



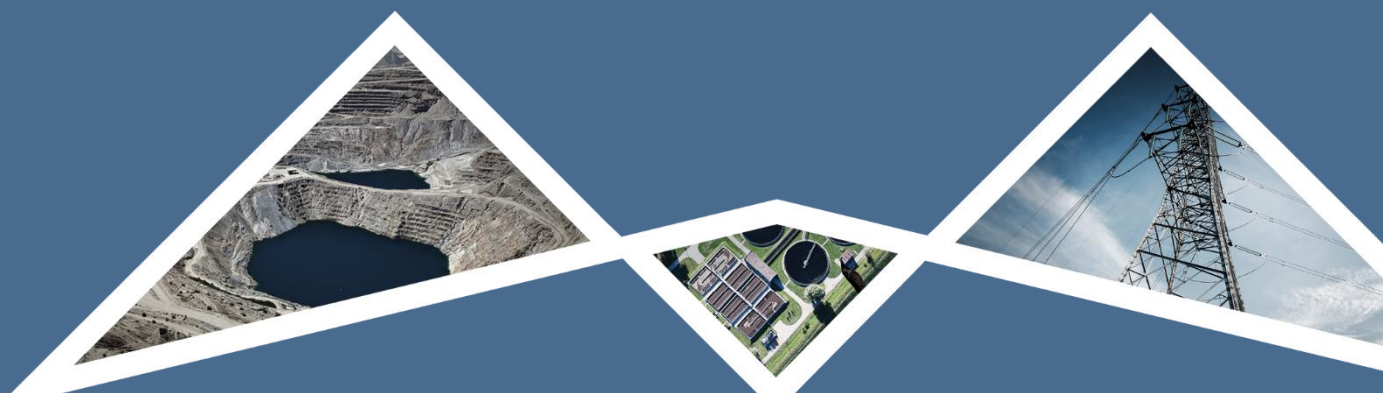
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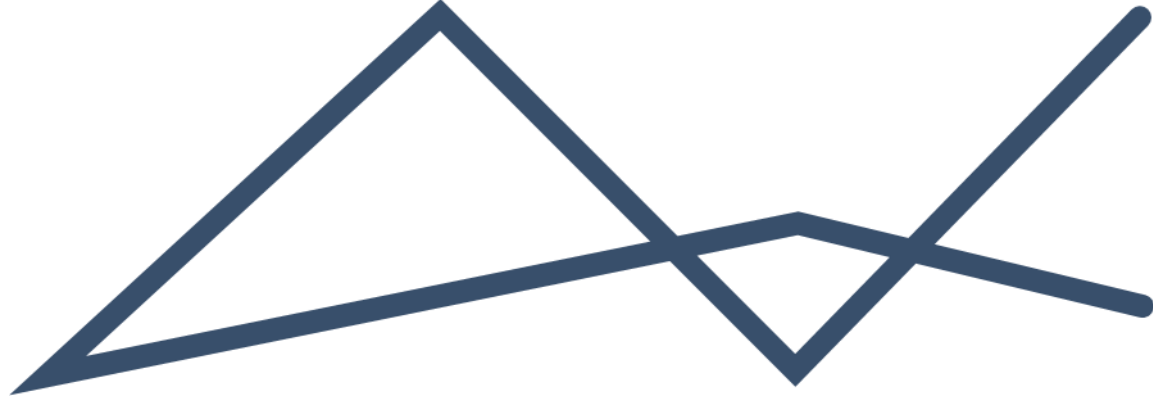
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ENVIRONMENTAL AUTHORISATION AMENDMENT: MOTIVATION REPORT

PROPOSED PHOTOVOLTAIC ENERGY PLANT ON FARM STRUISBULT
NEAR COPPERTON, NORTHERN CAPE

DFFE REFERENCE NUMBER: 12/12/20/2502/AM5
NEAS REF. NO. DEAT/EIA/0000606/2011





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1 INTRODUCTION

EIMS was appointed to undertake an update of the Environmental Management Programme (EMPr) as well as to apply for an extension of the validity Environmental Authorisation (EA) for the Struisbult PV2 Facility. Struisbult PV2 (Pty) Ltd proposes to construct a PV plant to generate approximately 100 MW (preferred alternative) on the farm Struisbult (Farm No. 104 Portion 1), also known as Vogelstruisbult near Copperton in the Northern Cape. Struisbult Farm borders Copperton on the eastern side of the town and covers approximately 6 194 ha.

In terms of associated infrastructure, the following would be required:

- Upgrade of existing internal farm roads and construction of new roads to accommodate the construction vehicles and access the site.
- Construction of a 132 kV transmission line to connect the proposed PV plant with Eskom’s grid via the Cuprum substation.
- Electrical fence to prevent illegal trespassing and the possible theft of panels, as well as keeping livestock from roaming between the solar arrays and causing accidental damage.
- Other infrastructure includes an office, connection centre and a guard cabin.

The Struisbult PV2 facility was issued an EA during 2013 by the Department of Forestry, Fisheries and the Environment (DFFE Ref: 12/12/20/2502). Subsequently a number of amendments have been applied for and granted as per Table 1 below. Each of these amendment application acceptance letters have been included in Appendix 2.

Table 1: Struisbult PV2 EA Amendments

| Date | Description | DFFE Reference |
|------------|-----------------------------|-------------------|
| 2013/03/28 | Name Change Amendment | 12/12/20/2502 |
| 2013/10/01 | Name Change Amendment | 12/12/20/2502 |
| 2015/10/07 | Struisbult PV2 EA Extension | 12/12/20/2502/AM2 |
| 2017/12/11 | Struisbult PV2 EA Extension | 12/12/20/2502/AM3 |
| 2020/12/10 | Struisbult PV2 EA Extension | 12/12/20/2502/AM4 |

The current EA was set to expire on 2 January 2023. The Applicant wishes to extend the validity of the EA as it is preparing to bid in future renewable energy tenders. Therefore, this document serves to provide a detailed motivation as to the need for the further extension of the validity of the EA beyond the 10 year period and to provide a response to the specific information requested by the DFFE.

The application for extension of the validity of the EA was submitted to the DFFE on 13 December 2022. The DFFE responded to the amendment application on 18 January 2023. The DFFE confirmed that application for amendment of the EA falls within the ambit of amendments to be applied for in terms of Part 1 of Chapter 5 of the EIA Regulations (GNR983, 2014), as amended. The DFFE also requested the submission of additional information in terms of Regulation 30(1)(a) of the EIA Regulations, as specified in Table 2 below, which includes this motivational report. The relevant section of this report where the requested information can be found has also been specified.

Table 2: DFFE Request and Report Sections

| # | DFFE Requirements | Report Section |
|---|--|----------------|
| 1 | A <u>detailed</u> motivation as to why the Department should extend the commencement period of the authorised development, including the | Section 2 |



| # | DFFE Requirements | Report Section |
|---|--|------------------------------------|
| | advantages and disadvantages associated with the approval or refusal to the request for extension; | |
| 2 | The status (baseline) of the environment (social and biophysical) that was assessed during the initial assessment (by the relative specialist, if applicable); | Section 4 Table 3 Appendix 5 |
| 3 | The current status of the assessed environment (social and biophysical) (by the relative specialist, if applicable); | Section 4 Table 3 Appendix 5 |
| 4 | A review of all specialist studies undertaken, and a detailed assessment, including a site verification report providing an indication of the status of the receiving environment (by the relative specialist, if applicable); | Section 4 Table 3 Appendix 5 |
| 5 | The terms of reference for the specialist reports and declaration of interest of each specialist must be provided; | Appendix 5 |
| 6 | The report mentioned above, must indicate if the impact rating as provided in the initial assessment remains valid; if the mitigation measures provided in the initial assessment are still applicable; or if there are any new mitigation measures which need to be included into the EA and EMP, should the request to extend the commencement period be granted by the Department; | Section 4 Table 3 Appendix 5 |
| 7 | An indication if there are any new assessments/guidelines which are now relevant to the authorised development which were not undertaken as part of the initial assessment, must be taken into consideration and addressed in the report; | Section 4 Table 3 Appendix 5 |
| 8 | A description and an assessment of any changes to the environment (social and biophysical) that has occurred since the initial EA was issued; | Section 4 Table 3 Appendix 5 |
| 9 | A description and an assessment of the surrounding environment, in relation to new developments or changes in land use which might impact on the authorised project, the assessment must consider the following: <ul style="list-style-type: none"> • similar developments within a 30km radius; • Identified cumulative impacts must be clearly defined, and where possible the size of the identified impact must be quantified and indicated, i.e., hectares of cumulatively transformed land; • Detailed process flow and proof must be provided, to indicate how the specialist's recommendations, mitigation measures and conclusions from the various similar developments in the area were taken into consideration in the assessment of cumulative impacts and when the conclusion and mitigation measures were drafted for this project; • The cumulative impacts significance rating must also inform the need and desirability of the proposed development; and • A cumulative impact environmental statement on whether the proposed development must proceed. | Section 4 Table 3 Appendix 5 |



| # | DFFE Requirements | Report Section |
|----|---|---------------------------|
| 10 | Consent from all affected landowners (where applicable); | Section 5.1 Appendix 3 |
| 11 | The Public Participation Process <u>must</u> be conducted in terms of Chapter 6 of the EIA Regulations, 2014 as amended i.e. Regulation 39; 40;41; 42; 43 and 44. | Section 5 |
| 12 | A comments and response report. | Section 5.3 |

2 EA VALIDITY EXTENSION MOTIVATION

The proposed project was earmarked for construction to commence in 2022 for a private off-taker until an Eskom Cost Estimate Letter (CEL) greatly increased the scope of self-build infrastructure required for the project to connect to the grid. The cost implications of the CEL scope increase made the project unfeasible for the proposed private off-taker. EA validity extension is being sought to allow this project which is near construction-readiness to be bid in upcoming renewable energy tender processes, specifically Bid Window 7 of the REIPPP programme. Significant recent environmental specialist input was provided due to preparatory works being undertaken for construction, including the following:

- A Basic Assessment Process for the grid connection self-build upgrade works anticipated (for which the EA is still being adjudicated by the Provincial Environmental Competent Authority); and
- An update of the EMPr in line with the requirements of the EA (See Section 3 below).

The recent environmental work conducted by the specialists have confirmed that minimal changes have occurred to the receiving environment since the EIA conducted in 2012. The proposed site remains one of relatively low environmental sensitivity. Furthermore, all specialists have confirmed that they are in support of the extension of the EA validity to the. It should further be noted that the specialists considered the cumulative impacts and it was considered that these impacts are still valid and the recommended mitigation measures are still sufficient. Relevant updated guidelines and legislation was considered, and it is considered that the project could still proceed with the implementation of the updated EMPr. Please refer to the Section 4 below and the specialist motivation reports in Appendix 5 in support of the proposed extension of the EA validity.

If the amendment application is not granted, the developer will not be able to construct the already approved solar PV facility within the approved EA validity. This would result in the lack of the developer being able to deliver renewable energy from the proposed project, and South Africa will lose an opportunity to procure energy from a renewable energy resource. The significant costs incurred by the applicant leading up to this stage in obtaining the licence to operate will to a large extent be nullified as applications will need to be resubmitted and processes unnecessarily repeated.

Should the requested extension of the validity period be granted, then the project may be prepared for construction, and the positive impacts on energy production, local economy (including employment and increased demand for local goods and services) and positive impacts on climate change will stand a better chance of being realised.

3 UPDATE OF THE EMPR

EA Condition 13 states that the Environmental Management Programme submitted as part of the EIR dated April 2012 was not approved and must be amended to include measures as dictated by the final site lay-out map and micro-siting; and the provisions of this environmental authorisation. The EMPr must be submitted to the Department for written approval prior to commencement of the activity. Once approved the EMPr must be implemented and adhered to. The amendments to the EMPr required by EA Condition 18 are specified in section 1.2 of the updated EMPr (Appendix 10 of this Motivation Report). It should further be noted that as part of the EMPr update, a number specialist investigations were undertaken during 2022, including the following:

- Alien Invasive Management Plan;



- Plant Rescue Plan;
- Rehabilitation Plan;
- Ecological Walkdown;
- Avifaunal Monitoring Programme;
- Traffic Management Plan;
- Storm Water Management Plan; and
- Wetland Baseline & Risk Assessment.

The original EMPr was compiled in line with the requirements of Regulation 33 of the EIA Regulations, 2010. The updated EMPr included additional updates in order to align with the requirements of Appendix 4 of the EIA Regulations, 2014, as amended, and are specified in Section 1.2 of the updated Draft EMPr.

4 BASELINE ENVIRONMENT AND SPECIALIST STUDIES

Based on the need for the consideration of new guidelines as requested by the DFFE, EIMS had prepared a DFFE Screening Tool Report (attached as Appendix 6). The Screening Tool Report provides a breakdown of the specialist studies that would need to be included as part of any new assessment as part of a new EA application. Please refer to the table below for a breakdown of the specialist assessments recommended by the Screening Tool Report, as well as comments regarding these recommendations and an indication of whether the specialist studies would reasonably be required for inclusion in this motivation report.

As a result of the recent updated studies and the results of the screening tool report, it is concluded that the information required by the DFFE as per Table 2 Items 2-9 are addressed in the Table 3 below.



Table 3: DFFE Screening Tool Report sensitivities and specialist assessments undertaken.

| Theme | Sensitivity | Further Assessment? ¹ | Comments Regarding Further Assessment | Specialist Findings | Revised Sensitivity |
|-----------------------------|-------------|----------------------------------|--|---|---------------------|
| Agriculture Theme | Low | No | Low Sensitivity - No further assessment required. | | |
| Animal Species Theme | High | No | <p>Avifaunal Species causing the High Sensitivity - this has been addressed through the Avifaunal Monitoring undertaken as part of the EMPr Update during 2022. Ecological walkdown has been done and mitigation measures updated in the updated draft EMPr.</p> <p>Please refer to Appendix 5, for a letter from the Avifaunal specialist, which provides further details with regards to recent studies undertaken and the adequacy and inclusion of mitigation measures in the updated EMPr to be considered by DFFE in line with the requirements of condition 13 of the EA issued for this development.</p> | <p>The Biodiversity Company (TBC) concluded the following as per the attached letter in Appendix 5.</p> <p>Conclusions from the 2022 Terrestrial Ecology Walkdown report included the following:</p> <p>7.1. The mitigation measures prescribed for the original Environmental Authorisation by Aurecon (2012) and Aurecon (2012a) remain applicable for the development and must be adhered to.</p> <p>7.2. Avifaunal disturbance mitigation measures and long-term monitoring must be put in place and action taken according to Avisense (2012), specifically in line with sections 10 and 12 of the report. As per section 6.1 of Aurecon (2012a), an avifaunal specialist must be appointed to develop and undertake an avifauna monitoring programme that aligns with the requirements set in the Avisense (2012) report. This is especially critical due to the numerous species of conservation concern (SCC) bird species recently and historically recorded within and nearby to the project area.</p> <p>7.3. The mitigation measures prescribed by Bergwind (2011) are now largely considered inadequate and must be supplemented and re-</p> | Medium |

¹ Refers to the need for further assessments to be undertaken after the Screening Tool Report was compiled. Where required, these assessments were undertaken or updated and specialists provided a review of the existing studies and additional mitigation measures for inclusion in the EMPr.



| Theme | Sensitivity | Further Assessment? ¹ | Comments Regarding Further Assessment | Specialist Findings | Revised Sensitivity |
|-------|-------------|----------------------------------|---------------------------------------|---|---------------------|
| | | | | <p>prioritised in accordance with the updated measures presented in the walkdown report.</p> <p>7.4. All watercourses and any rocky outcrops must be avoided as much as possible. Avoid fragmenting any sensitive habitats.</p> <p>8 Mitigation measures prescribed by each of the reviewed specialist reports remains applicable and must be adhered to. Recommended monitoring must be undertaken, specifically:</p> <p>8.1. The construction phase should be closely monitored by an Environmental Control Officer who should identify any areas that would require rehabilitation in the post-construction phase ((Bergwind, 2012).</p> <p>8.2. A comprehensive programme must be put forward to fully monitor and research the actual impacts of the PV Facility on the broader avifauna of the area, from preconstruction and into the operational phase of the development (Avisense Consulting, 2012).</p> <p>In order to manage the impacts effectively, the mitigation management measures detailed in the table in Section 9 of the TBC Letter in Appendix 5 should be put into place for the general impacts associated with flora and fauna. These measures have been included in the updated EMPr.</p> <p>9.1. The following management plans have been compiled for the facility and included in the updated EMPr and must be implemented:</p> | |



| Theme | Sensitivity | Further Assessment? ¹ | Comments Regarding Further Assessment | Specialist Findings | Revised Sensitivity |
|-------|-------------|----------------------------------|---------------------------------------|--|---------------------|
| | | | | <p>9.1.1. Alien Invasive Plant Management Plan.</p> <p>9.1.1. Re-vegetation and Habitat Rehabilitation Plan.</p> <p>9.1.1. Plant Rescue and Protection Plan.</p> <p>10 The desktop terrestrial biodiversity theme sensitivity for the area is 'Very High' due to the presence Ecological Support Area and the Freshwater Ecological Priority Area (FEPA) Sub catchment. A baseline assessment (January 2022) determined the sensitivity of the shrubland habitat to be 'Medium', with drainage features assigned a 'High' sensitivity. The drainage features are not located within the planned development area.</p> <p>11 It is further understood that a detailed Avifaunal Monitoring Programme has been prepared and monitoring undertaken by Wildskies Environmental Services during 2022 in compliance with the recommendations of the recommendations of section 6.1 of Aurecon (2012a).</p> <p>12 All prescribed mitigation measures and supporting recommendations presented here will help to achieve an acceptable residual impact. These measures and recommendations will remain applicable for the requested extension of the EA. To this end, these measures have been included in the updated EMPr for this development as per the requirements of the EA.</p> <p>13 As such, should the measures described above, and as included in the updated EMPr for this development be implemented, it was the reasoned</p> | |



| Theme | Sensitivity | Further Assessment? ¹ | Comments Regarding Further Assessment | Specialist Findings | Revised Sensitivity |
|-----------------------------------|------------------|----------------------------------|---|---|---------------------|
| | | | | opinion of the specialist that the EA be extended for an additional 3 years. | |
| Aquatic Biodiversity Theme | Very High | Yes | <p>Aquatic biodiversity was rated as very high by the screening tool report, due to the site being located within freshwater ecosystem priority area quinary catchments.</p> <p>No aquatic features of any significance were indicated during the previous investigations to occur at the site of the proposed PV facility. However, some potential wetland features were identified within 500 m of the site and these could fall within the Regulated Area as defined in the General Authorisations issues by the Department of</p> | <p>Three shallow depression features were identified within the PAOI (Figure 4-1 of the EMPr Appendix L). Although, no evidence of hydrophytic vegetation and hydromorphic soils were found within these features (Figure 4-2 of the EMPr Appendix L). Furthermore, the drainage features identified in the desktop assessment (Figure 3-3 of the EMPr Appendix L) are likely to be of a historical nature and do not presently display any distinct flow paths, riparian, or wetland characteristics (Figure 4-2 of the EMPr Appendix L).</p> <p>Whilst these three depression features do not qualify as wetlands, they are still considered an</p> | Low |



| Theme | Sensitivity | Further Assessment? ¹ | Comments Regarding Further Assessment | Specialist Findings | Revised Sensitivity |
|-------|-------------|----------------------------------|--|--|---------------------|
| | | | <p>Water and Sanitation (DWS) for 21(c) and (i) water uses.</p> <p>As a result, a wetland assessment was commissioned to investigate the sensitivity of the site and to delineate any potential watercourses located within 500 m from the boundary of the site. This assessment also included a hydrogeological assessment. Please refer to Appendix L of the updated draft EMP, which details the results of the Wetland Assessment.</p> | <p>important aspect of the broader ecosystem attributed to temporarily providing a water source for animals in a water scarce biome. These features are not intersected by the proposed development and are located a sufficient distance away from the proposed layout however, it is still necessary for the development to take cognisance of their location as a precautionary measure to prevent adverse impacts (e.g. infilling, dumping and, littering) to them. Additionally, the development should take cognisance of the location of non-perennial drainage features as a precaution to prevent damage to the development infrastructure in the low likelihood event that these systems do flow in periods of exceptionally high precipitation.</p> <p>The project area was characterised by Mispah and Glenrosa soil forms, with other associated soils also occurring in the assessment footprint area. The Mispah soil form typically consists of an orthic A horizon overlaying hard rock substratum. Whilst the Glenrosa soil form consists of an orthic A horizon overlaying a lithic B horizon. Both of these forms have shallow free-draining soils that are not typically found in wetlands as they do not have a high water retention capacity attributed to their low clay and fine sand textural properties.</p> <p>It was concluded during the site assessment, that no wetlands were found within the project area of influence. The project area was characterised by Mispah and Glenrosa soil forms which are not typically found within wetland areas.</p> | |



| Theme | Sensitivity | Further Assessment? ¹ | Comments Regarding Further Assessment | Specialist Findings | Revised Sensitivity |
|---|-------------|----------------------------------|---|---|---------------------|
| | | | | <p>It is suggested that the three depression features identified should be demarcated and avoided for their functional capability of providing wildlife with water following high rainfall events.</p> <p>During the assessment no wetlands were found within the project area of influence. Based on this, no Section 21 (c) and (i) water uses are required to be authorised for this project.</p> | |
| Archaeological and Cultural Heritage Theme | Low | No | <p>Low Sensitivity - No further assessment required.</p> <p>Please refer to Appendix 5, for a letter from the Heritage specialist, which provides further details with regards to recent studies undertaken and the adequacy of the mitigation measures included in the EMPr.</p> | <p>PGS Heritage (PGS) concluded that: No significant change to the baseline heritage environment has occurred since the original assessment. PGS has completed various other studies in the surrounding area and for the grid connection associated with the Struisbult PV2 facility (2022). Findings relating to cultural heritage and palaeontology (2012) for the project are still applicable.</p> <p>PGS noted that no changes to the layout and infrastructure from the original layouts are proposed and only the extension of the EA.</p> <p>PGS' evaluation of the original HIA and PIA and subsequent documentation concluded that no changes to the projected impact.</p> <p>PGS further evaluated the cumulative impact related to the number of other proposed wind and solar renewable projects in the vicinity of the approved Struisbult PV2 Facility. It was concluded that the cumulative impact on cultural heritage resources would potentially change since the project's inception in 2012. However, no cumulative impact assessment was done in 2012</p> | Low |



| Theme | Sensitivity | Further Assessment? ¹ | Comments Regarding Further Assessment | Specialist Findings | Revised Sensitivity |
|--------------------|-------------|----------------------------------|--|---|---------------------|
| | | | | <p>and it must be considered that the whole of the Copperton area is being developed for Renewables Energy Projects. The likelihood of occurrence of cultural heritage resources was considered to be low and localised and could be managed through the recommendations from the HIA and PIA contained in the EMPR for the project.</p> <p>PGS concluded that the extension of the EA for the authorised Struisbult PV2 Facility will not have any additional impacts on the heritage resources inventory identified for the project as part of the original heritage studies, and that the proposed extension of the EA can proceed from a heritage perspective.</p> | |
| Avian Theme | Low | No | <p>Low Sensitivity - No further assessment required.</p> <p>Please refer to Appendix 5, for a letter from the Avifaunal specialist, which provides further details with regards to recent studies undertaken and the adequacy and inclusion of mitigation measures in the updated EMPr to be considered by DFFE in line with the requirements of condition 13 of the EA issued for this development.</p> | <p>Wildskies Ecological Services undertook a review of the studies for this development and concluded the following:</p> <p>The avifaunal studies on site to date are summarised below:</p> <ol style="list-style-type: none"> 1. The avifaunal impact assessment was conducted by Avisense (undated – but likely 2012) and was entitled “Struisbult PV Energy Facility – Avian Impact Assessment”. 2. Subsequently, the Applicant contracted JAH Environmental Consultancy (2013) to conduct preconstruction bird monitoring on the site (Pre-construction monitoring of bird populations at a PV facility near Copperton, Northern Cape: final report. Prepared by James Harrison for Mulilo- | Low-Medium |



| Theme | Sensitivity | Further Assessment? ¹ | Comments Regarding Further Assessment | Specialist Findings | Revised Sensitivity |
|-------|-------------|----------------------------------|---------------------------------------|--|---------------------|
| | | | | <p>Gestamp Renewable Energy, Cape Town April 2013).</p> <p>3. In 2021-2022 pre-construction bird monitoring was repeated on the site to ensure that current best practice was met, that nothing significant had changed on site with respect to the avifaunal community, and in compliance with the Environmental Authorisation conditions.</p> <p>This monitoring consisted of two seasonal site visits, one of which was in summer, compliant in all respects with the best practice guidelines for this type of work (Jenkins et al, 2017).</p> <p>Key findings of this study were as follows:</p> <ul style="list-style-type: none"> • There are no new significant findings emerging from the second round of pre-construction monitoring. There is no need to change either layout or the previously recommended mitigation measures. • There are no significant changes to the avifaunal community on and near site since the previous pre-construction bird monitoring. • There is no need for any changes to the proposed layout from an avifaunal perspective. • There are no avifaunal receptors which require construction phase monitoring. • Operational phase monitoring will however be required as stipulated in the | |



| Theme | Sensitivity | Further Assessment? ¹ | Comments Regarding Further Assessment | Specialist Findings | Revised Sensitivity |
|-------|-------------|----------------------------------|---------------------------------------|--|---------------------|
| | | | | <p>best practice guidelines (Jenkins et al, 2017). This monitoring should be supervised by an independent avifaunal specialist. The fatality search component could possibly be done by facility staff under the specialist's supervision. The framework for such monitoring is as follows:</p> <ul style="list-style-type: none"> ○ For Regime 2 projects, post construction bird monitoring is necessary in order to: <ul style="list-style-type: none"> ▪ Determine the actual impacts of the facility; ▪ Determine if additional mitigation is required; ▪ Learn about impacts and improve future assessments. ○ Post construction monitoring should be started as soon as the facility becomes operational ○ Post construction monitoring can be divided into three sections: <ul style="list-style-type: none"> ▪ Habitat classification (this is a once off exercise) ▪ Replicating pre-construction baseline monitoring (2 x site visits of 3 days each, one in peak season) ▪ Estimating bird mortalities. This will | |



| Theme | Sensitivity | Further Assessment? ¹ | Comments Regarding Further Assessment | Specialist Findings | Revised Sensitivity |
|-------|-------------|----------------------------------|---------------------------------------|---|---------------------|
| | | | | <p>include: searching a minimum of 20% of the PV panel array for bird fatalities every 14 days for the full year; estimating searcher efficiency and carcass persistence through bias trials. Fences, electrical compounds, and other key infrastructure which may kill birds should also be searched.</p> <ul style="list-style-type: none"> ○ Operational monitoring should be done for one year, and if significant impacts recorded it can be extended to two years. ○ Quarterly reports summarising interim findings should be submitted to Birdlife South Africa and the DFFE. ○ Final year end reports with full results analysis should also be submitted to Birdlife South Africa and the DFFE. <p>4. WildSkies provided input into the final layout EMPr through an avifaunal walk through of the facility conducted in 2022.</p> <p>In terms of the Site Sensitivity stated in the Screening tool, Wildskies concluded the following:</p> <p>The DFFE Online Screening Tool for the site was consulted, in accordance with GN 320 and GN 1150</p> | |



| Theme | Sensitivity | Further Assessment? ¹ | Comments Regarding Further Assessment | Specialist Findings | Revised Sensitivity |
|-------|-------------|----------------------------------|---------------------------------------|---|---------------------|
| | | | | <p>(20 March 2020) of the NEMA EIA Regulations of 2014 (as amended). Prior to commencing with a specialist assessment, a Site Sensitivity Verification (SSV) must be undertaken to confirm the current land use and environmental sensitivity of the proposed project area as identified by the National Web-Based Environmental Screening Tool (i.e., Screening Tool). Wildskies examined the Screening Tool output generated by EIMS (dated 25 August 2022) and found the following:</p> <ul style="list-style-type: none"> • The Animal Theme is classed as High sensitivity, with Ludwig’s Bustard Neotis ludwigii highlighted. • The Avian Theme is classified as Low sensitivity. No bird species are highlighted. <p>Wildskies base this SSV on both a desktop analysis of the various avifaunal databases consulted in the Screening and Scoping Phases (e.g.: IUCN, SABAP, CWAC, CAR) as well as their comprehensive work on site as part of the pre-construction monitoring. Our on-site methodologies align with best practice requirements.</p> <p>The on-site findings for the avian Species of Conservation Concern (SCC) recorded on site by our work are highlighted in Appendix 5.</p> <p>Wildskies disputed the Screening Tool finding for the Avian Theme which designates the site as Low sensitivity, and the Tool’s assessment of a High sensitivity in the Animal Species Theme (for Ludwig’s Bustard). We rather classify the site as Low-Medium sensitivity for avifauna. For the SCC</p> | |



| Theme | Sensitivity | Further Assessment? ¹ | Comments Regarding Further Assessment | Specialist Findings | Revised Sensitivity |
|--|-------------|----------------------------------|--|--|---------------------|
| | | | | <p>identified by the screening tool specifically, the Ludwig's Bustard, the site is of Low sensitivity.</p> <p>Wildskies concluded that based on their work on site in 2021-2022, and desktop work it could be confirmed that the impacts in the original EIA have not changed. The recommendations in the 2022 monitoring report and the mitigation and management measures included in the EMPr remain relevant and sufficient. It was recommended that the amendment be authorised.</p> | |
| Civil Aviation (Solar PV) Theme | Medium | No | <p>The site is "<i>Within 8 km of an other civil aviation aerodrome</i>".</p> <p>Please refer to Appendix 8, for a letter from the Civil Aviation Authority (CAA), which confirmed that the CAA did not have any objection to the development of the PV facility.</p> | <p>Please refer to Appendix 8, for a letter from the Civil Aviation Authority (CAA), which confirmed that the CAA did not have any objection to the development of the PV facility.</p> | |
| Defence Theme | Low | No | <p>Low Sensitivity - No further assessment required.</p> | | |
| Landscape (Solar) Theme | Very High | No | <p>A very small section of the northern boundary of the site contains "Mountain tops and high ridges" in terms of the Landscape (Solar Theme).</p> <p>Please refer to Appendix 5, for a letter from the landscape specialist, which provides further details with regards to the adequacy of the mitigation measures included in the EMPr.</p> | <p>Environmental Planning and Design undertook a review of the landscape features and studies and concluded the following:</p> <p>From the landscape description and aerial mapping included in the VIA and from reference to current aerial photography available through Google Earth, the following:</p> <ul style="list-style-type: none"> • The development footprint does not appear to have changed since the | |



| Theme | Sensitivity | Further Assessment? ¹ | Comments Regarding Further Assessment | Specialist Findings | Revised Sensitivity |
|----------------------------|-------------|----------------------------------|--|---|---------------------|
| | | | | <p>preparation of the Visual Impact Assessment (VIA);</p> <ul style="list-style-type: none"> • Several solar PV projects have been developed in the vicinity of the project site since the preparation of the VIA; and • It also appears that there are airstrips in the area that could be affected by glare from solar PV panels (Please refer to Appendix 8, for a letter from the Civil Aviation Authority (CAA), which confirmed that the CAA did not have any objection to the development of the PV facility). | |
| Palaeontology Theme | Medium | No | <p>No activities have been undertaken on the site and as such it is anticipated that the mitigation measures will be sufficient to manage the heritage and palaeontology on the site.</p> <p>Please refer to Appendix 5, for a letter from the Heritage specialist, which provides further details with regards to recent studies undertaken and the adequacy of the mitigation measures included in the EMPr.</p> | <p>PGS Heritage (PGS) concluded that: No significant change to the baseline heritage environment has occurred since the original assessment. PGS has completed various other studies in the surrounding area and for the grid connection associated with the Struisbult PV2 facility (2022). Findings relating to cultural heritage and palaeontology (2012) for the project are still applicable.</p> <p>PGS noted that no changes to the layout and infrastructure from the original layouts are proposed and only the extension of the EA.</p> <p>PGS' evaluation of the original HIA and PIA and subsequent documentation concluded that no changes to the projected impact.</p> <p>PGS further evaluated the cumulative impact related to the number of other proposed wind and solar renewable projects in the vicinity of the approved Struisbult PV2 Facility. It was concluded</p> | |



| Theme | Sensitivity | Further Assessment? ¹ | Comments Regarding Further Assessment | Specialist Findings | Revised Sensitivity |
|----------------------------|-------------|----------------------------------|---|--|---------------------|
| | | | | <p>that the cumulative impact on cultural heritage resources would potentially change since the project's inception in 2012. However, no cumulative impact assessment was done in 2012 and it must be considered that the whole of the Copperton area is being developed for Renewables Energy Projects. The likelihood of occurrence of cultural heritage resources was considered to be low and localised and could be managed through the recommendations from the HIA and PIA contained in the EMPR for the project.</p> <p>PGS concluded that the extension of the EA for the authorised Struisbult PV2 Facility will not have any additional impacts on the heritage resources inventory identified for the project as part of the original heritage studies, and that the proposed extension of the EA can proceed from a heritage perspective.</p> | |
| Plant Species Theme | Medium | No | <p>An Ecological walkdown has been done and mitigation measures updated in the EMPr. Relocation and alien invasive plans have been prepared and added to the EMPr.</p> <p>Please refer to Appendix 5, for a letter from the Ecologist, which provides further details with regards to recent studies undertaken and the adequacy and inclusion of mitigation measures in the updated EMPr to be considered by DFFE in line with the requirements of condition 13 of the EA issued for this development.</p> | <p>The Biodiversity Company (TBC) concluded the following as per the attached letter in Appendix 5.</p> <p>Conclusions from the 2022 Terrestrial Ecology Walkdown report included the following:</p> <p>7.1. The mitigation measures prescribed for the original Environmental Authorisation by Aurecon (2012) and Aurecon (2012a) remain applicable for the development and must be adhered to.</p> <p>7.2. Avifaunal disturbance mitigation measures and long-term monitoring must be put in place and take action as according to Avisense (2012), specifically in line with sections 10 and 12 of the report. As per</p> | Medium |



| Theme | Sensitivity | Further Assessment? ¹ | Comments Regarding Further Assessment | Specialist Findings | Revised Sensitivity |
|-------|-------------|----------------------------------|---------------------------------------|---|---------------------|
| | | | | <p>section 6.1 of Aurecon (2012a), an avifaunal specialist must be appointed to develop and undertake an avifauna monitoring programme that aligns with the requirements set in the Avisense (2012) report. This is especially critical due to the numerous species of conservation concern (SCC) bird species recently and historically recorded within and nearby to the project area.</p> <p>7.3. The mitigation measures prescribed by Bergwind (2011) are now largely considered inadequate and must be supplemented and re-prioritised in accordance with the updated measures presented in the walkdown report. 7.4. All watercourses and any rocky outcrops must be avoided as much as possible. Avoid fragmenting any sensitive habitats.</p> <p>8 Mitigation measures prescribed by each of the reviewed specialist reports remains applicable and must be adhered to. Recommended monitoring must be undertaken, specifically:</p> <p>8.1. The construction phase should be closely monitored by an Environmental Control Officer who should identify any areas that would require rehabilitation in the post-construction phase ((Bergwind, 2012).</p> <p>8.2. A comprehensive programme must be put forward to fully monitor and research the actual impacts of the PV Facility on the broader avifauna of the area, from preconstruction and into the operational phase of the development (Avisense Consulting, 2012).</p> | |



| Theme | Sensitivity | Further Assessment? ¹ | Comments Regarding Further Assessment | Specialist Findings | Revised Sensitivity |
|-------|-------------|----------------------------------|---------------------------------------|---|---------------------|
| | | | | <p>In order to manage the impacts effectively, the mitigation management measures detailed in the table in Section 9 of the TBC Letter in Appendix 5 should be put into place for the general impacts associated with flora and fauna. These measures have been included in the updated EMPr.</p> <p>9.1. The following management plans have been compiled for the facility and included in the updated EMPr and must be implemented:</p> <p>9.1.1. Alien Invasive Plant Management Plan.</p> <p>9.1.1. Re-vegetation and Habitat Rehabilitation Plan.</p> <p>9.1.1. Plant Rescue and Protection Plan.</p> <p>10 The desktop terrestrial biodiversity theme sensitivity for the area is 'Very High' due to the presence Ecological Support Area and the Freshwater Ecological Priority Area (FEPA) Sub catchment. A baseline assessment (January 2022) determined the sensitivity of the shrubland habitat to be 'Medium', with drainage features assigned a 'High' sensitivity. The drainage features is not located within the planned development area.</p> <p>11 It is further understood that a detailed monitoring Avifaunal Monitoring Programme has been prepared and monitoring undertaken by Wildskies Environmental Services during 2022 in compliance with the recommendations of the recommendations of section 6.1 of Aurecon (2012a).</p> | |



| Theme | Sensitivity | Further Assessment? ¹ | Comments Regarding Further Assessment | Specialist Findings | Revised Sensitivity |
|---------------------------------------|-------------|----------------------------------|--|--|---------------------|
| | | | | <p>12 All prescribed mitigation measures and supporting recommendations presented here will help to achieve an acceptable residual impact. These measures and recommendations will remain applicable for the requested extension of the EA. To this end, these measures have been included in the updated EMPr for this development as per the requirements of the EA.</p> <p>13 As such, should the measures described above, and as included in the updated EMPr for this development be implemented, it was the reasoned opinion of the specialist that the EA be extended for an additional 3 years.</p> | |
| RFI Theme | Very High | No | <p>The site is <i>"Between 8 and 14 km of the Radio Astronomy Advantage Area"</i>.</p> <p>Please refer to Appendix 7, for a letter from the Square Kilometre Array (SKA), which confirmed that the SKA did not have any objection to the development of the PV facility.</p> | <p>Please refer to Appendix 7, for a letter from the Square Kilometre Array (SKA), which confirmed that the SKA did not have any objection to the development of the PV facility.</p> | |
| Terrestrial Biodiversity Theme | Very High | No | <p>Ecological walkdown has been done and mitigation measures updated in the EMPr.</p> <p>Please refer to Appendix 5, for a letter from the Ecologist, which provides further details with regards to recent studies undertaken and the adequacy and inclusion of mitigation measures in the updated EMPr to be considered by DFFE in line with the requirements of condition 13 of the EA issued for this development.</p> | <p>The Biodiversity Company (TBC) concluded the following as per the attached letter in Appendix 5.</p> <p>Conclusions from the 2022 Terrestrial Ecology Walkdown report included the following:</p> <p>7.1. The mitigation measures prescribed for the original Environmental Authorisation by Aurecon (2012) and Aurecon (2012a) remain applicable for the development and must be adhered to.</p> <p>7.2. Avifaunal disturbance mitigation measures and long-term monitoring must be put in place and take</p> | Medium |



| Theme | Sensitivity | Further Assessment? ¹ | Comments Regarding Further Assessment | Specialist Findings | Revised Sensitivity |
|-------|-------------|----------------------------------|---------------------------------------|--|---------------------|
| | | | | <p>action as according to Avisense (2012), specifically in line with sections 10 and 12 of the report. As per section 6.1 of Aurecon (2012a), an avifaunal specialist must be appointed to develop and undertake an avifauna monitoring programme that aligns with the requirements set in the Avisense (2012) report. This is especially critical due to the numerous species of conservation concern (SCC) bird species recently and historically recorded within and nearby to the project area.</p> <p>7.3. The mitigation measures prescribed by Bergwind (2011) are now largely considered inadequate and must be supplemented and re-prioritised in accordance with the updated measures presented in the walkdown report. 7.4. All watercourses and any rocky outcrops must be avoided as much as possible. Avoid fragmenting any sensitive habitats.</p> <p>8 Mitigation measures prescribed by each of the reviewed specialist reports remains applicable and must be adhered to. Recommended monitoring must be undertaken, specifically:</p> <p>8.1. The construction phase should be closely monitored by an Environmental Control Officer who should identify any areas that would require rehabilitation in the post-construction phase ((Bergwind, 2012).</p> <p>8.2. A comprehensive programme must be put forward to fully monitor and research the actual impacts of the PV Facility on the broader avifauna of the area, from preconstruction and into the</p> | |



| Theme | Sensitivity | Further Assessment? ¹ | Comments Regarding Further Assessment | Specialist Findings | Revised Sensitivity |
|-------|-------------|----------------------------------|---------------------------------------|---|---------------------|
| | | | | <p>operational phase of the development (Avisense Consulting, 2012).</p> <p>In order to manage the impacts effectively, the mitigation management measures detailed in the table in Section 9 of the TBC Letter in Appendix 5 should be put into place for the general impacts associated with flora and fauna. These measures have been included in the updated EMPr.</p> <p>9.1. The following management plans have been compiled for the facility and included in the updated EMPr and must be implemented:</p> <p>9.1.1. Alien Invasive Plant Management Plan.</p> <p>9.1.1. Re-vegetation and Habitat Rehabilitation Plan.</p> <p>9.1.1. Plant Rescue and Protection Plan.</p> <p>10 The desktop terrestrial biodiversity theme sensitivity for the area is 'Very High' due to the presence Ecological Support Area and the Freshwater Ecological Priority Area (FEPA) Sub catchment. A baseline assessment (January 2022) determined the sensitivity of the shrubland habitat to be 'Medium', with drainage features assigned a 'High' sensitivity. The drainage features is not located within the planned development area.</p> <p>11 It is further understood that a detailed monitoring Avifaunal Monitoring Programme has been prepared and monitoring undertaken by Wildskies Environmental Services during 2022 in compliance with the recommendations of the</p> | |



| Theme | Sensitivity | Further Assessment? ¹ | Comments Regarding Further Assessment | Specialist Findings | Revised Sensitivity |
|-------|-------------|----------------------------------|---------------------------------------|--|---------------------|
| | | | | <p>recommendations of section 6.1 of Aurecon (2012a).</p> <p>12 All prescribed mitigation measures and supporting recommendations presented here will help to achieve an acceptable residual impact. These measures and recommendations will remain applicable for the requested extension of the EA. To this end, these measures have been included in the updated EMPr for this development as per the requirements of the EA.</p> <p>13 As such, should the measures described above, and as included in the updated EMPr for this development be implemented, it was the reasoned opinion of the specialist that the EA be extended for an additional 3 years.</p> | |



5 PUBLIC PARTICIPATION

5.1 LANDOWNER CONSENT

Please refer to the landowner consent included in Appendix 3.

5.2 INTERESTED AND AFFECTED PARTIES NOTIFICATION

Please refer to the attached Public Participation Report which provides details on the Public Consultation undertaken as part of this application (Appendix 9).

5.3 COMMENTS AND RESPONSES REPORT

Please refer to the attached Public Participation Report which provides details on the Public Consultation undertaken as part of this application (Appendix 9). No comments have been received to date.

6 REFERENCES

Aurecon (2012). Proposed Photovoltaic Energy Plant on Struisbult Farm near Copperton, Northern Cape: Final Environmental Impact Assessment Report. Report No. 5949a/107516.

Aurecon (2012a). Life-Cycle Environmental Management Programme (Draft) for the Proposed PV plant on farm Struisbult, near Copperton Northern Cape. Report No. 5949/107516.

Avisense (2012). Struisbult photovoltaic energy facility Avian impact assessment. AVISENSE Consulting cc.

Bergwind (2011). Botanical Assessment for a proposed solar energy plant at Struisbult 104 Portion 1 at Copperton, Northern Cape Province. Bergwind Botanical Surveys & Tours CC.

7 APPENDICES



Appendix 1: DFFE Correspondence



Appendix 2: Copies of the Environmental Authorisations and all subsequent Amendments



Appendix 3: List of landowners (with contact details) and land owners consent



Appendix 4: Declaration of independence of the EAP and undertaking under oath or affirmation, if appointed



Appendix 5: Specialist Motivation Reports and Declarations



Appendix 6: DFFE Screening Tool Report



Appendix 7: SKA Confirmation Letter



Appendix 8: CAA Confirmation Letter



Appendix 9: Public Participation Report



Appendix 10: Updated Environmental Management Programme