approximately 7° C, according to the EIA report of the project.

2. Which are the specific specie/s or habitat/s included in one of the Appendices of the Bern Convention potentially affected? (Please include here information about the geographical area and the population of the species concerned, if applicable)

Two distinctive species included in Appendix II Strictly protected fauna, nest on the beach: *Chelonia mydas* and *Caretta caretta*. The power plant project site is constructed on an area of 418.034,9 m2, which sitsdirectlyon and surrounds the sea turtles' nesting site, withinan area of which the coordinates are precisely defined as a protected area, as per Circular no. 2009-10 on the Protection of Sea Turtles issued by the Directorate General of Nature Conservation and National Parks (DKMP).⁷ This geographical area is officially recognized by the Turkish authority **as a protected site**, recognizing the existence of both turtle species in this area and explicitly referring to the ban of power plants construction.

3. What might be the negative effects for the specie/s or habitat/s involved?

Habitat loss and fragmentation of the land and in the sea: The power plant is constructed directly on the sea turtlenesting beach, resulting in total loss of their habitat. In addition, the coastal area will be covered with concrete, thus preventing sea turtles from nesting. The pier stretching right into the sea will interrupt the natural state of sediments in the sea, thus altering the nesting beach morphology. These changes of the natural sediment flow will result in accretion in some areas and erosion on others depending on the nearshore currents. The natural environment of the nesting beach will therefore be completely altered.

The project area already has high water temperature, above 29°C at times. According to the EIA report of the project, the hot water that will be discharged to the sea from the power plant will beapproximately 7 °C hotter than the sea water temperature⁸. It is said that measures will be taken to keep the temperature increase in the water less than 1C, but no concrete or scientific actions are committed to.

Light pollution: Light pollution is known to have a severe impact on sea turtles when nesting and the construction of the plant kept ongoing during the nesting season. The noise and vibration effects of the plant, together with the ships that will work 24 hours a day and the light system during night work, will disturb the sea turtles. It is stated in the EIA report that filtered and right angle lights will be used in

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⁵ Coordinates of power plant, pier and the Akkum beach under

 $protection: https://earth.google.com/web/data=Mj8KPQo7CiExOEkxN3FCeTRvSTdNQ2ZYblVndG1hdW1sU2F0RWMyQjQSFgoUMEJCMUM2NzI3RjExNjREOTNENjE\ 2 with the second control of the c$

https://www.planet.com/stories/adana-construction-turkey-2017-2020-g1Zu_W3ZR

⁶ EIA report: https://drive.google.com/drive/u/3/folders/l cQyJX6-sDKBmhD8V3BSCiU iY99uexLv

^{7 2009-10} Circular: https://drive.google.com/drive/u/3/folders/1 cQyJX6-sDKBmhD8V3BSCiU iY99uexLv 4 Satellite images of plant and pier July 2020:

⁸ EIA report: https://drive.google.com/drive/u/3/folders/l cQyJX6-sDKBmhD8V3BSCiU iY99uexLv

order to prevent sea creatures from being disturbed by the ship lights during nighttime work, however no measures are stated in the EIA report regarding the light structures of the plant itself, during the construction or operation phases of the power plant. This issue raises an important problem as the 2018 spatial plan for this project explicitly states that; "one of the most important factors affecting sea turtles and their hatchlings is the light sources located in the terrestrial area. For this reason, it is of great importance to screen the sea-facing sides of the light sources to be arranged in the thermal power plant and /or to use low-intensity sodium-containing light sources. By this way, the hatchlings will be prevented from losing their lives by turning to light sources". Soil pollution: A study published in 2013, refers to the spatial distribution of heavy metals in the Hatay province of Iskenderun Bay where Yumurtalık is located and the Hunutlu Project is sited. Soil samples were analyzed for heavy metal concentration. It was found that the soil in the study area was contaminated predominantly by Cadmium and Nickel, which may give rise to various health hazards or diseases. 10 Even with advanced technology, new coal power plant projects such as Hunutlu, will only worsen environmental pollution as the soil is already contaminated and existing heavy metals exceed Turkish and WHO standards. Air pollution: The project's EIA report mentions the 2006 EU Reference Document on Best Available Techniques for Large Combustion Plants (BREF) emission limits, which instead of implementing them exceed pollution limits, according to the most recent Turkish Air Pollution Control Regulation. The report does not refer to the 2017 EU BREF limits, which are even stricter than in 2006.

4. Do you know if potentially affected species or habitats also fall under the scope of other international Conventions, (for instance: RAMSAR, CMS, ACCOBAMS, Barcelona Convention, etc) or if the area has been identified as a NATURA 2000/Emerald network site?

The power plant project is also in breach of the Barcelona Convention's Action Plan for the Conservation of Mediterranean Marine Turtles, as it is directly being constructed on the green sea turtle nesting beach. As per CBD, the project is violating Article 8 (Pollution from land-based sources) regarding the conservation of the site. Turkey and the power plant investor which is China are both parties to the Convention. The project site is 16 km away from the Yumurtalık Lagoon which is a Ramsar site.

There are four ongoing lawsuits, three of which are related to the urban plan revisions of the coal plant. The first case was filed in 2017 to cancel the electricity generation license of the plant. The expert panel which the court assigned for inspection of the arguments demonstrated the impacts on public health. According to the expert panel, the number of cancer cases and the types of cancer, increase due to pollution from the coal plant in operation 2 km away from the Hunutlu Project. They also pointed out the negative impacts on agricultural yields. The case is ongoing. The second case, also filed in 2017 was to cancel the revised plan of the coastal and marine structures of the coal plant and regional spatial plan that are granting permission to build the plant's coastal structures on a nesting site under protection. The third case was filed in 2018 to cancel the revised plan of the land structures of the coal plant. The court assigned an expert panel to inspect the technicalities of the arguments for both cases. The expert panel decided that both plan revisions were violating national legislation regarding the conservation of the sea turtles nesting sites (circular no: 2009/10). The case is ongoing. While the construction is continuing and the cases are ongoing, a further revision of the urban plan of coastal and marine structures was taken to the court in August 2020. According to this recent revision, the water withdrawal and discharge structures will be removed in the urban plan however there is no clear information available of how those structural changes will take place. Finally, in September 2020, ÇETKO filed a complaint to the Ministry of Environment and Urbanization stating that the company was violating the urban plan and the circular ruling stating that the embankment on the nesting beach should have been removed before the nesting season. A law case is also filed for this breach in October 2020 by CETKO.

^{9 1/000} scale urban spatial plan for Hunutlu power plant, $2018\,$

¹⁰Coal power generation and health in Iskenderun Bay, Turkey, Health and Environment Alliance (HEAL), 2016 https://env-health.org/IMG/pdf/heal_toolkit_final.pdf

5. Do you know if there are any pending procedures at the national or international level regarding the object of your complaint?

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6. Any other information (existence of an Environmental Impact Assessment (FAA), size of projects, maps of the area, etc)

The circular drafted by the General Directorate of Nature Conservation and National Parks and signed by the then Minister of Environment and Forestry (Circular No: 2009/10) lists the conservation sites of nesting turtles referring to the Bern Convention and states the Convention conditions regarding those sites. Article 12 of the circular clearly states that new industrial facilities and energy investments are not permitted on the nesting site and that further tourism and infrastructural facilities as well as new nearby facilities have to be considered for approval by the Ministry of Environment. Yumurtalık Akkum, is one of the sites listed in the circular. The Ministry granted permits in favor of the coal plant after referring to the opinion of a scientist, Prof. Oğuz Türkozan, who is a member of the Turkish Scientific Committee for Sea Turtles. The opinion and the permit constituted the basis of important decisions such as the EIA approval and the urban plan revisions. The Ministry officials are responsible for the wrongful enforcement of the above circular. expert opinions are given throughout the construction by Prof Türkozan, being the consultant of EMBA, in addition to being a member of the scientific committee. Prof Türkozanapproved the construction on the nesting site, even during the nesting season.

The EIA report approved by the Ministry of Environment in 2014 includes outrageous statements such as "Caretta caretta and Chelonia mydas are frequently seen in the region. Although they are protected, the mentioned species have the ability to move at fairly high speeds and have the potential to leave the area during construction and operation. The species can only use this area for feeding and crawling. In this case, they are not expected to be adversely affected by the construction and operation of the coal plant".

¹¹EIA report: https://drive.google.com/drive/u/3/fòlders/l cQyJX6-sDKBmhD8V3BSCiU_iY99uexLv



Image 1: Map from Google earth demonstrating the boundaries of the protection area and the power plant structures

Image 2: Satellite image from Earth Observing System, demonstrating project construction as of July 2020