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Att: **The Directors**

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Att: **Dale Holder**

15 May 2020

RE: Amendment Application for the Hotazel Solar Facility

ABO Wind Hotazel PV (Pty) Ltd wishes to apply for an amendment to the authorised Hotazel Solar facility (EIA Ref No: 14/12/16/3/3/2/1086), located near Hotazel in the Northern Cape. The Environmental Authorisation (EA) Amendment Application proposes a change to the layout of the facility. Cape EAPrac has therefore requested a comparative assessment and comments from 3Foxes Biodiversity Solutions to assess the proposed changes in the context of the former Ecological Impact Assessment and to determine any impacts resulting from the proposed amendments. The motivation for and nature of the intended amendment include the following:

- Under the amended layout, the site access points and substation position do not differ from the original assessed and authorised layout.
- The two grid connection options remain the same with the inclusion of a third option. The third option includes a ±1km overhead 132kV powerline from the Hotazel Solar on-site substation/ collector switching station to the Hotazel 2 collector switching station (which is being proposed in a separate EIA process). The powerline will have a maximum height of 32m and a servitude width of between 31m and 36m. The preferred option remains as per the original EIA (i.e. LILO into the existing Hotazel/Eldoret 132kV line).
- The footprint of the PV field has been changed as indicated in Figure 1 below. In terms of the amended layout, the development footprint of the PV field has been moved further west within

the site so as to accommodate a second PV facility (which is being proposed in a separate EIA process) within the eastern half of the site.

- The total output and required components of the facility would remain approximately the same as those included in the original EIA. As such, the amendment amounts to a westward shift in the PV field of up to 1km from that originally assessed.

As the amendment will result in a change in the location of the footprint of the PV field, this may have different impacts from the original authorised layout, Cape EAPrac has requested confirmation regarding the assessed impacts in terms of the following:

1. Discussion on the change in the nature and significance of existing impacts or any new impacts, if any;
2. Any potential implications for the changes on CBAs and broad scale ecological processes;
3. Additional mitigation measures, if any;
4. Any disadvantages and advantages that may result due to the amendment.

Figure 1. Map illustrating the original authorised and the new amended PV footprint areas.

1. Change in Impact or any New Impact Due to the Proposed Amended Layout

The approved and the proposed amended PV footprint areas in relation to the ecological sensitivity of the site, are illustrated below in Figure 2. The shift of the PV field to the west of the site will result in an increase in areas classified as "Moderately Sensitive" falling within the new development footprint. The newly affected area is largely similar to the areas within the existing footprint, but has a higher density of protected trees, mostly *Vachellia erioloba* and *Vachellia haematoxylon*. The density of *V.haematoxylon* within the proposed new footprint area is approximately 30 trees per hectare, which is higher than the average density within the current development footprint. As a result, the total number of protected trees within the development footprint is likely to increase by approximately 1000 trees. This is not considered

to represent a significant loss to the local population of either *V.erioloba* or *V.haematoxylon* as the density and number of these trees in the local area is very high and probably numbers in the millions. The original assessment found that "Although relatively large numbers of *Acacia haematoxylon* (2000-6000) would potentially be lost as a result of the development, the extent of habitat loss (275 ha) is not seen as being highly significant for this species and is of local relevance only and as such, is not seen as sufficient to warrant an offset or other similar off-site mitigation measure." The increase in the number of affected trees is approximately 15% and this is not considered to represent a significant increase that would invalidate the original findings of the EIA. As such, the original conclusion of that study as quoted above is considered to be consistent with the amended layout.

Overall, the amended layout would increase the impacts of the development on protected trees. However, the increase is not considered sufficient to increase the original post-mitigation significance from Medium to High. As such, the original Medium negative post-mitigation impact on vegetation and protected tree species would remain unchanged.

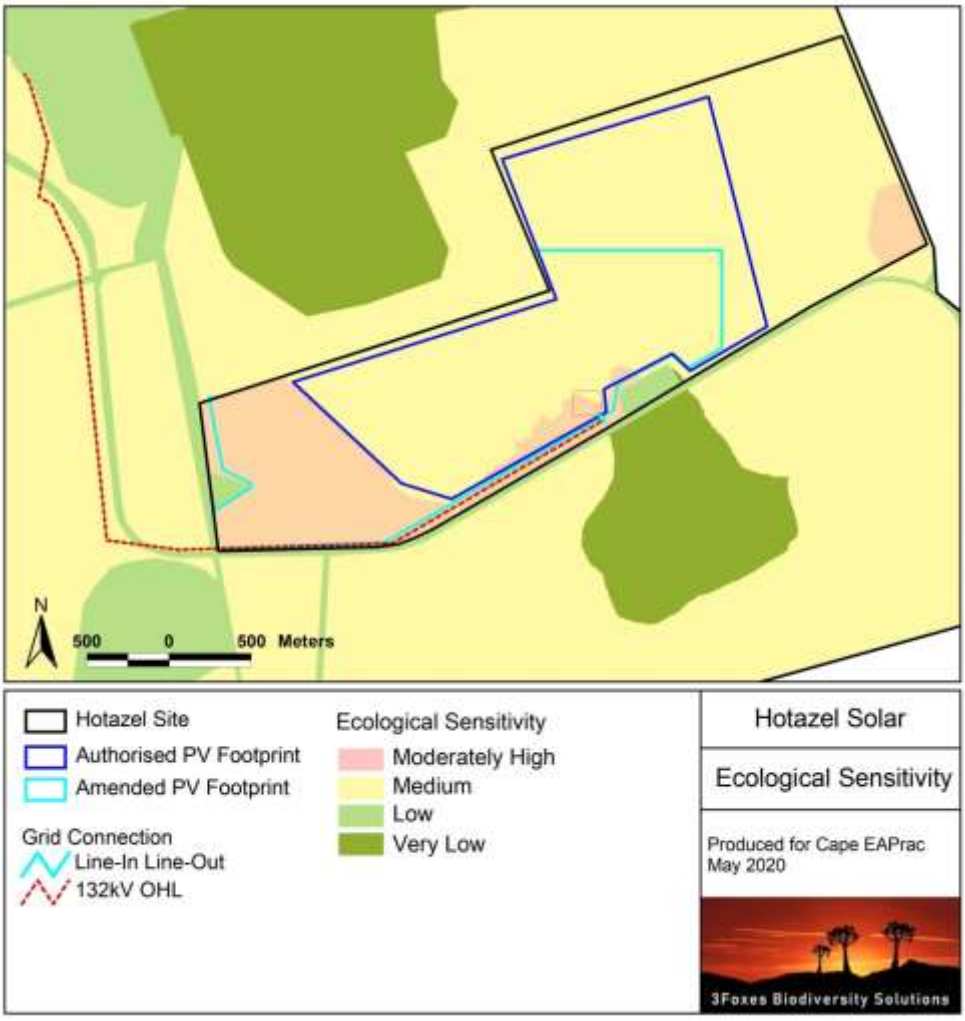

Figure 2. Ecological sensitivity map of the study area, showing the approved and the proposed amended footprint of the PV field.

2. <u>Impact on CBAs and Broad-Scale Ecological Processes</u>

The site falls outside of any CBAs or protected area expansion strategy focus areas. As such, the change in PV field footprint would not change the current negligible impact on CBAs and future conservation expansion priorities. Since the overall footprint of the development would not increase, the shift in the PV field would not be likely to increase any other broad-scale ecological processes, especially given the context of the site near Hotazel, the existing surrounding mines, existing railway infrastructure and the R31 and R380 regional roads.

3. Additional Mitigation Measures

No additional mitigation measures or changes to the EMPr mitigation measures would be required in terms of this amendment, as no significant change to impacts or new impacts will occur. All the original avoidance and mitigation measures as indicated in the original botanical and faunal studies are still relevant and applicable to the amended layout and must be implemented.

4. Advantages and Disadvantages of the Proposed Amendment

The primary disadvantage of the shift in PV footprint would be the increase in the number of protected tree species that would be impacted by the development. In principle, the shift would potentially have some positive impacts on landscape connectivity as the development footprint would shift closer to the railway, R31 and R380 allowing for more open space elsewhere in less trafficked areas. However, as the shift is to allow an additional PV plant to be accommodated within the site, this potentially positive outcome is discounted and the overall impacts of the amendment is considered to represent a small increase in negative impacts on fauna and flora.

Conclusions and Summary Findings

- The PV footprint would be shifted west within the site into an area classified as Moderately High Sensitivity. This area is characterised by higher protected tree density than the rest of the site and therefore the amendment would result in an increase in impact on protected trees by approximately 15%. The original post-mitigation impacts on vegetation and protected tree species were assessed as being of Medium Significance. The increase associated with the proposed amendment is not considered sufficient to increase the assessed impact from Medium to High. As such, the Medium significance as originally assessed is considered consistent with the amended layout.
- The Hotazel Solar amendment is therefore supported in terms of terrestrial ecology impacts. The impact of the amended layout on fauna and flora would be similar to the authorised layout and no changes to the assessed impacts are considered warranted.
- No additional mitigation or avoidance measures are recommended as a result of the amendment. The original mitigation and avoidance measures as included in the EIA should still be applied to the current study.

Prepared by Simon Todd
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