



MAY 2013

ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

PROPOSED

ORYX SOLAR ENERGY FACILITY NEAR VIRGINIA

FREE STATE PROVINCE

BACKGROUND INFORMATION DOCUMENT



FRV Energy South Africa (Pty) Ltd is proposing to establish a commercial photovoltaic solar energy facility with a export capacity of up to 75MW, as well as associated infrastructure on a site located approximately 11 km south-west of Virginia, Free State Province. Based on a pre-feasibility analysis, site identification and environmental screening process undertaken by FRV Energy South Africa (Pty) Ltd, a favourable area has been identified for consideration and evaluation through an Environmental Impact Assessment (EIA).

The purpose of the proposed PV facility will be to evacuate the generated power into the Eskom electricity grid. The project is proposed to be part of the Department of Energy's (DoE) Renewable Energy Independent Power Producer Programme (REIPPPP) and is expected to be bid in August 2014. Should the project be selected by the DoE for implementation, FRV Energy South Africa (Pty) Ltd will be required to apply for a generation license from the National Energy Regulator of South Africa (NERSA), as well as a power purchase agreement from Eskom (i.e. typically for a period of 20 - 25 years) in order to build and operate the proposed facility. As part of the agreement, FRV Energy South Africa (Pty) Ltd will be remunerated by Eskom per kilowatt hour generated. Eskom will be financially backed by government. Depending on the economic conditions following the lapse of this period, the facility can either be decommissioned or the power purchase agreement may be renegotiated and extended.

The Oryx Solar Energy Facility is proposed to be located on portion 2 of farm Kalkoen-Krans 225, about 11 km south-west of Virginia, within the Mathjabeng Local Municipality of the Free State Province. The nature and extent of this facility is explored in more detail in this Background Information Document (BID).

AIM OF THIS BACKGROUND INFORMATION DOCUMENT

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

- » An overview of the proposed Solar Energy Facility.
- » An overview of the Environmental Impact Assessment process and studies being undertaken to assess the potential impacts, both positive and negative, associated with the proposed project.
- » Details of how you can become involved in the process, receive information, or raise issues, which may concern and/or interest you.

OVERVIEW OF THE PROPOSED PROJECT

By undertaking a technical feasibility study which considered favourable climatic conditions (solar renewable energy facilities are directly reliant on average solar radiation values for a particular area), access to the electricity grid, accessibility of the study site, local site topography, and environmental constraints, a potentially suitable site has been identified by FRV Energy South Africa (Pty) Ltd for the establishment of the proposed solar energy facility. The solar energy facility is proposed to accommodate an array of photovoltaic (PV) panels with a generating capacity of up to 80 MW. It is proposed to make use of either static or tracking solar panel technology for this facility.

Other infrastructure associated with the facility will include:

- » Mounting structures for the solar panels to be either rammed steel piles or piles with pre-manufactured concrete footings to support the PV panels.
- » Cabling between the project components, to be lain underground where practical.
- » A new on-site substation to evacuate the power from the facility into the Eskom grid (loop in loop out connection to the 132kv line on the farm and this connects to the Oryx 132/44/11 kV substation)
- » Internal access roads and fencing.
- » Workshop area for maintenance, storage, and offices.

The overall aim of the design and layout of the facility is to maximise electricity production through exposure to the solar radiation, while minimising infrastructure, operation and maintenance costs, and social and environmental impacts. The use of solar energy for power generation can be described as a non-consumptive use of natural resources which emits zero greenhouse gas emissions. The generation of renewable energy contributes to South Africa's electricity generating market which has historically been dominated by coal-based power generation.

RENEWABLE ENERGY TECHNOLOGY PROPOSED FOR THE PROJECT

Solar energy facilities, such as those using PV panels use the 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 PV facilities will comprise of the following components:

The Photovoltaic Cell

Individual PV cells (static or tracking) are linked and placed behind a protective glass sheet to form a photovoltaic panel. Other technologies that can be used include thin film and concentrated solar PV (CPV).

The Inverter

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

The Support Structure

The PV panels will be attached to a support structure approximately 4 meters off the ground set at an angle so to receive the maximum amount of solar radiation (fixed technology), or set to track the sun (tracking technology) in order to increase the amount of energy produced. 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 PV panels are designed to operate continuously for more than 20 years, unattended and with low maintenance.



Figure 1: Illustration of a photovoltaic solar facility (refer to Courtesy of Decchi)



Figure 2: Picture of a PV Panel (refer to Courtesy of Decchi)

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), FRV Energy South Africa (Pty) Ltd requires authorisation from the National Department of Environmental Affairs (DEA), as the competent authority (in consultation with the Free State Department of Economic Development, Tourism and Environmental Affairs (DEDTEA)) for the construction and operation of the proposed solar energy facility. In terms of sections 24 and 24D of NEMA, as read with the EIA Regulations of GN R543 (Regulations 26-35) and R545, a Scoping and EIA are required to be undertaken for this 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 14/12/16/3/3/2/482.

An EIA is an effective planning and decision-making tool. It allows the potential environmental consequences resulting from a technical facility during its establishment and its operation to be identified and appropriately managed. It provides the opportunity for the applicant to be forewarned 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.

FRV Energy South Africa (Pty) Ltd has appointed Savannah Environmental, as the independent environmental consultants, to undertake the required Scoping Phase and Environmental Impact Assessment 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 also being undertaken by Savannah Environmental.

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

A number of potential environmental impacts, both positive and negative, associated with the proposed Solar Energy Facility have been identified. These include the following:

Biophysical Studies

Social Studies

Impacts on ecology, fauna and flora: The construction of the facility and the associated disturbance of vegetation may result in impacts on ecology.

Visual quality and aesthetics: The solar energy facility have the potential to have a visual impact on the surrounding area.

Impacts on heritage sites and fossils/paleontology: Disturbance to or destruction of heritage sites and fossils/paleontology may result during the construction of the facility.

Impacts on agricultural potential: Impacts on agricultural areas and potential, and land capacity.

Impacts on the social environment: The construction and operation of the facility may result in limited job opportunities and could impact on the local land use.

Specialist studies will be undertaken to identify and assess these potential impacts and will be undertaken in two phases:

1. The Scoping Phase/Study consists of a desktop study wherein potential issues associated with the proposed project are identified and evaluated, and those issues requiring further investigation through the EIA phase are highlighted.
2. The EIA phase involves the detailed assessment of potentially significant impacts identified in the Scoping Phase. Practical and achievable mitigation and management measures will be recommended within the draft Environmental Management Plan (EMP).

The potential environmental impacts associated with not undertaking the proposed project will also be explored through the EIA process. Specialist studies will be guided by existing information, field observations and input from the public participation process. As an I&AP, your input is considered

an important part of this process, and we urge you to become involved.

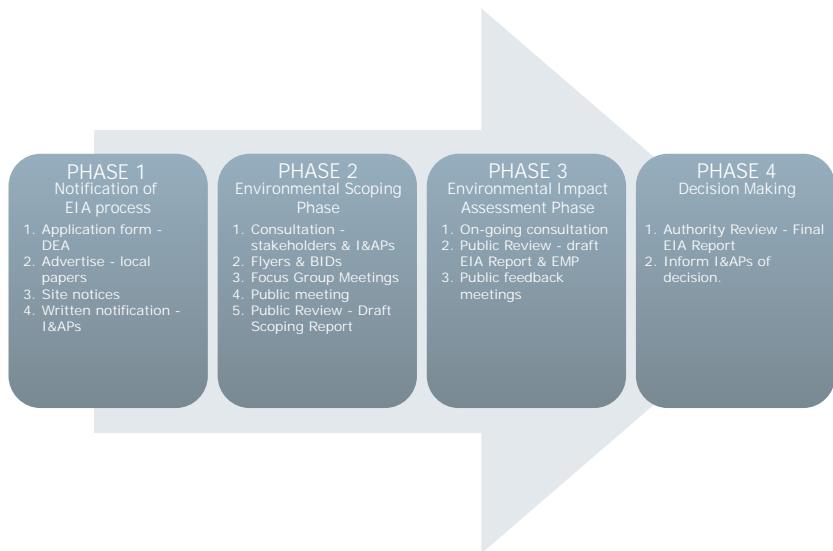
PUBLIC INVOLVEMENT PROCESS

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

The public involvement 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 involvement process includes the following 4 phases:



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 facility.

HOW TO BECOME INVOLVED

1. By responding (by phone, fax or e-mail) to our invitation for your involvement which has been advertised in local and national newspapers.
2. By returning the attached Reply Form to the relevant contact person.
3. 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.
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 public 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 involvement process to provide comment, or raise those issues and concerns which affect and/or interest you, and about which you would like more 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:

Gabriele Wood of Savannah Environmental
PO Box 148, Sunninghill, Johannesburg, 2157
Phone: 011 656 3237
Fax: 086 684 0547
E-mail: gabriele@savannahsa.com

To view project documentation, visit

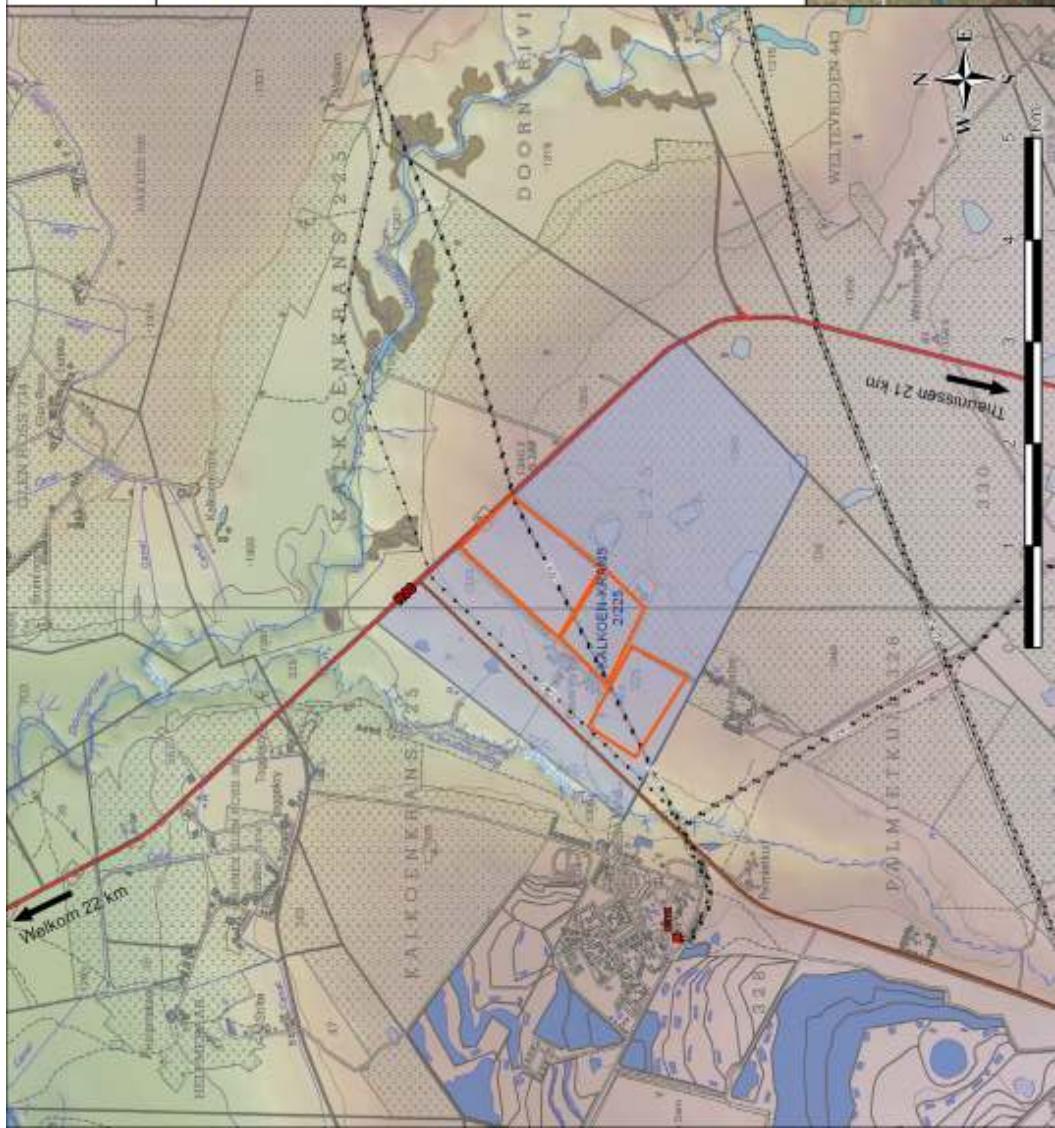
www.savannahSA.com

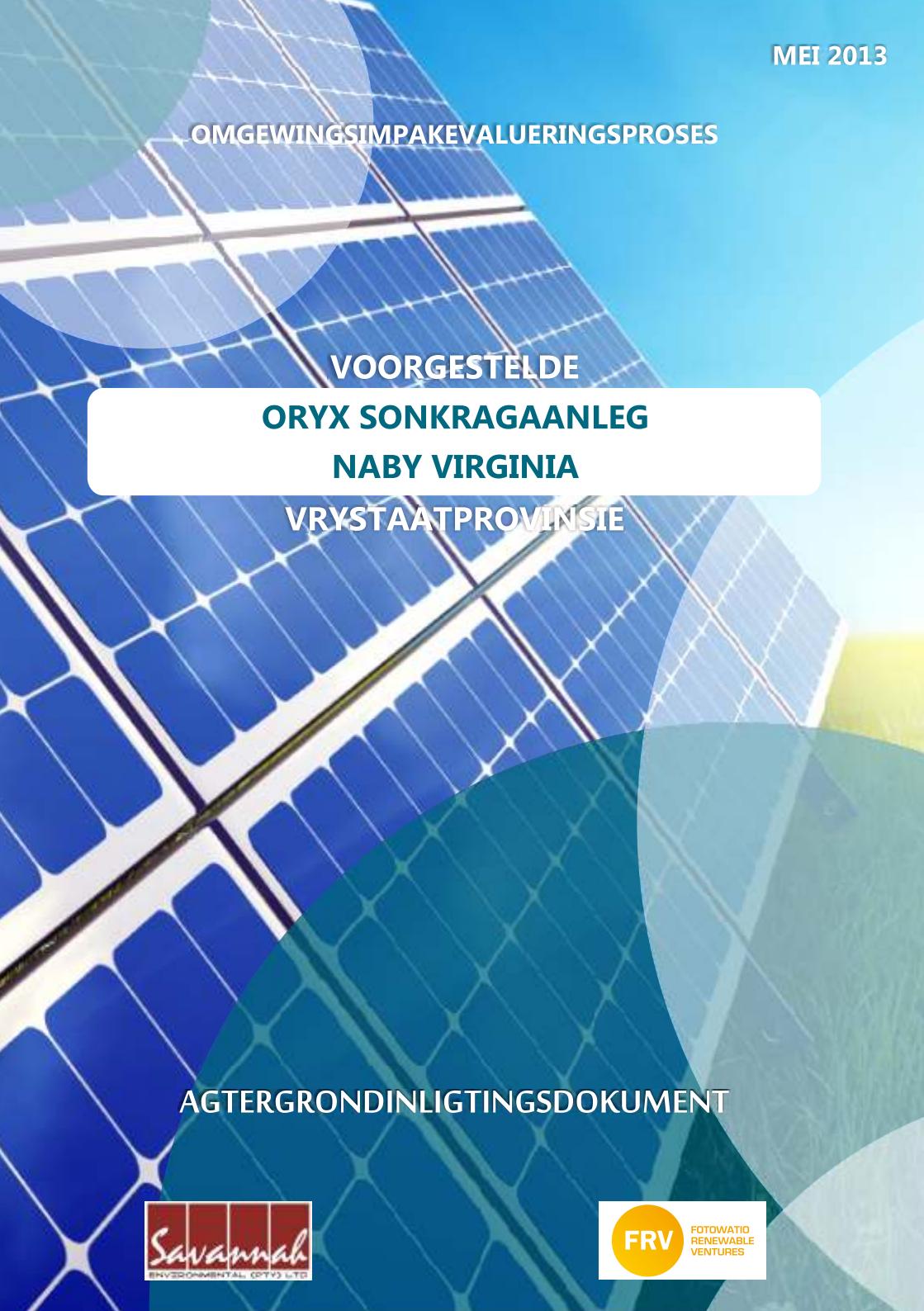
Oryx Solar Energy Facility

Locality Map

Legend

- National Road
 - Regional Road
 - Secondary Road
 - Railway Line
 - Perennial River
 - Non-perennial River
 - Existing Power Line
 - Distribution Substation
- Layout**
- SEF farm portion
 - Project boundary



The background of the entire page features a close-up, perspective view of numerous blue and green solar panels, creating a textured, overlapping pattern.

MEI 2013

OMGEWINGSIMPAKEVALUERINGSPROSES

VOORGESTELDE
ORYX SONKRAGAANLEG
NABY VIRGINIA

VRYSTAATPROVINSIE

AGTERGRONDINLIGTINGSDOKUMENT



FRV Energy Suid-Afrika (Edms.) Bpk stel die oprigting voor van 'n kommersiële fotovoltaiese sonkragaanleg met 'n uitvoervermoë van tot 75 MW, sowel as gepaardgaande infrastruktuur op 'n terrein sowat 11 km suidwes van Virginia, Vrystaatprovincie. Op grond van 'n vooraf-bedryfbaarheidsontleding, 'n proses van terreinidentifisering en 'n omgewingskeuringsproses wat deur FRV Energy Suid-Afrika (Edms.) Bpk. onderneem is, is 'n gunstige gebied geïdentifiseer vir oorweging en evaluering deur 'n Omgewingsimpaktevaluering (OIE).

Die doel van die voorgestelde FV aanleg sal wees om die opgewekte krag na Eskom se elektrisiteitsrooster te evakueer. Die projek word voorgestel as deel van die Departement van Energie (DvE) se Program vir die Verkryging van Hernubare Energie van Onafhanklike Kragproduksente (REIPPP) en sal na verwagting in Augustus 2014 ingelewer word. Indien die projek deur die DvE gekies word vir implementering, sal FRV Energy Suid-Afrika (Edms.) Bpk. by die Nasionale Energiereguleerde van Suid-Afrika (NERSA) moet aansoek doen om 'n opwekkingslisensie en 'n kragkoopooreenkoms met Eskom moet aangaan (d.i. gewoonlik vir 'n tydperk van 20 – 25 jaar) ten einde die voorgestelde aanleg te bou en te bedryf. As deel van die ooreenkoms, sal Eskom FRV Energy Suid-Afrika (Edms.) Bpk. vergoed per kilowatt uur wat opgewek word. Eskom sal finansieel deur die Regering gerugsteun word. Afhangend van die ekonomiese toestande na afloop van hierdie tydperk, kan die aanleg hetsy uit bedryf gestel word of die ooreenkoms om krag te koop kan herbeding en verleng word.

Die Oryx Sonkragaanleg word voorgestel op Gedeelte 2 van die plaas Kalkoen-Krans 225, sowat 11 km suidwes van Virginia in die Mathjabeng Plaaslike Munisipaliteit van die Vrystaatprovincie. Die aard en omvang van hierdie aanleg word van naderby in hierdie Agtergrondinligtingsdokument (AID) ondersoek.

DOEL VAN HIERDIE AGTERGRONDI NLIGTINGSDOKUMENT

Hierdie AID 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 Omgewingsimpaktevaluatingsproses en studies wat onderneem word om die potensiële impakte van die voorgestelde projek, beide positief en negatief, te evalueer; en
- » besonderhede van hoe u by die proses betrokke kan raak, inligting kan ontvang of vraagstukke kan opper wat u dalk kan raak en/of wat vir u van belang kan wees.

OORSIG VAN DIE VOORGESTELDE PROJEK

Deur 'n tegniese bedryfbaarheidstudie te onderneem waartydens oorweging geskenk is aan gunstige klimaatstoestande (hernubare sonkragaanlegte is direk afhanklik van gemiddelde sonbestralingswaardes in 'n bepaalde gebied), toegang tot en vermoë van die elektrisiteitnet, toeganklikheid van die studiereën, plaaslike topografie van die terrein en omgewingsbeperkinge, het FRV Energy Suid-Afrika (Edms.) Bpk 'n potensieel gesikte terrein vir die voorgestelde sonkragaanleg geïdentifiseer. Daar word voorgestel dat die sonkragaanleg 'n reeks fotovoltaiese (FV) panele met 'n opwekkingsvermoë van tot 80 MW sal akkommodeer. Die voorstel is dat hetsy stilstaande of naspoor sonpaneeltegnologie vir hierdie aanleg gebruik sal word.

Ander infrastruktuur wat met die aanleg gepaard gaan, sal die volgende insluit:

- » Monteerstrukture vir die sonpanele, hetsy vasgestampte staalsuile of suile met voorafvervaardigde betonfondamente om die FV panele te dra;
- » kabels tussen die projekkomponente, ondergronds gele waar prakties moontlik;
- » 'n nuwe substasie op die terrein om die aanleg se krag na Eskom se kragrooster te evakuier (aan die hand van 'n inlus-uitlusverbinding met die 132 kV kraglyn op die plaas, wat aansluit by die Oryx 132/44/11 kV Substasie);
- » interne toegangspaaie en 'n omheining; en
- » 'n werkswinkelgebied vir instandhouding, berging en kantore.

Die oorhoofse doel agter die ontwerp en uitleg van die aanleg is om die opwekking van elektrisiteit te maksimaliseer deur blootstelling aan sonbestraling, terwyl infrastruktuur, bedryfs- en instandhoudingskoste sowel as maatskaplike en omgewingsimpakte tot die minimum beperk word. Die gebruik van sonkrag vir die opwekking van elektrisiteit kan as 'n nie-verbruikende benutting van 'n natuurlike hulpbron geag word, wat geen kweekhuisgasse vrystel nie. Die opwekking van hernubare krag dra by tot Suid-Afrika se elektrisiteitsopwekkingsmark, wat in die verlede deur steenkoolkragopwekking oorheers was.

VOORGESTELDE HERNUBARE KRAGTECHNOLOGIE VIR DIE PROJEK

Sonkragaanlegte, soos dié wat van FV-panele gebruik maak, benut die son se energie om elektrisiteit op te wek deur 'n proses wat as die Fotovoltaiese Effek bekend staan. Hierdie effek verwys na ligfotone wat met elektrone bots, wat die elektrone gevolelik in 'n hoër staat van energie plaas om elektrisiteit voort te bring. Die FV Sonkragaanlegte sal uit die volgende komponente bestaan:

Die Fotovoltaiese Sel

Individuale FV selle (stilstaande of naspoorder) is verbind en agter 'n besermende glaspaneel geplaas om 'n fotovoltaiese paneel te vorm. Ander tegnologie wat gebruik kan word, sluit dun film en konsentrerende FV sonkrag (KFV) in.

Die Wisselrigter

Die fotovoltaiese effek wek elektrisiteit in gelykstroom op, met die gevolg dat 'n wisselrigter gebruik moet word om dit in wisselstroom om te sit.

Die Steunstruktur

Die FV panele sal op 'n steunstruktur sowat 4 meter bo die grond gemonteer wees, wat teen 'n hoek gestel is om die maksimum hoeveelheid sonbestraling (vasstaande tegnologie) te ontvang, of wat gestel is om die son te volg (naspoortegnologie) ten einde die hoeveelheid energie wat opgewek word, te verhoog. Die hoek van die paneel hang af van die breedteligging van die voorgestelde aanleg en die hoeke kan verstel word om die kenmerke van somer- of wintersonbestraling ten volle te benut.

Die FV panele is ontwerp om vir meer as 20 jaar ononderbroke, onbeman en met min instandhouding bedryf te word.



Figuur 1: Illustrasie van 'n fotovoltaiese sonkragaanleg (met vergunning van Decchi)



Figuur 2: Foto van 'n FV Paneel (met vergunning van Decchi)

OMGEWINGSIMPAKEVALUERINGSROSES

Ingevolge die OIE-regulasies wat ingevolge Artikel 24(5) van die Nasionale Wet op Omgewingsbestuur (NEMA, Wet 107 van 1998) gepubliseer is, verlang FRV Energy Suid-Afrika (Edms.) Bpk. magtiging van die Nasionale Departement van Omgewingsake (DO), as die bevoegde owerheid (in oorleg met die Vrystaatse Departement van Ekonomiese Ontwikkeling, Toerisme en Omgewingsake (DEDTEA)) vir die oprigting en bedryf van die voorgestelde sonkragaanleg. Ingevolge Artikel 24 en 24D van NEMA, saamgelees met die OIE-regulasies van Staatskennisgewing R543 (Regulasie 26 – 35), en R545, moet 'n Bestekopname en 'n OIE vir hierdie voorgestelde projek onderneem word. Ten einde magtiging te verkry, moet omvattende, onafhanklike omgewingstudies ingevolge die OIE-regulasies onderneem word. Hierdie projek is by die Nasionale DO geregistreer onder Aansoekverwysingsnommer 14/12/16/3/3/2/482.

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

FRV Energy Suid-Afrika (Edms.) Bpk. het Savannah Environmental aangestel as die onafhanklike omgewingskonsultant om die nodige Bestekopnamefase en Omgewings-impaktevaluering te onderneem ten einde alle potensiële omgewingsimpakte wat met die voorgestelde projek gepaard gaan, te identifiseer en te evalueer, en om gepaste versagtings- en bestuursmaatreëls in 'n Omgewingsbestuursplan (OBP) voor te stel. As deel van hierdie omgewingstudies, sal B&GP's aktief betrokke raak deur die openbare deelnameproses wat ook deur Savannah Environmental onderneem word.

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

'n Aantal potensiële omgewingsimpakte, beide positief en negatief, wat gepaardgaan met die voorgestelde sonkragaanleg, is geïdentifiseer. Dit sluit die volgende in:

Biofisiese Studies

Impakte op ekologie, fauna en flora: Die oprigting van die aanleg en die gevolglike versteuring van plantegroei kan impakte op die ekologie tot gevolg hê.

Impakte op landboupotensiaal: Impakte op landbougebiede en -potensiaal, asook op grondvermoë.

Maatskaplike Studies

Visuele gehalte en estetika: Die sonkragaanleg het die potensiaal om 'n visuele impak op die omliggende omgewing te hé.

Impakte op erfenisterreine en fossiele/paleontologie: Die versteuring of vernietiging van erfenisterreine en fossiele/paleontologie kan tydens die oprigting van die aanleg opduik.

Impakte op die maatskaplike omgewing: Die oprigting en bedryf van die aanleg kan lei tot beperkte werkgeleenthede en kan 'n impak op plaaslike grondgebruik hê.

Spesialisstudies sal soos volg in twee fases onderneem word ten einde hierdie potensiële impakte te identifiseer en te evalueer:

1. Die Bestekopnamefase/-studie, wat bestaan uit 'n kantoor (desktop) studie waartydens potensiële vraagstukke wat met die voorgestelde projek gepaard gaan, geïdentifiseer en geëvalueer sal word en daardie vraagstukke sal uitlig wat verdere ondersoek deur die OIE-fase verg.
2. Die OIE-fase, wat die gedetailleerde evaluering van potensieel wesenlike impakte behels wat tydens die Bestekopnamefase geïdentifiseer is. Praktiese en uitvoerbare versagtings- en bestuursmaatreëls sal in die Konsep Omgewingsbestuursplan (OBP) aanbeveel word.

Die potensiële omgewingsimpakte wat gepaard gaan met die nie-onderneming van die voorgestelde projek sal ook deur die OIE-proses ondersoek word. Spesialisstudies sal geleidelik word

deur bestaande inligting, veldwaarnemings en insette wat uit die openbare deelnameproses voortspruit. As 'n B&GP word u insette as 'n belangrike deel van hierdie proses geag, en ons moedig u aan om betrokke te raak.

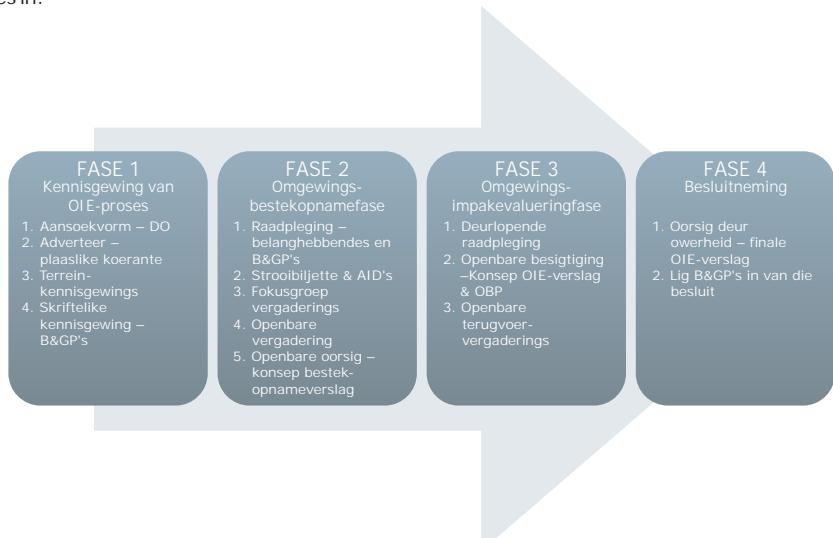
OPENBARE DEELNAMEPROSES

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

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; en
- » toereikende besigtigingstydperke 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 vier fases in:



U VERANTWOORDELIKHED AS 'N B&GP

Kragtens die OIE-regulasies, word u aandag gevvestig 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 belang wat u dalk mag hê in die goedkeuring of afkeuring van die aansoek vir die voorgestelde aanleg, 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 en nasionale 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 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 streekkoerante 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 openbare oorsigtydperke.

Indien u usef as 'n B&GP vir hierdie voorgestelde projek ag, moedig ons u aan om gebruik te maak van die geleenthede wat geskep word deur die openbare deelnameproses om kommentaar te lewer of daardie vraagstukke en knelpunte 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 OIE-proses.

Deur die meegaande Antwoordvorm in te vul en in te dien, registreer u usef 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:

Gabriele Wood van Savannah Environmental
Posbus 148, Sunninghill, Johannesburg, 2157
Telefoon: 011 656 3237
Faks: 086 684 0547
E-pos: gabriele@savannahsa.com

Vir dokumentasie wat met die projek gepaardgaan, besoek

www.savannahSA.com

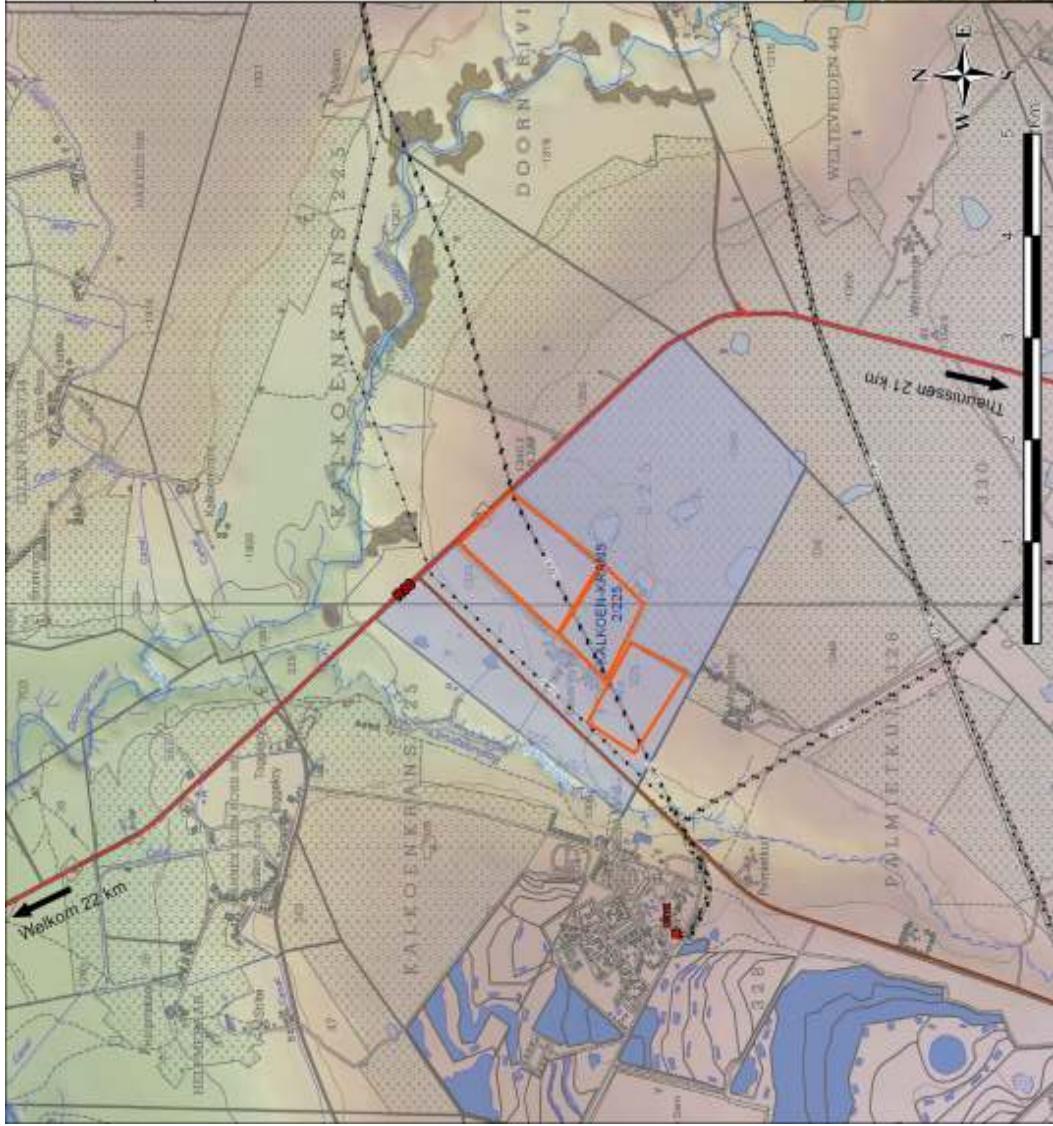
Oryx Solar
Energy Facility
Locality Map



Legend

- The legend consists of nine entries, each with a colored line or symbol followed by its name: National Road (blue), Regional Road (red), Secondary Road (green), Railway Line (black dashed), Perennial River (dark blue), Non-perennial River (light blue), Existing Power Line (orange dashed), Distribution Substation (brown square), and Layout (grey box).

Layout



ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

ORYX SOLAR ENERGY FACILITY NEAR VIRGINIA, FREE STATE PROVINCE

DEA REF: 14/12/16/3/3/2/482

PUBLIC INVOLVEMENT PROCESS REPLY FORM

Return completed reply form to: **Gabriele Wood of Savannah Environmental (Pty) Ltd**

Fax: 086 684 0547

Phone: 011 656 3237

E-mail: gabriele@savannahsa.com

Postal Address: P O Box 148 Sunninghill 2157

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: Please register as an I&AP to receive further correspondence regarding the EIA process for the project. Once registered on the project database, your contact details MAY be included in public documentation.

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:

English

Afrikaans

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

OMGEWINGSIMPAKEVALUERINGSPROSES

ORYX SONKRAGAANLEG NABY VIRGINIA, VRYSTAATPROVINSIE

DEA VERWYSINGSNOMMER: 14/12/16/3/3/2/482

OPENBARE DEELNAMEPROSES REGISTRASIE/KOMMENTAAR VORM

Stuur voltooide registrasie/kommentaar vorm aan: **Gabriele Wood** van **Savannah Environmental (Edms.) Bpk**

Faks: 086 684 0547

Telefoon: 011 656 3237

E-pos: gabriele@savannahsa.com

Posadres: **Posbus 148 Sunninghill 2157**

Verskaf asseblief u persoonlike kontak besonderhede:

Naam & Van:

Naam & Van:		
Organisasie & Rol:		
Posadres:		
Telefoon:		Selfoon:
Faks:		Vonkpos:

Organisasie & Rol:

Posadres:

Telefoon:

Faks:

Selfoon:

Vonkpos:

Stel u belang om te regstreer as 'n belangstellende en/of geaffekteerde party JA
(B&GP)? (Merk met X) NEE

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

Verduidelik u belangstelling in hierdie projek (gebruik addisionele bladsye indien nodig):

Verduidelik u belangstelling in hierdie projek (gebruik addisionele bladsye indien nodig):
--

Lys u vroe, opinies of besorghede in verband met hierdie projek (gebruik addisionele bladsye indien nodig):

Lys u vroe, opinies of besorghede in verband met hierdie projek (gebruik addisionele bladsye indien nodig):

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

Naam & Van:

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

Organisasie & Rol:

Posadres:

Telefoon:

Faks:

Selfoon:

E-pos:

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

Engels
Afrikaans

Engels
Afrikaans



14 May 2013

Dear Stakeholder

**NOTIFICATION OF ENVIRONMENTAL IMPACT ASSESSMENT PROCESS
PROPOSED ORYX SOLAR ENERGY FACILITY, NEAR VIRGINIA, FREE STATE PROVINCE
(DEA REF: 14/16/3/3/3/2/482)**

FRV Energy South Africa (Pty) Ltd is proposing to establish a commercial photovoltaic solar energy facility with a generating capacity of up to 80MW, as well as associated infrastructure on a site located approximately 11 km south-west of Virginia, Free State Province.

Based on a pre-feasibility analysis, site identification and environmental screening processes undertaken by FRV Energy South Africa (Pty) Ltd, a favourable area has been identified for consideration and evaluation through an Environmental Impact Assessment (EIA). The solar energy facility is proposed to accommodate an array of **photovoltaic (PV) panels** with a generating capacity of up to 80 MW. It is proposed to make use of either static or tracking solar panel technology for this facility. Other **infrastructure** associated with the facility will include:

- » Mounting structures for the solar panels to be either rammed steel piles or piles with pre-manufactured concrete footings to support the PV panels.
- » Cabling between the project components, to be lain underground where practical.
- » A new on-site substation to evacuate the power from the facility into the Eskom grid (loop in loop out connection to the 132kv line on the farm and this connects to the Oryx 132/44/11 kV substation)
- » Internal access roads and fencing.
- » Workshop area for maintenance, storage, and offices.

The Oryx Solar Energy Facility is proposed to be located on portion 2 of farm Kalkoen-Krans 225, about 11 km south-west of Virginia, within the Mathjabeng Local Municipality of the Free State Province.

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), FRV Energy South Africa (Pty) Ltd requires authorisation from the National Department of Environmental Affairs (DEA), as the competent authority (in consultation with the Free State Department of Economic Development, Tourism and Environmental Affairs (DEDTEA)) for the construction and operation of the proposed solar energy facility. In terms of sections 24 and 24D of NEMA, as read with the EIA Regulations of GN R543 (Regulations 26-35) and R545, a Scoping and EIA are required to be undertaken for this 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 **14/12/16/3/3/2/482**.

FRV Energy South Africa (Pty) Ltd has appointed **Savannah Environmental**, as the independent environmental consultants, to undertake the required Scoping Phase and Environmental Impact Assessment 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 also being undertaken by Savannah Environmental.

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

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,

MRS GABRIELE WOOD
PUBLIC PARTICIPATION AND SOCIAL CONSULTANT
SAVANNAH ENVIRONMENTAL

(not signed, sent via email)



Notice of Environmental Impact Assessment - Oryx Solar Energy Facility, Free State (DEA REF: 14/16/3/3/2/482)

[Forward](#)

Assigned to:	Gabriele Wood	Date Sent:	15/05/2013 13.28
Teams:	Global	Project:	Oryx Solar Energy Facility
From:			Gabriele Wood <gabriele@savannahsa.com>
To:			
Cc:			
Bcc:	Andrea van Gensen <andrea.vangensen@eskom.co.za>, B Mlambo <mlambob@nra.co.za>, JC Landman <landmanc@nra.co.za>, William du Plessis <williamdup@vodamail.co.za>, S Kewuti <kalipa.kewuti@dmr.gov.za>, John Geeringh <john.geeringh@eskom.co.za>, L van Rensburg <vrensbl@detea.fs.gov.za>, Lizell Stroh <strohl@caa.co.za>, MP Thabethe <pahod@fs.agric.za>, Mr Ikhraam Osman <moetit@dteea.fs.gov.za>, Ms C Booysse <booysec@freetrans.gov.za>, Jeaane Nel <nelj@sacr.fs.gov.za>, Grace Mkhosana <mkhosana@detea.fs.gov.za>, Thoko Buthelezi <thokob@daff.gov.za>, Archie Jonas <archie@lejwe.co.za>, W.A Naude <naudew@freetrans.gov.za>, Eddie Scott <eddie@fscogta.gov.za>, Moss Mthombeni <moss@lejwe.co.za>, Mashudu Marubini <mashuduma@daff.gov.za>		
Subject:	Notice of Environmental Impact Assessment - Oryx Solar Energy Facility, Free State (DEA REF: 14/16/3/3/2/482)		
Body:	Dear Stakeholder FRV Energy South Africa (Pty) Ltd is proposing to establish a commercial photovoltaic solar energy facility with a generating capacity of up to 80MW, as well as associated infrastructure on a site located approximately 11 km south-west of Virginia, Free State Province. Savannah Environmental has been appointed to undertake the Environmental Impact Assessment for the proposed project. Please find herewith a project notification letter, Back Ground Information Document and stakeholder reply form for your reference. Please do not hesitate to contact me if you have any queries in this regard. Kind Regards Mrs Gabriele Wood Public Participation and Social Consultant Savannah Environmental (Pty) Ltd Tel: 27 11 656 3237 Fax: 086 684 0547		



Email: gabriele@savannahsa.com**www.savannahsa.com** Show Plain Text

Attachments:

- [Oryx Reply Form.pdf](#)
- [Oryx SEF BID Afri.pdf](#)
- [Oryx SEF BID, Eng.pdf](#)
- [Oryx SEF Notification Letter 14.05.2013.pdf](#)

Activities

(0 - 0 of 0)				
Subject ▾	Status ▾	Contact	Due Date ▾	Assigned User ▾
No Data				

Attachments

(1 - 4 of 4)			
Subject ▾	Contact ▾	Last Modified ▾	
Oryx Reply Form.pdf		15/05/2013 13.28	edit <input type="button" value=""/>
Oryx SEF BID Afri.pdf		15/05/2013 13.28	edit <input type="button" value=""/>
Oryx SEF BID, Eng.pdf		15/05/2013 13.28	edit <input type="button" value=""/>
Oryx SEF Notification Letter 14.05.2013.pdf		15/05/2013 13.28	edit <input type="button" value=""/>

Accounts

Create	(0 - 0 of 0)	
Account Name ▾	Town/City ▾	Phone ▾
No Data		

Contacts

Create	(0 - 0 of 0)	
Name ▾	Organisation	Email
No Data		

Email Stakeholders

(1 - 10 of 21)	

Name	Organisation	Email	
Ms C Booyse	Free State Department of Police, Roads & Transportation	booysec@freetrans.gov.za	<input type="button" value="edit"/>
Thoko Buthelezi	Department of Agriculture, Forestry & Fisheries	thokob@daff.gov.za	<input type="button" value="edit"/>
William du Plessis		williamdup@vodamail.co.za	<input type="button" value="edit"/>
John Geeringh	Eskom	john.geeringh@eskom.co.za	<input type="button" value="edit"/>
Archie Jonas	Lejweleputswa District Municipality	archie@lejwe.co.za	<input type="button" value="edit"/>
S Kewuti	Department of Mineral Resources	kalipa.kewuti@dmr.gov.za	<input type="button" value="edit"/>
JC Landman	South African National Roads Agency Limited	landmanc@nra.co.za	<input type="button" value="edit"/>
Mashudu Marubini	Department of Agriculture, Forestry & Fisheries	mashuduma@daff.gov.za	<input type="button" value="edit"/>
Grace Mkhosana	Free State Department of Economic Development, Tourism and Environmental Affairs	Mkhosana@detea.fs.gov.za	<input type="button" value="edit"/>
B Mlambو	South African National Roads Agency Limited	mlambob@nra.co.za	<input type="button" value="edit"/>

Users

<input type="button" value="Select"/>	(0 - 0 of 0)
<input type="button" value="Name"/>	<input type="button" value="User Name"/>
<i>No Data</i>	

Projects

<input type="button" value="Create"/> <input type="button" value=""/>	(1 - 1 of 1)		
<input type="button" value="Name"/>	<input type="button" value="Assigned To"/>	<input type="button" value="Start Date:"/>	<input type="button" value="End Date:"/>
Oryx Solar Energy Facility	Gabriele Wood	01/05/2013	01/05/2014 <input type="button" value="edit"/> <input type="button" value=""/>

 Print  Back to top