

MAART 2012

OMGEWINGSIMPAKEVALUERINGSPROSES

OPRICHTING VAN DIE VOORGESTELDE

SAN SONKRAGAANLEG

NABY KATHU, NOORD-KAAPPROVINSIE

'N INISIATIEF VAN
SAN SONKRAGAANLEG (EDMS.) BPK.

AGTERGRONDINLICHTINGSDOKUMENT



San Sonkragaanleg (Edms.) Bpk. stel die oprigting voor van 'n kommersiële sonkragaanleg en gepaardgaande infrastruktuur op 'n terrein wat ongeveer 16 km suid-oos van Kathu in die Noord-Kaapprovinsie geleë is. San Sonkragaanleg het 'n gunstige terrein vir oorweging en evaluering ooreenkomstig die Regulasies op Omgewingsimpakteenvaluering (OIE-regulasies) geïdentifiseer. Die voorgestelde aanleg sal hierna die San Sonkragaanleg genoem word, en die aard en omvang van dié aanleg sal in meer besonderhede in hierdie dokument ondersoek word.

DOEL VAN HIERDIE AGERGRONDINLIGTINGSDOKUMENT

Hierdie dokument poog om u, as 'n belangstellende en/of geaffekteerde party (B&GP), te voorsien van:

- » 'n oorsig van die voorgestelde sonkragaanleg;
- » 'n oorsig van die OIE-proses (insluitend die Bestekopname- en 'n OIE-fase) en die spesialisstudies wat onderneem word ten einde die potensiële impakte van die voorgestelde projek, positief sowel as negatief, te evalueer; en
- » besonderhede van hoe u by die OIE-proses betrokke kan raak, inligting kan ontvang of vraagstukke kan opper wat u dalk kan raak en/of vir u van belang kan wees.

OORSIG VAN DIE VOORGESTELDE PROJEK

Die San Sonkragaanleg word voorgestel op die Restant van die plaas Wincanton 472 wat in die Gamagara Plaaslike Munisipaliteit geleë is. Die voorgestelde terrein word verkies danksy Klimaatstoestande (hoofsaaklik omdat die ekonomiese lewensvatbaarheid van 'n sonkragaanleg direk afhang van die jaarlikse direkte sonbestralingswaardes vir 'n spesifieke gebied), orografiese toestande, reliëf en aspek, en die beskikbaarheid van 'n roosterkonneksie (d.i. die konneksiepunt met die nasionale elektrisiteitnet).

Daar word aan die hand gedoen dat die aanleg verskeie reekse fotovoltaïese (FV) sonpanele en/of konsentrerende fotovoltaïese sonpanele met 'n opwekkingsvermoë van sowat 75 Megawatt elektrisiteit en die volgende gepaardgaande infrastruktuur sal insluit:

- » FV sonpanele met 'n opwekkingsvermoë van 75 MW;
- » 'n Wisselrigter om die krag te verhoog en 'n klein substasie op die terrein om die verbinding tussen die sonkragaanleg en Eskom se elektrisiteitnet moontlik te maak;
- » 'n kraglyn
- » interne toegangspaaie; en
- » 'n werkswinkelgebied vir instandhouding en berging.

Die voorgestelde ontwikkeling, wat die gepaardgaande infrastruktuur insluit, kan na behore op die geïdentifiseerde terrein geplaas word, wat 'n totale oppervlak van sowat 8 km² beslaan. Die omvang van die breër terrein is groter as die ruimte wat benodig word vir die aanleg se ontwikkelingsvoetspoor. Die FV-panele en gepaardgaande infrastruktuur kan dus na behore binne die grense van die breër gebied versprei word, terwyl gepoog word om omgewingsensitiewe

gebiede te vermy wat deur die OIE-proses geïdentifiseer is.

Terreinspesifieke studies sal onderneem word ten einde die gelokaliseerde impak van die voorgestelde ontwikkeling te evalueer en om sensitiewe gebiede in die breër gebied af te merk. Sodra die beperkende omgewingsfaktore bepaal is, kan die uitleg van die voorgestelde aanleg afgehandel en in besonderhede in die OIE-fase geëvalueer word.

SONKRAGAAANLEGTE

Die aanwending van sonbestraling vir kragopwekking word as 'n nie-verbruikende benutting van 'n natuurlike hulpbron geag, wat geen kweekhuiskas vrystel nie. Die opwekking van hernubare krag sa bydra tot Suid-Afrika se elektrisiteitsmark, wat tot dusver grootliks deur steenkoolkragopwekking oorheers was. Die vooruitgang van hernubare energie is 'n prioriteit vir Suid-Afrika, aangesien die regering 'n 10-jaar teiken van 10 000 GWh (Gigawatt Uur) van elektrisiteit teen 2013 gestel het, as deel van sy Witskrif op Hernubare Energie. Voorts beklemtoon onlangse beleid die wenslikheid vir skoon, groen energie en energie wat deur sonkrag opgewek word sal 'n belangrike rol speel om hierdie kwotas te bereik.

Sonkragaanlegte, soos dié wat van FV-tegnologie gebruik maak, wend die son se energie aan om elektrisiteit op te wek deur 'n proses wat as die Fotovoltaïese Effek bekend staan. In leketaal verwys dit na ligfotone wat elektrone na 'n hoër staat van energie stamp om elektrisiteit op te wek. FV-aanlegte bestaan uit die volgende:

Fotovoltaïese Selle

'n Fotovoltaïese sel bestaan uit silikon wat as halfgeleier optree wat gebruik word om die fotovoltaïese effek voort te bring. Individuele FV-selle word aanmekaar geskakel en agter 'n beskermende glaspaneel geplaas om 'n FV-paneel te vorm.

Optika

Konsentreerende FV-tegnologie bestaan normaalweg uit verskillende optiese elemente, soos spieëls en Fresnel-lense, wat gebruik word om sonbestaling op 'n punt te konsentreer waar 'n fotovoltaïese sel geplaas is. Om die son se radiasie te konsentreer, help om die potensiële elektrisiteitopwekking te maksimaliseer.

Wisselrigter

Die fotovoltaïese effek wek elektrisiteit in 'n gelykstroom op. 'n Wisselrigter moet dus gebruik word om dit in 'n wisselstroom om te sit.

Steunstruktuur

Die FV-paneel sal op 'n steunstruktuur aangebring word wat teen 'n hoek gemonteer is om die maksimum sonbestraling te ontvang. Die hoek van die paneel hang af van die breedteligging van die voorgestelde aanleg. Die hoek van die steunstruktuur kan dus in die winter en somer verstel word ten einde die kenmerke van somer- en winteronbestraling te optimaliseer.



Die FV-paneel is ontwerp om vir langer as 20 jaar ononderbroke, onbeman en met min instandhouding bedryf te word. Die voorgestelde ontwikkeling sal uit verskeie FV-reekse bestaan met 'n opwekkingsvermoë van 75 MW elektrisiteit. Konstruksie sal na raming tot twee jaar neem en ingebruikneming sal deur ervare, kundige personeel geskied.

OMGEWINGSIMPAKTEVALUERINGSPROSES

Ingevolge die OIE-regulasies wat kragtens Artikel 24(5) van die Nasionale Wet op Omgewingsbestuur (NEMA, Wet 107 van 1998) gepubliseer is, verlang Vexen Trading and Investments magtiging van die Nasionale Departement Omgewingsake (DEA) (in oorleg met die Noord-Kaapse Departement Omgewingsake en Natuurbewaring (DENC)) vir die onderneming van die voorgestelde projek. Hierdie projek is by die DEA geregistreer onder aansoekverwysingsnommer 14/12/16/3/3/2/273.

Ingevolge Artikel 24 en 24D van NEMA, saamgelees met die OIE-regulasies van Staatskennisgewing 543, R544, R545 en R546, word 'n Bestekopname- en OIE-fase vir die voorgestelde projek verlang. Ten einde magtiging te verkry, moet omvattende, onafhanklike omgewingstudies ingevolge die OIE-regulasies onderneem word.

'n OIE is 'n doeltreffende beplannings- en besluitnemingswerktuig. Dit bring mee dat die potensiele omgewingsverwante gevolge wat voortspruit uit die voorgestelde aktiwiteit, geïdentifiseer en na behore bestuur word tydens die oprigting en bedryf daarvan. Dit bied die applikant die geleentheid om vooraf gewaarsku te wees teen potensiele omgewingsvraagstukke en bied die geleentheid om die vraagstuk(ke) waarvoor verslag gedoen word in die OIE-verslag, asook uit dialoog met B&GP's, op te los.

San Sonkragaanleg het Savannah Environmental aangestel as onafhanklike omgewingskonsultante om die nodige Bestekopnamefase en OIE te onderneem ten einde alle potensiele omgewingsimpakte wat met die voorgestelde projek gepaard gaan, te identifiseer en te evalueer, en om gepaste versagtings- en bestuursmaatreëls in 'n Omgewingsbestuursplan (EMP) voor te stel. As deel van hierdie omgewingstudies sal B&GP's aktief betrokke raak deur die openbare

deelnameproses wat deur Sustainable Futures ZA onderneem word.

Die fases van 'n OIE is:

FASE 1

Kennisgewing van OIE-proses

1. Aansoekvorm aan die Departement Omgewingsake gestuur
2. Adverteer in plaaslike en/of streekkoerante
3. Lig B&GP's en belanghebbendes in aan die hand van terreinkennisgewings, Agtergrondinligtingsdokumente en briewe aan belanghebbendes

FASE 2

Bestekopnamefase

1. Raadpleging met B&GP's en belanghebbendes
2. Fokusgroepvergaderings
3. Openbare vergadering
4. Openbare oorsig van Konsep Bestekopnameverslag

FASE 3

Omgewingsimpakevalueringsfase

1. Deurlopende raadpleging met B&GP's en belanghebbendes
2. Fokusgroepvergaderings
3. Openbare vergaderings
4. Openbare oorsig van Konsep OIE-verslag en OBP

FASE 4

Besluitneming

1. Oorsig van Finale OIE-verslag deur die Departement Omgewingsake
2. Verwittig B&GP's en belanghebbendes skriftelik van die besluit

WAT IS DIE POTENSIËLE OMGEWINGSIMPakte WAT MET DIE VOORGESTELDE PROJEK GEPAARD GAAN?

'n Aantal potensiële omgewingsimpakte wat met die voorgestelde projek gepaard gaan, is geïdentifiseer. Hierdie potensiële impakte sal deur die volgende spesialisstudies geëvalueer word:

Ekologie, fauna en flora – die oprigting van die aanleg en die gevolglike versteuring van die plantegroei kan die terrein se ekologie en biodiversiteit affekteer.

Geologie en gronderosie – die onderliggende geologie kan beïnvloed word ten opsigte van gronddegradasie en/of erosiepotensiaal.

Landboupotensiaal – sonkragaanlegte het normaalweg 'n volskaalse versteuring van die ontwikkelingsvoetspoor tot gevolg, dus moet die landboupotensiaal van die geïdentifiseerde terrein bepaal word.

Erfenisterreine en paleontologie – die versteuring of vernietiging van erfenisterreine en fossiele kan tydens die konstruksiefase weens uitgrawings opduik.

Visuele estetika – die oprigting van 'n industriële aanleg van hierdie aard kan die gebied se visuele estetika affekteer.

Maatskaplik – die oprigting en bedryf van die aanleg kan positiewe sosio-ekonomiese geleenthede bied betreffende plaaslike werkgeleenthede, asook negatiewe impakte inhou ten opsigte van sekuriteit en die kenmerkende grondgebruik.

Die OIE prosas sal in die volgende twee aparte fases verdeel word:

Bestekopnamestudie – 'n Kantoor (desktop) studie, waartydens potensieël vraagstukke wat met voorgestelde projek gepaard gaan, geïdentifiseer sal word en daardie vraagstukke wat verdere ondersoek verg, deur die OIE-fase uitgelig sal word.

Evaluering van OIE-fase – 'n Gedetailleerde studie van daardie potensieel wesenlike impakte wat tydens die Bestekopnamefase geïdentifiseer is. Spesialisstudies sal onderneem word om die aard en wesenlikheid van die potensieel impakte te bepaal. Hierdie spesialisstudies sal toegelig word deur bestaande inligting, veldwaarnemings en insette wat uit die openbare deelnameproses voortspruit. Praktiese en haalbare versagtingsmaatreëls sal aanbeveel word ten einde potensieel wesenlike impakte wat geïdentifiseer is, te minimaliseer. Hierdie aanbevelings sal in 'n Omgewingsbestuursprogram vervat word.

OPENBARE DEELNAMEPROSES

Die deel van inligting vorm die grondslag van die openbare deelnameproses en bied u die geleentheid om uit die staanspoor aktief by die OIE-proses betrokke te raak. Kommentaar en insette van B&GP's tydens die Bestekopname- en OIE-fase word aangemoedig ten einde te verseker dat oorweging geskenk word aan potensieel impakte binne die omvang van die studie. Die openbare deelnameproses poog om te verseker dat:

- » inligting wat al die tersaaklike feite met betrekking tot die aansoek bevat, aan B&GP's beskikbaar gestel word vir oorsig;
- » deelname deur B&GP's op so 'n wyse gefasiliteer word dat hulle 'n redelike kans gegun word om kommentaar te lewer oor die voorgestelde projek; en
- » toereikende oorsigtydperke aan B&GP's gebied word om kommentaar te lewer oor die bevindinge van die konsep Bestekopname- en OIE-verslag.

Ten einde doeltreffende deelname te verseker, sluit die openbare deelnameproses die volgende in:

- » Die verspreiding of hierdie Agtergrondinligtingsdokument wanneer die proses 'n aanvang neem.
- » Die identifisering van B&GP's, wat naburige grondeienaars en staatsinstansies insluit.
- » Die aanbring van terreinkennisgewings by die geaffekteerde eiendomme.
- » Die plasing van advertensies in plaaslike en/of streekkoerante.
- » Die samestelling van 'n G&GP databasis wat regdeur die OIE-proses bygewerk sal word. Alle geregistreerde B&GP's word persoonlik aan die hand van briewe aan belanghebbendes verwittig van mylpale in die OIE-proses.
- » Die vrystelling van die Konsep Bestekopname- en OIE-verslag vir openbare besigtiging.
- » Die hou van openbare vergaderings en fokusgroepvergaderings met B&GP's om die openbare deelnameproses verder te fasiliteer.

U VERANTWOORDELIKHEDE AS 'N B&GP

Ingevolge die OIE-regulasies, word u aandag gevestig op u verantwoordelikhede as 'n B&GP:

- » Ten einde aan hierdie OIE-proses deel te neem, moet u self op die projek se databasis registreer.
- » U moet toesien dat enige kommentaar rakende die voorgestelde projek binne die gestipuleerde tydsraamwerke ingedien word.
- » Daar word van u verlang om enige regstreekse sake-, finansiële-, persoonlike- of ander belange wat u dalk mag hê in die goedkeuring of afkeuring van die aansoek vir die voorgestelde sonkragaanleg, bekend te maak.

HOE OM BETROKKE TE RAAK

1. Deur te reageer (telefonies, per faks of per e-pos) op ons uitnodiging vir u betrokkenheid wat in plaaslike koerante geadverteer is.
2. Deur die aangehegte antwoordvorm aan die tersaaklike kontakpersoon terug te besorg.
3. Deur die vergaderings by te woon wat gedurende die verloop van die proses gehou sal word. As 'n geregistreerde B&GP sal u outomaties uitgenooi word om hierdie vergaderings by te woon. Datums vir openbare vergaderings sal ook in plaaslike koerante geadverteer word.
4. Deur die konsultante te kontak met navrae of kommentaar.
5. Deur oorsig en kommentaar te bied oor die konsep Bestekopname- en OIE-verslag, en wel binne die gestipuleerde 30-dae besigtigingstydperke.

Indien u self as 'n B&GP vir hierdie voorgestelde projek ag, moedig ons u aan om gebruik te maak van die geleentheid wat geskep word deur die openbare deelnameproses om kommentaar te lewer, asook om vraagstukke en knelpunte te opper wat u raak en/of waarin u belangstel of waaroor u meer inligting verlang. U insette in hierdie proses vorm 'n belangrike deel van die OIE-proses.

Deur die meegaande antwoordvorm in te vul en terug te stuur, registreer u self outomaties as 'n B&GP vir hierdie projek en verseker u dat kennis geneem word van die kommentaar, knelpunte of navrae wat u betreffende die projek opper.

KOMMENTAAR EN NAVRAE

Rig alle kommentaar, navrae of antwoorde aan:

Shawn Johnston van Sustainable Futures ZA
Posbus 749, Rondebosch, KAAPSTAD, 7701
Telefoon: 083 325 9965
Faks: 086 510 2537
E-pos: swjohnston@mweb.co.za

Vir dokumentasie wat met die projek gepaardgaan, besoek

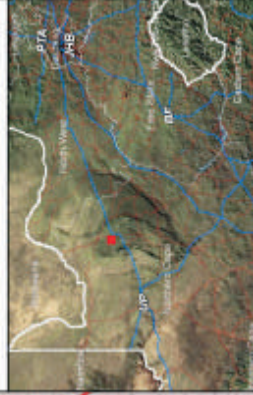
www.savannahSA.com

Wincanton Solar

Locality Map

Legend

- National Road
- Regional Road
- Secondary Road
- Perennial River
- Non-perennial River
- Power Line
- Farm Portion



MARCH 2012

ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

ESTABLISHMENT OF THE PROPOSED

SAN SOLAR ENERGY FACILITY

NEAR KATHU, NORTHERN CAPE

AN INITIATIVE OF
SAN SOLAR ENERGY FACILITY (PTY) LTD

BACKGROUND INFORMATION DOCUMENT



San Solar Energy Facility (Pty) Ltd is proposing the establishment of a commercial solar energy facility and associated infrastructure on a site located approximately 16 km south-east of Kathu in the Northern Cape. San Solar Energy Facility has identified a favourable site for consideration and evaluation as per the Environmental Impact Assessment (EIA) Regulations. The proposed facility will hereafter be referred to as the San Solar Energy Facility, the nature and extent of which is explored in more detail in this document.

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 facility.
- » An overview of the EIA process (including a Scoping Phase and an EIA Phase) and the specialist studies being undertaken to assess the potential impacts, both positive and negative of the proposed project.
- » Details of how you can become involved in the EIA process, receive information, or raise issues which may concern and/or interest you.

OVERVIEW OF THE PROPOSED PROJECT

The San Solar Energy Facility is proposed on the remaining extent of the Farm Wincanton 472 which falls within the Gamagara Local Municipality. The proposed site is preferred by virtue of climatic conditions (primarily as the economic viability of a solar energy facility is directly dependent on the annual direct solar irradiation values for a particular area), orographic conditions, relief and aspect, and the availability of a grid connection (i.e. the point of connection to the National grid).

The facility is proposed to include several arrays of photovoltaic (PV) solar panels and/or concentrating photovoltaic solar panels with a generating capacity of approximately 75 Megawatts of electricity and includes the following associated infrastructure:

- » PV panels with a generating capacity of 75MW.
- » An on-site inverter to step up the power and a small substation to facilitate the connection between the solar energy facility and the Eskom electricity grid.
- » Power line
- » Internal access roads.
- » Workshop area for maintenance and storage.

The proposed development inclusive of associated infrastructure can be appropriately located on the identified site, which covers a total area of approximately 8 km². The extent of the broader site is larger than the space required for the facility's development footprint. Therefore, the PV panels and the associated infrastructure can be appropriately placed within the boundaries of the broader site while aiming to avoid any environmental sensitivities identified through the EIA process.

Site-specific studies will be undertaken to assess the localised impact of the proposed development,

and in order to delineate areas of sensitivity within the broader site. Once the constraining environmental factors have been determined, the layout of the proposed facility can be finalised, and assessed in detail in the EIA Phase.

SOLAR ENERGY FACILITIES

The use of solar radiation for power generation is considered a non-consumptive use of a natural resource which produces zero greenhouse gas emissions. The generation of renewable energy will contribute to South Africa's electricity market which has, to date, been heavily dominated by coal-based power generation. The advancement of renewable energy is a priority for South Africa as the government has set a 10-year target of 10 000 GWh (Gigawatt Hour) of electricity by 2013, as part of its White Paper on Renewable Energy. Furthermore, recent policy highlights the desirability of clean; green energy and solar generated energy will play a significant role in reaching these quotas.

Solar energy facilities, such as those using PV technology use the energy from the sun to generate electricity through a process known as the Photovoltaic Effect. Simply speaking, this refers to photons of light knocking electrons into a higher state of energy to create electricity. PV facilities consist of the following:

Photovoltaic Cell

A photovoltaic cell is made of silicone which acts as a semiconductor used to produce the photovoltaic effect. Individual PV are linked and placed behind a protective glass sheet to form a PV panel.

Optics

Concentrating PV technology typically consists of different optical elements, such as mirrors and Fresnel lenses which are used to concentrate solar radiation onto a point where a photovoltaic cell is located. Concentrating the solar radiation serves to maximise the potential electricity generation.

Inverter

The photovoltaic effect produces electricity in direct current. Therefore an inverter must be used to change it to alternating current).

Support Structure

The PV panels will be fixed to a support structure set at an angle to receive the maximum amount of solar radiation. The angle of the panel is dependent on the latitude of the proposed facility. The angle of the support structure may be adjusted in winter and summer for to optimise summer or winter solar radiation characteristics.



The PV panels are designed to operate continuously, unattended and with low maintenance for approximately 20 years. The proposed development would consist of several PV arrays with a generating capacity of 75 MW of electricity. Construction would approximately take up to two years and commission with experienced, expert staff.

ENVIRONMENTAL BASIC ASSESSMENT PROCESS

In terms of the EIA Regulations published in terms of Section 24(5) of the National Environmental Management Act (NEMA, Act No. 107 of 1998), Vexcen Trading and Investments requires authorisation from the National Department of Environmental Affairs (DEA) (in consultation with the Northern Cape Department of Environment and Nature Conservation (DENC), for the undertaking of the proposed project. This project has been registered with the DEA under application reference number 14/12/16/3/3/2/273.

In terms of sections 24 and 24D of NEMA, as read with the EIA Regulations of GNR 543, GNR544, GNR545, and GNR546, a Scoping and an EIA Phase are required to be undertaken for the proposed project. In order to obtain authorisation, comprehensive, independent environmental studies must be undertaken in accordance with the EIA Regulations.

An EIA is an effective planning and decision-making tool. It allows the potential environmental consequences resulting from a proposed activity to be identified and appropriately managed during its establishment and its operation. It provides the opportunity for the applicant to be fore-warned of potential environmental issues, and allows for resolution of the issue(s) reported on in the EIA report as well as dialogue with I&APs.

San Solar Energy Facility has appointed Savannah Environmental, as the independent environmental consultants, to undertake the required Scoping Phase and EIA to identify and assess all the potential environmental impacts associated with the proposed project, and proposes appropriate mitigation and management measures in an Environmental Management Plan (EMP). As part of these environmental studies, I&APs will be actively involved through the public involvement process being undertaken by Sustainable Futures ZA.

The phases of an EIA are:

PHASE 1

Notification of EIA Process

1. Application form sent to Department of Environmental Affairs
2. Advertise in local and/or regional newspapers
3. Inform I&APs & stakeholders through site notices, background information documents & stakeholders letters

PHASE 2

Scoping Phase

1. Consultation with I&APs & stakeholders
2. Focus group meetings
3. Public meetings
4. Public review of Draft Scoping Report

PHASE 3

Environmental Impact Assessment Phase

1. On-going consultation with I&APs & stakeholders
2. Focus group meetings
3. Public meetings
4. Public review of Draft EIA Report & EMP

PHASE 4

Decision Making

1. Review of Final EIA Report by Department of Environmental Affairs
2. Inform I&APs and stakeholders of the decision in writing

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

A number of potential environmental impacts associated with the proposed project have been identified. These potential impacts will be assessed through the following specialist studies:

Ecology, fauna, and flora - the construction of the facility and the associated disturbance of vegetation may affect the ecology and biodiversity of the site.

Geology and soil erosion - the underlying geology may be affected in terms of soil degradation and/or erosion.

Agricultural potential - solar facilities typically result in whole-scale disturbance of the development footprint and therefore the impact on the agricultural potential of the identified site must be assessed.

Heritage sites and palaeontology - disturbance to or destruction of heritage sites and fossils may result during the construction phase through excavation activities.

Visual aesthetics - the establishment of an industrial facility of this nature has the potential to affect the visual aesthetics within the area.

Social - the construction and operation of the facility may result in positive socio-economic opportunities in terms of local employment as well as negative impacts in terms of safety and security and land use characteristics.

The EIA process will be separated into two distinct phases:

Scoping Phase Study - A desk-top study wherein potential issues associated with the proposed project are identified and those issues requiring further investigation through the EIA Phase are highlighted.

EIA Phase Assessment – A detailed study of the potentially significant impacts identified in the Scoping Phase. Specialist studies will be undertaken in order to determine the nature and significance of the potential impacts. These specialist studies will be informed by existing information, field observations and input from the public participation process. Practical and achievable mitigation measures will be recommended in order to minimise potentially significant impacts identified. These recommendations will be included within an Environmental Management Programme.

PUBLIC PARTICIPATION PROCESS

The sharing of information forms the basis of the public participation process and offers you the opportunity to become actively involved in the EIA Process from the outset. Comments and inputs from I&APs during the Scoping and the EIA Phases are encouraged in order to ensure that potential impacts are considered within the ambit of the study. The public participation process aims to ensure that:

- » Information that contains all the 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 a reasonable opportunity to comment on the proposed project.
- » Adequate review periods are provided for I&APs to comment on the findings of the draft Scoping and EIA Reports.

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

- » Distribution of this Background Information Document at the start of the process.
- » Identification of I&APs including adjacent landowners and Organs of State.
- » Placement of site notices at the affected properties.
- » Placement of advertisements and local and/or regional newspapers.
- » Compilation of an I&AP database which is updated throughout the EIA Process. All registered I&APs are personally notified at milestones in the EIA process through a stakeholder letter.
- » Release of the Draft Scoping and EIA Reports for public review.
- » Holding public meetings, and focus group meetings with I&APs to further facilitate the participation process.

YOUR RESPONSIBILITIES AS AN I&AP

In terms of the EIA Regulations, your attention is drawn to your responsibilities as an I&AP:

- » In order to participate in this EIA process, you must register yourself on the project database.
- » You must ensure that any comments regarding the proposed project are submitted within the stipulated timeframes.
- » You are required to disclose any direct business, financial, personal or other interest which that you may have in the approval or refusal of the application for the proposed solar energy facility.

HOW TO BECOME INVOLVED

1. By responding by phone, fax or e-mail to the invitation for your involvement which has been advertised in local newspapers.
2. By returning the reply form to the relevant contact person.
3. By attending the meetings to be held during the course of the process. As a registered I&AP you will automatically be invited to attend these meetings. Dates for public meetings will also be advertised in local newspapers.
4. By contacting the consultants with queries or comments.
5. By reviewing and commenting on the draft Scoping and EIA Reports within the stipulated 30-day review periods.

If you consider yourself an I&AP for this project, 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 into this process forms a key element of the EIA process.

By completing and submitting the accompanying reply form, you automatically register yourself as an I&AP for this project, and are ensured that your comments, concerns or queries raised regarding the project will be noted. .

COMMENTS AND QUERIES

Direct all comments, queries or responses to:

Shawn Johnston of Sustainable Futures ZA
PO Box 749, Rondebosch, CAPE TOWN, 7701

Phone: 083 325 9965

Fax: 086 510 2537

E-mail: swjohnston@mweb.co.za

To view project documentation, visit

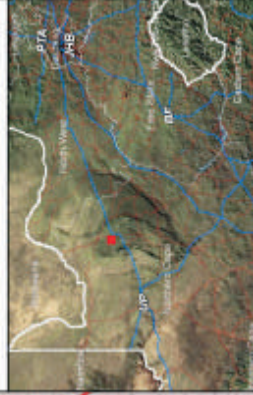
www.savannahSA.com

Wincanton Solar

Locality Map

Legend

- National Road
- Regional Road
- Secondary Road
- Perennial River
- Non-perennial River
- Power Line
- Farm Portion



**ENVIRONMENTAL IMPACT ASSESSMENT PROCESS: PROPOSED ESTABLISHMENT
OF THE SAN SOLAR ENERGY FACILITY, NORTHERN CAPE
(DEA REF No. 14/12/16/3/3/2/273)
PUBLIC INVOLVEMENT PROCESS REPLY FORM**

Return completed reply form to: **Shawn Johnston** of **Sustainable Futures ZA**

Fax: **086 510 2537**

Phone: **083 325 9965**

E-mail: **swjohnston@mweb.co.za**

Postal Address: **PO Box 749, Rondebosch, Cape Town, 7701**

Please provide your complete contact details:

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

Would you like to register as an interested and affected party (I&AP)? YES
 (please tick the relevant box) NO

Note: You are required to register as an I&AP to receive further correspondence regarding the EIA process for the project.

Please state your interest in the project (add additional pages if necessary):

Please list your questions, views or concerns regarding the project (add additional pages if necessary):

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

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

What is your preferred language of correspondence? (please tick the relevant box) English
Afrikaans



(Sien keersy vir Afrikaans)

**OMGEWINGSIMPAAKEVALUERINGSPROSES: VOORGESTELDE OPRIGTING VAN DIE
SAN SONKRAGAANLEG, NOORD-KAAPPROVINSIE
(DEA REF No. 14/12/16/3/3/2/273)
OPENBARE DEELNAMEPROSES REGISTRASIE/KOMMENTAAR VORM**

Stuur voltooide registrasie/kommentaar vorm aan: **Shawn Johnston** by **Sustainable Futures ZA**

Faks: **086 510 2537**

Telefoon: **083 325 9965**

E-pos: **swjohnston@mweb.co.za**

Posadres: **Posbus 749, Rondebosch, Kaapstad, 7701**

Verskaf asseblief u persoonlike kontak besonderhede:

Naam & Van:		
Organisasie & Rol:		
Posadres:		
Telefoon:	Selfoon:	
Faks:	E-pos:	

Stel u belang om te registreer as 'n belangstellende en/of geaffekteerde party JA

(B&GP)? (Merk met X)

NEE

Nota: Dit word van u vereis om te registreer as 'n B&GP om alle toekomstige inligting in verband met die Omgewingsimpakevalueringproses te ontvang.

Verduidelik u belangstelling in hierdie projek (gebruik addisionele bladsye soos benodig):

Lys u vrae, opinies of besorghede in verband met hierdie projek (gebruik addisionele bladsye soos benodig):

Verskaf bykommende kontak besonderhede van addisionele persoon/e wie u beskou as potensiele belangstellende en/of geaffekteerde partye:

Naam & Van:		
Organisasie & Rol:		
Posadres:		
Telefoon:	Selfoon:	
Faks:	E-pos:	

Dui u taal van keuse en korrespondensie aan (Merk met X)

Engels

Afrikaans



(See reverse side for English)



**SUSTAINABLE
FUTURES ZA**

P.O. Box 749 Rondebosch 7701 Cape Town South Africa

Tel: +27(0)833259965 Fax 0865102537

E-mail: swjohnston@mweb.co.za

March 2012

Dear Stakeholder,

**NOTICE OF ENVIRONMENTAL IMPACT ASSESSMENT PROCESS:
PROPOSED SAN SOLAR ENERGY FACILITY & ASSOCIATED
INFRASTRUCTURE, NORTHERN CAPE
DEA Ref No. 14/12/16/3/3/2/273**

**NOTICE OF ENVIRONMENTAL IMPACT ASSESSMENT PROCESS AND
INVITATION TO REVIEW THE DRAFT SCOPING REPORT**

San Solar Energy Facility (Pty) Ltd is proposing the establishment of a commercial solar energy facility and associated infrastructure on a site located approximately 16 km south-east of Kathu in the Northern Cape. San Solar Energy Facility (Pty) Ltd has identified a favourable site for consideration and evaluation as per the Environmental Impact Assessment (EIA) Regulations. The proposed facility will hereafter be referred to as the San Solar Energy Facility, the nature and extent of which is explored in more detail in this document.

Solar energy facilities use the energy from the sun to generate electricity. This can be achieved through the **Photovoltaic Effect** which refers to photons of light knocking electrons into a higher state of energy to create electricity. Photovoltaic technology typically consists of **Optics** (different optical elements, such as mirrors and Fresnel lenses which are used to concentrate solar radiation onto a point where a photovoltaic cell is located), the **Photovoltaic Cell** (the semiconductor used to produce the photovoltaic effect), and the **Inverter** (the photovoltaic effect produces direct current, therefore an inverter must be used to change it to alternating current). Individual photovoltaic cells, which are commonly constructed from silicon, are linked and placed behind a protective glass sheet to form a photovoltaic panel. The proposed facility will consist of numerous panels joined to form a **photovoltaic array** which will be fixed to a **support structure** so to receive the maximum amount of solar radiation. The

angle of the panel is dependent on the latitude of the proposed facility and the angles may be adjusted to optimise for summer or winter solar radiation characteristics.

The proposed site was identified through an extensive site selection process which took **climatic conditions** (primarily as the economic viability of a solar energy facility is directly dependent on the annual direct solar irradiation values for a particular area), solar irradiation values), **orographic conditions, relief and aspect**, and the availability of a **grid connection** (i.e. the point of connection to the National grid) into consideration.

The local level issues pertaining to the larger farm portion are currently being considered within site-specific studies in order to delineate areas of sensitivity within the broader site. Once the constraining environmental factors have been determined through the EIA process, the layout of the proposed facility can then be finalised, and assessed in detail in the EIA Phase.

ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

In terms of the EIA Regulations published in terms of Section 24(5) of the National Environmental Management Act (NEMA, Act No. 107 of 1998), Renewable Energy Investments South Africa requires authorisation from the National Department of Environmental Affairs in consultation with the Northern Cape Department of Environment and Nature Conservation, for the undertaking of the proposed solar energy facility. In terms of sections 24 and 24D of NEMA, as read with the EIA Regulations of GN R453 – GN R546, a Scoping and an EIA process are required.

In order to obtain authorisation, comprehensive, independent environmental studies must be undertaken in accordance with the EIA Regulations. This project has been registered under application reference number 14/12/16/3/3/2/273.

San Solar Energy Facility (Pty) Ltd has appointed **Savannah Environmental** as the independent environmental consultants to undertake the Scoping and the EIA processes to identify and assess the potential environmental impacts associated with the proposed project, and to propose appropriate mitigation and management measures within the framework of an **Environmental Management Plan** (EMP). As part of these environmental studies, interested and affected parties (I&APs) will be actively involved through the public involvement process being undertaken by **Sustainable Futures ZA**. You and/or the organisation/department which you represent have been identified as an I&AP. Should you have an interest in this project, please register yourself as an I&AP and note your formal comments by sending written correspondence in this regard. All comments received will form part of the Comments and Response

Report that will be included in the Final EIA Report. By submitting your details and comments you are ensured that your comments, concerns or queries will be noted.

To obtain further information and register on the project database, please submit your name, contact information and interest in the project to the contact person below.

INVITATION TO REVIEW THE DRAFT SCOPING REPORT

In accordance with the EIA Regulations, a Draft Scoping Report has been compiled and is now available for public review and comment by I&APs. You are invited to review and comment on the draft report at the following locations:

www.savannahSA.com	Kathu Public Library
Dibeng Public Library	

The 30-day period for review is from **16 March 2012 to 18 April 2012 2012**. Please submit written comment to Sustainable Futures ZA no later than 18 April 2012.

Comments can be made as written submission via fax, post or e-mail.

Please submit your comments to
Shawn Johnston of Sustainable Futures ZA PO Box 749, Rondebosch, Cape Town, 7701 Fax: 086 510 2537 E-mail: swjohnston@mweb.co.za
The due date for comments on the Draft Scoping Report is 18 April 2012

PUBLIC MEETING

In order to facilitate comments on the Draft Scoping Report, a public meeting will be held during the review period, all I&APs are invited to attend on:

DATE: 2 April 2012
TIME: 18:00pm - 19:30pm
VENUE: Namakwari Lodge, 1 Frikkie Meyer Road, Kathu.

The aim of the public meeting is to provide you with further information regarding the proposed project, including technical details, the project process and expected timeframes etc, to provide a summary of the findings of the environmental scoping studies undertaken, to invite comment on the proposed project, and to further discuss possible issues of specific concern to you which may need to be investigated and managed through the EIA process.

Please do not hesitate to contact us should you require additional information and/or clarification regarding the proposed project. Our team welcomes your participation and looks forward to your involvement throughout this process.

Yours sincerely,

Shawn Johnston
Process Facilitator