

# **Appendix C3**

## **Background Information Letter**



MAY  
2022



ENVIRONMENTAL IMPACT ASSESSMENT AND PUBLIC PARTICIPATION PROCESS

**SBPM & SCSC SOLAR PHOTOVOLTAIC FACILITIES AND ASSOCIATED INFRASTRUCTURES, FOR THE SIYANDA BAKGATLA PLATINUM MINE, WITHIN THE THABAZIMBI LOCAL MUNICIPALITY, LIMPOPO PROVINCE AND THE MOSES KOTANE LOCAL MUNICIPALITY,**

NORTH WEST PROVINCE



The development of two separate solar photovoltaic (PV) facilities, each with a generating capacity of up to 100MW, and associated infrastructures is proposed on the farms Portion 3 and Portion 4 of the farm Grootkuil 409 located approximately 6.5km west of the town of Northam in the Limpopo Province. The two solar PV facilities are to be known as SBPM Solar PV and SCSC Solar PV. The facilities are located within the Thabazimbi Local Municipality of the Waterberg District Municipality. The proposed grid connection routes for the PV developments for the Siyanda Bakgatla Platinum Mine extend to the North West Province within the Moses Kotane Local Municipality and the Bojanala Platinum District Municipality.

The nature and extent of the two solar PV facilities for the Bakgatla mine are explored in more detail in this Background Information Document (BID). A full Scoping and Environmental Impact Reporting (S&EIR) process is being undertaken in support of an application for Environmental Authorisation (EA) for the development of the respective PV facilities. The public participation processes for the projects will be undertaken concurrently, providing the public with an opportunity to comment on all projects simultaneously. Each solar PV facility will be constructed as a separate stand-alone project, with a separate project development company (or Special Purpose Vehicle (SPV)) as the applicant for each project. The project details for the respective projects are as follows:

Applicant:	Project Name:
Main Street 1886 Proprietary Limited	SBPM Solar PV
Main Street 1887 Proprietary Limited	SCSC Solar PV

#### 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 facilities and associated infrastructure.
- » An overview of the Environmental Impact Assessment (EIA) processes and specialist studies being undertaken to assess each of the projects.
- » Details of how you can become involved in the EIA processes, receive information, or raise comments that may concern and/or interest you.





## OVERVIEW OF THE PROJECTS

A project site considered to be suitable for the development of two solar PV facilities, with an extent of approximately 1138 hectares (ha) in total, was identified by the project developer. The dedicated development area for each solar PV facility does not exceed 250ha in extent. The facility development area as well as grid connection solution will be evaluated in the Scoping phase to identify sensitivities. Once constraining factors have been confirmed, the layout of the solar PV facilities within the development areas can be planned to minimise social and environmental impacts.

The layout for each facility will be designed to avoid sensitive environmental areas and features and is likely to be smaller than the development area identified for the scoping phase. Details for the respective projects are as follows:

Project Name:	Affected property:	Contracted Capacity:	Development Area:
SBPM Solar PV	<p>Solar PV:</p> <ul style="list-style-type: none"> <li>» Portion 4 of Farm Grootkuil 409</li> </ul> <p>Grid connection:</p> <ul style="list-style-type: none"> <li>» Portion 3 of Farm Grootkuil 409</li> <li>» Portion 4 of Farm Grootkuil 409</li> <li>» Portion 5 of Farm Grootkuil 409</li> <li>» Portion 0 of Farm Spitskop 410</li> <li>» Portion 0 of Farm Turfbult 404</li> <li>» Portion 1 of Farm Zwartklip 405</li> <li>» Portion 2 of Farm Zwartklip 405</li> </ul>	100MW	574ha
SCSC Solar PV	<p>Solar PV:</p> <ul style="list-style-type: none"> <li>» Portion 3 of Farm Grootkuil 409</li> </ul> <p>Grid connection:</p> <ul style="list-style-type: none"> <li>» Portion 3 of Farm Grootkuil 409</li> <li>» Portion 4 of Farm Grootkuil 409</li> <li>» Portion 5 of Farm Grootkuil 409</li> <li>» Portion 0 of Farm Spitskop 410</li> <li>» Portion 0 of Farm Turfbult 404</li> <li>» Portion 1 of Farm Zwartklip 405</li> <li>» Portion 2 of Farm Zwartklip 405</li> </ul>	100MW	564ha

The infrastructure associated with each 100MW solar PV facility will include:

- » 100MW Solar PV array comprising PV modules and mounting structures.
- » Inverters and transformers.
- » Cabling between the project components.
- » Battery Energy Storage System (BESS).
- » On-site facility substation and power lines between the solar PV facility and the Mine and Eskom substations.
- » Site offices, Security office, operations and control, and maintenance and storage laydown areas.
- » Access roads, internal distribution roads

The power generated by the solar PV facility will be transferred to the three step up transformers at the on-site/plant substation. Power will then be delivered from each step-up transformer as follows:

- » Two 6.6 km, 33 kV transmission lines to the Mortimer substation with four step down transformers (33/6.6 kV; 10 MVA),
- » Two 4.7 km, 33 kV transmission lines to the Fridge substation with two step down transformers (33/6.6 kV; 10 MVA),
- » Two 2.9 km, 33 kV transmission lines to the Ivan substation with three step down transformers (33/11 kV; 10 MVA)
- » 132kV transmission line to the south west area of the SCSC solar PV (where a new furnace substation (to be assessed through separate EIA processes) is proposed.

The site is accessible via the Swartklip Road which branches off the R510 provincial route.

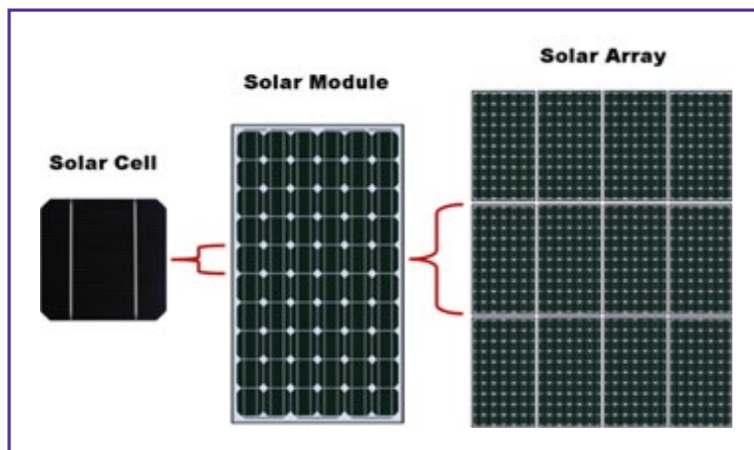


## MORE ABOUT SOLAR PV TECHNOLOGY

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.

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

### 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.

## 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 applicants require EA from the National Department of Forestry, Fisheries and the Environment (DFFE) in consultation with the Limpopo Department of Economic Development, Environment and Tourism (LDEDET) and the North West Department of Rural, Environment, and Agricultural Development. 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 two applications for EA are subject to the completion of Scoping and EIA (S&EIA) processes. Each 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 applications for EA and undertaking the supporting EIA process required to identify and assess potential environmental impacts associated with the projects, as well as propose appropriate mitigation and management measures to be contained within the Environmental Management Programmes (EMPrs). I&APs will be actively involved in the EIA processes through the public participation process.

#### **WHAT ARE THE POTENTIAL ENVIRONMENTAL IMPACTS ASSOCIATED WITH THE PROPOSED PROJECTS?**

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

- » Biodiversity impact assessment – includes consideration of impacts on ecology and freshwater, fauna and flora and assessment of the potential impact and the associated disturbance of vegetation on the biodiversity (including critical biodiversity areas and broad-scale processes).
- » Avifauna impact assessment – includes an assessment of impacts on sensitive avifaunal species, avifaunal habitats and sensitive features.
- » Soils, Land Use, and Agricultural Potential impact assessment – includes an assessment of land types and the significance of loss of agricultural land and soil degradation and/or erosion.
- » Heritage (Archaeology and Palaeontology) impact assessment – includes assessment of impacts on archaeology and palaeontology and the potential of disturbance to or destruction of heritage sites and fossils during the construction phase through excavation activities.
- » Social impact assessment – including an assessment of the positive and negative social impacts of the solar PV facilities and the grid connection solution.

The independent specialist studies will be undertaken wherein the potentially significant impacts will be identified, assessed and ground-truthed. Practical and achievable mitigation measures will be recommended in order to minimise the significance of the potential impacts identified. These recommendations will be included within an EMPr compiled for the projects.

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 processes. Comments and inputs from I&APs are encouraged to ensure that potential impacts are considered throughout the EIA processes. The public participation process aims to ensure that:

- » Information containing all relevant facts in respect of the applications are 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 proposed projects.
- » Adequate review periods are provided for I&APs to comment on the findings of the Scoping/EIA Reports.

An integrated public participation process will be conducted for both PV projects and associated grid connection solutions. To ensure effective participation, the public participation processes include the following:

- » Identifying I&APs, including affected and adjacent land-owners 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 processes and distributing the Background Information Document (BID).
- » 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 the Platinum Bushvelder 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 processes, you must register yourself on the I&AP database.
- » You must ensure that any comments regarding the proposed projects are submitted within the stipulated time-frames.
- » You are required to disclose any direct business, financial, personal, or other interest that you may have in the approval or refusal of the applications.





## 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 contacting the environmental consultant with queries or comments.
4. 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.

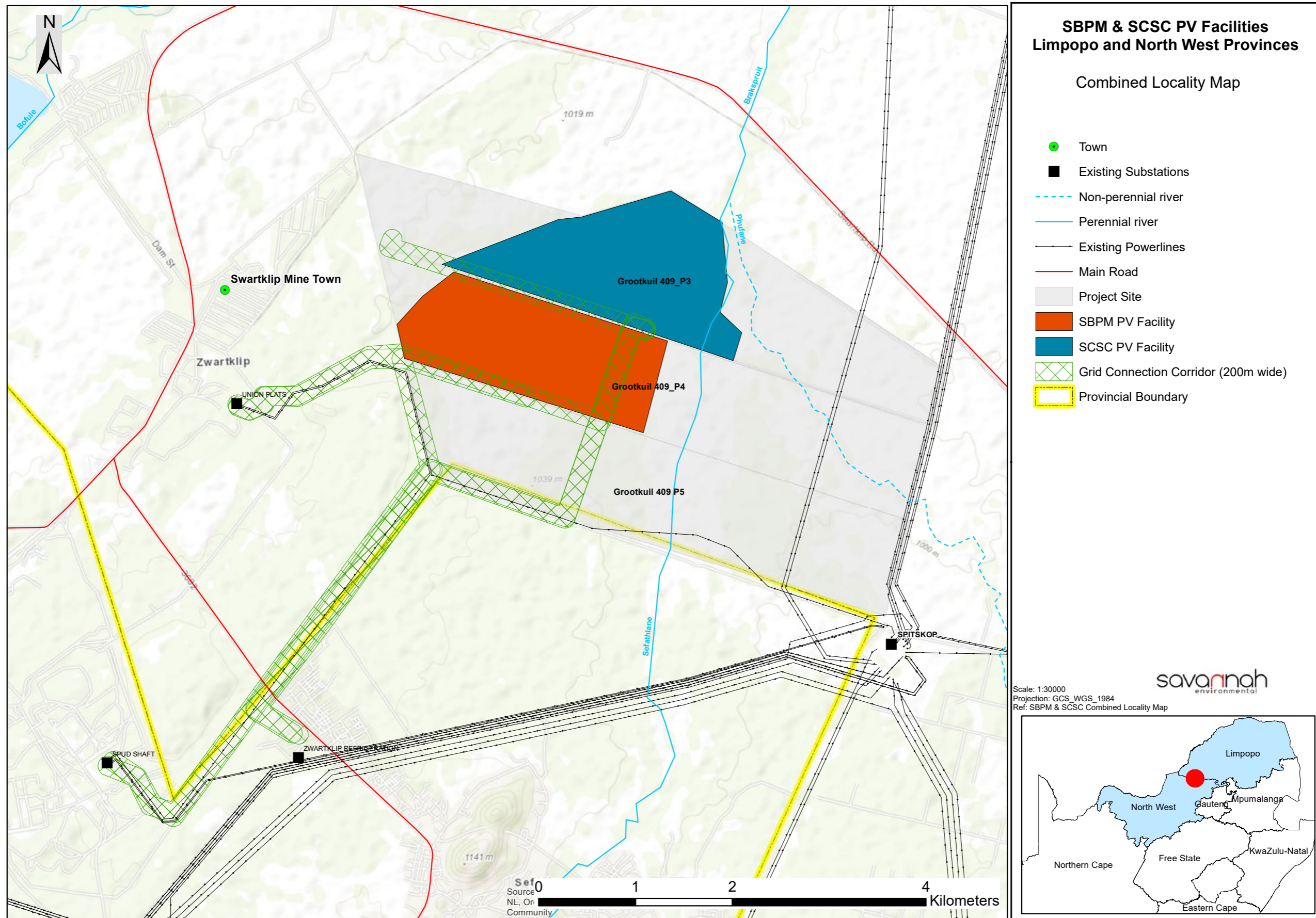
If you consider yourself an I&AP for the proposed projects, we urge you to make use of the opportunities created by the public participation process to provide comment, raise issues and concerns which affect and / or interest you, or request further information. Your input forms a key element of the EIA processes.

By completing and submitting the accompanying reply form, you automatically register yourself as an I&AP for the proposed projects, and are ensured that your comments, concerns, or queries raised regarding the projects will be noted. Please note that all comments received will be included in the project documentation. This may include personal information.





Figure 1: Overall layout of the proposed infrastructure







## COMMENTS AND QUERIES

Direct all comments, queries or responses to:

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To view project documentation, visit  
[www.savannahsa.com/public-documents/energy-generation/](http://www.savannahsa.com/public-documents/energy-generation/)

