

SITE SENSITIVITY VERIFICATION REPORT FOR THE PROPOSED LIMESTONE PV1

AGV Projects (Pty) Ltd is proposing the construction and operation of a commercial Photovoltaic (PV) Solar Energy Facility and associated infrastructure on Portion 4 of Farm Engeland 300, located approximately ~16km south-east of the town of Danielskuil and 10km east of Lime Acres, within the Kgatelopele Local Municipality and the ZF Mgcawu District Municipality in the Northern Cape Province. The facility will have a contracted capacity of up to 150MW Maximum Export Capacity and will be known as the Limestone PV1 Solar Energy Facility. The project is planned as part of a larger cluster of renewable energy projects, which includes another 150MW Maximum Export Capacity PV Solar Energy Facility (Limestone PV2) located on the same property as Limestone PV1 and 360MW Wind Energy Facility (Oryx Wind Energy Facility) also located near Danielskuil.

The full extent of the project site (i.e., ~1 842ha) was considered during the Scoping Phase of the EIA process, within which Limestone PV1 will be appropriately located from a technical and environmental sensitivity perspective. A development footprint of has been identified within the project site and assessed for the construction of the facility and its associated infrastructure.

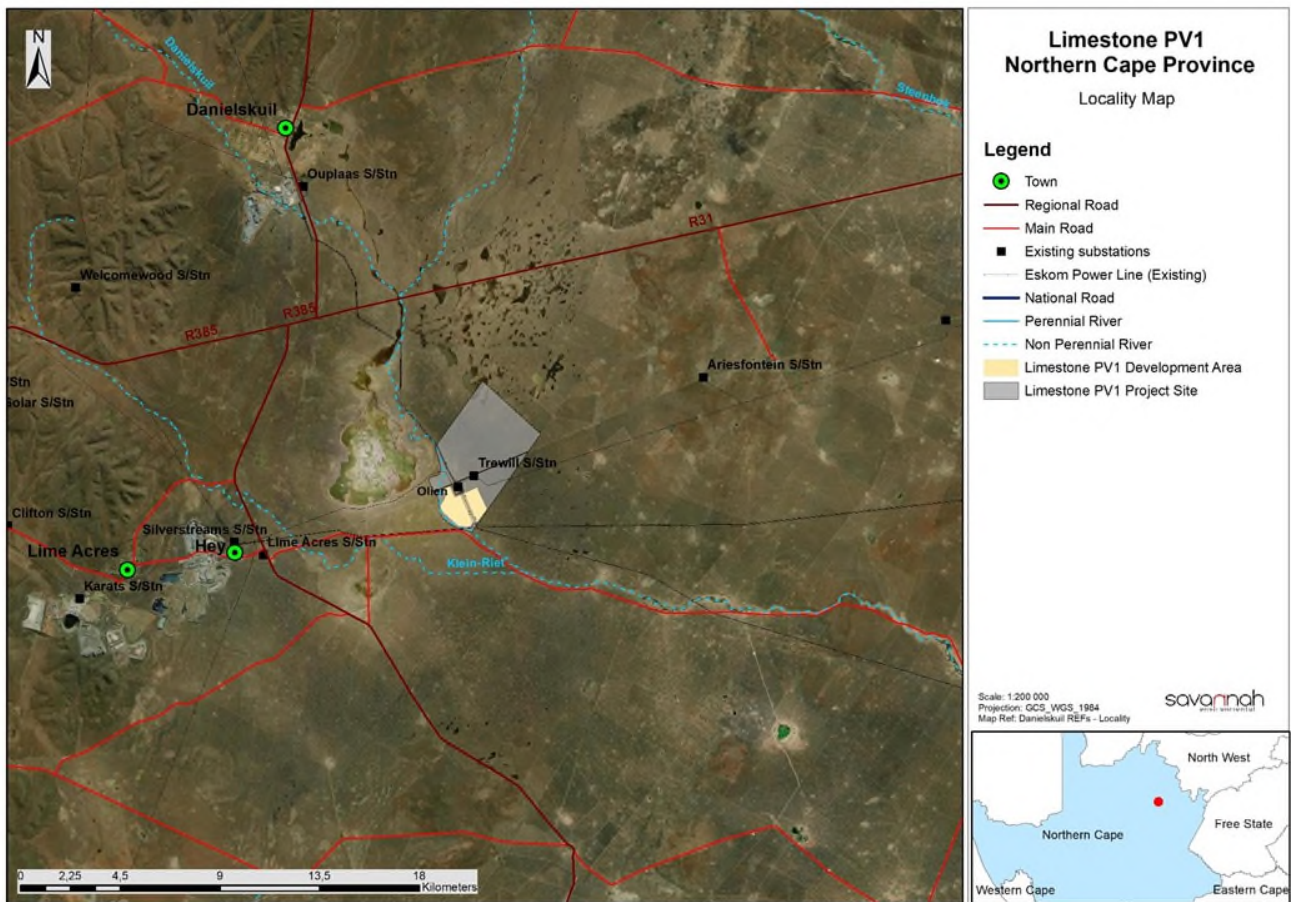


Figure 1: Locality map illustrating the location of Limestone PV1 and associated infrastructure

SENSITIVITY VERIFICATION METHODOLOGY:

The site sensitivity verification report was compiled by the EAP and is based on specialist desktop information and field work undertaken as part of the S&EIA process. This report forms part of the Scoping and Environmental Impact Assessment (S&EIA) process being undertaken for the proposed Limestone PV1 solar energy facility.

SITE SENSITIVITY VERIFICATION:

The table below and reference to specialist assessments serve to:

- » Verify land use and sensitivities identified in the screening report; and
- » Confirm / contest the need for the various specialist inputs called for in terms of the screening tool report.

Environmental Theme/Specialist Assessment	Sensitivity Rating as per the Screening Tool (relating to the need for the study)	Verification of Site Sensitivity
Agriculture Theme/Agricultural Impact Assessment	Medium	<p>The proposed Limestone PV1 project is mostly characterised with "Low" land capability with very small portions of "medium" sensitivity. In the assessment area there is no segregation of agricultural lands or crop fields with high potentials. The "Low to Moderate" sensitivities also fall within the DAFF, (2017) requirements for a compliance statement report only.</p> <p>The overall sensitivity for the project site is confirmed as low. A Soils and Agricultural Potential Compliance Statement is included in the EIA Report as Appendix F.</p>
Animal Species Theme/ Terrestrial Ecology Impact Assessment	High	<p>A total of 7 mammal, 1 amphibian, and 5 reptile species were recorded within the project/study area. 12 threatened avifauna species were identified within the project site. Six (6) different habitat units were identified during the assessment.</p> <p>Habitat is generally disturbed and adjacent to roads and development, thus the presence of SCC is unlikely. SCC may forage in specific areas. High sensitivity of screening was mainly attributed to Avifauna species.</p> <p>The specialist validates the high sensitivity and validates the project site as being comprised of High sensitivity. A terrestrial ecology and freshwater ecology Impact Assessment has been undertaken for the Solar Energy Facility and is included as Appendix G and an Avifauna impact assessment is included as Appendix H of the EIA Report.</p>
Landscape (Solar) Theme/Visual Impact Assessment	Very High	<p>Despite being located on plains, the area surrounding the project site comprises of low population density land. This results in a low number of receptors within the receiving environment.</p> <p>The specialist disputes the very high sensitivity and validates that the project site comprises of overall moderate visual sensitivity. A Visual Impact</p>

Environmental Theme/Specialist Assessment	Sensitivity Rating as per the Screening Tool (relating to the need for the study)	Verification of Site Sensitivity
		Assessment has been undertaken for the Solar Energy Facility and is included in this EIA Report as Appendix I .
Archaeological and Cultural Heritage Theme/Heritage Impact Assessment	High	<p>Some significant archaeological resources were identified within the project area. This includes a farmhouse werf graded III C.</p> <p>The specialist validates the high sensitivity for the project site. A Heritage Impact Assessment (including cultural heritage, palaeontology and archaeology) has been undertaken for the Solar Energy Facility and is included in this EIA Report as Appendix G.</p>
Palaeontology Theme/Heritage Impact Assessment	Very High	<p>No highly significant palaeontological resources were identified within the development area, however the geology underlying the development area is very sensitive for impacts to significant fossils.</p> <p>The specialist validates the very high sensitivity for the project site. A Heritage Impact Assessment (including cultural heritage, palaeontology and archaeology) has been undertaken for the Solar Energy Facility and is included in this EIA Report as Appendix G.</p>
Terrestrial Biodiversity Theme/ Terrestrial Ecology Impact Assessment	Very High	<p>Certain habitat sensitivities are regarded as very high sensitivity due to the role of this intact habitat to biodiversity within an area being more fragmented locally, which is supported by the various ecological datasets.</p> <p>The specialist validates the very high sensitivity. A terrestrial ecology and freshwater ecology Impact Assessment has been undertaken for the Solar Energy Facility and is included as Appendix G of the EIA Report.</p>
Aquatic Biodiversity Theme/Freshwater Impact Assessment	Very High	<p>The project site is located within CBA1 and 2 areas and has a number of depressions located across the site.</p> <p>The specialist disputes the screening tool results and validates the site as having a high sensitivity.. A terrestrial ecology and freshwater ecology Impact Assessment has been undertaken for the Solar Energy Facility and is included as Appendix G of the EIA Report.</p>
Avian Impact Assessment/Avifauna Impact Assessment	Low	<p>Five (5) different habitat units were identified during the assessment. Areas of very high sensitivity (watercourses/rivers) and areas of high ecological sensitivity represent other such as wooded Vaalbosveld, open shrubland and open grassland were also identified on site. In addition, 25 species at risk for collisions were identified on site.</p> <p>The specialist disputes the low sensitivity and validates that the project site comprises of overall high sensitivity. An Avifauna Impact Assessment has been undertaken for the Solar Energy Facility and included as Appendix F of the EIA Report. 12-months pre-construction monitoring as per the BirdLife SA Best Practice Guidelines has been completed and has informed the assessment of impacts.</p>
Civil Aviation (Solar PV) Theme	Low	The South African Civil Aviation Authority (SACAA) and Air Traffic Navigation Services (ATNS) have been consulted throughout the EIA

Environmental Theme/Specialist Assessment	Sensitivity Rating as per the Screening Tool (relating to the need for the study)	Verification of Site Sensitivity
		<p>process to obtain input and details of any requirements for further studies. No objections to the project have been received.</p> <p>The project site is not located within close proximity of any aerodromes, landing strips or infrastructure. The low sensitivity rating is supported, and no study is required in this regard. A Compliance Statement has been included as Appendix P of the EIA Report.</p>
Defence Theme	Low	<p>The project site is not located within close proximity of any military base or infrastructure. The South African Defence force been consulted throughout the EIA process to obtain input and details of any requirements for further studies. The low sensitivity rating is supported, and no study is required in this regard. A Compliance Statement has been included as Appendix Q of the EIA Report.</p>
RFI Theme	Low	<p>The project site is not located near any SKA receptors. The South African Radio Astronomy Observatory (SARAO) will however be consulted during the 30-day review and comment period of the EIA Report to provide written comment on the proposed development. The low sensitivity rating is supported, and no study is required in this regard. A Compliance Statement has been included as Appendix R of the EIA Report.</p>
Plant Species Theme/ Terrestrial Ecology Impact Assessment	Medium	<p>The composition of flora, the high species diversity and number of plant species recorded.</p> <p>The specialist validates the moderate sensitivity. An Ecology Impact Assessment has been undertaken for the Solar Energy Facility and is included as Appendix G of the EIA Report.</p>
Socio-Economic Assessment	The screening report does not indicate a rating for this theme.	<p>A Socio-Economic Impact Assessment has been undertaken and is included in the EIA Report as Appendix H.</p>
Traffic Impact Assessment	The screening report does not indicate a rating for this theme.	<p>A Traffic Impact Assessment has been undertaken and is included in the EIA Report as Appendix M</p>
Geotechnical Assessment	The screening report does not indicate a rating for this theme.	<p>A preliminary desktop geotechnical study was undertaken as part of the pre-feasibility studies by the Applicant. This study indicated that the project was considered to meet feasibility criteria and there are no geotechnical constraints to prevent the progress to preliminary and detailed design-level investigations. This indicates a low risk for the theme. Further study is not required as part of the environmental assessment process, and no risk was assigned for this theme in the Screening Tool report. The requirements for an infield Geotechnical Assessment is to inform the infrastructure foundation designs. A detailed geotechnical study and survey will be conducted prior to construction.</p>

Based on the outcomes of the Scoping Phase evaluation of the project and the outcomes of the Site Sensitivity Verification, the following studies were identified as being required:

- » Terrestrial and Freshwater Ecology Impact Assessment
- » Avifauna Impact Assessment
- » Soils and Agricultural Potential Compliance Statement
- » Heritage Impact Assessment (Including cultural heritage, archaeology, and palaeontology)
- » Visual Impact Assessment
- » Social Impact Assessment
- » Traffic Impact Assessment

The specialist studies undertaken for this project are required to comply with either the above Protocols or, alternatively, with the requirements of Appendix 6 of the NEMA EIA Regulations of 2014 (as amended 2017 & 2021).