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Ref: EIA/2018/021  
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Date: 30 August 2021

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FOR ATTENTION: CAROLINE EVANS

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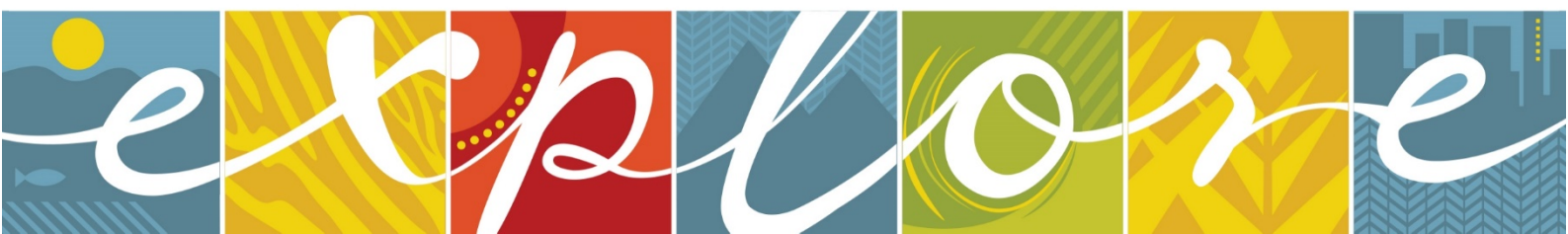
Dear Ms Evans

**RE: DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT FOR THE PROPOSED ALBANY WIND ENERGY FACILITY NEAR MAKANDA, EASTERN CAPE (DFFE REF: 14/12/16/3/3/2/1131)**

Thank you for providing the Eastern Cape Parks and Tourism Agency (ECPTA) with the opportunity to provide comment on the draft Environmental Impact Assessment (EIA) Report for the proposed Albany Wind Energy Facility (WEF) within the Makana Local Municipality. As per the mandate of the ECPTA, the Agency is responsible for developing and managing protected areas and promoting and facilitating the development of tourism in the Province. Relating to the mandate of the ECPTA, the following comments that should be addressed:

### **ECPTA Protected Areas**

The ECPTA is the management authority of Beggar's Bush, Kap River Great Fish River Nature Reserves. For Beggar's Bush Nature Reserve, we note that the Nature Reserve is in the middle of the project area for the proposed WEF. As such, we are concerned about the impact this development would have on the ecological functioning of the Nature Reserve. It is noted that a buffer has been demarcated for Beggar's Bush Nature Reserve, however its concerning to note that the specialist for the ecological assessment has noted that detailed surveys still needs to be undertaken to the confirm presence of threatened and animal species when finalising the . Beggar's Bush Nature Reserve will be surrounded by the proposed Wind Energy Facilities which can have a negative impact on species movement between the Nature Reserve and the proposed project sites.



## Visual impacts

The site of the proposed wind farm is in a very high landscape sensitivity class according to the REDZ SEA. This is acknowledged in the Visual Impact Assessment, which states that the southern and eastern portions of the focus area (the proposed site for development) should possibly have been excluded from the focus area due to their scenic sensitivity.

Despite the reduction in number of turbines, we remain concerned about the visual impact on the private reserves, especially on Kwandwe which seems to be disproportionately impacted upon by the development. The potential visual impacts relate to the socio-economic impacts, and I expand upon my concerns further in my comments.

Although the landscape is impacted on by human activities, an illusion of wilderness is presented from many of the vantage points within the Great Fish Nature Reserve. This is because most of the existing human activities create a scene that blends in (e.g. due to their size, texture and colour) with the surrounding natural features when viewed from a distance (this is evident from the photographs presented in pages 113-114 of the Visual Impact Assessment). The presence of wind turbines, extending above the horizon, greatly impact on this (also evident from the modelled photographs). Considering the prominence of the wind turbines in the viewshed, and that they could result in a change in visitors' perception of a wilderness landscape to a perception of an anthropogenically transformed landscape, we would argue that the turbines represent a high level of scenic intrusion. We do not know what impact this will have on visitor experience of the reserve. The private reserves surrounding the Great Fish River Nature Reserve will be similarly affected.

It is incorrect to say that the Great Fish River Nature Reserve is located more than 20 km north of the project site (page 30 Table 6-2 and page 50 Table 7.1 of the Visual Impact Assessment). The closest turbines are less than 15 km from this reserve. As such, the reserve falls within the 16 km threshold for high impact as outlined in Figure 6.16 of the Visual Impact Assessment. The correct distance from the reserve is recorded on page 70 of the Visual Impact Assessment and the impact ratings have considered the correct distance.

When considering visual impact, the DEIR states (page 126) that the lifespan of the project is likely to be 20-25 years, after which the infrastructure can be removed, thus restoring the landscape. The DEIR therefore does not fully consider that repowering may be considered after the lifespan of the installed infrastructure, thus resulting in longer term impacts. Full decommissioning of old wind turbines and restoration of a site is costly, therefore wind farms are more often repowered than removed (Szumilas-Kowalczyk et al., 2020). Moreover, due to rapidly evolving technology old wind turbines are usually replaced by higher and more powerful turbines, which impact the landscape even more. The DEIR states that any renewal of the wind farm will be addressed in a subsequent environmental authorisation process, however it must be considered that the existence of an already established wind energy facility will likely influence the decision in favour of renewal.

## Impact on birds

The Agency is concerned about the cumulative impact of the various wind farms in the area on birds, particularly on the long-lived and slow to reproduce species (such as martial eagle and black



harrier). Diurnal raptors appear to be the most frequently recorded group amongst wind farm bird mortalities due to collision and they are regarded amongst the most vulnerable birds to wind farm impacts. The numbers and diversity of raptors in Sub-Saharan Africa have declined dramatically over the past few decades (see McPherson et al. 2021). Mortality rates are not comparable amongst taxonomic groups. Long-lived, slow reproducing species are less able to compensate for increases in anthropogenic mortality and are at a higher risk. For example, the Avifauna Specialist Study estimates an annual mortality rate for martial eagle at 0.66 (this estimate only takes the Albany wind farm into consideration, and not the additional mortality caused by the other existing and proposed wind farms in the region). Based on the acknowledged limitations of the data, one must appreciate that the confidence intervals for this estimate are large, and that the true mortality rate could be substantially higher. However, even if the estimated mortality rate were accepted, the annual loss of a single adult martial eagle due to the wind farm could have a significant impact on the population (due to the disruption of breeding cycles and the lag time for recolonization of a breeding site). Although the historic nest near the site was assumed to be unoccupied, the presence of a historic nest site for martial eagle, the possibility of undiscovered nest sites, and the frequent observation of this species on the site is a cause for concern. The presence of several wind farms in the area may result in the region switching from acting as a source area for martial eagles to a sink area, and this may contribute to the decline of this species.

The Avifauna Specialist Study states a principal mitigation measure for the impact of collisions was to identify areas that should be avoided for new infrastructure. However, the avifauna specialist has recognised the limitations of the data collected and that the collision risk model presented is crude. As acknowledged in the report, there are biases in the dataset of recorded flight activity patterns, with most of the data centred around the vantage points. Our concern is not so much that these data have been used to identify collision risk areas, but rather that it creates the assumption that other areas, including those that are not represented by data, have lower collision risk. The collision risk for areas not covered by data is unknown. The impact of bird collisions is initially rated as moderate negative, but this is reduced to low negative with mitigation. The further mitigation measures presented in the report are however speculative or based on the development of future knowledge (see next bullet), and therefore it is not clear how it is justified to reduce the impact rating based on mitigation.

The Avifauna Specialist Study recommends that a contingency mitigation budget be set aside for the operational phase to allow for adaptive management of impacts, including further research, human based shut down on demand, bird deterrence or other measures. While the need for adaptive management is understood, without a clear presentation of specific mitigation measures (such as those recommended for bats), and their effectiveness, there is a reduced justification for down-rating impacts based on mitigation.

Additional consideration needs to be given to how birds use the winds and terrain to fly. The turbines at the central and eastern clusters are situated on a ridge. Raptors and other large birds utilise such terrain features for orographic lift (slope soaring). The areas used for orographic lift by birds often correspond to locations selected by wind farm designers for the placement of turbines (due to attractive wind yield). Hanssen et al. (2020) outlined a cost-effective method to model uplift areas in landscapes to support the micro-siting of wind turbines to reduce impacts on raptors. A similar approach should be included in the specialist study. At the very least, the study should acknowledge that this behaviour occurs and that the turbines in the south represent a particular hazard in this





regard. The impact ratings should be reassessed based on the increased likelihood of collision by birds utilizing orographic lift.

The Avifauna Specialist Study recommends that cumulative impacts on birds be reduced by ensuring that each project in the broader area spares no effort mitigating the impact on avifauna. This idea is supported but needs to be developed further. This could include recommendations on the development of a joint monitoring committee to evaluate the results of monitoring data and to jointly develop strategies to mitigate impacts.

The Avifauna Specialist Study presents a map of the site with the Avian Wind Farm Sensitivity Map for South Africa (Retief et al 2011) as an overlay. Is the scale of this assessment useful at the site level?

The status of several bird species appears to be incorrectly recorded in the DEIR (see page 67; although these are correct in the Avifauna Specialist Study). Blue crane is recorded as Critically Endangered in Section 5.8.4 of the report, but it is Near Threatened according to the SA Red List Assessment and Vulnerable according to the IUCN assessment. Martial eagle is recorded as Near Threatened in the Table 5-6, but it is listed as Endangered by both the SA and IUCN assessments. Denham's bustard is recorded as Near Threatened in Table 5-6, but it is Vulnerable according to the SA assessment. Black harrier is recorded as Vulnerable in Table 5-6, but it is listed as Endangered by both the SA and IUCN assessments. Crowned eagle is recorded as Near Threatened in Table 5-6, but it is listed as Vulnerable in the SA assessment.

The DEIR states that 16 bird species of special concern occur on site and 10 of these are of high importance with regard to wind energy facilities. These numbers do not appear to correlate to the Avifauna Specialist Study, which reports 55 high risk species (as identified by Retief et al. 2014) recorded on site, 28 of which were considered priority target species by the study. The study also recorded 12 Red Listed species, including four Endangered species.

### **Impact on bats**

We are satisfied that the Bat Specialist Study has done a good job of identifying and assessing impacts on bats. The mitigation measures presented are clear and practical and, if implemented, will likely reduce the impacts substantially. These should be captured as conditions of the environmental authorisation, should the development be approved. Monitoring of the operational phase should include monitoring of adherence to these mitigation measures.

### **Socio-economic impact**

On page 119 of the DEIR, the paucity of research on the impact of wind farms on tourism-based economies in the local context is highlighted. Although no published papers on the local context exist, there are indications that the international experience of limited impact on tourism may not apply here. According to the Socio-Economic Specialist Study, respondents of the Kwandwe survey indicated that the presence of a wind farm would detract from their selection of the area as a



destination of choice. The Socio-Economic Specialist Study goes on to rate the impact on nature-based tourism industries as a moderate negative impact, but the specialist admits to a low confidence in this assessment. Research on tourist attitudes to wind farms in the context of the Eastern Cape is urgently needed to reduce uncertainty in the assessment of this impact and to aid decision-making. In the absence of data, the precautionary principle should be applied. In addition, according to the polluter pays principle (the wind turbines can be seen as a source of visual pollution), the wind farms should compensate existing private reserves for loss of revenue, if it can be established through independent research that they are a direct contributor to this.

We are concerned that the presence of several wind farms in the region may reduce the potential of the landscape to move to a more sustainable nature-based economy. Historic land-uses in Albany Thicket (e.g. goat pastoralism) have proven to be unsustainable (see for example Kerley et al. 1995; Mills et al. 2007). The recent trend of conversion of agricultural farms to game-based operations has held promise of the region moving toward a more sustainable, biodiversity-based economy, which has greater potential for employment and economic development (see Sims-Castley et al 2005). Considering the high initial costs of establishing private game reserves and the risk associated with the uncertainty of tourist acceptance of the infrastructure, the development of wind farms in this area may cause investors to look elsewhere.

Due to the high rate of Wind energy facilities in the area we are concerned about the cumulative impact on the tourism industry. A threshold needs to be determined to establish when tourist will find the area not appealing. How many wind farms can be accommodated in the landscape before this threshold is reached? In addition, we are concerned about the impact the proposed Wind energy facility on the competitive ability of tourism facilities. If tourists can choose between similar offerings, would they be more likely to select a destination that is not near a wind energy facility? Loss of employment in the tourism sector can occur within the area should tourist decide to visit another destination due to the high volume of wind energy facilities in the area.

## CONCLUSION

Should you wish to discuss the above comments please do not hesitate to contact the ECPTA Environmental Planner, Ms Shanè Gertze (Email: [shane.gertze@ecpta.co.za](mailto:shane.gertze@ecpta.co.za)). Note the ECPTA reserves the right to revise initial comment and request further information based on any additional information that may be received. It would be appreciated if ECPTA could be included in all future correspondence relating to this application.

Yours sincerely,

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**Vuyani Dayimani**  
**Chief Executive Officer**



Received by (full name and signature):	Date:

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