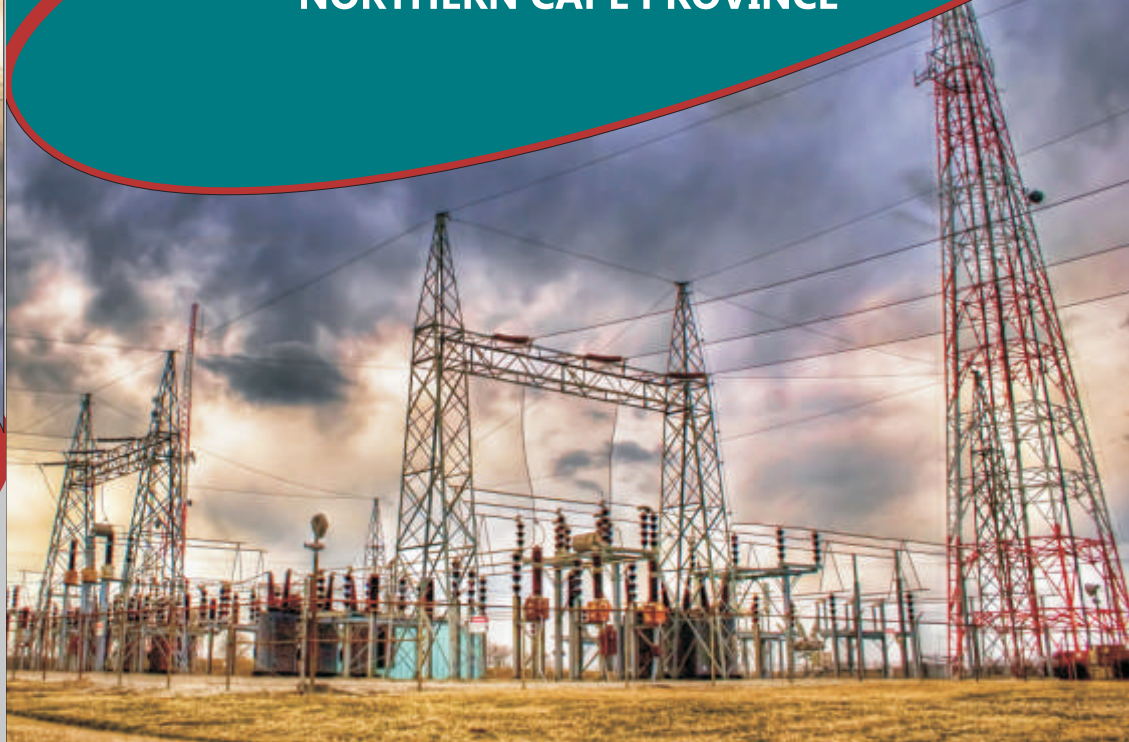


ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

PROPOSED

DE AAR SOLAR ENERGY FACILITY
ON A SITE EAST OF DE AAR

NORTHERN CAPE PROVINCE



AN ACED RENEWABLES DE AAR INITIATIVE
BACKGROUND INFORMATION DOCUMENT



AGTERGRONDINLIGTINGSDOKUMENT
IN INISIATIEF VAN ACED RENEWABLES DE AAR



DE AAR SONKRAAGANLEG
OP 'N TERREIN OOS VAN DE AAR

NOORD-KAAPPROVINSIE

VOORGESTELDE

OMGEWINGSIMPAAKEVALUERINGSPROSES

ACED Renewables De Aar (Pty) Ltd (ACED De Aar) is proposing the establishment of a solar energy facility for the purpose of commercial electricity generation. The project is known as the De Aar Solar Energy Facility. ACED De Aar has identified a favourable site located approximately 10 km east of De Aar within the Emthanjeni Local Municipality for the establishment of the proposed facility. ACED De Aar is required to subject the proposed project to an Environmental Impact Assessment (EIA) as per the requirement of the EIA Regulations published in terms of Section 24(5) of the National Environmental Management Act (NEMA, Act No. 107 of 1998).

This Background Information Document aims to provide you, as an interested and/or affected party (I&AP), with an overview of the proposed project, the EIA process, and the public participation process.

OVERVIEW OF THE PROPOSED PROJECT

The facility is proposed to accommodate a Concentrating Solar Power (CSP) and Photovoltaic (PV) component and associated infrastructure on a portion of the proposed site. ACED De Aar is planning to apply for a license with the National Energy Regulator of South Africa (NERSA) to build a solar energy facility with a maximum generating capacity of 500 MW to be built in phases on the following farm portions (refer to the attached locality map):

- » Portion 3 of Farm Carolus Poort 3
- » Portion 4 of Farm Carolus Poort 3
- » Portion 1 of Farm Riet Fountain 6
- » Farm Wag 'n Bietjie Annex C 137
- » Farm Wag 'n Bietjie 5

This broader site is preferred for the development of a solar facility by way of the solar resource, the topography, and slope of the site, the current land use, the potential for evacuation options, and the availability of water.

The EIA process will consider the full extent of the facility which will include the following components:

- » A Photovoltaic (PV) component comprising numerous arrays of photovoltaic panels and dedicated inverters to generate up to 400 MW through the photovoltaic effect.
- » A Concentrating Solar Power (CSP) component comprising numerous arrays of parabolic troughs to generate up to 100 MW through steam generation.
- » A power generation block which will consist of a conventional steam turbine linked to a generator.
- » Concrete foundations to support the PV and CSP infrastructure.
- » Up to five substations to facilitate connection between the solar energy facility and existing or newly constructed powerlines.
- » Up to five new sections of overhead powerlines feeding into Eskom's existing Hydra Substation.
- » Underground cabling between the PV and CSP project infrastructure.
- » Water supply pipelines, water treatment and storage reservoirs, cooling facilities, and evaporation ponds.

ACED Renewables De Aar (Edms.) Bpk. (ACED De Aar) stel voor die oprigting van 'n sonkragaanleg ten einde elektrisiteit kommersieel op te wek. Die projek staan bekend as die De Aar Sonkragaanleg. ACED De Aar het 'n geskikte terrein vir die oprigting van die voorgestelde aanleg geïdentifiseer, wat sowat 10 km oos van De Aar in die Emthanjeni Plaaslike Munisipaliteit geleë is. Daar word van ACED De Aar verlang om die voorgestelde projek aan 'n Omgewingsimpakbeoordeling (OIE) te onderwerp, ingevolge die veristes van die OIE-regulasies wat gepubliseer is kragtens Artikel 24(5) van die Nasionale Wet op Omgewingsbestuur (NEMA, Wet 107 van 1998).

Hierdie Agtergrondinligtingsdokument poog om u, as 'n belangstellende en/of geïnteresseerde party (B&GP), te voorsien van 'n oorsig van die voorgestelde projek, die OIE-proses en die openbare deelnameproses.

OORSIG VAN DIE VOORGESTELDE PROJÊK

Daar word aan die hand gedoen dat die voorgestelde aanleg 'n komponent wat sonkrag konsentreer (CSP) en 'n Fotovoltatiese (FV) komponent, asook gepaardgaande infrastruktuur moet insluit op 'n gedeelte van die voorgestelde terrein. ACED De Aar beplan om aansoek te doen om 'n lisensie by die Nasionale Energie-reguleerder van Suid-Afrika (NERSA) ten einde 'n sonkragaanleg met 'n maksimum opwekkingsvermoë van 500 MW te bou, wat in fases op die volgende plaasgedeeltes sal geskied (sien die aangehegte liggingkaart):

- » Gedeelte 3 van die plaas Carolus Poort 3
- » Gedeelte 4 van die plaas Carolus Poort 3
- » Gedeelte 1 van die plaas Riet Fountain 6
- » Die plaas Wag 'n Bietjie Annex C 137
- » Die plaas Wag 'n Bietjie 5

Hierdie breër terrein geniet voorkure vir die ontwikkeling van 'n sonkragaanleg weens die sonkragruipbron, die topografie, die helling van die terrein, die huidige grondgebruik, die potensiele opsies om die krag te ontruim en die beskikbaarheid van water.

Die OIE-proses sal oorweging skenk aan die volle omvang van die aanleg, wat die volgende komponente sal insluit:

- » 'n Fotovoltatiese (FV) komponent, wat uit verskeie reekse fotovoltatiese panele en hul eie wisselrigters bestaan, ten einde tot 400 MW deur die fotovoltatiese effek op te wek.
- » 'n Komponent wat sonkrag konsentreer (CSP), wat uit verskeie reekse paraboliese trôe bestaan, ten einde tot 100 MW deur stoom op te wek.
- » 'n Kragopwekkingsblok, wat uit 'n konvensionele stoomturbine bestaan wat aan 'n generator gekoppel is.
- » Betonfondasies om die FV- en CSP-infrastruktuur te dra.
- » Tot vyf substasies om die konneksie tussen die sonkragaanleg en die bestaande of nuwe kraglyne te bewerkstellig.
- » Tot vyf nuwe oorhoofse kraglyngedeeltes wat by Eskom se bestaande Hydra Substasie invoer.
- » Ondergrondse kabele tussen die FV- en die CSP-projekinfrastruktuur.
- » Pyplyne vir wateroorsiening, waterbehandelings- en bergingsreservoirs, koelaanlegte en verdampingsdamme.

« Die FV-stelsel sal bestaan uit FV-panele, wat uit baie silikon selle/wafels bestaan, wat dien as halfgeleiers om die fotovoltaïese effek voort te bring. Hierdie elektrisiteit word in gelykstrom opgewek, dus word 'n wisselrigter benodig om die elektrisiteit in 'n wisselstroom (wat ons in ons huise gebruik) om te sit. Die FV-paneel sal op onbeweeglike steunstrukture gemonteer word wat teen 'n hoek geplaas is om maksimum hoeveelheid sonbestraling te ontvang. Die hoek van die paneel hang af van die voorgestelde aanleg se breedtegraad en kan verstel word om die eienskappe van seisoenale sonbestraling ten volle te benut.



« Voorgestel word: Afhangend van die soort tegnologie waarop besluit word, span sonkragaanlegte hetsy die son se hitte of ligenergie in om elektrisiteit op te wek. Tegnologie wat sonkrag konsentreer (CSP- tegnologie) span die son se hitte in om stoom op te wek, ampere soos konvensionele steenkoolkragstasies. Fotovoltaïese (FV) tegnologie sit die son se ligenergie direk om in elektrisiteit deur die fotovoltaïese effek. Die volgende is van toepassing op die aktiwiteit wat vir hierdie terrein voorgestel word:

« Die CSP-stelsel sal uit paraboliese trôe (d.i. reflektors) en silindriese buise (d.i. ontvangers) bestaan. Die trôe is van paraboliese spieëlpanele gemaak, wat die inkomende sonbestraling ontvang en reflekteer/konsentreer op die ontvanger. Hierdie ontvanger bevat warmteoordravlavoestof (d.i. olie of water) wat in 'n geslote stelsel na die sonkragaanleg se kragopwekkingsblok vloei. Deur 'n reeks warmte-uitruilers word die warmte-energie gebruik om water te verhit ten einde stoom voort te bring vir die opwekkingsproses.

SONKRAAGANLEGTE

« Terrain-spesifieke studies sal as deel van die OLE-proses onderneem word om sensitiewe gebiede binne die geïdentifiseerde terrein af te baken. Sodra hierdie sensitiewe gebiede en enige beperkende omgewingsfaktore vasgestel is, kan die uitleg van die voorgestelde aanleg afgehandel en in besonderhede in die OLE-fase geëvalueer word.

- « Tydelike geriewe om arval te berg (indien nodig).
- « Interne en eksternere toegangspaaie.
- « Geboue vir instandhouding, neerligtingsgebiede en 'n terrein kantoor.

- » Temporary waste storage facilities (if required).
- » Internal and external access roads.
- » Maintenance buildings, lay down areas, and a site office.

Site-specific studies will be conducted as part of the EIA Process in order to delineate areas of sensitivity within the identified site. Once these sensitive areas, as well as any 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

Depending on the type of technology that is used, solar energy facilities harness either the heat or the light energy of the sun to generate electricity. Concentrating Solar Power (CSP) technologies use the heat of the sun to generate steam, much like conventional coal-fired power stations. Photovoltaic (PV) technologies directly convert light energy from the sun into electricity through the photovoltaic effect. The following is relevant to the activities proposed on this site:

- » The CSP system will be comprised of parabolic troughs (i.e. reflectors) and cylindrical tubes (i.e. receivers). The troughs are made of parabolic mirrored panels which receive the solar radiation and reflect / concentrate it onto the receiver. This receiver contains a heat transfer fluid (i.e. oil or water) which flows within a closed circuit to the power generation block of the solar facility. Through a series of heat exchangers the thermal energy is used to heat water for the purpose of steam generation.



- » The PV system will be comprised of PV panels which are made of multiple silicon cells/wafers which act as semiconductors used to produce the photovoltaic effect. This electricity is produced as direct current and therefore an inverter is required to convert the power to alternating current (i.e. what we use in our homes). The PV panels will be fixed to static support structures set at an angle so to receive the maximum amount of solar radiation. The angle of the panel is dependent on the latitude of the proposed facility and can be adjusted to optimise for seasonal solar radiation characteristics.



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), ACED De Aar requires authorisation from the National Department of Environmental Affairs (DEA), in consultation with the Northern Cape Department of Agriculture and Nature Conservation (DNC), for the establishment of the proposed solar energy facility. 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. This project has been registered with the National DEA under application reference number 12/12/20/2250.

The EIA process is an effective planning and decision-making tool as it allows for the identification and assessment of potential positive and negative environmental impacts (i.e. direct, indirect, and cumulative) that could result from the establishment of a facility of this nature. Furthermore through the compilation of a Draft Environmental Management Programme (EMP), it provides site-specific environmental guidance required for the establishment and operation of a proposed facility. The EIA process includes four phases which are shown below.

OMGEWINGSIMPAAKVALUERINGSPROSES



Ingevolge die OIE-regulasies, gepubliseer kragtens Artikel 24(5) van die Nasionale Wet op Omgewingsbestuur (NEMA, Wet 107 van 1998), verlang ACED De Aar magtiging van die Nasionale Departement Omgewingsake (DEA), in ooreenstemming met die Noord-Kaapse Departement Landbou en Natuurbeheer (DNC), vir die oprigting van die voorgestelde sonkragaanleg. Ingevolge Artikel 24 en 24D van NEMA, saamgelees met die OIE-regulasies van Staatskenningsgewing R543, R544, R545 en R546, word verlang dat 'n Bestekopname- en 'n OIE-fase vir die voorgestelde projek onderneem word.

Ten einde magtiging te verkry, moet omvattende, onafhanklike omgewingsstudies ingevolge die OIE-regulasies onderneem word. Hierdie projek is by die Nasionale DEA geregistreer onder aansoekverwysingsnommer 12/12/20/2250.

Die OIE-proses is 'n doeltreffende beplannings- en besluitnemingswerktuig, aangesien dit die geleentheid skep om potensieel positiewe en negatiewe omgewingsimpakte (d.i. regsreeks, onregsreeks en kumulatiewe) te identifiseer en te evalueer wat weens die oprigting van 'n aanleg van hierdie aard kan optreek. Voorts bied dit die nodige terrein-spesifieke leiding vir die oprigting en bedryf van 'n voorgestelde aanleg deurdat 'n Konsep Omgewingsbestuurplan (EMP) saamgestel word. Die OIE-proses sluit vier fases in, wat hieronder uiteengesit word:

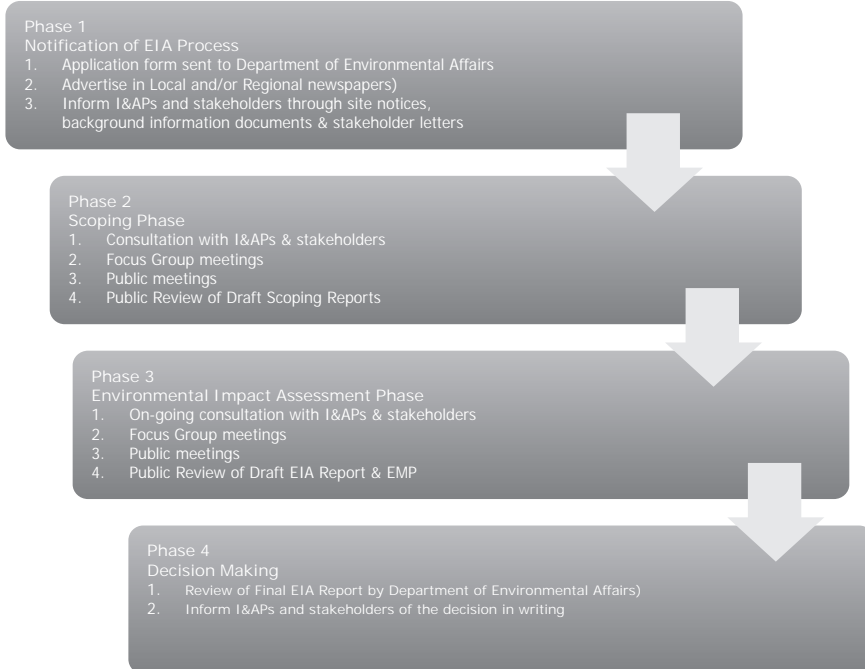
Geologie en gronderosie – die onderliggende geologie kan beïnvloed word ten opsigte van Ekologie, fauna en flora – die oprigting van die aanleg en die gevolglike verstoring van die plantegroei kan die terrein se ekologie en biodiversiteit affekteer.

Danksy Savannah Environmental se ondervinding met sonkragaanlegte, is 'n aantal potensiele omgewingsimpakte wat met die voorgestelde projek gepaard kan gaan, reeds geïdentifiseer.

Spesialisstudies moet as deel van die OIE-proses onderneem word. Hierdie studies sal toegelig word deur bestaande inligting, veldwaarnemings en insette wat uit die openbare deelnameproses voortspuit. Die spesialiste sal tydens die Bestekopnamefase kantoor (desktop) studies onderneem, en geëvalueer sal word en daardie vraagsukke wat verdere ondersoek verg, as deel van die Plan van Studie uitgelig sal word. Gedetailleerde studies word tydens die OIE-fase onderneem ten einde die omvang van daardie impakte wat tydens die Bestekopnamefase geïdentifiseer is, te bepaal. Hierdie studies sal terrein-spesifieke bestuurs- en versagtingsmaatreëls insluit, wat by die konsep EMP ingesluit moet word.

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

ACED De Aar het Savannah Environmental as die onafhanklike omgewingskonsultante aangestel om die nodige OIE-proses te onderneem. As deel van hierdie proses, sal B&G's aktief betrokke raak deur die openbare deelnameproses wat deur Sustainable Futures ZA onderneem word.



ACED De Aar has appointed Savannah Environmental, as the independent environmental consultants, to undertake the required EIA process. As part of this process, I&APs will be actively involved through the public participation process being undertaken by Sustainable Futures ZA.

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

Specialist studies are required to be undertaken as part of the EIA process. These studies will be informed by existing information, field observations and input from the public participation process. During the Scoping Phase the specialists undertake desk-top studies, wherein potential issues associated with the proposed project are identified, and those issues requiring further investigation through the EIA Phase are highlighted as part of a Plan of Study. During the EIA Phase detailed studies are undertaken in order to determine the significance of those impacts identified in the Scoping Phase. These studies will include site specific management and mitigation measures to be included as part of the Draft EMP.

Through Savannah Environmental's experience with solar energy facilities, a number of potential environmental impacts associated with the proposed project have already been identified.

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 agricultural potential of the identified site (i.e. which is zoned as agricultural) needs to be determined.

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

Water resources - the treatment, storage, and use of water in the steam generation process may result in water supply / quality impacts on the underground water resources.

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

Noise - sensitive noise receptors may be affected during the construction phase and during the operational phase (i.e. due to the operation of the steam turbine and generator).

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.

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 effected 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.

gronddegradasie en/of erosie.
 Landboupotensiaal – sonkragaanlegte het normaalweg 'n algehele versterking van die ontwikkelingsvoetspoor tot gevolg, dus moet die landboupotensiaal van die geïdentifiseerde terrein (d.i. wat vir landbou gesoneer is) bepaal word.
 Erfenissterreine en paleontologie – die versterking of vernietiging van erfenissterreine en fossiele kan tydens die konstruksiefase weens grondverskuivings plaasvind.
 Waterhulpbronne – die behandeling, opgaar en gebruik van water in die stoomopwekkingsproses kan 'n impak op die watervoorsiening / gehalte van die ondergrondse waterbronne hê.
 Visuele estetika – die oprigting van 'n nywerheidsaanleg van hierdie aard kan die gebied se visuele estetika affekteer.
 Geraas – resoptore wat sensitief is vir geraas, kan tydens die konstruksie- en bedryfsfase geraak word (d.i. weens die werking van die stoomturbine en die generator).
 Maatskaplik – die oprigting en bedryf van die aanleg kan positiewe sosio-ekonomiese geleenthede bied betreffende plaaslike werkskepping, asook negatiewe impakte inhou ten opsigte van sekuriteit en die kenmerkende grondgebruik.
 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 potensieël 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 geleentheid gegun word om kommentaar te lewer oor die voorgestelde projek.
 » 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 van hierdie Agtergrondinligtingsdokument wanneer die proses 'n aanvang neem.
 » Die identifisering van B&GP's, wat naburige grondelenaars en staatsinstansies insluit.
 » Die aanbring van terreinkenningsgewings by die geaffekteerde eiendomme.
 » Die plasing van advertensies in plaaslike en/of strekkekoerante.
 » Die samestelling van 'n B&GP databasis wat regdeur die OIE-proses bygewerk 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 fokusgroepevergaderings met B&GP's om die openbare deelnameproses verder te fasiliteer.

OPENBARE DEELNAMEPROSES

U VERANTWOORDELIKHEDE AS 'N B&GP EN HOE OM BETROKKE TE RAAK

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

« Ten einde aan hierdie OLE-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 tydraamwerke ingedien word.

« Daar word van u verlang om enige regstreke sake-, finansiële-, persoonlike- of ander belang wat u dalk mag he in die goedkeuring of afkeuring van die aansoek vir die voorgestelde sonkragaanleg, bekend te maak.

« Deur te reageer, hetsy telefonies, per faks of per e-pos, op die uitnodiging vir u betrokkeheid wat in plaaslike en nasionale koerante geadverteer is.

« Deur die vergaderings by te woon wat gedurende die verloop van die projek 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 en strekkekoerante geadverteer word (d.i. die De Aar Echo en Die Volksblad).

« Deur die konsultante te kontak met navrae of kommentaar.
« Deur oorsig en kommentaar te bied oor die konsep Bestekopname- en OLE-verslag, en wel binne die gestipuleerde 30-dae oorsigtidperke.

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

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 projekte gepaard gaan, besoek

www.savannahSA.com

YOUR RESPONSIBILITIES AS AN I&AP & HOW TO BECOME INVOLVED

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.
- » By responding by phone, fax or e-mail to the invitation for your involvement which has been advertised in local and national newspapers.
- » By attending the meetings to be held during the course of the project. As a registered I&AP you will automatically be invited to attend these meetings. Dates for public meetings will also be advertised in local and regional newspapers (i.e. De Aar Echo, and Die Volksblad).
- » By contacting the consultants with queries or comments.
- » 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 proposed 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.

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

Solar Energy Facility near De Aar, Northern Cape

Legend

- National Road
- Regional Road
- Secondary Road
- Railway Line
- Perennial River
- Non-perennial River
- Power Line
- Distribution Substation
- Transmission Substation
- Farm Portions

