

JUNE 2011

ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

AN ESKOM RENEWABLE ENERGY INITIATIVE

PROPOSED

KLEINZEE 300MW WIND FARM

NORTHERN CAPE PROVINCE

BACKGROUND INFORMATION DOCUMENT



Eskom Holdings Limited is proposing to establish a commercial wind energy facility and associated infrastructure on a site located approximately 6km south of Kleinsee in the Northern Cape Province. Based on a detailed site identification process undertaken by Eskom, and confirmed for environmental suitability by Savannah Environmental through a Regional Assessment process, a broader area which falls within the Nama Khoi Local Municipality has been identified by Eskom for consideration within an Environmental Impact Assessment (EIA). It is proposed for a cluster of between 150 and 200 wind turbines (described as a wind energy facility or a wind farm) to be constructed over an area of approximately 9300 ha in extent. The nature and extent of this facility is explored in more detail in this document.

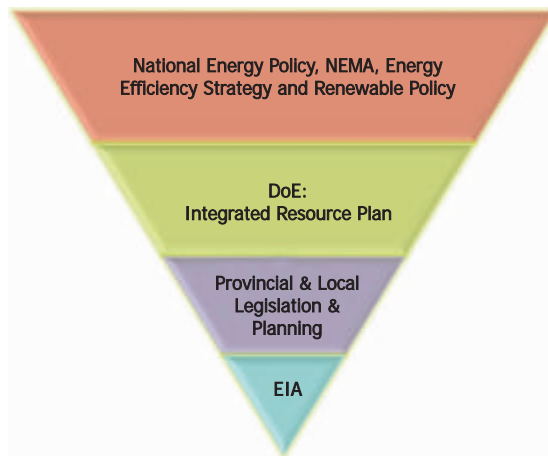
AIM OF THIS BACKGROUND INFORMATION DOCUMENT

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

- » an overview of the Wind Energy Facility project proposed by Eskom.
- » an overview of the Environmental Impact Assessment (EIA) process and studies being undertaken to assess the project.
- » details of how you can become involved in the EIA process, receive information, or raise issues, which may concern and/or interest you.

POLICY PLANNING, RENEWABLE ENERGY

The need to expand electricity generation capacity in South Africa is based on national policy and informed by on-going strategic planning undertaken by the Department of Energy (DoE). The hierarchy of policy and planning documentation that support the development of renewable energy projects such as wind and solar energy facilities is illustrated below.



Globally there is increasing pressure on countries to increase their share of renewable energy generation due to concerns such as climate change and exploitation of non-renewable resources. In order to meet the long-term goal of a sustainable renewable energy industry, a goal of 17,8GW of renewables by 2030 has been set by the DoE within the Integrated Resource Plan (IRP) 2010, to be produced mainly from wind, solar, biomass and small-scale hydro (with wind and solar comprising the bulk of the power generation capacity). This amounts to ~42% of all new power generation being derived from renewable energy forms by 2030. This is however dependent on the assumed learning rates and associated cost reductions for renewable options.

In responding to the growing electricity demand within South Africa, as well as the country's targets for renewable energy, Eskom has a drive to establish renewable forms of energy generation capacity. Eskom embarked upon a research programme through its Resources and Strategy Division to investigate South Africa's sources of renewable energy, and identify appropriate alternative solutions to meet the energy needs of the country. Through this research, the viability of a wind energy facility was investigated and the potential to establish a wind energy facility at a site along the Northern Cape Coast has been identified.

OVERVIEW OF THE PROPOSED PROJECT

In selecting a site for the proposed wind energy facility, it must be ensured that the proposed project can meet economic, social and environmental sustainability criteria. Therefore, a regional site identification process to determine and delineate areas suitable for wind energy development was undertaken and included the consideration of sites/areas of special environmental importance and planning criteria, as well as issues relating to landscape character, value, sensitivity and capacity. These aspects were then balanced with technical constraining factors affecting the siting of a wind farm, including the wind resource land availability, accessibility and existing grid infrastructure.

Through this siting study, an area which falls within the Nama Khoi Local Municipality is now considered as potentially suitable for the wind energy development (as indicated on the attached map). This area (~9300 ha in extent) comprise the farms:

- RE of Brazil 329,
- RE of Goraap 323,
- RE of Honde Vlei 325,
- RE of Kannabieduin 324,
- Portions 2 and 3 of Roovlei 327.

The proposed facility is proposed to accommodate up to 300 MW of generating capacity which would be accomplished by means of installing between 150 and 200 wind turbines of optimal rated capacity of between 1.5MW and 2MW each. Other infrastructure associated with the facility will include:

- » Concrete foundations to support the turbines
- » Cabling between the turbines to be laid underground where practical
- » An on-site substation to facilitate the connection between the facility and the electricity grid
- » An overhead power line (400kV) feeding into Eskom's electricity grid at Gromis Substation, approximately 60 km from the site
- » Internal access roads
- » Borrow pits within the site for construction of access roads
- » Office/Workshop area for maintenance and storage, and
- » Visitors centre

The overall aim of the design and layout of the facility is to maximise electricity production through exposure to the wind resource, while minimising infrastructure, operation and maintenance costs, and social and environmental impacts. Therefore, detailed and reliable information about the strength, direction, and frequency of the wind resource is vital when considering the installation of a wind energy facility, as the wind resource is a critical factor to the success of the installation. As such, Eskom is currently undertaking on-site wind monitoring in order to determine the on-site wind regime and inform the design of the facility.

WHAT IS A WIND TURBINE AND HOW DOES IT WORK?

Wind energy is firmly established as a mature technology for electricity generation, with a reported 65 000 MW installed base worldwide. It is one of the fastest growing electricity generating technologies with installed capacity increasing by ~10 000 MW annually, and features in energy plans across all five continents. Use of wind for electricity generation is essentially a non-consumptive use of a natural resource, and produces zero greenhouse gas emissions. A wind energy facility also qualifies as a Clean Development Mechanism (CDM) project as it meets all international requirements.

A wind energy facility consists of multiple wind turbines which are used to capture the kinetic energy of the wind. A wind turbine consists of three rotor blades and a nacelle mounted at the tip of a tapered tower (refer to Figure 1). The mechanical power generated by the rotation of the blades is transmitted to the generator within the nacelle via a gearbox and drive train.

Turbines are able to operate at varying speeds. The amount of energy a turbine can harness depends on both the wind velocity and the swept area of the rotor blades. It is anticipated that the turbines utilised for the proposed wind energy facility on the West Coast will have a hub height of up to 140m, and a rotor diameter of up to 140m (i.e. each blade being up to 70m in length). Wind turbines can start generating at wind speeds of between 3 to 4 m/second, with nominal wind speeds required for maximum power output varying between ~10 and 25 m/s.

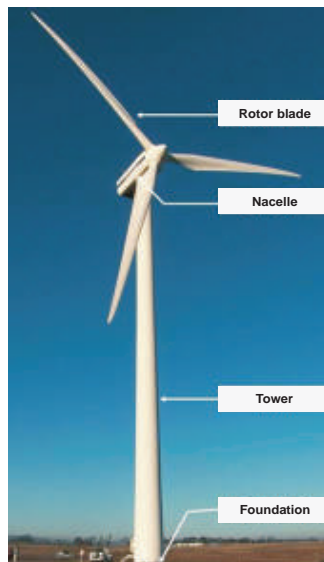


Figure 1: Illustration of the components of a typical wind turbine

A turbine is designed to operate continuously, with low maintenance for 20 years. The operation of the proposed facility will require 20 to 40 permanent personnel located close to the facility.

Complete turbine erection and commissioning is typically one tower per week. A facility consisting of up to 200 turbines will therefore take approximately 3 and a half years to construct and commission.

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), Eskom Holdings Ltd requires authorisation from the National Department of Environmental Affairs (DEA) (in consultation with the Northern Cape Department of Environmental and Nature Conservation), for the undertaking of the proposed wind energy facility. In terms of sections 24 and 24D of NEMA, as read with the EIA Regulations of GNR543, a Scoping and EIA 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 12/12/20/2212.

An EIA is an effective planning and decision-making tool. It allows for the identification of potential environmental consequences resulting from a proposed activity. Furthermore it allows these impacts to be appropriately managed during a project's construction and operation. An EIA provides the opportunity for dialogue with I&APs, through a public participation process.

Eskom has appointed Savannah Environmental, as the independent environmental consultants, to undertake the required EIA process to identify and assess potential environmental impacts associated with the proposed project, and propose appropriate mitigation and management measures as part of an Environmental Management Programme. As part of these environmental studies, I&APs will be actively involved through the public involvement process, and throughout the project studies.

The EIA process is comprised of the following 4 primary phases:



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

Although a wind energy facility utilises a renewable resource to generate electricity, the construction and operation of the proposed facility has the potential to impact on the environment in both a positive and negative manner, both directly and indirectly. A number of potential environmental impacts, both positive and negative, associated with the proposed facility 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 and faunal habitats may affect the ecology and biodiversity of the site.
- Avifauna: Birds and bats may be impacted upon through collision with the rotor blades of the wind turbines, as well as through disturbance of habitats during construction.
- Geology and soil erosion: the construction of the facility may affect the underlying geology in terms of soil degradation and/or erosion.
- Agricultural potential: the construction of the facility may impact on agricultural areas and potential as well as on land capability and production potential.
- 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 a 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. Positive and negative impacts on tourism potential of an area may also be associated with a facility of this nature.

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

- » The Scoping Phase, where potential issues associated with the proposed project will be identified as part of a desktop study. Areas of sensitivity within the broader site will be identified and delineated in order to identify an appropriate portion of the site for the proposed development. The outcome of this phase will be a Scoping Report and a Plan of Study for the EIA Phase
- » The EIA Phase, which involves a 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 Programme.

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.

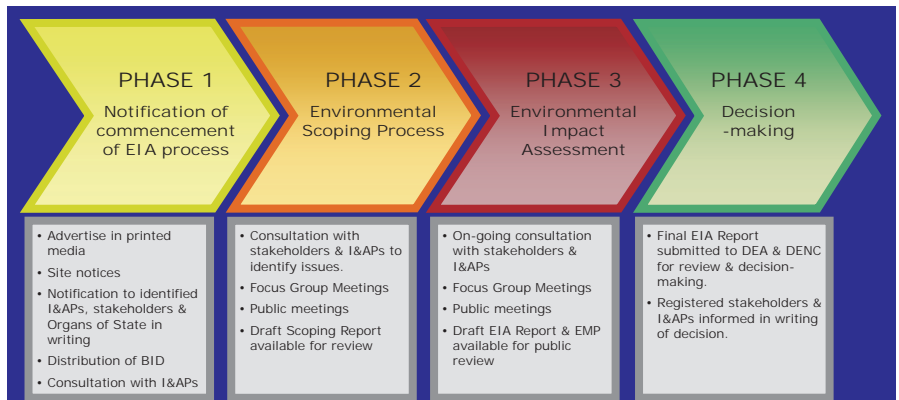
PUBLIC PARTICIPATION PROCESS

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, as dictated by legislation, 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 that you may have in the approval or refusal of the application for the proposed wind facility.

HOW TO BECOME INVOLVED

1. By responding (via phone, fax, or e-mail) to our invitation for your involvement which has been advertised in local and/or 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 be invited to attend these meetings.
4. Dates for public meetings will also be advertised in local and/or regional newspapers
5. By contacting the consultants with queries or comments
6. 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 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:

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

Kleinsee Wind Energy Facility

Locality Map

Legend

- Project Boundary
- Secondary Road
- Non-perennial River
- Power Line



JUNIE 2011

OMGEWINGSIMPAKEVALUERINGSPROSES

'N HERNUBARE ENERGIE INISIATIEF DEUR ESKOM

VOORGESTELDE

KLEINZEE 300 MW WINDPLAAS

NOORD-KAAPPROVINSIE

AGTERGRONDINLICHTINGS-DOKUMENT



Eskom Holdings Beperk stel voor die oprigting van 'n kommersiële windkragaanleg en gepaardgaande infrastruktuur op 'n terrein sowat 6 km suid van Kleinsee in die Noord-Kaapprovinsie. Op grond van 'n gedetailleerde proses van terreinidentifisering, sowel as deur bevestiging dat dit geskik is vanuit 'n omgewingsoogpunt op grond van 'n streekevalueringproses wat Savannah Environmental onderneem het, het Eskom 'n breër gebied, wat in die Nama Khoi Plaaslike Munisipaliteit geleë is, geïdentifiseer vir oorweging deur 'n Omgewingsimpakevaluering (OIE). Daar word aan die hand gedoen dat 'n groep van tussen 150 en 200 windturbines (beskryf as 'n windkragaanleg of 'n windplaas) oor 'n gebied van sowat 9 300 ha opgerig word. Die aard en omvang van hierdie aanleg word van naderby in hierdie dokument ondersoek.

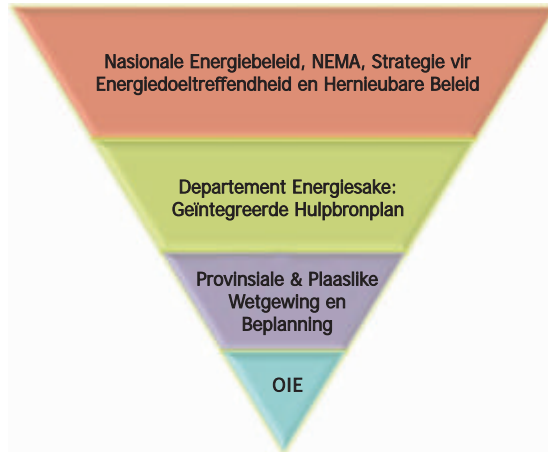
DOEL VAN HIERDIE AGTERGRONDI N LIGTINGS DOKUMENT

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

- » 'n oorsig van Eskom se voorgestelde Windkragaanleg-projek.
- » 'n oorsig van die Omgewingsimpakevalueringproses (OIE) en studies wat onderneem word om die projek te evalueer.
- » 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.

BELEIDSBEPLANNING, HERNIEUBARE ENERGI E

Die behoefte om Suid-Afrika se opwekkingsvermoë te vergroot, is op grond van nasionale beleid, wat toegelig is deur volgehoue strategiese beplanning deur die Departement Energiesake (DE). Die hiërargie van beleidsmaking en beplanningsdokumentasie wat die ontwikkeling van hernieubare kragprojekte, soos wind- en sonkragaanlegte ondersteun, word hieronder uiteengesit:



Wêreldwyd is daar toenemende druk op lande om 'n groter aandeel in hernieubare kragopwekking te hê, weens kommer oor onder andere klimaatverandering en die uitputting van nie-hernieubare hulpbronne. Ten einde die langtermyn doelwit van 'n volhoubare, hernieubare kragbedryf gestand te doen, het die DE 'n doelwit van 17,8 GW hernieubare krag teen 2030 onder die Geïntegreerde Hulpbronplan (IRP) 2010 gestel, wat hoofsaaklik aan die hand van windkrag, sonkrag, biomassa en kleinskaalse hidro-opwekking (met wind- en sonkrag wat die grootste bydrae moet lewer) opgewek moet word. Dit kom neer daarop dat ~42% van alle nuwe krag wat opgewek word, teen 2030 uit hernieubare kragbronne moet kom. Dit hang egter af van die veronderstelde koers waarteen die kennis opgedoen word en die gepaardgaande kostevermindering vir hernieubare opsies.

In antwoord op die groeiende vraag na elektrisiteit in Suid-Afrika, asook op die land se teikens vir hernieubare energie, voer Eskom 'n veldtog om hernieubare vorme van kragopwekkingsvermoë te vestig. Eskom het 'n navorsingsprogram van stapel gestuur deur sy Hulpbronne en Strategiese Afdeling om Suid-Afrikaanse bronne van hernieubare energie te ondersoek en om gepaste alternatiewe oplossings te identifiseer om in die land se kragbehoefte te voorsien. Die lewensvatbaarheid van 'n windkragaanleg is deur hierdie navorsing ondersoek, en die potensiaal om 'n windkragaanleg op 'n terrein langs die Noord-Kaapse kus te vestig, is geïdentifiseer.

OORSIG VAN DIE VOORGESTELDE PROJEK

Wanneer op 'n terrein vir die voorgestelde windkragaanleg besluit word, moet verseker word dat die voorgestelde projek kan voldoen aan die ekonomiese, maatskaplike en omgewingsvolhoubaarheidskriteria. 'n Proses van terreinidentifikasie op streekvlak om die geskikte gebiede vir die windkragaanleg te identifiseer en af te merk, is onderneem en het die oorweging van terreine/gebiede van spesiale omgewingsbelang en beplanningskriteria ingesluit, asook kwessies wat verband hou met die eienskappe, waarde, sensitiwiteit en vermoë van die grond. Hierdie aspekte is toe opgeweeg teen beperkende tegniese faktore, wat die plasing van 'n windplaas raak, soos windhulpbron, die windpotensiaal, die beskikbaarheid van grond, toeganklikheid en die bestaande kragnet-infrastruktuur.

Deur die plasingstudie word 'n gebied wat in die Nama Khoi Plaaslike Munisipaliteit geleë is, nou oorweeg as 'n potensieel geskikte terrein vir die ontwikkeling van 'n windkragaanleg (soos aangedui op die meegaande kaart). Hierdie gebied (~9 300 ha in omvang) bestaan uit:

- die Restant van die plaas Brazil 329;
- die Restant van die plaas Goraap 323;
- die Restant van die plaas Honde Vlei 325;
- die Restant van die plaas Kannabieduin 324; en
- Gedeelte 2 en 3 van die plaas Rooivlei 327.

Daar word aan die hand gedoen dat die voorgestelde aanleg oor 'n opwekkingsvermoë van tot 300 MW sal beskik, wat verweselik sal word deur tussen 150 en 200 windturbines op te rig waarvan die optimale vermoë tussen 1.5 MW en 2 MW elk sal wees. Ander infrastruktuur wat met die aanleg gepaard gaan, sal insluit:

- » betonfondasies om die turbines te dra;
- » kables tussen die turbines, ondergronds gelê waar prakties moontlik;
- » 'n substasie op die terrein om die konneksie tussen die aanleg en die elektrisiteitnet te bewerkstellig;
- » 'n oorhoofse kraglylyn (400 kV) wat by die Gromis Substasie, sowat 60 km van die terrein af, by Eskom se elektrisiteitnet sal invoer;
- » interne toegangspaaie;
- » steelgate op die terrein vir die bou van toegangspaaie;
- » 'n kantoor/werkswinkelgebied vir instandhouding en berging; en
- » 'n besoekersentrum.

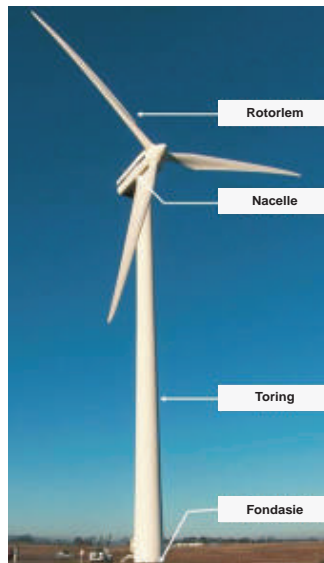
Die uiteindelige doel agter die ontwerp en uitleg van die aanleg is om die opwekking van elektrisiteit te maksimaliseer deur blootstelling aan die windhulpbron terwyl infrastruktuur, bedryfs- en instandhoudingskoste en maatskaplike en omgewingsimpakte tot 'n minimum beperk word. Gedetailleerde en betroubare inligting oor die sterkte, rigting en gereeldheid van die windhulpbron is dus noodsaaklik wanneer oorweging geskenk word aan die installasie van 'n windkragaanleg, aangesien die windhulpbron 'n deurslaggewende faktor in die sukses van die installasie is. Die gevolg is dat Eskom dus tans windmonitering op die terrein uitvoer om die windregime te bepaal en om die ontwerp van die aanleg toe te lig.

WAT IS 'N WINDTURBINE EN HOE WERK DIT?

Windkrag is goed gevestig as 'n volwaardige kragopwekkingstegnologie, wat met 'n wêreldwye geïnstalleerde basis van by die 65 000 MW spog. Dit is een van die snelgroeiendste elektriese opwekkingstegnologieë, waarvan die geïnstalleerde vermoë jaarliks met ~10 000 MW toeneem en wat regoor al vyf kontinente deel van energieplanne uitmaak. Die aanwending van wind vir die opwekking van elektrisiteit is in wese 'n nie-verbruikende benutting van 'n natuurlike hulpbron wat geen kweekhuysgasse vrystel nie. 'n Windkragaanleg kwalifiseer ook as 'n Skoon Ontwikkelingsmeganisme (CDM-projek) aangesien dit aan alle internasionale vereistes voldoen.

'n Windkragaanleg bestaan uit verskeie windturbines wat gebruik word om die kinetiese energie van die wind vas te lê. 'n Windturbine bestaan uit drie rotorlemme en 'n nacelle (turbinehuis) wat op die bopunt van 'n spitsoring gemonteer is (sien Figuur 1). Die meganiese krag wat opgewek word deur die rotasie van die lemme, word aan die generator in die nacelle oorgedra via 'n ratkas en dryfwerk.

Turbines kan teen verskillende snelhede funksioneer. Die hoeveelheid energie wat 'n turbine kan inspan hang af van beide die windsnelheid en die lengte van die rotorlemme. Na verwagting sal die turbines wat vir die voorgestelde windkragaanleg aan die Weskus gebruik sal word, spog met 'n naafhoogte van tot 140 m en 'n rotordeursnee van tot 140 m (d.i. elke lem is tot 70 m lank). Windturbines kan krag begin opwek teen windsnelhede van tussen 3 tot 4m/sekonde, met nominale windsnelhede wat vereis word vir volle kragbediening wat wissel tussen ~10 en 25 m/s.



Figuur 1: Voorstelling van die komponente van 'n tipesie windturbine

'n Turbine is ontwerp om vir 20 jaar met min onderhoud ononderbroke te funksioneer. Die bedryf van die voorgestelde aanleg sal 20 tot 40 permanente personeellede verg wat naby die aanleg woonagtig moet wees.

Die oprigting en inbedryfstelling van 'n kompleet turbine geskied normaalweg teen een toering per week. 'n Aanleg wat uit tot 200 turbines bestaan, sal dus nagenoeg 3½ jaar neem om op te rig en in bedryf te stel.

OMGEWINGSIMPAKEVALUERINGSPROSES

Ingevolge die OIE-regulasies, gepubliseer kragtens Artikel 24(5) van die Nasionale Wet op Omgewingsbestuur (NEMA, Wet 107 van 1998), verlang Eskom Holdings Beperk magtiging van die Nasionale Departement Omgewingsake (DEA) (in oorleg met die Noord-Kaapse Departement Omgewingsake en Natuurbewaring) vir die onderneming van die voorgestelde windkragaanleg. Ingevolge Artikel 24 en 24D van NEMA, saamgelees met die OIE-regulasies van Staatskennisgewing R543, word 'n Bestekopname en 'n OIE vir die voorgestelde projek verlang.

Ten einde magtiging te verkry, moet omvattende, onafhanklike omgewingstudies ingevolge die OIE-regulasies onderneem word. Hierdie projek is by die Nasionale DEA geregistreer onder aansoekverwysingsnommer 12/12/20/2212.

'n OIE is 'n doeltreffende beplannings- en besluitnemingswerktuig. Dit skep die geleentheid dat potensieële omgewingsverwante gevolge weens die voorgestelde aktiwiteit geïdentifiseer word. Voorts bring dit mee dat hierdie impakte na behore bestuur word tydens 'n projek se konstruksie en bedryf. 'n OIE skep die geleentheid vir dialoog met B&GP's deur 'n openbare deelnameproses.

Eskom het Savannah Environmental aangestel as die onafhanklike omgewingskonsultante ten einde die nodige OIE-proses te onderneem om potensieële omgewingsimpakte betreffende die voorgestelde projek te identifiseer en te evalueer, en om gepaste versagende 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 regdeur die projekstudies gehou sal word.

Die OIE-proses bestaan uit die volgende vier primêre fases:



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

Hoewel 'n windkragaanleg van 'n hernubare hulpbron gebruik maak om elektrisiteit op te wek, het die oprigting en bedryf van die voorgestelde aanleg die potensiaal om beide 'n positiewe en negatiewe impak op die omgewing te hê, direk sowel as indirek. 'n Aantal potensieële omgewingsimpakte, beide positief en negatief, wat gepaard gaan met die voorgestelde aanleg, is geïdentifiseer. Hierdie potensieële impakte sal deur die volgende spesialisstudies geëvalueer word:

- **Ekologie, fauna en flora:** Die oprigting van die aanleg en die gevolglike versteuring van plantegroei en habitat vir dierelewe kan die terrein se ekologie en biodiversiteit affekteer.
- **Avifauna:** Voëls en vlermuise kan beïnvloed word deurdat hulle in die windturbines se rotorlemme kan vasvlieg, asook weens die versteuring van hul habitat tydens oprigting.
- **Geologie en gronderosie:** Die onderliggende geologie kan beïnvloed word ten opsigte van gronddegradasie en/of -erosie weens die oprigting van die aanleg.
- **Landboupotensiaal:** Die oprigting van die aanleg kan landbougebiede en landboupotensiaal, asook grondvermoë en produksiepotensiaalbeïnvloed.
- **Erfenisterreine & paleontologie:** Die versteuring of vernietiging van erfenisterreine en fossiele kan tydens die konstruksiefase weens grondverskuiwings voorkom.
- **Visuele estetika:** Die oprigting van 'n aanleg van hierdie aard kan die gebied se visuele estetika affekteer.

- Maatskaplik: Die oprigting en bedryf van die aanleg kan positiewe sosio-ekonomiese geleentheid bied betreffende plaaslike werkgeleenthede, asook negatiewe impakte inhou ten opsigte van sekuriteit en die kenmerkende grondgebruik. Positiewe en negatiewe impakte op 'n gebied se toerismepotensiaal kan ook met so 'n aanleg gepaard gaan.

Spesialisstudies sal soos volg in twee fases onderneem word om hierdie potensiele impakte te identifiseer:

- » Die Bestekopnamefase, waartydens potensiele vraagstukke wat met die voorgestelde projek gepaard gaan, as deel van 'n kantoor (desktop) studie geïdentifiseer sal word. Sensitiewe gebiede binne die breër terrein sal geïdentifiseer en afgebaken word ten einde 'n gepaste gedeelte van die terrein vir die voorgestelde ontwikkeling te identifiseer. Die resultaat van hierdie fase sal 'n Bestekopnameverslag en 'n Plan van Studie vir die OIE-fase wees.
- » Die OIE-fase, wat 'n gedetailleerde evaluering van potensieel wesenlike impakte behels wat tydens die Bestekopnamefase geïdentifiseer is. Praktiese en uitvoerbare versagende en bestuursmaatreëls sal in die Konsep Omgewingsbestuursplan aanbeveel word.

Spesialisstudies sal toegelig 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.

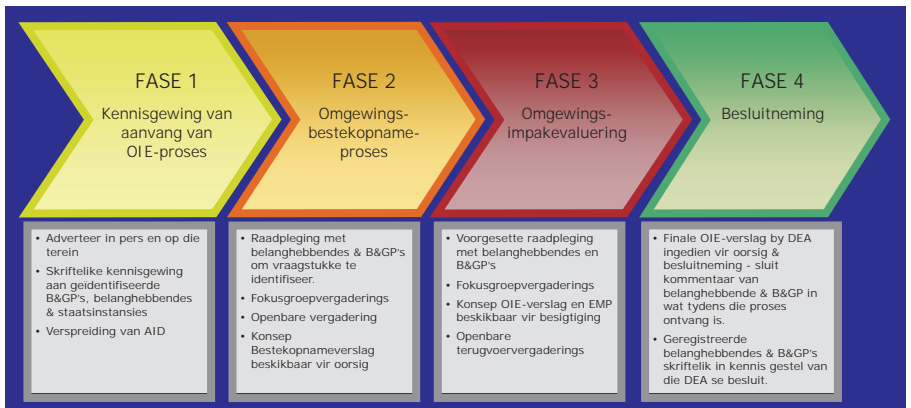
OPENBARE DEELNAMEPROSES

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 geskenk word aan potensiele 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, soos deur wetgewing voorgeskryf, 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 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 uself 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 windkragaanleg, 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/of 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 uitgenooi word om hierdie vergaderings by te woon.
4. Datums vir openbare vergaderings sal ook in plaaslike en/of streekkoerante geadverteer word.
5. Deur die konsultante te kontak met navrae of kommentaar.
6. Deur oorsig en kommentaar te bied oor die Konsep Bestekopname- en OIE-verslag, en wel binne die gestipuleerde 30-dae oorsigtydperke.

Indien u uself 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 of knelpunte te opper wat u raak en/of waarin u belangstel en waarvoor 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 aan ons terug te besorg, registreer u uself outomaties as 'n B&GP vir hierdie projek en verseker u dat kennis geneem sal 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

Kleinsee Wind Energy Facility

Locality Map

Legend

- Project Boundary
- Secondary Road
- Non-perennial River
- Power Line



**ENVIRONMENTAL IMPACT ASSESSMENT PROCESS: PROPOSED KLEINZEE 300MW
WIND FARM, NORTHERN CAPE PROVINCE**

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: Please 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



**This assessment is being conducted on
behalf of Eskom**
(Sien keersy vir Afrikaans)

OMGEWINGSIMPAKSTUDIE PROSES: VOORGESTELDE KLEINZEE 300 MW WINDPLAAS, NOORD-KAAP PROVINSIE

OPENBARE DEELNAMEPROSES REGISTRASIE/KOMMENTAAR VORM

Stuur asb u voltooide registrasie vorm aan: **Shawn Johnston** van **Sustainable Futures ZA**

Faks: **086 510 2537**

Tel: **083 325 9965**

Epos: **swjohnston@mweb.co.za**

Pos Adres: **Posbus 749, Rondebosch, Cape Town, 7701**

Verskaf asseblief u persoonlike kontak besonderhede:

Naam & Van:

Organisasie & Rol:

Posadres:

Telefoon:

Faks:

Selfoon:

Epos:

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

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 indien nodig):

--

Lys u vrae, 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:

Organisasie & Rol:

Posadres:

Telefoon:

Faks:

Selfoon:

E-pos:

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

Engels

Afrikaans



Hierdie studie word namens Eskom
onderneem (Sien omkeer bladsy vir Engels)