



CONSERVA

Environmental Management Services

DATE: 27 July 2023

Dear Stakeholder / Interested and Affected Party (I&APs),

NOTICE OF A SCOPING AND ENVIRONMENTAL IMPACT ASSESSMENT (EIA) STUDY
PROPOSED TO DEVELOP A 480MW SOLAR PHOTOVOLTAIC (PV) FACILITY ON PORTION 1 OF THE FARM ZWARTWITPENSBOKFORTEIN 434-KQ, KOEDOESKOP, WATERBERG DISTRICT, LIMPOPO PROVINCE.

DFFE Reference number: Pending

Notice is hereby given in terms of Regulation 41 (2)(b) of the National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA) EIA Regulations of 2014 (GNR. 326) of the commencement of an EIA process and public participation for the above-mentioned project.

We draw your attention to the following:

- An invitation to register as an I&AP on the project database; and
- The availability of a Background Information Document (BID) for review and comment.

Allied Green Energy (Pty) Ltd (AGE) proposes to develop a 480MW Solar PV Facility on approximately 275-hectares of land comprising Portion 1 of the farm Zwartwitpensbokfontein 434-KQ. The property falls within the jurisdiction of Thabazimbi Local Municipality, 10km south-west of Koedoeskop along the D1234 Northam-Koedoeskop Road.

The project requires environmental authorisation subject to a full EIA process from the National Department of Forestry, Fisheries and Environment (DFFE) before it can be commissioned because it triggers several scheduled activities published under the NEMA EIA Regulations of 2014 i.e., GN R. 327, GN R. 325 and GN R. 324.

AGE will also apply for a General Authorisation (GA) / Water Use License Application (WULA) from the Department of Water and Sanitation (DWS): Crocodile Proto CMA in terms of the National Water Act (Act 36 of 1998) (NWA) for relevant Section 21 (a) and (g) water uses.

Conserva Environmental Management Services (CEMS) have been appointed as the independent environmental assessment practitioner (EAP) to conduct the environmental authorisation process and WULA for the project.

As part of the application process, we are required to notify Stakeholders/ I&APs of the project. The aim is to solicit your views, comments, and or recommendations to help inform the EIA Study.

What to do if you are interested and or affected?



Refer to the enclosed BID which provides **(i)** more project detail, **(ii)** gives an overview of the EIA process and explains **(iii)** how you can become involved in the process. A period from **28 July until 28 August 2023** is provided to register, review the BID, and submit comments concerning the application.

You may review the BID and complete the Registration & Comment Form on the last page of the BID. Send your comments together with your name, contact details and interest in the project to conserva-ems@outlook.com or contact us at 084-226-5584 / 072-755-5103 for more information. Registration and comments must be submitted **on or before 28 August 2023.**

Only registered stakeholders/ I&APs will receive future project notifications/information post the registration phase.

+2784-226-5584



conserva-ems@outlook.com



10 Knoppiesdoorn Avenue, Thabazimbi, 0387

Sole Proprietor: Marissa Ilse Botha (Pr. Sci.Nat), Maryke André (EAP)

What next?

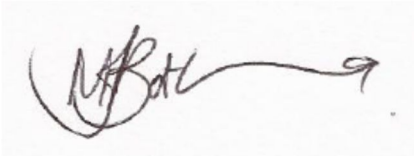
Submissions received during the public registration period will:

- Be responded to and captured in an Issues and Response Report (IRR); thereafter,
- Incorporated into a Draft Scoping Report which will be subject to a 30-days public comment period.
- With the lapse of the comment period, the report will be finalised and submitted to the DFFE for acceptance.

The Draft Scoping Report is the first report released as part of the EIA process and aims to solicit public comment on the proposal, its potential environmental consequences, and scope of the EIA Study by giving the public an opportunity to review the report. The report will be available after the public registration period.

The availability of the report and where it can be obtained will be communicated to registered Stakeholders / I&APs through email and or telephonically.

Sincerely,



and

Marissa Botha (Pr. Sci.Nat)

Conserva Environmental Management Services

10 Knoppiesdoorn Avenue, Thabazimbi, 0387

Cell: 084 226 5584 (Marissa)

Email: conserva-ems@outlook.com

Maryke André

Conserva Environmental Management Services

Environmental Assessment Practitioner (EAP)

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10 Knoppiesdoorn Avenue, Thabazimbi, 0387

Sole Proprietor: Marissa Ilse Botha (Pr. Sci.Nat), Maryke André (EAP)



NOTICE OF AN ENVIRONMENTAL IMPACT ASSESSMENT PROCESS FOR THE PROPOSED ZWARTWITPENSBOK FONTEIN 480MW SOLAR PHOTOVOLTAIC FACILITY, KOEDOESKOP, WATERBERG DISTRICT, LIMPOPO PROVINCE

BACKGROUND INFORMATION DOCUMENT

DFFE Reference no. Pending

DATE: 27 July 2023

PURPOSE OF DOCUMENT

The Background Information Document (BID) serves as a notice in terms of Regulation 41 (2)(b) of the NEMA EIA Regulations of 2014 (GNR. 326) of the intent to develop a photovoltaic solar facility and associated infrastructure at Koedoeskop in the Waterberg District of the Limpopo Province.

The BID provides a brief description of the project and authorisation procedures being followed to obtain the necessary approvals to commission the project. Importantly it indicates how you can become involved and raise issues that may concern and/or affect you. The BID gives you the opportunity to:

- **Register as an interested and affected party (I&APs).**
- **Give initial comments**, raise issues/concerns about the project within the given timeframes to ensure that it is captured in the upcoming EIA Scoping Report.

You are herewith invited to register your interest in the project and to submit your comments by:

- Reviewing the BID.
- Completing the registration form at the end of the BID and emailing it to CEMS; and or
- Writing us a letter / contacting us / sending an email.

Only registered I&APs will receive further notifications regarding the EIA process and reports released for public review and comment.

Registrations and comments must be submitted on or before 28 August 2023 to:

EAP CONTACT DETAILS

Marissa Botha / Maryke André

Conserva Environmental Management Services
10 Knoppiesdoorn Avenue, Thabazimbi, 0387

Tel: 084 226 5584 / 072 755 5103

Email: conserva-ems@outlook.com

1. PROJECT BACKGROUND

Allied Green Energy (Pty) Ltd (AGE) proposes to develop a Solar Photovoltaic Facility with associated infrastructure on Portion 1 of the farm Zwartwitpensbokfontein 434-KQ.

The property is in the jurisdiction of Thabazimbi Local Municipality, 10km south-west of Koedoeskop along the D1234 Northam-Koedoeskop gravel road. GPS coordinates: S 24°56'44.12" E 27°26'25.38". (See **Figure 1** and **2** for the Locality Plans).

The proposed solar pv facility will have a total power generation capacity of up to 480MW, covering a total area of approximately 275-hectares. The facility will connect to the Eskom grid via the existing 132kV Spitskop-Mamba power line crossing the application property. The facility will link using an onsite substation and 132kV power line connection.

2. LEGAL REQUIREMENTS

The proposed project triggers several listed activities in Government Notice (GN) No. R. 324, R. 325, and R. 327 of 7 April 2017 (as amended), which require environmental authorisation in terms of the 2014 EIA Regulations (GNR 326) published under the National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA) from the National Department of Forestry, Fisheries and Environment (DFFE). The application is subject to a Scoping and EIA process.

The main activities associated with the project include GNR 325 (Listing Notice 2) Activity 1: *The development of a facility for the generation of electricity from a renewable resource where the output is 20MW or more* and Activity 15: *The clearance of an area of more than 20-hectares of indigenous vegetation.*

A General Authorisation (GA) / Water Use License Application (WULA) will also be required under the provisions of the National Water Act, 1998 (Act 36 of 1998) for Section 21(a) and (g) water uses from the Department of Water and Sanitation (DWS).

CEMS is the independent environmental assessment practitioner appointed to conduct the environmental authorisation process and WULA for the project.

3. PROJECT MOTIVATION

South Africa is experiencing a continued national energy crisis and the agricultural sector is bearing the brunt as like many other sectors. There has been an urgent call for installation of renewable energy sources to supplement the ailing Eskom power fleet.

AGE intends to sell 66% of the solar power generated at the facility to Eskom, 33% will be wheeled through the national grid to private users (i.e., nearby farmers, mine) and 1% will be supplied to Allied Farms (Pty) Ltd for commercial farming activities.

Allied Farms (Pty) Ltd is a sister company to AGE, and is a major supplier of maize, wheat, and soybean at Koedoeskop. The agricultural producer cannot afford to be without power for 1 day. Developing the solar facility will ensure a consistent power supply to Allied including nearby farmers.

4. PROJECT FEASIBILITY

South Africa has one of the highest solar radiation-levels in the world making it ideal for solar pv energy installations. The country's annual average 24-hour global solar radiation is about 220 W/m² vs. the world average of 100 – 150W/m².

South Africa has a large area (around 194,000 km²) of high radiation and Koedoeskop is one of the 'High to Moderate' solar resource areas in the country able to produce 8000-8500 Megajoule per square meter. (See **Figure 3**).

Solar energy generation in Koedoeskop is therefore highly feasible and the end users established.

5. SOLAR PV FACILITY LOCATION

AGE owns Portion 1 of the farm Zwartwitpensbokfontein 434-KQ. It is zoned for 'Agriculture' but previously used as a game farm.

The property has no water rights. Water use in the Crocodile West Irrigation Scheme already exceed the allocation and therefore no new applications would be entertained (*B. Greeff, DALRRD*). Dryland farming is not feasible at Koedoeskop nor is it supported by Department of Agriculture Land Reform and Rural Development (DALRRD).

The 88kV Northam-Rooiberg including the 132kV Spitskop-Mamba power lines cross the development property requiring a very short grid connection. It is for these reasons that AGE has selected the property to develop the solar facility.

The property is approximately 377-hectares of which 25% is hilly and 75% is flat. AGE should be able to develop the facility on the 250-275-hectares flat terrain on the western section of the property (i.e., assessment focus area).

The exact available developable area will be confirmed during the EIA process based on the geotechnical conditions and findings of the specialist studies.

6. PROJECT COMPONENTS

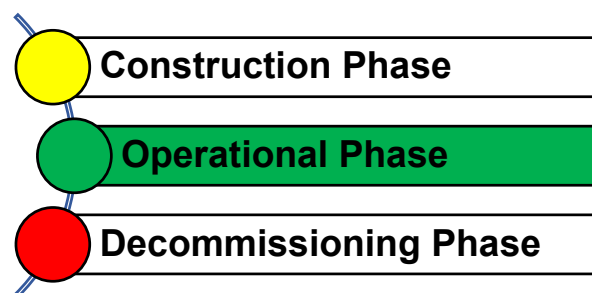
The solar facility components will include:

- 480MW Solar PV arrays consisting of 1000-Watt mono-facial solar panels.
- Mounting structures and underground cabling (AC/DC).
- Inverters and transformers.
- 132kV Onsite substation.
- Short onsite 132kV power line connection to Eskom grid.
- Operations building and Guardhouse.
- Main entrance from the D1234 Northam-Koedoeskop Road including internal access roads.
- Security residence (existing building to be upgraded).
- Perimeter fence and stormwater infrastructure
- Laydown area.

The facility will exclude a Battery Energy Storage System (BESS).

The current solar panel sizes available locally are 500 - 600 Watt/panel but technology is improving rapidly, therefore AGE will be able to install 1000-Watt panels.

The solar facility will comprise three phases:



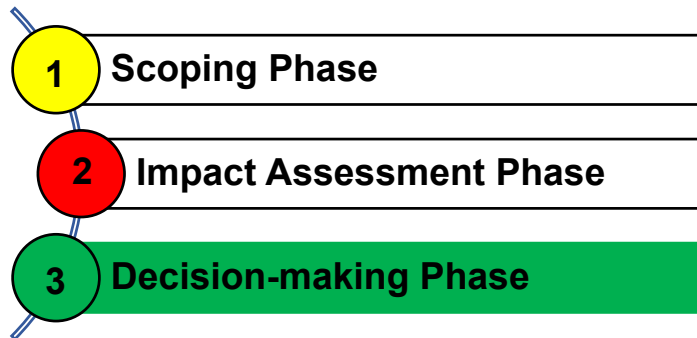
The project is anticipated to take 24 months to construct and commission. The overall lifespan of the solar facility will be approximately 20-25 years. The facility solar panels can either be replaced after 25-years or the facility can be decommissioned after it has reached its lifespan.

7. ENVIRONMENTAL IMPACT ASSESSMENT (EIA) PROCESS

The EIA is a planning and decision-making tool used to assess the potential environmental, social, and economic consequences of a project, through a consultative process, that may occur should it be authorised.

Public issues and concerns must therefore be identified timeously so it can be recorded and addressed in the EIA process for consideration by the competent authority, DFFE.

The EIA will inform the DFFE and the public of the project consequences, should it be authorised. The EIA process is conducted in line with regulation 21-24 of the NEMA EIA Regulations (GNR 326 as amended in 2017) which comprise three phases:



During the Scoping Phase the potential negative and positive consequences relevant to the project area identified to determine the aspects to be focussed on during the Impact Phase which require more detailed specialist investigations i.e., Plan of Study for the EIA.

The potential impacts will be identified through initial desktop analysis, environmental screening and site verification, initial specialist inputs including comments received from the public and key commenting authorities and experience from similar projects. The findings will be presented in a **Draft Scoping Report and will be made available for 30-days public and authority review.**

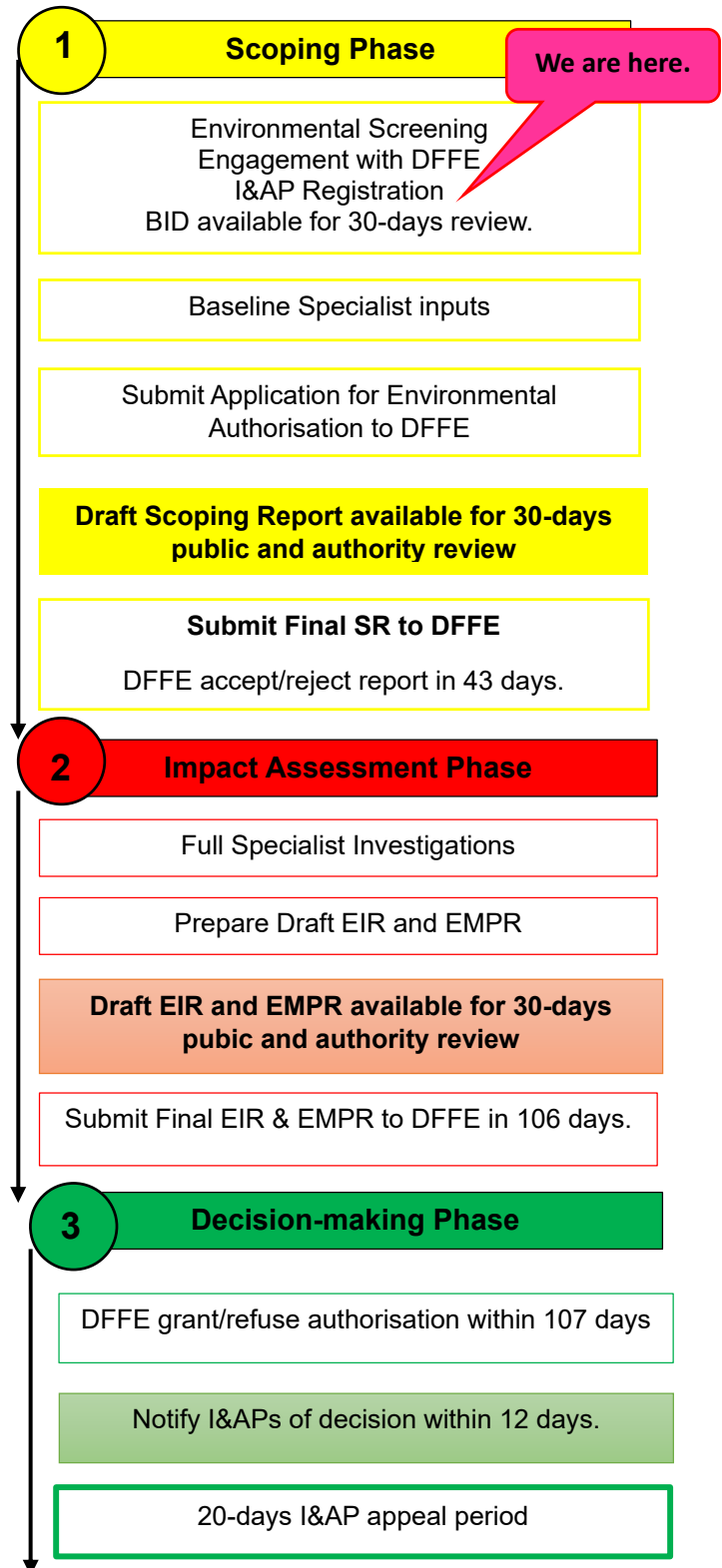
Once the DFFE approves the Scoping Report and Plan of Study for the EIA, the Impact Assessment Phase will commence during which detailed specialist investigations will be undertaken for the issues identified during the Scoping Phase. The findings will be presented in a **Draft Environmental Impact Report (EIR)** which provides an overview of the potential impacts and overall significance including the prescribed mitigation measures to be adhered to minimise these to acceptable levels.

An auditable **Environmental Management Programme (EMPR)** will be prepared that recommends the environmental management specifications to be observed by AGE during the construction, operation, and decommissioning phases of the facility. **Both the Draft EIR and EMPR will be released for 30-days public and authority review.**

Finalised reports will be submitted to the DFFE who will reach a decision on the application within 107 days.

I&APs will be notified of the decision and the opportunity to appeal the decision.

The EIA process is regulated at 300-days. It comprises the following basic steps presented in Figure 4:



8. WATER USE LICENSE APPLICATION

The solar pv facility will require water for construction activities and for domestic purpose (i.e., guardhouse, security residence) during its operation.

There is an existing equipped borehole that can be repaired and used as water supply for the facility.

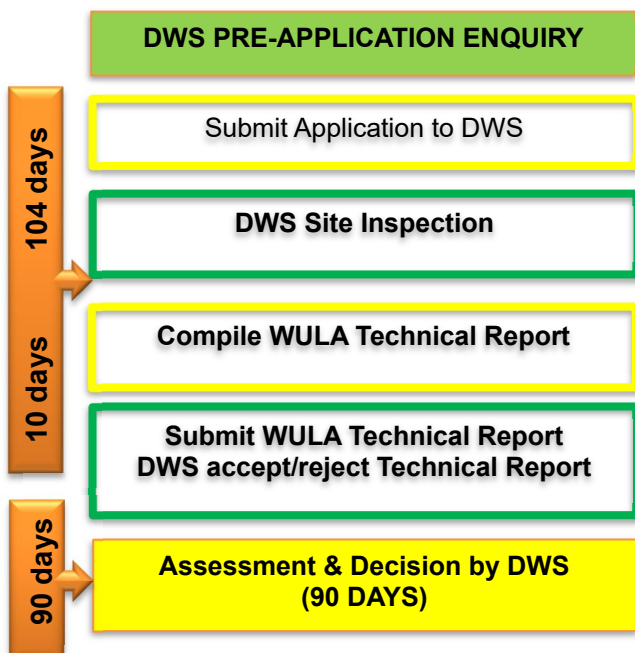
There is also an existing septic tank and soak away system on the property where greywater from the guardhouse and security residence can be disposed to.

AGE will therefore apply to the Department of Water and Sanitation (DWS): Crocodile Proto CMA for either a General Authorisation (GA) / Water Use License Application (WULA) in terms of section 39 / 40 of the National Water Act (Act 36 of 1998) (NWA) for water uses specified under Section 21 (a) and (g). The expected water use and greywater disposal will be very low. The DWS will confirm if the expected quantities can be generally authorised or must be licensed. The applicable water uses include:

- **Section 21 a** – Abstraction of water from a borehole for domestic purposes.
- **Section 21 g** – Disposing of greywater into an existing septic tank and soakaway system generated at the onsite guard/security house.

The application will be subject to a WULA Procedure as set out in the NWA WULA Regulations of 2017 (GNR. 267). The basic procedure will include:

- Pre-application enquiry and engagement to DWS
- Application submission to DWS
- DWS site inspection
- Compile and submit a Water Use Technical Reports to DWS
- DWS evaluation and assessment
- DWS issue decision (water use license)
- EAP inform the registered I&APs of the decision.



9. POTENTIAL IMPACTS & REQUIRED SPECIALIST STUDIES

Several potential impacts have been identified that will be investigated further during the EIA process.

The potential impacts have been informed by the DFFE GIS-based National web-based Environmental Screening Tool Report and typical known impacts for solar pv facilities.

The following specialists will be conducted as part of the EIA process based on the identified key impacts:

- Geotechnical Investigation
- Agricultural Potential Compliance Statement
- Aquatic Compliance Statement
- Heritage Impact Assessment Study
- Palaeontological Field Study
- Level 3 Visual Impact Study
- Terrestrial Biodiversity Impact Study
- Regime 2 Avifauna Study

Additional impacts may be added or considered insignificant based on the finding of further site inspections and inputs received from the public.

10. PUBLIC PARTICIPATION (PP)

Public participation (PP) is a key component of the EIA process and will be conducted in line with both the NEMA EIA Regulations (regulation 39-44) and the NWA.

The PPP aims to engage I&APs and provide an opportunity for the expression of public views on the environmental impacts of the application. All public issues and views on impacts are documented, addressed, and responded to in the EIA process and incorporated into environmental reports for consideration by the DFFE.

It is important that relevant I&APs are identified and involved in the PPP from the beginning of the process to help focus the EIA process plan. The project PPP is illustrated below.

The public is encouraged to get involved in the EIA process by:

- Registering an Interested and Affected Party.
- Review and submitting comments on the BID, Draft Scoping Report, Draft EIR and EMPR.

Targeted meetings will also be held with key commenting authorities and stakeholder as required during the EIA process.

To receive further communication regarding the project, **please register by completing the attached registration form** and sending it back to CEMS **on or before 28 August 2023**.

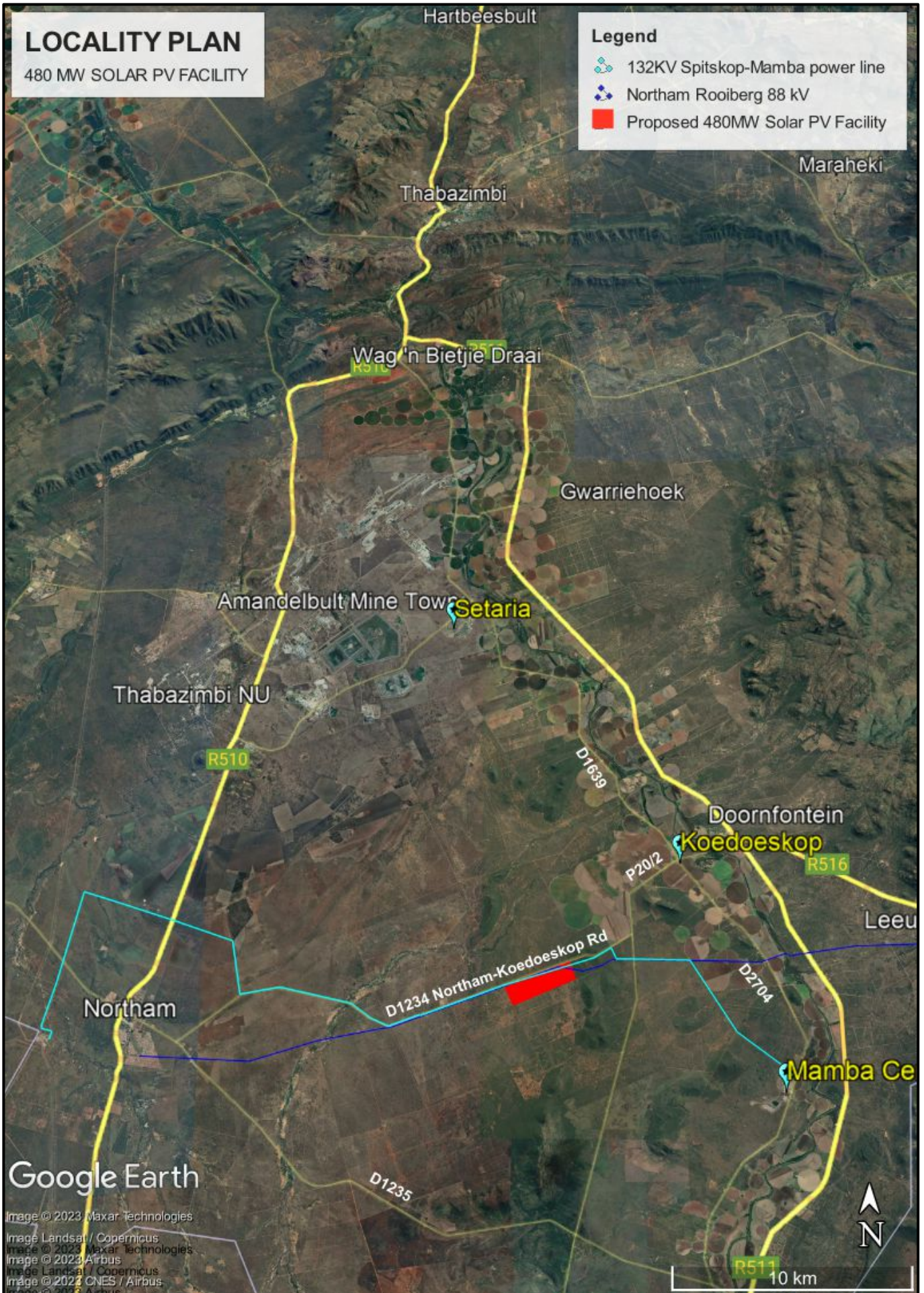


Figure Error! No text of specified style in document.: Project Locality Plan (Regional Plan)

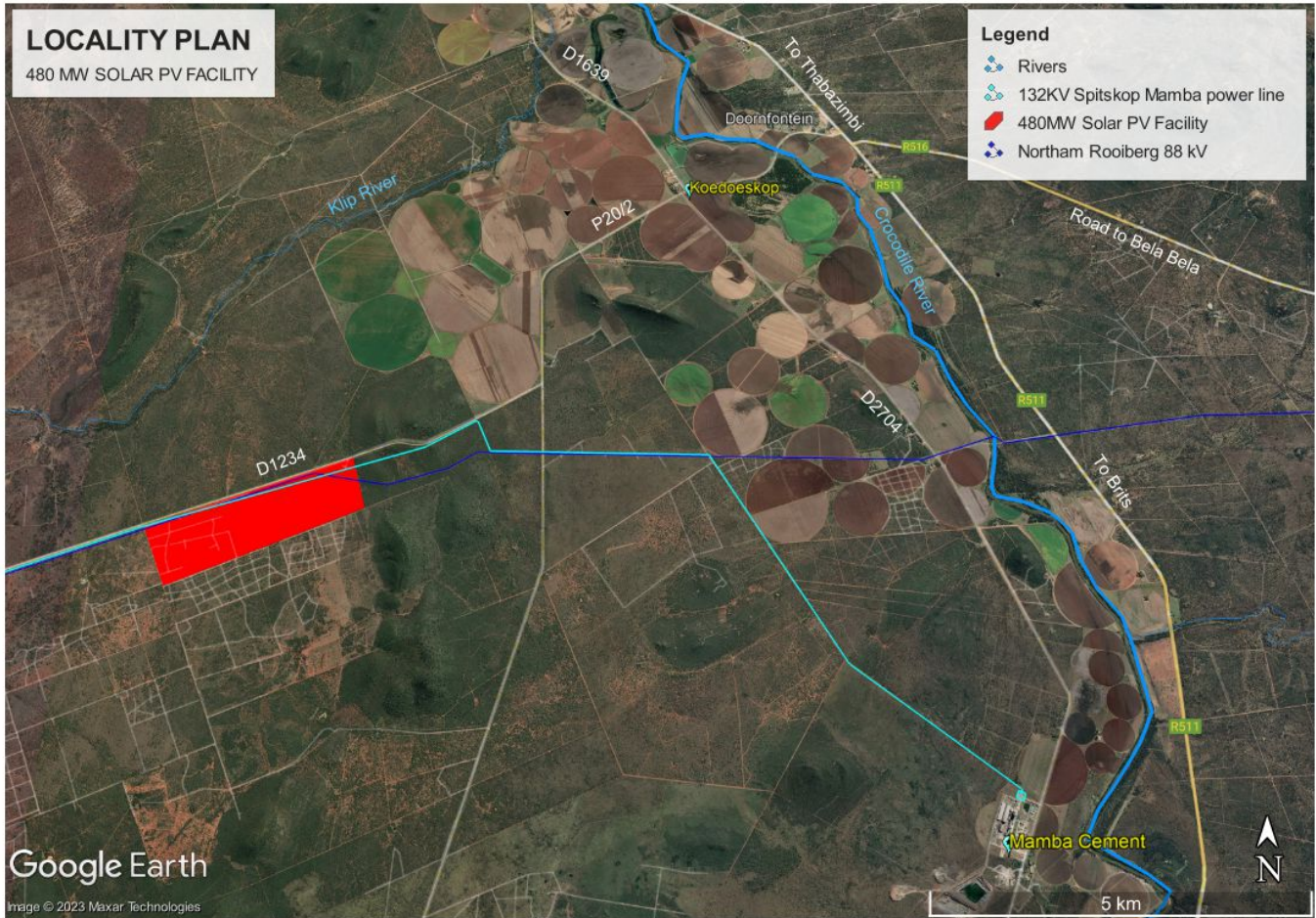


Figure 2: Project Locality Plan (Local Plan)

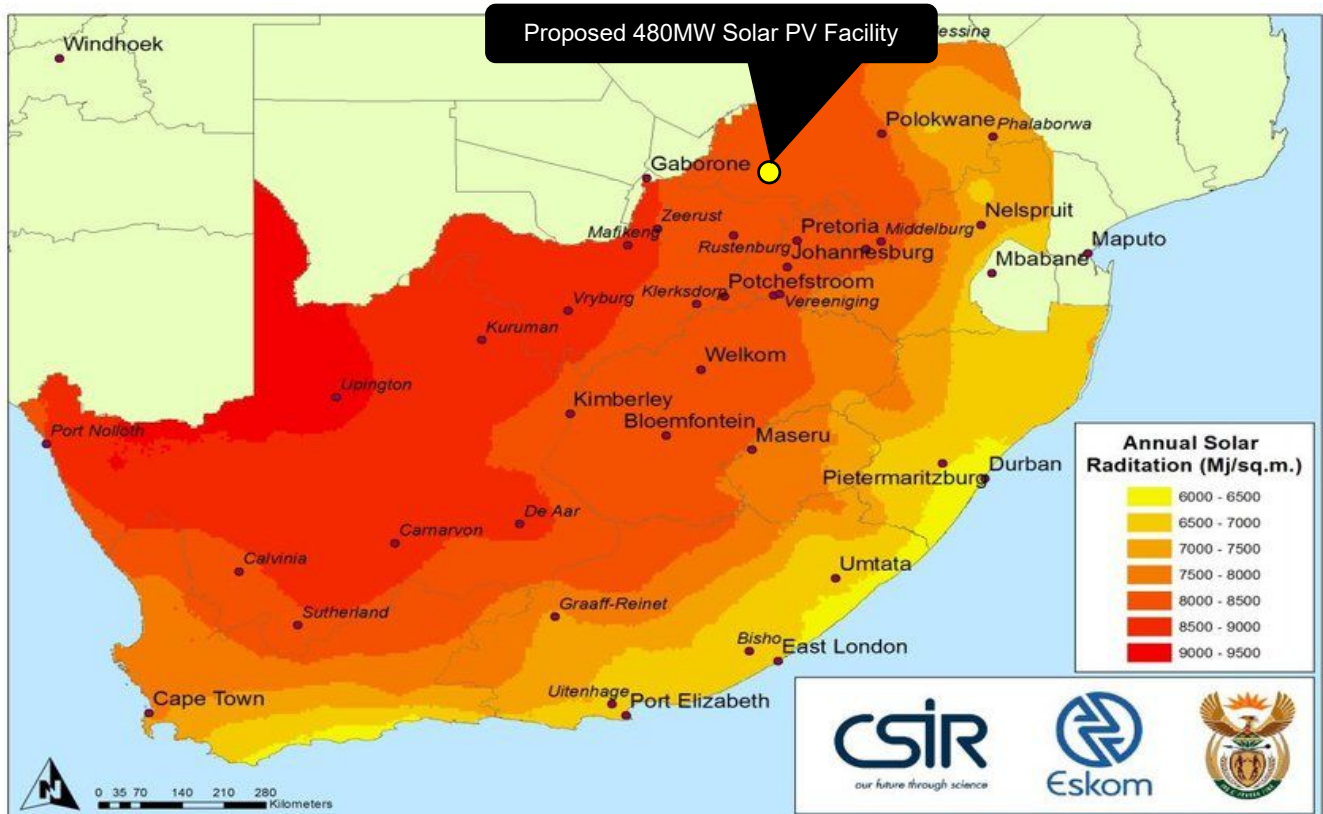


Figure 3: Annual Solar PV Radiation Plan of South Africa. The project site is indicated using a yellow dot/ circle. (Image courtesy of CSIR)



CONSERVA

Environmental Management Services

Registration and Comments Form

Scoping and EIA Process for Proposed
480MW Solar PV Facility at Koedoeskop,
Limpopo Province

INTERESTED AND AFFECTED PARTY REGISTRATION DETAILS:

TITLE:			
NAME AND SURNAME:			
CAPACITY			
ORGANISATION			
POSTAL ADDRESS			
TEL NO		CELL NO	
EMAIL ADDRESS			
INTEREST IN THE MATTER:			

Yes, I would like to participate in the EIA process.	YES
No, kindly remove me from the project mailing list.	NO

COMMENTS (You are welcome to use a separate sheet, if required)

Please provide details of a friend/neighbour/colleague whom we must add to the project mailing list:

Title: _____ Name: _____

Surname: _____ Organisation: _____

Tel: _____

Mobile: _____

Email: _____

Complete and return this form to CEMS
no later than **28 August 2023**.

Attention:

Marissa Botha / Maryke André

Email: conserva-ems@outlook.com

Tel: 084-226-5584



CONSERVA

Environmental Management Services

DATUM: 27 Julie 2023

Geagte Belanghebbende en of Geaffekteerde Party (B&GP)

KENNISGEWING VAN 'N OMGEWINGSIMPAK (OIS) STUDIE PROSES

VOORGESTELDE ONTWIKKELING VAN 'N 480MW FOTO-VOLTAÏESE SONKRAG-AANLEG OP GEDEELTE 1 VAN DIE PLAAS ZWARTWITPENSBOK FONTEIN 434-KQ, KOEDOESKOP, WATERBERG DISTRIK, LIMPOPO PROVINSIE (DBVO Verwysings nommer: Hangende)

Geliewe kennis te neem ingevolge Regulasie 41 (2)(b) van die Wet op Nasionale Omgewingsbestuur, 1998 (WNOB) OIS-regulasies van 2014 (SK. 326) van die aanvang 'n OIS-proses en publieke deelname vir die bogenoemde projek.

Ons vestig graag u aandag op die volgende:

- 'n Uitnodiging om as B&GP op die projekdatabasis te registreer; en
- U het nou geleentheid om die projek Agtergronds Inligtings Dokument (AID) te lees en insette te lewer.

Allied Green Energy (Edms) Bpk (AGE) beoog om 'n 480MW Fotovoltaïese Sonkrag-aanleg te ontwikkel van ongeveer 275-hektaar. Die aanleg sal geleë wees op Gedeelte 1 van die plaas Zwartwitpensbokfontein 434-KQ. Die eiendom val onder die jurisdiksie van Thabazimbi Plaaslike Munisipaliteit, 10km suidwes van Koedoeskop aggresend tot die D1234 Northam- Koedoeskoppad

AGE benodig omgewingsmagtiging onderhewig aan 'n OIS-proses vanaf die Nasionale Departement van Bosbou, Visserij en Omgewingsake (DBVO) alvorens hul die aanleg kan te ontwikkel. Magtiging word vereis omdat die projek verskeie geskeduleerde aktiwiteite sal insluit soos gepubliseer ingevolde die WNOB OIS-regulasies van 2014 d.w.s. SK. 327, SK. 325 en SK 324.

AGE sal ook aansoek doen by die Departement van Water en Sanitasie (DWS): Krokodil Opvangsbestuursgebied-agentskap vir óf 'n Algemene Magtiging (GA) óf Watergebruikslisensie (WGLA) ingevolge die Nasionale Waterwet (Wet 36 van 1998) vir watergebruike gespesifiseer ingevolge Artikel 21 (a) en (g).

Conserva Omgewingsbestuurs Dienste (CEMS) is aangestel as die onafhanklike omgewings-evaluerings praktisyn (OEP) om die omgewings-magtingsproses asook die WGLA deur te voer.

As deel van die aansoekproses moet ons B&GPe in kennis stel van die projek met die doel om u siening, insette en óf aanbevelings in te win vir die projek sodat dit die OIS-proses kan in lig.

Wat om te doen as u belangstel en óf geraak word?



Verwys na die ingeslote AID wat (i) meer projekbesonderhede verskaf, (ii) 'n oorsig gee van die OIS-proses en verduidelik (iii) hoe u by die proses betrokke kan raak. 'n Tydperk vanaf **28 Julie tot 28 Augustus 2023** word toegelaat om te registreer, die AID te lees en insette te lewer.

U kan die AID lees en die registrasie-en kommenaarvorm op die laaste bladsy van die AID voltooi. Rig die voltooiide vorm tesame met u naam, insae, kontakbesonderhede en belang in die projek aan conserva-ems@outlook.com of skakel ons by 084-226-5584 / 072-755-5103 vir meer inligting. Registrasies en insette moet voor of op 28 Augustus 2023 ingedien word.

Slegs geregistreerde B&GPe sal in kennis gestel word van enige toekomstige projek-kennisgewings/inligting na verstryking van die registrasie tydperk.

+2784-226-5584

conserva-ems@outlook.com



10 Knoppiesdoorn Laan, Thabazimbi, 0387

Eenmansaak: Marissa Ilse Botha (Pr. Sci.Nat), Maryke André (OEP)

Wat is volgende?

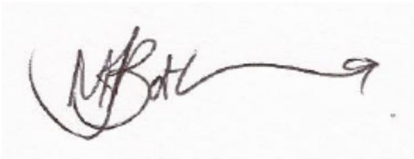
Insette wat gedurende die publieke registrasie tydperk ontvang word, sal:

- Beantwoord en vasgelê word in 'n Insette en Terugvoer-verslag; daarna,
- Ingesluit word in die Konsep Omvangsbepalings-verslag. Die verslag sal onderhewig wees aan 'n 30-dae publieke insae tydperk.
- Sodra die tydperk verstyk sal die verslag gefinaliseer en aan die DBVO voorgelê word vir aanvaarding.

Die Konsep Omvangsbepalings-verslag is die eerste verslag wat vrygestel word as deel van die OIS-proses. Dit word vrygestel om die publiek die geleentheid te gee om insette te lewer oor die voorgestelde projek, moontlike omgewings impakte en die omvang van die OIS-proses. Die verslag sal beskikbaar gestel word na afloop van die publieke registrasie tydperk.

CEMS sal registreerde B&GPe per e-pos en óf telefonies in kennis stel sodra die verslag beskikbaar is en ook waar dit verkry kan word,

Vriendelike groete,



en

Marissa Botha (Pr. Sci.Nat)

Conserva Omgewingsbestuurs Dienste

Senior Omgewings Wetenskaplike

10 Knoppiesdoorn Laan, Thabazimbi, 0387

Skakel: 084 226 5584 (Marissa)

E-pos: conserva-ems@outlook.com

Maryke André

Conserva Omgewingsbestuurs Dienste

Omgewings Evaluerings Praktisyn (OEP)

Skakel: 072-755-5103

E-pos: maryke.andre@gmail.com



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conserva-ems@outlook.com



10 Knoppiesdoorn Laan, Thabazimbi, 0387

AGTERGRONDS INLIGTING DOKUMENT (AID)

DBVO Verwysings nommer: Hangende

DATUM: 27 Julie 2023

DOEL VAN DIE DOKUMENT

Die Agtergrond Inligting Dokument(AID) dien as kennisgewing, ingevolge Regulasie 41(2)(b) van die WNOBOIS-Regulasies van 2014 (SK. 326), van die voorneme om 'n fotovoltaiëse sonkrag-aanleg en gepaardgaande infrastruktuur te ontwikkel by Koedoeskop in die Waterberg-distrik van die Limpopo-provinsie.

Die AID verskaf 'n kort beskrywing van die projek en magtigingsproses wat gevolg word om die nodige goedkeurings te verkry om die projek te ontwikkel. Dit dui ook aan hoe u betrokke kan raak en insette kan lewer indien u geraak word. Die AID bied u die geleentheid om:

- **Te registreer as 'n belanghebbende en geaffekteerde (B&GP) party.**
- **Aanvanklike insette/ bekommernisse/ kwessies** oor die projek binne die gegewe tydperk te lewer sodat dit in die opkomende OISOmvangsbepalings-verslag ingesluit kan word.

U word hiermee uitgenooi om te registreer, u belangstelling in die projek te staaf en u insette in te dien deur:

- Die AID te lees.
- Die registrasie vorm aan die einde van die AID te voltooi en te epos aan CEMS; en of
- 'n Brief te skryf / ons te kontak / e-pos te stuur.

Neem asseblief kennis dat slegs geregistreerde B&GPe in kennis gestel sal word van enige toekomstige projek-kennisgewings/inligting na verstryking van die registrasie tydperk..

Registrasies en insette moet voor of op die 28st Augustus 2023 ingedien word.

OEP KONTAKBESONDERHEDE:

Marissa Botha / Maryke André
Conserva Omgewingsbestuurs Dienste(CEMS)
10 Knoppiesdoorn Laan, Thabazimbi, 0387
Skakel: 084 226 5584 / 072 755 5103
E-pos: conserva-ems@outlook.com

1. PROJEK AGTERGROND

Allied Green Energy (Edms) Bpk(AGE) is van voorneme om 'n fotovoltaiëse sonkrag-aanleg met gepaardgaande infrastruktuur te ontwikkel op Gedeelte 1 van die plaas Zwartwitpensbokfontein 434-KQ.

Die eiendom val onder die jurisdiksie van Thabazimbi Plaaslike Munisipaliteit, 10km suidwes van Koedoeskop langs die D1234 Northam-Koedoeskop grondpad. GPS-koördinate. (Verwys na **Figuur 1** en **2** vir Liggingsplanne).

Die voorgestelde sonkrag-aanleg sal 'n totale opwekkingskapasiteit van tot 480MW hê, en 'n totale oppervlakte van ongeveer 275-hektaar beslaan. Die aanleg sal verbind met die Eskom-netwerk deur die bestaande 132kV Spitskop-Mamba-kraglyn wat die aanleg-eiendom kruis. Die aanleg sal verbind met die netwerk deur middel van 'n substasie en 132kVA kraglynverbinding.

2. WETLIKE VEREISTES

Die ontwikkeling lei tot 'n aantal geskeduleerde aktiwiteite soos gepubliseer in Staatskennisgewings (SK) No.SK. 324, SK. 325, en SK. 327 van 7 April 2017 (soos gewysig), wat omgewingsmagtiging vereis ingevolge die 2014 OIS-regulasies (SK. 326) gepubliseer ingevolge die Wet op Nasionale Omgewingsbestuur, 1998 (Wet 107 van 1998) (WNOB) vanaf die Nasionale Departement van Bosbou, Visserye en Omgewing (DBVO). Die aansoek is onderhewig aan 'n volledige Omvang- en OIS-proses.

Die sleutel aktiwiteite verbonde aan die projek sluit in: (a) SK. 325 (Kennisgewings Lys 2)Aktiwiteit 1: *Die ontwikkeling van 'n fasiliteit vir die opwekking van elektrisiteit uit 'n hernubare hulpbron waar die uitset 20MW of meer is en (b) Aktiwiteit 15: Die verwydering van inheemse plantegroei van 'n gebied van meer as 20-hektaar.*

'n Bykomende vereiste sal wees 'n Algemene Magtiging (AM) óf Watergebruiks-lisensie-aansoek (WGLA) ingevolge die Nasionale Waterwet, 1998 (Wet 36 van 1998) vir Artikel 21 (a) en (g) watergebruike vanaf die Departement van Water en Sanitasie (DWS). **CEMS is aangestel as die onafhanklike omgewings-evaluerings praktisyn (OEP) om die omgewingsmagtiging proses asook die WGLA deur te voer.**

3. PROJEK MOTIVERING

Suid-Afrika beleef 'n voortgesette nasionale energiekrisis en die landbousektor word besonder erg geraak. Daar is 'n dringende beroep gedoen vir die installasie van hernubare energiebronne om die gebrekkige Eskom-kragvoorsiening aan te vul.

AGE beoog om 66% sonkrag wat by die aanleg opgewek word aan Eskom te verkoop. 33% daarvan sal deur die nasionale netwerk aan privaat verbruikers (d.w.s. nabygeleë boere, myne) voorsien word en 1% sal aan Allied Farms (Edms) Bpk verskaf word vir kommersiële boerderyaktiwiteite.

Allied Farms (Edms) Bpk is 'n sustermaatskappy van AGE en produseer mielies, koring en sojabone te Koedoeskop. Die landbouprodusent kan nie bekostig om vir 1 dag sonder krag te wees nie. Die ontwikkeling van die sonkrag-aanleg sal 'n konsekwente kragtoevoer aan Allied Farms, insluitend nabygeleë boere, verseker.

4. PROJEK HAALBAARHEID

Suid-Afrika het een van die hoogste sonsbestralingsvlakke ter wêreld wat dit ideaal maak vir foto-voltaïse sonkrag installasies. Die land se jaarlikse 24-uur globale sonstraling is ongeveer 220 W/m² teenoor die wêreldgemiddeld van 100-150W/m².

Suid-Afrika het 'n groot hoë-stralings oppervlakte (ongeveer 194,000 km²) en Koedoeskop is een van die 'Hoë tot Matige' sonhulpbrongebiede in die land wat 8000-8500 Megajoule per vierkante meter kan produseer. (Verwys na **Figuur 3**).

Die opwekking van sonkrag by Koedoeskop is dus hoogs haalbaar en die eindverbruikers reeds bevestig.

5. SOLARKRAG-AANLEG LIGGING

AGE besit Gedeelte 1 van die plaas Zwartwitpensbokfontein 434-KQ. Dit is gesoneer vir 'Landbou', maar was voorheen as 'n wildsplaas bedryf.

Die eiendom het geen waterregte nie. Watergebruik in die Krokodil-Wes Besproeiingskema oorskry reeds die waterallokasie en daarom sal geen nuwe waterallokasie toegestaan word nie (*B. Greeff, DALRRD*). Droëlandboerdery is nie haalbaar by Koedoeskop nie en word ook nie deur die Departement van Landbou, Grondhervorming en Landelike Ontwikkeling (DLGLO) ondersteun nie.

Die 88kV Northam-Rooiberg, insluitend die 132kVA Spitskop-Mamba-kraglyne, kruis die ontwikkelings-eiendom, dus word net 'n kort aansluiting benodig. Dit is om hierdie redes dat AGE die eiendom gekies het om die sonkrag-aanleg te bou.

Die eiendom is ongeveer 377-hektaar waarvan 25% heuwelagtig en 75% plat is. AGE sal die aanleg bou op die plat westelike gedeelte van die eiendom wat 250-275 hektaar beslaan (d.w.s. omgewings impak evaluerings area).

Die presiese beskikbare ontwikkelbare area sal tydens die OIS-proses bevestig word op grond van die geotegniese ondersoek en bevindings van die spesialisstudies.

6. PROJEK KOMPONENTE

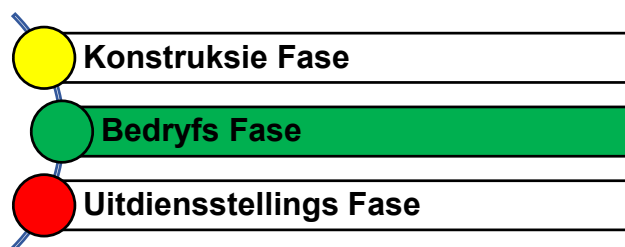
Die sonkrag-aanleg sal uit die volgende komponente bestaan:

- 480MW Sonpaneel-skikkings wat bestaan uit 1000-Watt enkelgesig sonpanele.
- Monteerstrukture en ondergrondse kables (AC/DC).
- Omskakelaars en transformators.
- 132 kVA Aanlegsubstasie.
- Kort 132 kVA kraglynerverbinding met die Eskom-netwerk.
- Operasionele-gebou en waghuis.
- Hoofingang vanaf die D1234 Northam-Koedoeskoppad insluitend interme toeganspaaie.
- Sekuriteitswoning (bestaande gebou wat opgegradeer sal word).
- Grensheining en stormwater infrastruktuur.
- Masjien- en materiaal bergingsarea.

Die battery-energiestoorstelsel is uitgesluit.

Die huidige sonpaneelgroottes wat plaaslik beskikbaar is, is 500-600 Watt panele, maar tegnologie verbeter vining, daarom sal AGE 1000-Watt-panele kan installeer.

Die sonkrag-aanleg projek sal uit drie fases bestaan:



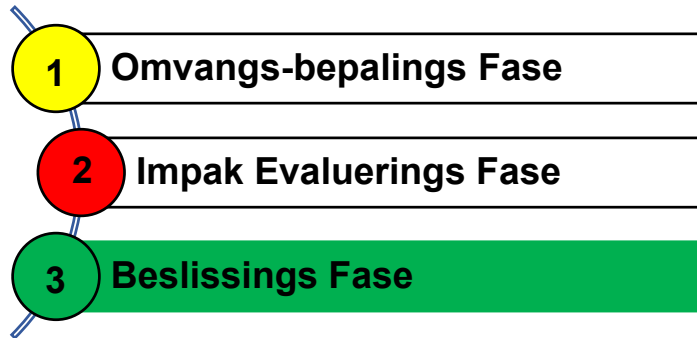
Dit sal ongeveer 24-maande neem om die aanleg te bou en operasioneel te kry. Die algemene lewensduur van 'n sonkrag-aanleg sal ongeveer 20-25 jaar wees. Die aanleg se sonpanele kan na 25-jaar vervang word óf die aanleg kan uit diens gestel word nadat dit sy lewensduur bereik het.

7. OMGEWINGS IMPAK STUDIE (OIS) PROSES

Die OIS is 'n beplannings- en besluitneminstrument wat gebruik word om die potensiële omgewings-, sosiale- en ekonomiese gevolge van 'n projek te bepaal, deur middel van 'n publiekedeelname proses. Die proses sal plaasvind indien die projek gemagtig word.

Publieke kwessies en bekommernisse moet dus betyds geïdentifiseer word sodat dit in die OIS-proses aangeteken en aangespreek kan word vir oorweging deur die bevoegde owerheid, DBVO.

Die OIS sal die DBVO asook die publiek in kennis stel van projek gevolge, sou dit gemagtig word. Die OIS-proses word uitgevoer in oorstemming met Regulasie 21 – 24 van die WNOB OIS-Regulasies (SK. 326 soos gewysig in 2017). Die proses bestaan uit drie fases:



Tydens die Omvangs-bepalingsfase word die potensiële negatiewe en positiewe impakte van die projek uitgelig sodat die fokus van die Impakfase bepaal kan word en die behoefte na meer gedetailleerde spesialisondersoeke vasgestel kan word. Die Omvangsbepalings-verslag is in effek 'n voorgestelde studie plan vir die OIS.

Die potensiële impakte sal geïdentifiseer word deur aanvanklike lessenaarstudies, terreinbesoeke, aanvanklike spesialisinsette, asook kommentaar vanaf die publiek en sleutelowerhede en die OEP se ervaring van soortgelyke projekte.

Die bevindings sal in 'n **konsep-omvangsbepalings-verslag voorgelê word en sal beskikbaar gestel word vir 'n tydperk van 30-dae vir publieke insae.**

Sodra die DBVO die Omvangsbepalings-verslag(OBV) goedkeur, sal die Impak- evalueringsfase begin, waartydens gedetailleerde spesialisondersoeke gedoen sal word wat sal fokus op die kwessies wat tydens die Omvangs-bepalingsfase geïdentifiseer is. Die bevindings sal in 'n **konsep-Omgewingsimpak-verslag (OIV)** voorgelê word. Die OIV sal 'n oorsig gee van die potensiële projek impakte, insluitend die voorgeskrewe bestuursmaatreëls wat gevolg moet word om die impakte te bestuur/verminder.

'n **Omgewingsbestuurs-program (OBP)** wat ge-oudit kan word sal opgestel word met aanbevelings oor die nakoming van omgewingsbestuurs-spesifikasies deur AGE tydens die konstruksie-, bedryfs- en uitdienstellingsfases van die aanleg. **Beide konsep OIV en OBP sal vrygestel word vir 30-dae publieke insae.**

Die finale verslae sal by die DBVO ingedien word wat binne 107 dae 'n besluit oor die aansoek sal neem.

B&GPe sal in kennis gestel word van die beslissing en die dan die geleentheid om teen die beslissing te appelleer.

Die OIS-proses word geregleer op 300-dae. Dit bestaan uit die volgende basiese stappe wat in Figuur 4 aangebied word:



8. WATERGEBRUIKS-LISENSIE

Die sonkrag-aanleg benodig water vir konstruksie-aktiwiteite en huishoudelike gebruik (d.w.s. waghuis, sekuriteitswoning) gedurende die bedryf van die aanleg.

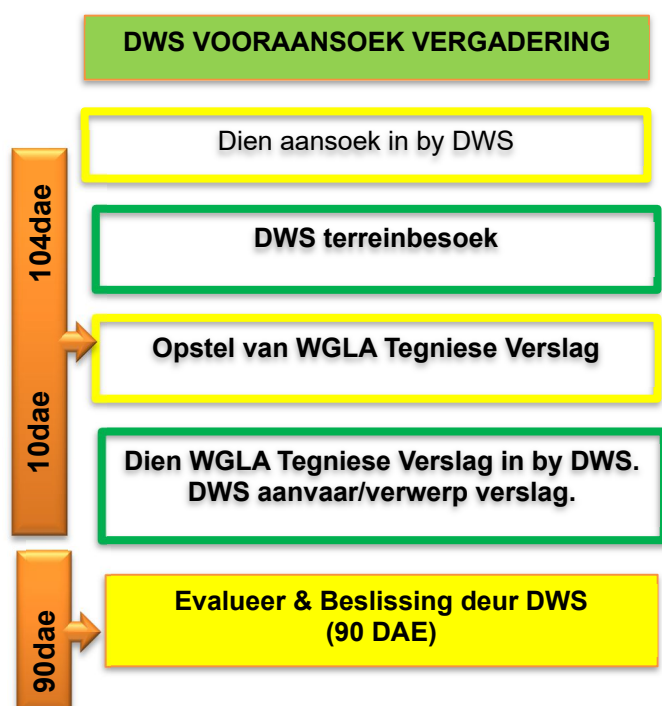
Daar is 'n bestaande septiese tenk en syferput op die eiendom waar met gryswater van die waghuis en sekuriteitswoning weggedoen kan word.

AGE sal dus ook aansoek doen by die DWS Krokodil Opvangsbestuursgebied-agentskap vir óf Algemene Magtiging (AM) / Watergebruiks-lisensie ingevolge Artikel 39/40 van die Nasionale Waterwet (Wet 36 van 1998) (NWW) vir watergebruike gespesifiseer ingevolge Artikel 21 (a) en (g). Die DWS sal bevestig of die verwagte gebruiksvolumes oor die algemeen gemagtig of gelisensieer moet word. Die toepaslike watergebruike sluit in:

- **Artikel 21 a** – Ontrekking van water vanuit 'n boorgat vir huishoudelike gebruik.
- **Artikel 21 g** – Ontslae raak van gryswater deur middel van 'n septiese tenk en syferput.

Die aansoek sal onderhewig wees aan 'n WGLA-prosedure soos uiteengesit in die NWW WGLA-regulasies van 2017 (SK. 267). Die basiese stappe sluit in:

- Vooraansoek vergadering met die DWS.
- Indien van die WGLA by DWS.
- Departementele terreinbesoek.
- Opstel en indien van Watergebruik Tegnieiese Verslag by DWS.
- DWS lees en evalueer aansoek dokumente.
- DWS reik beslissing uit vir watergebruikslisensie-aansoek.
- OEP stel die B&GPe in kennis van die beslissing.



9. POTENSIELE IMPAKTE & VEREISTE SPESIALISSTUDIES

Verskeie potensiele impakte is geïdentifiseer wat tydens die OIS-proses verder ondersoek sal word. Die potensiele impakte is gebaseer op die DBVO se GIS-gebaseerde nasionale omgewingsiftingsinstrument en tipiese bekende impakte vir sonkrag-aanlegte.

Die volgende spesialisstudies sal voltooi word as deel van die OIS-proses, gebaseer op die geïdentifiseerde sleutelimpakte:

- Geotegniese ondersoek
- Landbou Potensiaal Verklaring
- Akwatiese Verklaring (strome, riviere, vleilande)
- Erfenis Impaktudie
- Paleontologiese veldstudie
- Vlak 3 Visuele Impakstudie
- Ekologiese Impakstudie
- Regime 2 Avifauna-studie

Bykomende impakte kan bygevoeg of as onbeduidend beskou word op grond van die bevinding van verdere terreinondersoeke en insette wat van die publiek ontvang is.

10. PUBLIEKE DEELNAME (PD)

Publieke deelname (PD) is 'n sleutelkomponent van die OIS-proses en sal in ooreenstemming met beide die WNOB OIS-regulasies (regulasie 39-44) en die NWW uitgevoer word.

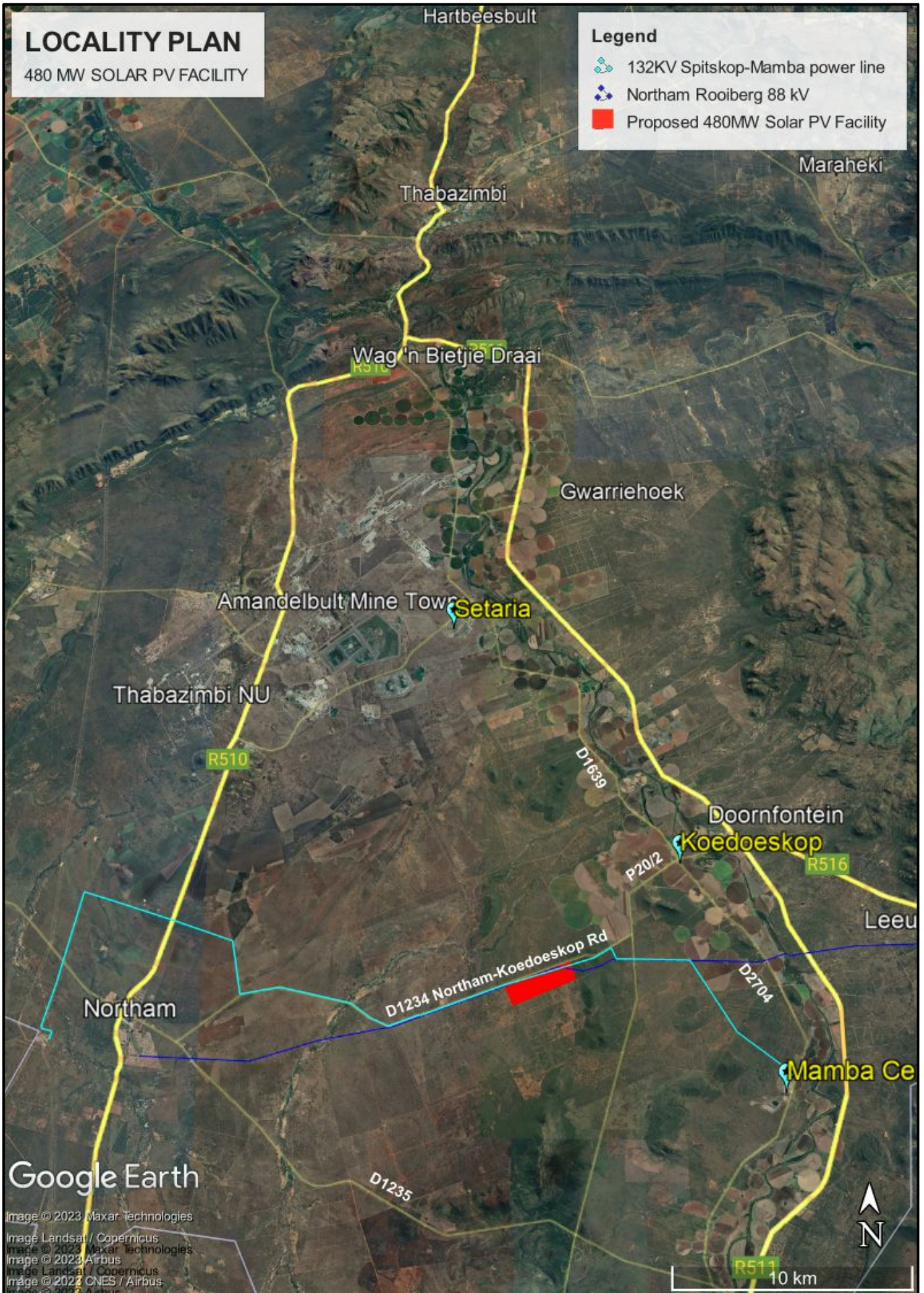
The PD het ten doel om B&GPe te betrek en 'n geleentheid te bied om hul sienings oor die omgewingsimpak van die aansoek te opher. Alle publieke kwessies en sienings oor die projek impakte word in die OIS-proses gedokumenteer, aangespreek en daarop gereageer en in omgewingsverslae opgeneem vir oorweging deur die DBVO.

Dit is belangrik dat B&GPe vanaf die begin geïdentifiseer word en betrokke raak by die OIS-proses om die studieplan so omvattend moontlik te maak. Die publiek word aangemoedig om by die OIS-proses betrokke te raak deur:

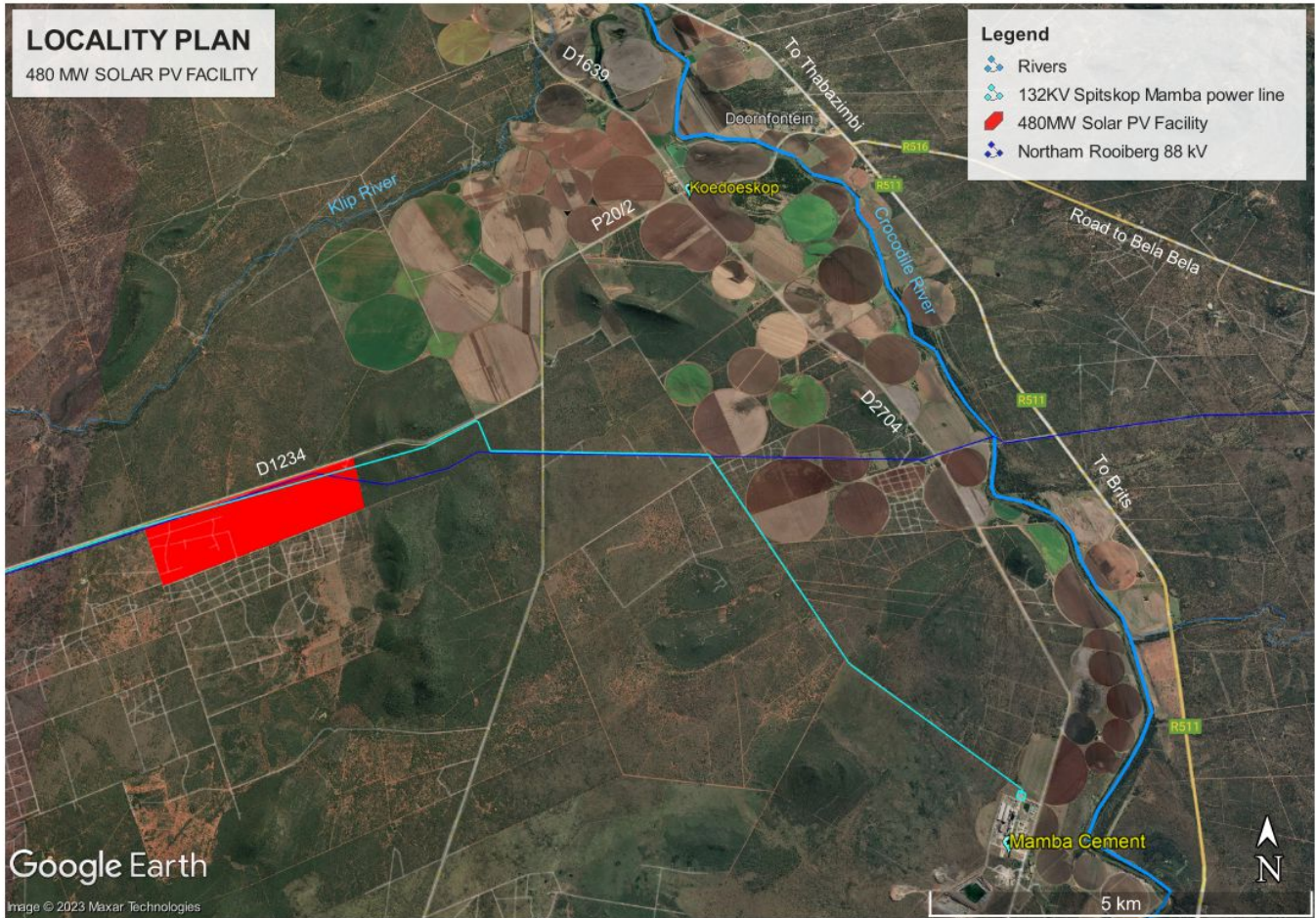
- Te registreer as 'n belanghebbende en geaffekteerde party.
- Vergewis u self van die inhoud van die AID, Konsep Omvangsbepalings-verslag asook OIV, OBP en lewer u insette daarop.

Doelgerigte vergaderings sal ook gehou word met belangrike sleutelowerhede en belanghebbendes soos vereis tydens die OIS-proses.

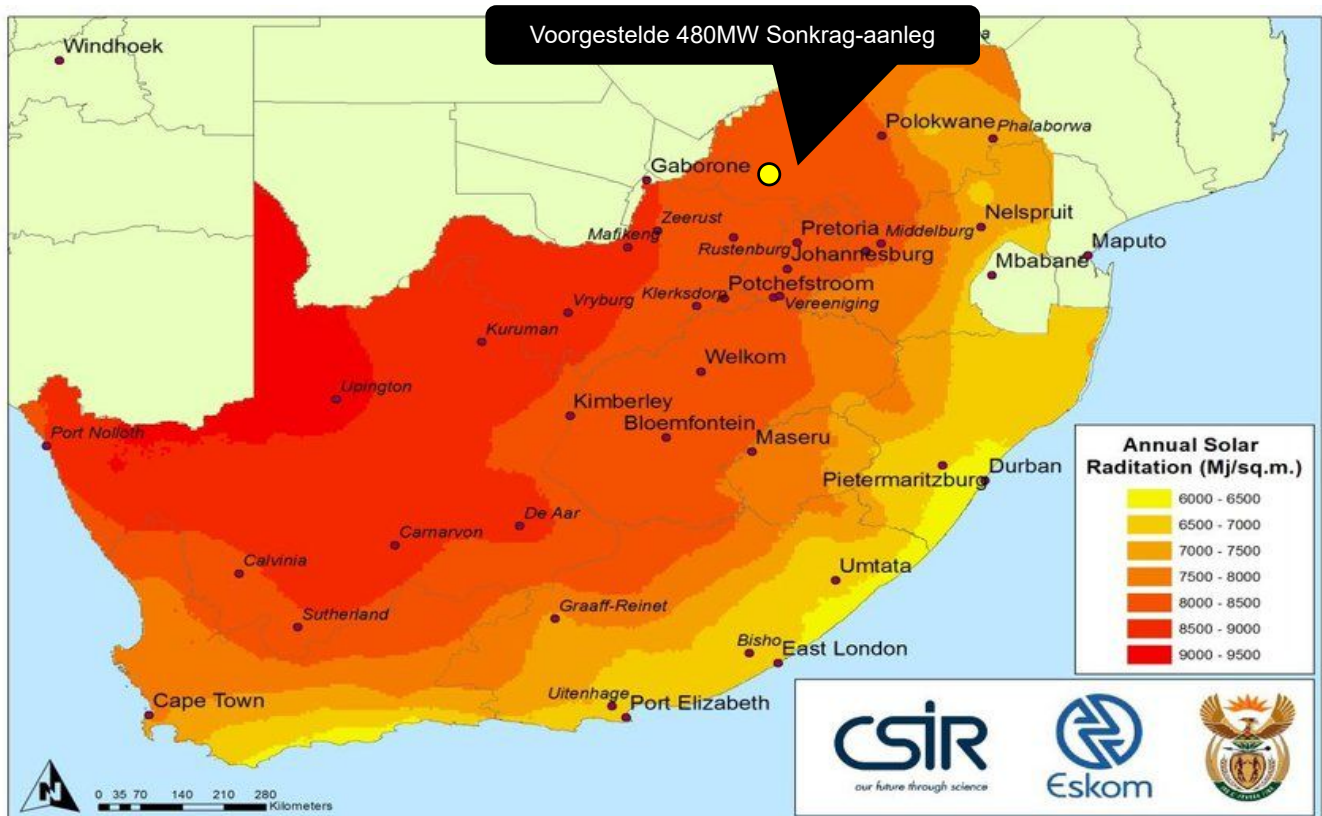
Om verdere kommunikasie rakende die projek te ontvang, registreer asseblief deur die aangehegte registrasievorm in te vul en dit **voor of op 28 Augustus 2023** aan CEMS terug te stuur.



Figuur 1: Projek Liggingsplan (Streek)



Figuur 2: Projek Liggingsplan (Lokaal)



Figuur 3: Jaarlikse sonkrag-PV-stralingsplan van Suid-Afrika. Die projekterrein word aangedui met behulp van 'n geel punt / sirkel. (Beeld met vergunning van WNNR)



CONSERVA

Environmental Management Services

Registrasie en Kommentaarvorm

OIS-proses vir die Voorgestelde 480MW
Fotovoltaïese Sonkrag-aanleg te
Koedoeskop, Limpopo Provinsie

BELANGHEBBENDE EN GEAFFEKTEERDE PARTYE REGISTRASIE BESONDERHEDE:

TITEL:			
NAAM EN VAN:			
POSISIE:			
ORGANISASIE:			
POS ADRES:			
TELEFOON NR.:		SELFOON NR.:	
E-POS ADRES:			
BELANG IN DIE PROJEK:			

Ja, ek wil graag aan die OIS-proses deelneem.	JA
Nee, verwyder my asseblief van die projekposlys.	NEE

INSETTE/KOMMENTAAR (Indien nodig is u welkom om 1 aparte vel papier by te voeg)

Verskaf asseblief besonderhede van 'n vriend/buurman/kollega wat ons by die projekposlys moet voeg:

Titel: _____ Naam: _____

Van: _____ Organisasie: _____

Telnr: _____

Selfoon nr: _____

E-pos: _____

Voltooi en stuur hierdie vorm terug aan
CEMS voor of op 28 Augustus 2023.

Vir Aandag:

Marissa Botha /Maryke André

E-pos: conserva-ems@outlook.com

Tel nr: 084-226-5584