

APPENDIX C3
BACKGROUND INFORMATION DOCUMENT



BACKGROUND INFORMATION DOCUMENT (BID)



October 2022

BASIC ASSESSMENT AND PUBLIC PARTICIPATION PROCESS

KOTULO TSATSI ENERGY PV3 AND ASSOCIATED INFRASTRUCTURE, NORTHERN CAPE



The development of a solar photovoltaic (PV) facility with a generating capacity of up to 480MW and other associated infrastructure is proposed by Kotulo Tsatsi Energy (Pty) Ltd on a site located approximately 70km south-west of the town of Kenhardt in the Northern Cape Province. The solar PV development will be known as the Kotulo Tsatsi Energy PV3 Facility. The project is within the in the Namakwa District Municipality.

Kotulo Tsatsi Energy PV3 Facility is located on Portion 2 of Farm Styns Vley 280. The grid connection infrastructure will include an on-site facility substation and a power line/s within a 500m wide corridor extending to the Eskom Aries Substation, located north-east of the site.

The nature and extent of the solar PV facility are explored in more detail in this Background Information Document (BID). An Environmental Impact Assessment (EIA) process is being undertaken in order to obtain Environmental Authorisation (EA) for the development of the PV facility and associated infrastructure. The public participation process provides the public with an opportunity to comment on the project.

AIM OF THIS BACKGROUND INFORMATION DOCUMENT

This document aims to provide you, as an interested and/or affected party (I&AP), with:

- » An overview of the proposed solar PV facility and associated infrastructure.
- » An overview of the Environmental Impact Assessment (EIA) process and specialist studies being undertaken to assess the project.
- » Details of how you can become involved in the EIA process, receive information, or raise comments that may concern and/or interest you.

OVERVIEW OF THE PROJECT

In response to the growing electricity demand within South Africa, the need to promote renewable energy and sustainability within the Northern Cape Province, as well as the country's targets for renewable energy, the development of a solar PV facility of up to 480MW is proposed. The development of the solar PV facility will add new capacity and transmission infrastructure to the national electricity grid network.

A project site considered to be technically suitable for the development of the solar PV facility was demarcated and allows an adequate development area for the installation of a solar PV facility with a contracted capacity of up to 480MW, while allowing for the avoidance of environmental site sensitivities.

The infrastructure associated with the 480MW solar PV facility will include:

- » Solar PV array comprising PV modules and mounting structures.
- » Inverters and transformers.
- » Cabling between the project components.
- » On-site facility substation and power line/s to facilitate the connection between the Solar PV Facility, the 400kV collector substation and the Eskom electricity grid at Aries Substation.
- » Battery Energy Storage System (BESS).
- » Site offices and maintenance buildings, including workshop areas for maintenance and storage.
- » Laydown areas and temporary man camp area.
- » Access roads, internal distribution roads and fencing around the development area.

The PV facility is planned to be located adjacent to the authorised Kotulo Tsatsi Energy PV1 and PV2 Facilities, and within an area previously authorised for CSP project infrastructure. Site-specific studies and assessments will delineate areas of potential sensitivity within the identified study area. Once constraining factors have been confirmed, the layout of the Solar PV Facility can be planned to minimise social and environmental impacts.

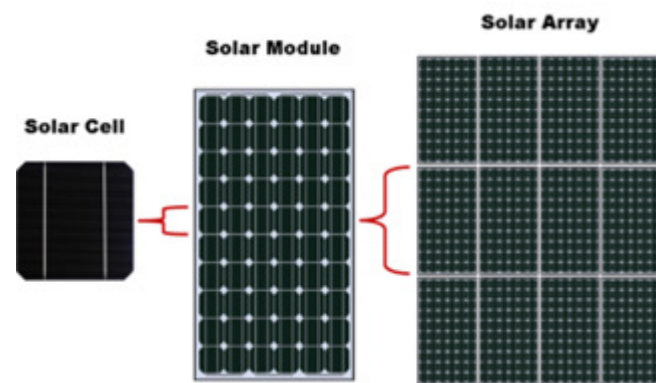
MORE ABOUT SOLAR PV TECHNOLOGY

Solar energy facilities use energy from the sun to generate electricity through a process known as the **Photovoltaic Effect**. This effect refers to photons of light colliding with electrons, and therefore placing the electrons into a higher state of energy to create electricity. The solar fields of the PV facilities will comprise the following components:



Photovoltaic Cells:

A photovoltaic (PV) cell is made of silicone that acts as a semiconductor used to produce the photovoltaic effect. PV cells are arranged in multiples/arrays and placed behind a protective glass sheet to form a PV panel. Each PV cell is positively charged on one side and negatively charged on the opposite side, with electrical conductors attached to either side to form a circuit. This circuit captures the released electrons in the form of an electric current (i.e. Direct Current (DC)).



Overview of a PV cell, module and array/panel (Source: pveducation.com)

A solar PV module is made up of individual solar PV cells connected together, whereas a solar PV array is a system made up of a group of individual solar PV modules electrically wired together to form a much larger PV installation. The PV panels will be fixed to support structures to maximise exposure to the sun.

Inverters:

Inverters are used to convert electricity produced by the PV cells from Direct Current (DC) into Alternating Current (AC) to enable the facility to be connected to the national electricity grid. Numerous inverters will be arranged in several arrays to collect and convert power produced by the facilities.

PV panels are designed to operate continuously for more than 20 years, mostly unattended and with low maintenance.

ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

In accordance with the EIA Regulations, 2014 (as amended) published in terms of Section 24(5) of the National Environmental Management Act (No. 107 of 1998) (NEMA), the applicant requires Environmental Authorisation (EA) from the National Department of Forestry, Fisheries and the Environment (DFFE) in consultation with the Northern Cape Department of Agriculture, Environmental Affairs, Rural Development and Land Reform for the development of the proposed project. In terms of Section 24(5) of NEMA, the EIA Regulations 2014 (as amended) and Listing Notices (GNR 327, GNR 325, and GNR 324), the application for the EA is subject to the completion of Scoping/EIA process. The application is required to be supported by comprehensive, independent environmental studies undertaken in accordance with the EIA Regulations, 2014 (as amended).

An EIA is an effective planning and decision-making tool. It allows for potential environmental consequences resulting from a proposed activity to be identified and appropriately managed during the construction, operation, and decommissioning phases of development. It also provides an opportunity for the project applicant to be forewarned of potential environmental issues, and allows for the resolution of issue(s) identified and reported on as part of the EIA process, as well as provides opportunity for dialogue with key stakeholders and Interested and Affected Parties (I&APs).

Savannah Environmental has been appointed as the independent environmental consultant responsible for managing the application for EA and undertaking the supporting EIA process required to identify and assess potential environmental impacts associated with the project, as well as propose appropriate mitigation and management measures to be contained within the Environmental Management Programmes (EMPrs).

WHAT ARE THE POTENTIAL ENVIRONMENTAL IMPACTS ASSOCIATED WITH THE PROPOSED PROJECT?

The study area and the grid connection corridor will be assessed by independent environmental specialists to identify the potential for environmental impacts. Specialist studies that are proposed as part of the EIA process include the following:

- » **Biodiversity** – includes ecology, freshwater features, fauna and flora and assess the potential impact and the associated disturbance of vegetation on the biodiversity (including critical biodiversity areas and broad-scale processes).



- » **Avifauna** – includes an assessment of impacts on avifaunal habitats and sensitive features.
- » **Soils, Land Use, and Agricultural Potential** – includes land types and assesses the significance of loss of agricultural land and soil degradation and/or erosion.
- » **Heritage (Archaeology and Palaeontology)** – which includes archaeology and palaeontology and assesses the potential of disturbance to or destruction of heritage sites and fossils during the construction phase through excavation activities.
- » **Visual** – which includes the visual quality of the area and assesses the impact of the solar PV facilities and the grid connection solution on the aesthetics within the area.
- » **Social** – which assesses the positive and negative social impacts.

Specialist studies will be informed by existing information, previous experience in the area, field observations and input from the public participation process. As an I&AP, your input is considered as an important part of the process, and we urge you to become involved.

PUBLIC PARTICIPATION PROCESS

The sharing of information forms the basis of the public participation process and offers I&APs the opportunity to become actively involved in the EIA process. Comments and inputs from I&APs are encouraged in order to ensure that potential impacts are considered throughout the EIA process. The public participation process aims to ensure that:

- » Information containing all relevant facts in respect of the application is made available to I&APs for review.
- » I&AP participation is facilitated in such a manner that they are provided with reasonable opportunity to comment on the project.
- » Adequate review periods are provided for I&APs to comment on the findings of the Scoping/EIA Reports.

In order to ensure effective participation, the public participation process include the following:

- » Identifying I&APs, including affected and adjacent landowners and occupiers of land, and relevant Organs of State, and recording details within a database.
- » Notifying registered I&APs of the commencement of the EIA process and distributing the Background Information Document (BID) to registered I&APs.
- » Providing access to registered parties to Savannah Environmental's website, which centralises project information and stakeholder input in a single digital platform.
- » Providing an opportunity for I&APs to engage with the EIA project team.



- » Placing site notices at the affected property/ies.
- » Placing an advertisement in a local newspaper.
- » Notifying I&APs of the release of the Reports for a 30-day review and comment period.

YOUR RESPONSIBILITIES AS AN I&AP

In terms of the EIA Regulations, 2014 (as amended) and the Public Participation Guidelines, 2014 your attention is drawn to your responsibilities as an I&AP:

- » To participate in the EIA process, you must register yourself on the I&AP database.
- » You are required to disclose any direct business, financial, personal, or other interest that you may have in the approval or refusal of the application.
- » You must ensure that any comments regarding the proposed project is submitted within the stipulated timeframe.

HOW TO BECOME INVOLVED

1. By responding by phone, fax, or e-mail, to the invitation for your involvement.
2. By returning the reply form to the relevant contact person.
3. By engaging with the project team on the online stakeholder engagement platform during the EIA process.
4. By contacting the environmental consultant with queries or comments.
5. By reviewing and commenting on the Reports within the stipulated 30-day review and comment periods. Registered I&APs will automatically be notified of the release of the Scoping/EIA Reports for comment, and the closing dates by which comments must be received.

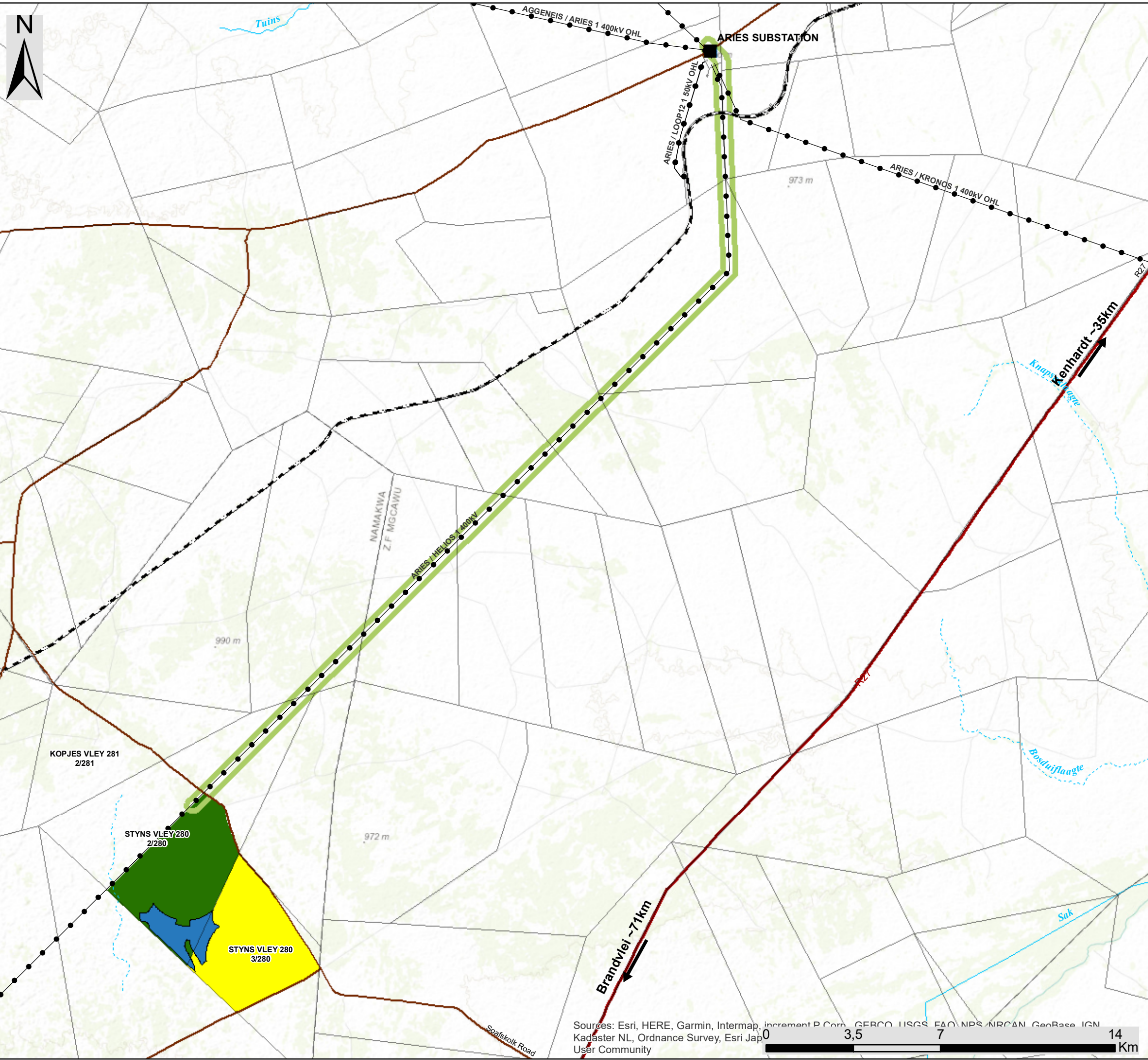


by the public participation process to provide comment, raise issues and concerns which affect and / or interest you, or request further information. Your input forms a key element of the EIA process.

By submitting your contact details, you automatically register yourself as an I&AP for the project, and are ensured that your comments raised will be noted. Please note that all comments received will be included in the project documentation, and this may include personal information.

In terms of Section 18(2) of the Protection of Personal Information Act (POPIA), by completing and submitting the accompanying reply form, you automatically register yourself as an I&AP for the proposed projects, and that all comments received will be included in the project documentation, and this will include personal information for certain purposes, including for purposes of the appeal processes. If you register as an I&AP please be informed that the consequences are of your registration is that your contact information will be included in documents and reports that will be available in the public domain.





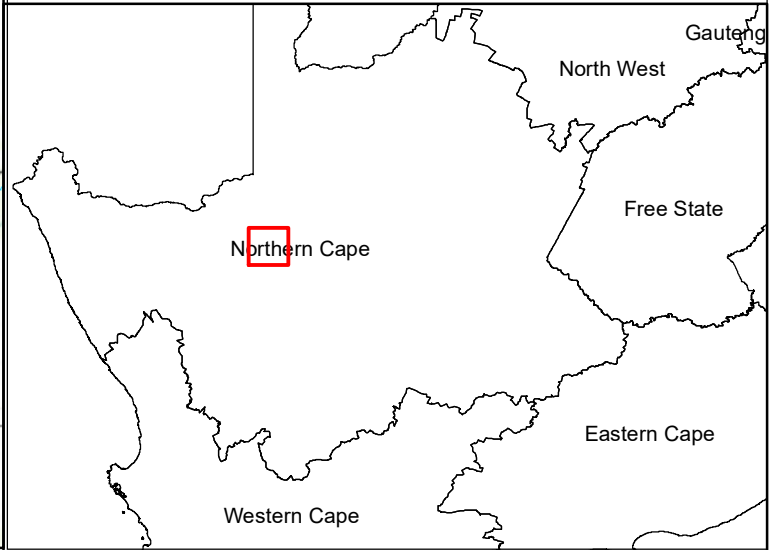
Kotulo Tsatsi Energy PV3 Facility, Northern Cape

Locality Map

Legend

- Eskom substation
- Existing Power Line
- Regional road
- Main road
- Railway
- Perennial river
- Non-perennial river
- Authorised Kotulo Tsatsi Energy PV1
- Authorised Kotulo Tsatsi Energy PV2
- Farm portions
- Kotulo Tsatsi Energy PV3 Development Area
- Grid Connection Corridor (500m wide)

Scale: 1: 150 000
 Projection: WGS1984
 Map Ref: Kotulo Tsatsi Energy PV3 - Locality Map



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Jap, User Community

0 3,5 7 14 Km



COMMENTS AND QUERIES

Direct all comments, queries or responses to:

Savannah Environmental

Nicolene Venter

P.O. Box 148, Sunninghill, 2157

Mobile: 060 978 8396

Tel: 011 656 3237

Fax: 086 684 0547

Email: publicprocess@savannahsa.com

To visit the online stakeholder engagement platform and view project documentation, visit www.savannahSA.com

ENVIRONMENTAL IMPACT ASSESSMENT AND PUBLIC PARTICIPATION PROCESS

**KOTULO TSATSI ENERGY PV3 AND ASSOCIATED INFRASTRUCTURE, NORTHERN CAPE PROVINCE
(DFFE Reference Nos.: To be Issued)**

Registration & Comment Form

October 2022

Return completed registration and comment form to: **Nicolene Venter of Savannah Environmental**

Phone: 011 656 3237 / **Mobile (incl. 'please call me'):** 060 978 8396 / **Fax:** 086 684 0547

E-mail: publicprocess@savannahsa.com **Postal Address:** PO Box 148, Sunninghill, 2157

Your registration as an interested and/or affected party will be applicable for this project only and your contact details provided are protected by the PoPI Act of 2013

Please provide your complete contact details:

Name & Surname:			
Organisation:			
Designation:			
Postal Address:			
Telephone:		Fax:	
Mobile:			
E-mail:			

Please register me as an interested and affected party (I&AP) on the project's database

In terms of EIA Regulations, 2014, as amended, Regulation 43(1), you are required to register as an I&AP to receive further correspondence regarding the BA process for the projects and to disclose any direct business, financial, personal or other interest which you may have in the approval or refusal of the application (add additional pages if necessary):

Please list your comments regarding your project selection above (add additional pages if necessary):

Please provide contact details of any other persons who you regard as a potential interested or affected party:

Name & Surname:			
Postal Address:			
Telephone:			
Mobile:			
E-mail:			

THANK YOU FOR YOUR REGISTRATION