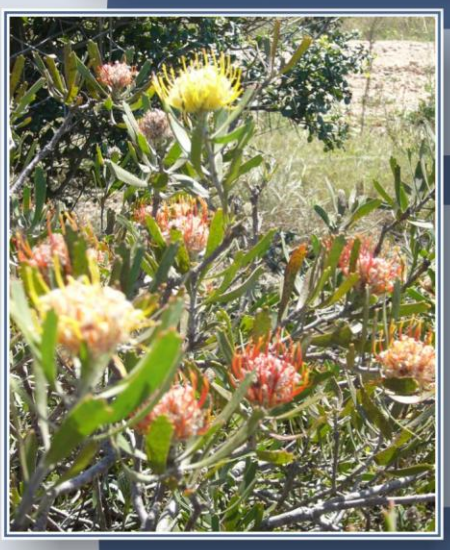
Environmental Impact Assessment for the proposed Ubuntu Wind Energy Project near Jeffrey's Bay, Eastern Cape:

Draft Scoping Report for comment

DEA Ref Number: 12/12/20/1752

CSIR
our future through science

Public Process Consultants
Environmental Impact Assessment and Public Participation Management



Authors:
Minnelise Levendal, Paul Lochner & Sandy Wren

Prepared by:
CSIR, P O Box 320, Stellenbosch, 7599, South Africa
Tel: +27-21-888 2400
Fax: +27-21-888 2693

Prepared for: Windcurrent SA (Pty) Ltd

CSIR Report Number: GWDMS STEL GEN 8669

February 2011

REPORT DETAILS

Title: **Environmental Impact Assessment for the proposed Ubuntu Wind Energy Project near Jeffrey's Bay, Eastern Cape: Draft Scoping Report**

Purpose of this report:

This Draft Scoping Report forms part of a series of reports and information sources that are being provided during the Environmental Impact Assessment (EIA) process for the proposed Ubuntu Wind Energy Project. In accordance with the EIA Regulations, the purpose of the Draft Scoping Report is to:

- Provide a description of the proposed project, including a sufficient level of detail to enable stakeholders to raise issues and concerns;
- Describe the local planning context and environment within which the project is proposed, to assist further in identifying issues and concerns;
- Provide an overview of the process being followed in the Scoping Phase, in particular the public participation process, as well as present the draft Plan of Study for EIA that would be followed in the subsequent EIA phase; and
- Present the issues and concerns identified to date from the stakeholder engagement process, together with an explanation of how these issues will be addressed through the EIA process.

All stakeholders are invited to comment on the Draft Scoping Report, with comments to reach Minnelise Levendal at CSIR by 28 March 2011.

Prepared for: Windcurrent SA (Pty) Ltd

Prepared by: CSIR, P O Box 320, Stellenbosch, 7599, South Africa
Tel: +27-21-888 2400
Fax: +27-21-888 2693

Authors: Minnelise Levendal and Paul Lochner

CSIR Report Number: GWDMS STEL GEN 8669
CSIR Project Number: CASKG87
DEA Ref Number 12/12/20/1752
Date: February 2011
To be cited as: *CSIR (2011): Environmental Impact Assessment for the Ubuntu Wind Energy Project near Jeffrey's Bay, Eastern Cape: Draft Scoping Report. CSIR Report Number: GWDMS STEL GEN 8669*

CONTENTS

CHAPTERS

APPENDICES

SUMMARY

Project Overview

Windcurrent SA (Pty) in a Joint Venture with WKN Windkraft Nord AG (hereinafter jointly referred to as "WKN Windcurrent"), is proposing to construct a 100 MW wind energy facility on the Farms Zuurbron and Vlakteplaas near Jeffrey's Bay in the Kouga Municipal area, Eastern Cape Province (see Figure 1.1). CSIR has been appointed by WKN Windcurrent to undertake the Environmental Impact Assessment for the proposed construction of the wind energy facility.

The proposed project, referred to as the Ubuntu Wind Energy Project, will be located on the farms Zuurbron and Vlakteplaas, situated in the Kouga Municipality approximately 4 km to 7 km north north west of the town of Jeffrey's Bay as follows:

- Remainder of Farm 830, Kransplaas, (Farm Zuurbron);
- Portions 2/3/4/5/6/7 of Farm 854 (Vlakteplaas);
- Farms 307/5; Div Humansdorp;
- 307/6; Div Humansdorp;
- 307/7 Div Humansdorp; and
- Farm 845, Div Humansdorp.

The proposed project will be undertaken in two phases, both of which are covered in this EIA:

- Phase 1 (2013): Installed capacity up to 50 MW
- Phase 2 (2013): Additional installed capacity of up to 50 MW, bringing the total installed capacity up to 100 MW.

Phase 1 will have a total capacity of up to 50 MW, which can readily be accommodated by the existing transmission infrastructure without the need for any upgrades and would consist of up to a maximum of 25 turbines.

Phase 2 consists of additional turbines, identical to the turbines used in the Phase 1, to bring the total capacity of the wind farm from both phases up to 100 MW. The capacity of the turbines that are considered ranges from 2 MW to 3 MW. The total number of turbines could therefore vary from 33 turbines of 3 MW to 50 turbines if a 2 MW turbine is used.

The existing 132 kV overhead transmission line will be used to connect between the wind farm and the transmission system (Eskom grid). A new 132 kV substation will be built on site to connect to the existing transmission line.

Objective of the Project

At a national scale, renewable energy (in particular, wind energy) has the potential to play an important role in meeting South Africa's energy demand through diversifying the sources of power generation whilst reducing the country's carbon footprint from coal power generation. The project will also make a significant contribution to meeting provincial power supply requirements. The Eastern Cape Province is reliant on electricity supply from other provinces, and is currently limited by both generation and transmission capacity. At a local scale this wind energy project will contribute to improved energy stability and security of supply. In the Kouga area secondary agricultural processing companies and both small and commercial scale farmers experience an intermittent and sometimes unreliable supply of electricity. In the towns of Jeffrey's Bay and Humansdorp the power supply is struggling to meet the local demand.

Project description

The key components of the project are:

Wind monitoring mast

WKN Windcurrent has erected a wind monitoring mast to collect wind data for a period of approximately 12 - 24 months to guide project design and further investment decisions and to gather the necessary site specific wind data. The proposed erection of the mast was covered by a separate Basic Assessment process conducted by CSIR on behalf of WKN Windcurrent in 2010 (DEA Reference number: 12/12/20/1753).

Wind turbines

1. 33 to 50 turbines (the actual number will be dependent on the capacity of the turbines selected in the range between 2 and 3 MW), with an expected hub height from 80 m to 105 m and a blade diameter from 90 m to 112 m
2. Turbines will be supported on reinforced concrete spread foundations from 16 m to 20 m in diameter and from 2.5 m to 3 m in depth.
3. Electrical transformers will be placed beside or in (the nacelle) of each turbine.

4. Hard standing areas will be established adjacent to each turbine for use by cranes during construction and retained for maintenance use throughout the life span of the project.
5. A maximum of three additional wind monitoring masts of up to 100 m in height may be installed.
6. Gravel roads, approximately 5 m wide, will be necessary to provide access to each turbine site, with the intent being to upgrade existing roads as far as possible.

Electrical connections

1. The wind turbines will be typically connected to each other and to the substation using medium voltage cables which will, in most cases, be buried approximately 1 m below ground, except where a technical assessment of the proposed design suggests that above ground lines are appropriate.
2. A new sub-station and transformer to the 132 kV Eskom grid will be constructed. The substation will preferably be located close to the 132 kV line.
3. The connection from the substation to the Eskom grid line is a stretch of over head line supported on an intermediate pole(s), depending on the location of the substation relative to the 132 kV line.

Other infrastructure

1. Operations and maintenance building: A single storey building, maximum 5000 m^2, with warehouse / workshop space and access, office and telecoms space and security and ablution facilities as required. This preferably should be situated close to the substation.
2. Fencing as required.

Temporary activities during construction

1. A lay down area is necessary for the assembly of the turbine components, beside an access route, of maximum area 10,000 m^2 – this hard standing area could be temporary or if the landowner prefers, left for long-term use.
2. The overall site compound for all contractors would be a maximum of 5000 m^2.
3. Existing borrow pits will be used as far as possible. The size of these pits will be dependent on the terrain and need for granular fill material for use in construction.
4. At the end of construction these borrow pits will be backfilled as much as possible using surplus excavated material from the foundations.

Construction consists of three distinct components: civil construction; electrical installation and wind turbine erection; and commissioning. The construction and commissioning phases are expected to require a total period of 8 to 15 months.

The operational life span of the wind turbines is expected to be 20 years. Turbine life can be extended beyond 20 years through regular maintenance and/or upgrades in technology.

The final choice of the type of turbines will be based on ease of erection, availability and suitability to the wind regime, amongst other criteria.

Wind turbines can be operated in parallel with farming activities. Internationally it is common practice for farming to continue whilst wind turbines are in operation leading to greater efficiency of land use and no loss of economic activity, but an added passive income for the landowner. Internationally, wind turbines and related components take up between 2% and 5% of the surface area of the wind farm, allowing other activities such as farming to continue on the land. Farms Zuurbron and Vlakteplaas have a combined area of approximately 4 200 ha. The proposed wind turbines will be situated on the northern half of Vlakteplaas and eastern half of Zuurbron. After construction, the turbine mast footprints will cover approximately 0.03 % of the total area.

Need for an EIA

In terms of the regulations promulgated under Chapter 5 of the National Environmental Management Act (Act 107 of 1998) ("NEMA") published in GN R 385, 386 and 387 on 21 April 2006, Scoping and Environmental Impact Assessment (EIA) is required for this project. The need for Scoping and EIA is triggered by, amongst others, the inclusion of activities listed in GN R 387, in particular:

1) The construction of facilities or infrastructure, including associated structures or infrastructure, for –

(a) the generation of electricity where -
(i) the electricity output is 20 megawatts or more; or
(ii) the elements of the facility cover a combined area in excess of 1 hectare.

Chapter 4 of this Draft EIA Report contains a list of activities contained in GN R 386 and GN R 387 that are triggered by the various project components and form part of this Scoping and Environmental Impact Assessment process.

It is noted that **Amended NEMA EIA Regulations** (Notices GN R. 543, 544, 545, and 546) were published in the Government Gazette No. 33306 of 18 June 2010, and came into effect from 2 August 2010 (referred to as the ***2010 EIA Regulations***). This EIA application by WKN Windcurrent was initiated in December 2009, prior to the enactment of the Amended Regulations, and will therefore be dealt with in terms of GN R 385, 386 and 387. However, in line with Regulation 76 (3) of the Amended EIA Regulations regarding transitional arrangements, any impacts associated with listed activities which are included in the Amended listing notices, which were not listed under the listing notices GN R386 and 387, would need to be assessed as part of this EIA process. The CSIR has

therefore checked the new activities and have included the listing notices which may be triggered by this project in this environmental assessment process.

Review of the Draft Scoping Report

This EIA process is currently at the stage where the Draft Scoping Report is being released for a 40-day public review period. Comments need to reach the public participation consultant, Ms Sandy Wren from Public Process Consultants, by no later than 28 March 2011. The Draft Scoping Report will be placed in the Jeffreys Bay and Humansdorp Municipal Libraries and on the project website at www.publicprocess.co.za.

Identification of Issues

The Draft Scoping Report includes the issues identified thus far in the scoping process. The project and EIA process were advertised in one regional newspaper, The Herald, and one local newspaper, Our Times. In addition to the newspaper advertisements, letters with personal notification regarding the EIA process were mailed to all pre-identified key stakeholders on the database, which at the time consisted of 49 I&APs (Letter 1). I&APs were provided a 30-day period within which to raise issues and/or register their interest on the project database, this period extended from the 4 November 2010 to the 3 December 2010.

A synthesis of these issues is provided in the Issues & Response Trail (Chapter 5 of the Draft Scoping Report), which includes an explanation of how the issues will be addressed through the EIA process.

In summary, the following issues have been identified (number in brackets indicates the number of issues raised):

1. Issues related to Noise Impacts (2)
2. Issues related to Birds and Bats (1)
3. Issues related to Visual Impacts (2)
4. Issues related to Agricultural land (4)
5. Issues related to Biophysical impacts (vegetation, fauna and wetlands) (7)
6. Issue related to Heritage related impacts (1)
7. Issue related to Socio-Economic impacts (1)
8. Project details required (2)
9. Environmental Assessment Process and Public Participation (7)
10. General issues and Project Motivation (1).

The *draft Plan of Study for EIA* (Chapter 6 of the Draft Scoping Report) presents the approach to the forthcoming EIA phase. This includes the Terms of Reference for the various specialist studies (listed below) that are proposed to address the issues raised, where necessary.

- Flora and Fauna (excluding avifauna)
  - Impact of the turbines and associated activities during construction as well as operation, on the vegetation and animals, with special attention to red data species.

- Avifauna (birds)
  - Assessment of the potential, as well as potential cumulative, impacts on avifauna, both positive and negative, associated with the proposed project for the construction, operation and decommissioning phases.
  - In addition to the specialist study, a pre-construction bird monitoring programme is being undertaken. The results and recommendations of this monitoring programme will be included in the specialist study.

- Bats
  - Identify and assess the potential impacts of the wind project on bats and bat mortality
  - In addition to the specialist study, a pre-construction bat monitoring programme will be undertaken. The results and recommendations of this monitoring programme will be included in the specialist study.

- Visual
  - Identify and assess the potential impacts of the wind project associated with the proposed project for the construction, operation and decommissioning phases.

- Noise
  - Identify and assess the potential noise impacts associated with the proposed project on residences for the construction, operation and decommissioning phases.

- Archaeology
  - Identify and assess potential impact on archaeology (e.g. stone age artefacts) or impacts on the built environment or places of cultural significance.

- Palaeontology
  - Identify and assess potential impact of excavations on palaeontology (e.g. fossils).

GLOSSARY

BA	Basic Assessment
BID	Background Information Document
CSIR	Council for Scientific and Industrial Research
DEA	National Department of Environmental Affairs
FSR	Final Scoping Report
EAP	Environmental Assessment Practitioner
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
I&AP	Interested and Affected Party
IDP	Integrated Development Plan
kWh	Kilowatt Hours
MW	Megawatts
NEMA	National Environmental Management Act (Act 107 of 1998)
NHRA	National Heritage Resources Act (Act 25 of 1999)
PPC	Public Process Consultants
PSEIA	Plan of Study for EIA
REFIT	Renewable Energy Feed-in Tariff
SAHRA	South African Heritage Resources Agency
SDF	Spatial Development Framework
ToR	Terms of Reference

Environmental Impact Assessment for the proposed Ubuntu Wind Energy Project near Jeffrey's Bay, Eastern Cape: Draft Scoping Report

Chapter 1: Introduction

CONTENTS

1. INTRODUCTION

Windcurrent SA (Pty) in a Joint Venture with WKN Windkraft Nord AG (hereinafter jointly referred to as "WKN Windcurrent"), is proposing the construction of a 100 MW wind energy facility on the Farms Zuurbron and Vlakteplaas near Jeffrey's Bay in the Kouga Municipal area, Eastern Cape Province. WKN Windkraft Nord AG (WKN) was founded in 1990 and is one of the pioneers of the German wind energy market. With international experience in the sectors of development, financing, erection and operation of wind farms, WKN has, as of 2010, a realised capacity of 1052.3 MW wind power.

The Joint Venture Company, presently being formed, will be a South African based renewable energy company that develops, builds and operates renewable energy projects.

The proposed project, referred to as the Ubuntu Wind Energy Project, will be located on the farms Zuurbron and Vlakteplaas in the Kouga Municipality approximately 4 km to 7 km north north west of the town of Jeffrey's Bay as follows:

- Remainder of Farm 830, Kransplaas, (Farm Zuurbron);
- Portions 2/3/4/5/6/7 of Farm 854 (Vlakteplaas);
- Farms 307/5; Div Humansdorp;
- 307/6; Div Humansdorp;
- 307/7 Div Humansdorp; and
- Farm 845, Div Humansdorp.

The locality map provided in Figure 1.1 provides an overview of the 11 erven included in this project.

The proposed project will be undertaken in two phases, both of which are covered in this EIA:

- Phase 1 (2013): Installed capacity up to 50 MW
- Phase 2 (2013): Additional installed capacity of up to 50 MW, bringing the total installed capacity up to 100 MW.

Phase 1 will have a total capacity of up to 50 MW, which can readily accommodated by the existing transmission infrastructure without the need for any upgrades and would consist of up to a maximum of 25 turbines.

Phase 2 consists of additional turbines, identical to the turbines used in the Phase 1, to bring the total capacity of the wind farm from both phases up to 100 MW. The capacity of the turbines that are considered ranges from 2 MW to 3 MW. The total number of turbines could therefore vary from 33 turbines of 3 MW to 50 turbines if a 2 MW turbine is used.

The existing 132 kV overhead transmission line will be used to connect between the wind farm and the transmission system (Eskom grid). A new 132 kV substation will be built on site to connect to the existing transmission line.

A separate Basic Assessment (Department of Environmental Affairs Reference number: 12/12/20/1753) was undertaken from January to June 2010 for the establishment of a wind monitoring mast on the Farm Zuurbron prior to the development of the wind farm. The monitoring mast has subsequently been erected and is 80 m high.

Figure 1.1: Location map of the proposed Ubuntu Wind Energy Project near Jeffrey's Bay in the Eastern Cape

1.1 BACKGROUND AND PROJECT OVERVIEW

The intention of this project is to generate electricity that will be fed into the national or the provincial grid by erecting a wind farm totalling 100 MW when both phases have been completed. At a national level, renewable energy has the potential to play an important role in South Africa through diversifying the sources of power generation and reducing the carbon footprint from fossil fuel power generation, such as coal fired power stations. The renewable energy feed-in tariffs (REFIT) released by the government in April 2009 provided an important catalyst to promote the use of wind energy in South Africa. At a provincial level, the project aims to assist the Eastern Cape in achieving improved energy stability and security. The local wind climate in the Jeffrey's Bay Region creates the potential for a wind energy project to generate electricity, thereby contributing towards the provision of sustainable renewable energy.

1.2 NEED AND JUSTIFICATION FOR THE PROJECT

The National government has set a renewable energy target and is promoting renewable energy using mechanisms such as the favourable renewable energy feed-in tariffs announced in April 2009. These tariffs are intended to stimulate the development of renewable energy projects such as wind farms.

At a national scale, renewable energy (in particular, wind energy) has the potential to play an important role in meeting South Africa's energy demand through diversifying the sources of power generation whilst reducing the country's carbon footprint from power generation. Currently, approximately 93% of South Africa's power generation is derived from coal. The proposed WKN Windcurrent project of 100 MW could offset 262 800 000 tonnes of CO_2 per year, or 5 256 000 000 tonnes of CO_2 over the lifetime (20 years) of the project. Wind farms have a relatively short construction lead time and could therefore be quickly developed to meet South Africa's power need. Coal fired power stations used approximately 292 million cubic metres of water, or 1.5% of national water consumption, for electricity generation during 2005. The future availability and treatment costs of water therefore presents a serious challenge for the economic sustainability of South Africa's current (coal-based) electricity supply.

The Eastern Cape Province is reliant on electricity imports from other provinces yet houses significant industrial and rural development potential. Power from the national grid is largely generated from coal power stations, and transmitted considerable distances to the Eastern Cape (e.g. from Mpumalanga). This leads to significant transmission losses and local grid instabilities. Electricity supply to the Eastern Cape Province is further constrained by transmission infrastructure. Eskom currently supplies approximately 1 400 MW of electricity to the Eastern Cape Province.

Against the background of international commitments to generation of "green energy" with low or zero CO_2 emissions, the intention of this project is to generate additional electricity that will be fed into the national grid by installing a wind farm with a capacity of 100 MW. The objective of the WKN Windcurrent project is to support the growing demand for electricity by means of renewable energy and to lower the emissions of carbon dioxide (CO_2) into the atmosphere. Electricity generated by wind energy, that replaces the use of

fossil fuels, results in greenhouse gas emission reductions. Wind energy is a national imperative. A constrained national energy supply and South Africa's commitments to meeting its 2013 CO_2 reduction target and to the Kyoto Protocol require the rapid deployment of renewable energy, of which wind power has the greatest commercial potential.

Further information on **energy planning and strategic initiatives** in South Africa, and the consequent need for the development of wind energy projects, is provided in Section 1.7. Further information on the **objectives** of the proposed project is provided in Section 2.3.

1.3 REQUIREMENTS FOR AN ENVIRONMENTAL IMPACT ASSESSMENT

In terms of the regulations promulgated under Chapter 5 of the National Environmental Management Act (Act 107 of 1998) ("NEMA") published in GN R 385, 386 and 387 on 21 April 2006, Scoping and Environmental Impact Assessment (EIA) is required for this project. The need for Scoping and EIA is triggered by, amongst others, the inclusion of activities listed in GN R 387, in particular:

1) The construction of facilities or infrastructure, including associated structures or infrastructure, for –

(a) the generation of electricity where -
(i) the electricity output is 20 megawatts or more; or
(ii) the elements of the facility cover a combined area in excess of 1 hectare.

Chapter 4 of this Draft EIA Report contains a list of activities contained in GN R 386 and GN R 387 that are triggered by the various project components and form part of this Scoping and Environmental Impact Assessment process. These listed activities require authorisation from the National Department of Environmental Affairs (DEA). The environmental assessment needs to show the responsible authority, DEA, and the project proponent, WKN Windcurrent, what the consequences of their choices will be in terms of impacts on the biophysical and socio-economic environment and how such impacts can be managed.

It is noted that **Amended NEMA EIA Regulations** (Notices GN R. 543, 544, 545, and 546) were published in the Government Gazette No. 33306 of 18 June 2010, and came into effect from 2 August 2010 (referred to as the ***2010 EIA Regulations***). This EIA application by WKN Windcurrent was initiated in December 2009, prior to the enactment of the Amended Regulations, and will therefore be dealt with in terms of GN R 385, 386 and 387. However, in line with Regulation 76 (3) of the Amended EIA Regulations regarding transitional arrangements, any impacts associated with listed activities which are included in the Amended listing notices, which were not listed under the listing notices GN R386 and 387, would need to be assessed as part of this EIA process. CSIR has therefore checked the new listed activities and have included the ones relevant to this project in Table 4.1 of Chapter 4.

1.4 EIA TEAM

The CSIR has been appointed by WKN Windcurrent to undertake the EIA required for this project.

The EIA team involved in this EIA is listed in Table 1.1. Most of the specialists are familiar with the area and have been involved in other specialist studies in the area.

1.5 DETAILS AND EXPERTISE OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP)

The EIA Project Team is being led by Paul Lochner, who has 16 years experience in environmental assessment and management studies, primarily in the leadership and integration functions (refer to Appendix A for his CV). This has included Strategic Environmental Assessments (SEAs), Environmental Impact Assessments (EIAs) and Environmental Management Plans (EMPs). He has been a certified Environmental Assessment Practitioner for South Africa (EAPSA) since July 2003; and has conducted several EIA processes both in South Africa and internationally. Examples of EIAs include the EIA for the 180 MW Jeffreys Bay Wind Project proposed by Mainstream, EIA for the BioTherm wind energy project near Swellendam, EIA for the InnoWind wind energy projects in the Western Cape, EIA for the Electrawinds wind energy project at Coega in the Eastern Cape, Coega Aluminium Smelter EIA, EIA for the expansion of the container terminal and construction of an administration craft harbour at the Port of Ngqura, Thesen Island EIA at Knysna, Century City Wetlands EIA in Cape Town, and ESIA for a proposed alumina refinery at Sosnogorsk in the Komi Republic of Russia. He has also prepared various EMPs, such as the EMP for the Rietvlei Wetland Reserve (Cape Town), EMP for Century City wetlands in Cape Town, EMP for Eskom Wind Energy Project (Klipheuwel near Stellenbosch in the Western Cape) and the EMP for the Coega Aluminium Smelter. He has authored several Guidelines, such as the "Overview of Integrated Environmental Management" information document for DEAT in 2004; and the "Guideline for EMPs" published in 2005 by the Western Cape government.

Paul will be supported by a CSIR Project Manager, Minnelise Levendal (refer to Appendix A for her CV). Minnelise managed the Basic Assessment Process for the national Department of Energy for the erection of 10 wind monitoring masts as part of the national wind atlas project. From 2009 until 2010 she was also part of the Project Implementation Team for South Africa's Second National Communication (SNC) in terms of climate change. SA needs to report on meeting its obligations specified in the Kyoto Protocol. This process was led by the South African Botanical Institute (SANBI), and the CSIR has been appointed by SANBI to manage the process. Minnelise is currently managing the BioTherm wind energy project near Swellendam. She has also conducted a number of Basic Assessments for the erection of wind monitoring masts.

Table 1.1: EIA Team

EIA Management Team		
Paul Lochner	CSIR	Project Leader (EAP-SA)
Rudolph du Toit	CSIR	Project Manager
Specialist Team		
Jamie Pote	Private Consultant	Ecology (Flora and Fauna)
Chris van Rooyen	Chris van Rooyen Consultants	Avifauna (birds)
Stephanie Dippenaar Anna Doty	CSIR Nelson Mandela Metro University	Bats
Henry Holland	Mapthis	Visual impacts
Brett Williams	SafeTech	Noise
Dr Johan Binneman	Albany Museum	Archaeology
Dr John Almond	NaturaViva	Palaeontology
Public Participation Process		
Sandy Wren	Public Process Consultants	Public Participation Process

1.6 OBJECTIVES OF THE DRAFT EIA REPORT

The Scoping Phase of the EIA refers to the process of determining the spatial and temporal boundaries for the EIA and identifying the issues and concerns arising from the proposed project. In broad terms, this involves three important activities:

- Confirming the process to be followed and opportunities for stakeholder engagement;
- Clarifying the project scope and alternatives to be covered; and
- Identifying the key issues to be addressed in the impact assessment phase and the approach to be followed in addressing these issues.

Scoping is achieved by parallel initiatives of consulting with the lead authorities involved in the decision-making for this EIA application; consulting with the public to ensure that local issues are well understood; and consulting with the EIA specialist team to ensure that "technical" issues are identified. The scoping process is supported by a review of relevant background literature on the local area. Through this comprehensive process, the environmental assessment can identify and focus on **key issues** requiring assessment and identify **reasonable alternatives.**

The primary objective of the Draft Scoping Report is to present key stakeholders (including affected organs of state) with an overview of the project and key issues that require assessment in the EIA Phase; and allow the opportunity for the identification of additional issues that may require assessment.

Issues raised in response to the Draft Scoping Report will be captured in an Issues Trail (Chapter 5) and be included in the Final Scoping Report and Plan of Study for EIA. These documents will be submitted to the competent authority, the DEA, for approval. This approval is planned to mark the end of the Scoping phase, after which the EIA process moves into the impact assessment and reporting phase.

In terms of legal requirements, a crucial objective of the Draft Scoping Report is to satisfy the requirements of Regulations 29 and 30 of the NEMA EIA Regulations. These sections regulate and prescribe the content of the Scoping Reports and specify the type of supporting information that must accompany the submission of the Scoping Report to the authorities. An overview of where the requirements of Sections 29 and 30 are addressed in this Draft Scoping Report is presented in Table 1.2.

Furthermore, this process is designed to satisfy the requirements of Regulations 57, 58 and 59 of the NEMA EIA Regulations relating to the public participation process and, specifically, the registration of and submissions from interested and affected parties.

Table 1.2: Summary of where requirements of a Scoping Report (in terms of Sections 29 and 30 of the NEMA EIA Regulations) are provided in this Draft Scoping Report

Section	Requirement for Scoping Report	Where this is provided in this Draft Scoping Report
29 (1)(a)	Details of the EAP who prepared the report.	Appendix A
29 (1)(b)	Description of the proposed activity and reasonable alternatives	Chapter 2 & 4
29 (1)(c)	Description of the property and the location of the activity on the property	Chapter 1
29 (1)(d)	Description of the affected environment	Chapter 3
29 (1)(e)	Identification of all legislation and guidelines considered for the preparation of Scoping Report	Chapter 4
29 (1)(f)	Description of environmental issues and potential impacts, including cumulative impacts	Chapter 6
29 (1)(g)	Information on the methodology that will be adopted in assessing the potential impacts that have been identified	Chapter 6
29 (1)(h)(i)	Steps taken to notify potential interested and affected parties (I&APs) of the application	Appendix G
29 (1)(h)(ii)	Proof of notice boards, advertisements and notices to I&APs	Appendices C & D
29 (1)(h)(iii)	List of all persons or organizations identified in terms of regulation 57	Appendix F
29 (1)(h)(iv)	Summary of issues raised by I&APs, date received and response by EAP	Chapter 5
29 (1)(i)(i)	Description of tasks undertaken as part of the EIA, including specialists reports and the manner in which tasks will be undertaken	Chapter 6
29 (1)(i)(ii)	Indication of stages at which competent authority will be consulted	Chapter 6
29 (1)(i)(iii)	Description of proposed method for assessing environmental issues and alternatives	Chapter 6

Section	Requirement for Scoping Report	Where this is provided in this Draft Scoping Report
29 (1)(i)(iv)	Particulars of public participation process during EIA	Chapter 4
29 (1)(j)	Specific information required by competent authority	No specific information was required
29 (2)	Guidelines applicable to the kind of activity which is the subject of the application	Chapter 4
30 (a)	Copies of representations, objections and comments received in connection with application or SR	Appendix H
30 (c)	Any responses by the EAP to those representations, objections, comments and views	Chapter 5

1.7 ENERGY PLANNING CONTEXT AND STRATEGIC INITIATIVES FOR SOUTH AFRICA

1.7.1 Current energy context: coal-based power generation

South Africa has an energy intensive economy, highly reliant on fossil fuels, and regards economic growth based on energy intensive industries as a key means to development. Eskom plays a central role in energy generation in South Africa, producing 95% of its total power. Currently Eskom has a total installed generating capacity of some 42 000 MW (net 36 200 MW, peak 34 200 MW) with new peak capacity in demand since 2007. Approximately 93% of its power production capacity is coal-based, 5% nuclear and 2% hydro-electric. Several small power stations and back-up gas-turbines represent less than 1% of the national output, and another 3% is used for own consumption by independent power producers.

Coal, though currently appearing to be cheaper per kWh than renewable energy sources, introduces a host of so-called externality costs which are not factored into its monetary value. These costs arise across the lifecycle of coal consumption, from extraction to disposal (also known as the chain of custody) and can cause irreparable environmental damage, such as deforestation, land erosion and the emission of greenhouse gasses due to underground coal fires. One of the most insidious impacts of coal mining is acid mine drainage containing carcinogens such as benzene and toluene, which drain from mines into surface and ground water sources. Coal burning releases oxides of sulphur and nitrogen as well as mercury into the atmosphere, which cause adverse impacts on the natural environment (e.g. acid rain).

A wind energy project, such as the proposed Ubuntu wind energy project aims to generate, at full capacity 100 MW of electricity with zero atmospheric emissions.

1.7.2 Policy context for promotion of renewable energy

A substantive body of policy and legislation (at international, national and provincial levels) supports the development of renewable energy in South Africa, for example:

- Kyoto Protocol
- The Constitution of the Republic of South Africa (Act 108 of 1996)
- White Paper on the Energy Policy of South Africa (December 1998)
- National Integrated Energy Plan for the RSA (March 2003)
- White Paper on Renewable Energy (November 2003)
- DME Energy Efficiency Strategy (March 2005)
- National Environmental Management Act (No. 107 of 1998) (NEMA)
- National Environmental Management: Air Quality Act
- National Strategy for Sustainable Development (DEAT, 2006)
- The Long term mitigation scenarios of the Department of Environmental Affairs (2008)
- Electricity Regulations Amendments (August, 2009)
- Renewable Energy Feed in Tariff Guidelines (NERSA, March 2009).

Generation of new power from wind, which is costed at R 1.25 per kWh in the feed-in tariffs released for South Africa in April 2009, is predicted to become cheaper than coal by as early as 2020 to 2025. Thereafter, wind energy is predicted to continue to become cheaper while coal power is expected to keep increasing in cost (NERSA, 2009).

1.7.3 Integrated Strategic Energy Planning for South Africa

Integrated Strategic Electricity Planning is the way in which Eskom assesses by how much the demand for electricity is likely to grow and how best to meet and manage that demand. The most likely future, based on long-term southern African economic scenarios, is forecasted and provides the framework for Eskom to investigate a wide range of new supply-side and demand-side technologies and options. Nationally the Department of Energy is embarking on an Integrated Resource Planning process to develop a country energy plan for the next 20 years of which renewable energy will form part of the proposed energy mix. The demand for electricity is growing continuously and is projected to continue growing in the foreseeable future (as shown in Figure 1.2, which includes three growth scenarios).

Considering the economic development of South Africa an additional 40 000 MW production capacity has been planned by Eskom over the next 20 years due mainly to upcoming large mining and metal industry. Therefore by 2020, South Africa will need several new sources of power to provide for the growing demand (see Figure 1.2). In order to meet this future demand, Eskom is actively investigating and installing new energy-generating facilities.

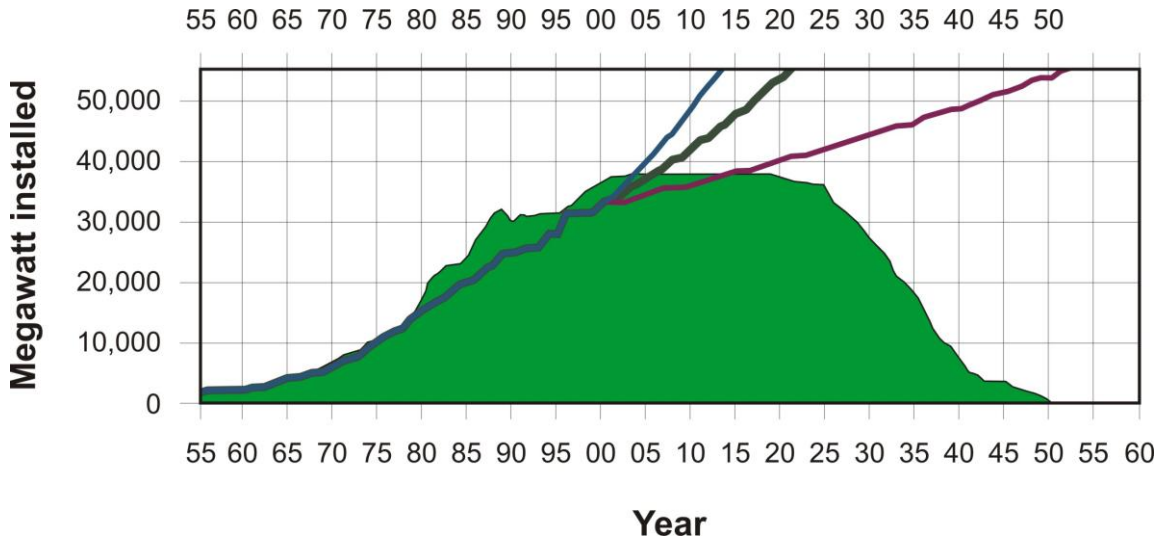


Figure 1.2: Eskom's installed generating capacity profile from 1955 to 2060.

The green shaded area shows Eskom's energy-generating capacity, which grows as new power stations are built. If no new power stations are built, the generating capacity will begin to decline from 2020 as existing power stations are decommissioned. The three lines show how energy consumption could grow in future via low, medium and high-growth scenarios.

All countries rely on a range of energy sources and generation technologies. Eskom is exploring a variety of ways of meeting the predicted future demand for electricity. In all probability the future energy needs of southern Africa will be supplied from a wide variety of sources, such as coal, gas, nuclear, hydro (electric), oil and renewable sources, as suggested in Figure 1.3. This figure incorporates Eskom's forecasting scenario whereby the current generating capacity of coal-fired power stations will decline from 2020. Among the renewable sources which are being explored, wind energy has been identified to contribute to the energy mix.

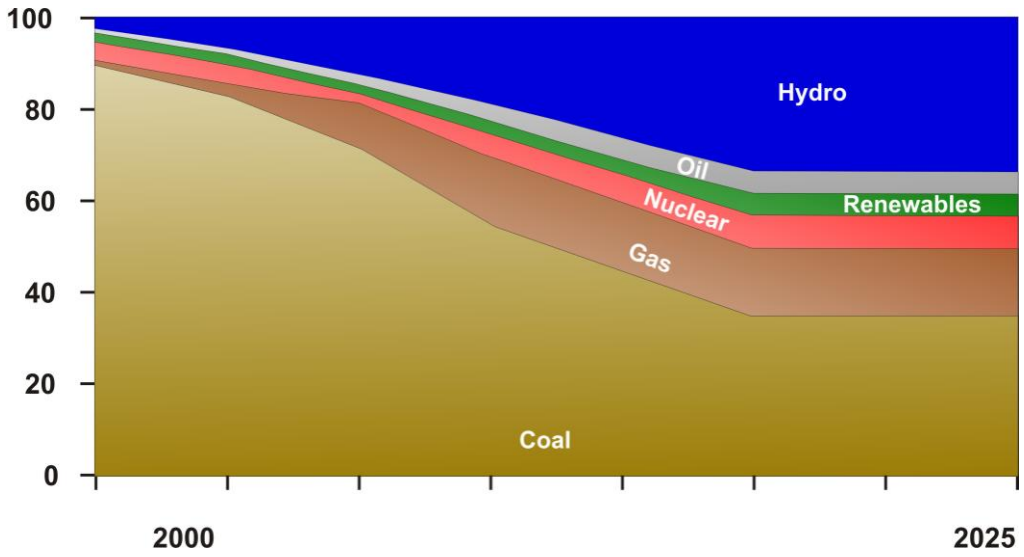


Figure 1.3: Predicted future regional electricity mix for southern Africa

Environmental Impact Assessment for the proposed Ubuntu Wind Energy Project near Jeffrey's Bay, Eastern Cape: Draft Scoping Report

Chapter 2: Project Description

CONTENTS

2. PROJECT DESCRIPTION

This chapter is based on information provided by WKN Windcurrent. A description of the site location is provided in Chapter 3.

WKN Windcurrent SA (Pty) Ltd is proposing to construct a wind energy facility near Jeffrey's Bay in the Kouga Municipal area of the Eastern Cape Province. The proposed project, referred to as the Ubuntu Wind Energy Project, will be undertaken in two phases and will utilise wind turbines with a combined generation capacity of 100 MW. A 100 MW wind project could produce enough electricity to power approximately 175 000[1] typical Eastern Cape households for a year.

2.1 OBJECTIVES OF THE PROJECT

National government has set a renewable energy target and is promoting renewable energy using mechanisms such as the favourable renewable energy feed-in tariffs (REFIT) announced in April 2009. These tariffs are intended to stimulate the development of renewable energy projects, such as wind farms.

At a national scale, renewable energy (in particular, wind energy) has the potential to play an important role in meeting South Africa's energy demand through diversifying the sources of power generation whilst reducing the country's carbon footprint from coal power generation. Currently, approximately 93 % of South Africa's power generation is derived from coal and 5 % from nuclear energy, whilst the remainder is produced by a combination of hydro-electric, pumped storage and biomass. The heavily energy-intensive South African economy makes the country one of the highest emitters of greenhouse gasses in Africa, and it stands above the OECD1 region average in energy sector emissions. South Africa produces more than 40% of Africa's fossil fuel-related carbon dioxide (CO_2) emissions, and is responsible for 1.5% of the world's total (ranking it 13th in the world in 2006).

A 100 MW wind farm would offset 262 800 000 tonnes of CO_2 per year or 5 256 000 000 tonnes of CO_2 over the lifetime of the project (i.e. 20 years). Wind farms have a relative short lead time and could therefore be quickly deployed to meet South Africa's power need.

The project will also make a significant contribution to meeting provincial power supply requirements. The Eastern Cape Province is reliant on electricity supply from other provinces, and is currently limited by both generation and transmission capacity. This situation is restricting the significant industrial and rural development potential of the province, for example, at the major metropolitan centres such as Port Elizabeth.

At a local scale this wind energy project will contribute to improved energy stability and security of supply. In the Kouga area secondary agricultural processing companies and

[1] Where a typical Eastern Cape household uses 1500 kwh per annum. In South Africa, usage ranges from less than a 1000 kwh per year to over 8000 kwh per year.

both small and commercial scale farmers experience an intermittent and sometimes unreliable supply of electricity. In the towns of Jeffrey's Bay and Humansdorp the power supply is struggling to meet the local demand. These towns are most severely affected by power failures as they consume more than 75% of the Kouga municipal energy supply. Furthermore, due to the length of the Eskom power lines from the power stations (e.g. in Mpumalanga) to the Kouga area, and the inherent characteristics of the Kouga network, the towns suffer from periodic power quality issues and voltage instabilities. Given these challenges, one of the objectives of the project is to help stabilise energy supply to the Jeffrey's Bay, Patensie, Hankey and Humansdorp area. The local economy, and in particular emerging entrepreneurs, will benefit from a more stable and reliable energy supply in the area.

2.2 SITE SELECTION

In the pre-feasibility stage of the project (2007-2009) sites were considered in the wider Eastern Cape region, leading to the selection of the Kouga area for more detailed studies and wind monitoring for the project. The Kouga region was seen as an ideal area for this project due to the following factors:

- The wind regime in the area appears favourable (see Figure 2.1).
- Existing Eskom power lines are in close proximity to the proposed site.
- Initial investigation suggests there are few additional constraints to the development in the immediate area.
- There is a need for additional energy capacity to support and stimulate economic growth.
- The network within the Kouga area can benefit from a localized power plant to stabilize the grid.

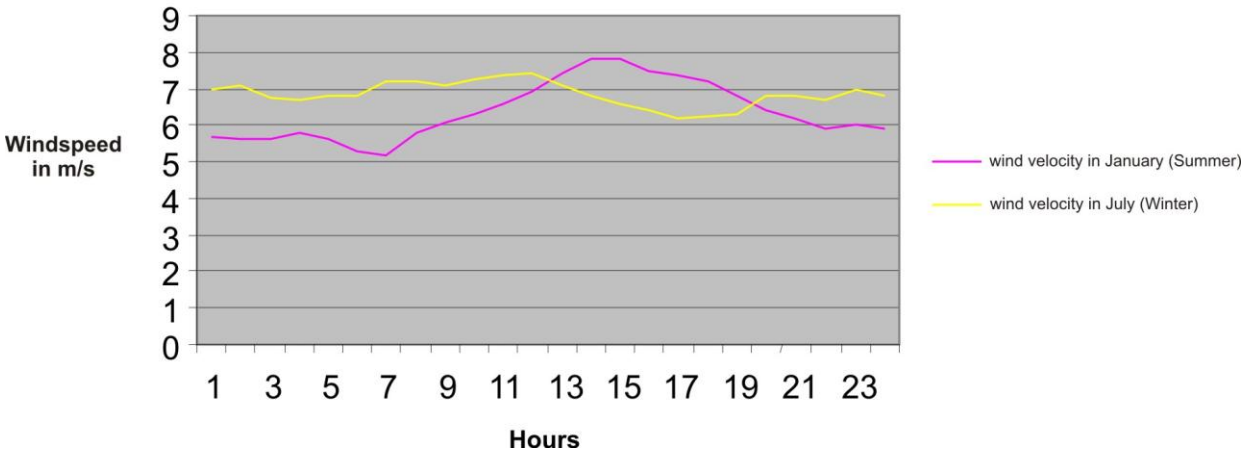


Figure 2.1: Provisional wind profile for the Kouga site showing daily and seasonal variation

2.3 OVERVIEW OF THE PROJECT

The objective of the project is to generate electricity to feed into the national grid by installing a wind farm with a maximum capacity of 100 MW. While the total capacity of this project is capped at 100 MW, the capacity of each phase is dependent on progress with other projects in the region and may be amended during the EIA process. The key components of the project are described below:

Wind monitoring mast

To guide project design and further investment decisions and to gather the necessary site specific wind data, WKN Windcurrent has erected a wind monitoring mast (Figure 2.2) to collect wind data for a period of approximately 12 - 24 months. The proposed erection of the mast was covered by a separate Basic Assessment process conducted by CSIR on behalf of WKN Windcurrent in 2010 (DEA Reference number: 12/12/20/1753). This mast is 80 m high with securing stays on three sides extending approximately 65 m from the base. The mast has anemometers at heights of 25 m, 50 m and 80m. When the 12-24 month monitoring period is complete the mast can be dismantled and re-used elsewhere

Figure 2.2/…

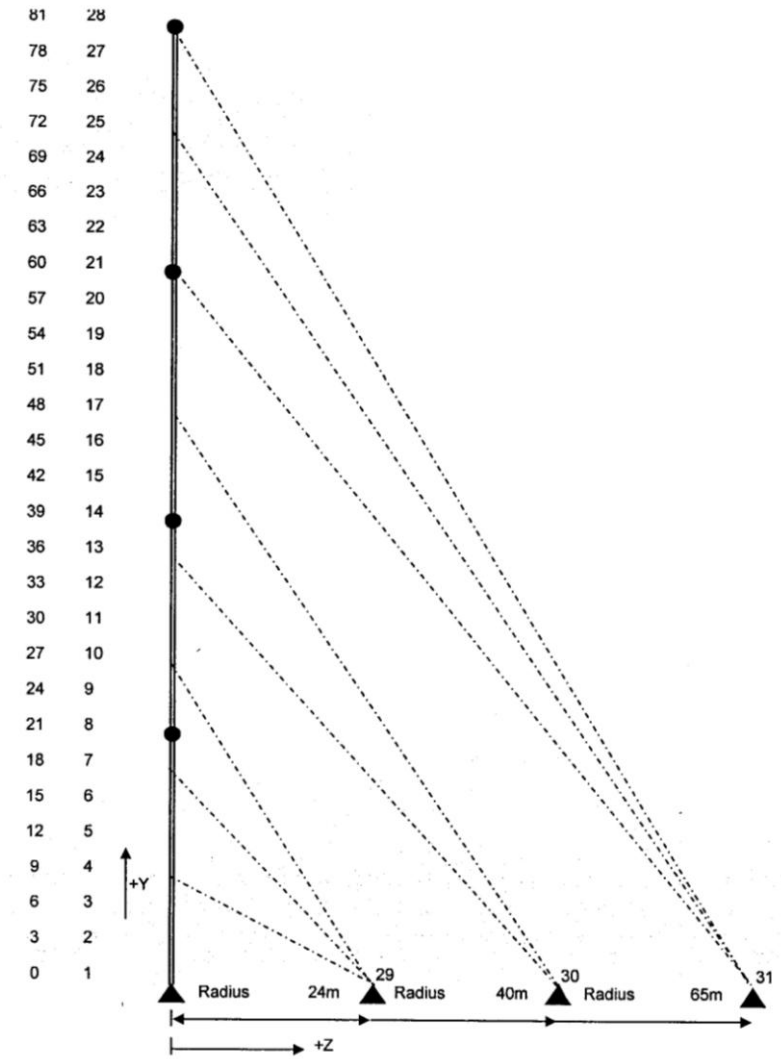


Figure 2.2: Example of the 80 m wind monitoring mast erected on Farm Zuurbron

Wind turbines

1. 33 to 50 turbines (the actual number will be dependent on the capacity of the turbines selected in the range between 2 and 3 MW), with an expected hub height from 80 m to 105 m and a blade diameter from 90 m to 112 m
2. Turbines will be supported on reinforced concrete spread foundations from 16 m to 20 m in diameter and from 2.5 m to 3 m in depth.
3. Electrical transformers will be placed beside or in (the nacelle) of each turbine.

4. Hard standing areas will be established adjacent to each turbine for use by cranes during construction and retained for maintenance use throughout life span of the project.
5. A maximum of three additional wind monitoring masts of up to 100 m in height may be installed.
6. Gravel roads, approximately 5 m wide, will be necessary to provide access to each turbine site, with the intent being to upgrade existing roads as far as possible.

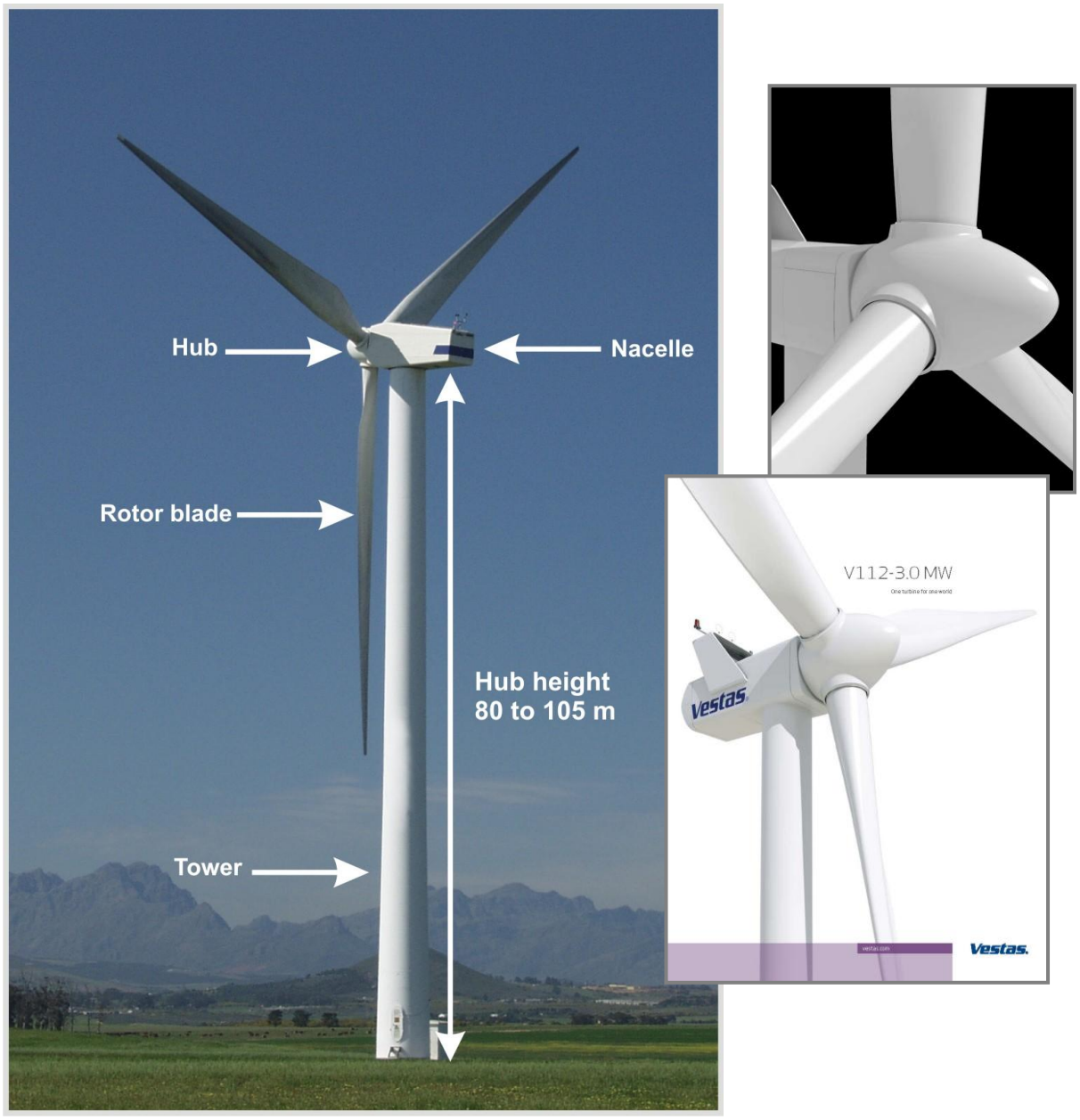


Figure 2.3: Vestas turbine - typical of the type of wind turbine proposed for this project

Electrical connections

1. The wind turbines will be typically connected to each other and to the substation using medium voltage cables which will, in most cases, be buried approximately 1 m below ground, except where a technical assessment of the proposed design suggests that above ground lines are appropriate.
2. A new sub-station and transformer to the 132 kV Eskom grid will be constructed. The substation will preferably be located close to the 132 kV line.
3. The connection from the substation to the Eskom grid line is a stretch of over head line supported on an intermediate pole(s), depending on the location of the substation relative to the 132 kV line.

Other infrastructure

1. Operations and maintenance building: A single storey building, maximum 5000 m^2, with warehouse / workshop space and access, office and telecoms space and security and ablution facilities as required. This preferably should be situated preferably close to the substation.
2. Fencing as required.

Temporary activities during construction

1. A lay down area is necessary for the assembly of the turbine components, beside an access route, of maximum area 10,000 m^2 – this hard standing area could be temporary or if the landowner prefers, left for long-term use.
2. The overall site compound for all contractors would be a maximum of 5000 m^2.
3. Existing borrow pits will be used as far as possible. The size of these pits will be dependent on the terrain and need for granular fill material for use in construction.
4. At the end of construction these borrow pits will be backfilled as much as possible using surplus excavated material from the foundations.

The construction will be undertaken in three distinct components:

- Civil construction
- Electrical installation and wind turbine erection, and
- Commissioning.

The construction and commissioning phases are expected to require a total period of 8 to 15 months.

The operational life span of the wind turbines is expected to be 20 years. Turbine life can be extended beyond 20 years through regular maintenance and/or upgrades in technology.

The final choice of the type of turbines will be based on ease of erection, availability and suitability to the wind regime, amongst other criteria.

Wind turbines can be operated in parallel with farming activities. Internationally it is common practice for farming to continue whilst wind turbines are in operation leading to greater efficiency of land use and no loss of economic activity, but an added passive income for the

landowner. Internationally, wind turbines and related components take up between 2% and 5% of the surface area of the wind farm, allowing other activities such as farming to continue on the land. Farms Zuurbron and Vlakteplaas have a combined area of approximately 4 200 ha. The proposed wind turbines will be situated on the northern half of Vlakteplaas and eastern half of Zuurbron. After construction, the turbine mast footprints will cover approximately 0.03 % of the total area.

Environmental Impact Assessment for the proposed Ubuntu Wind Energy Project near Jeffrey's Bay, Eastern Cape: Draft Scoping Report

Chapter 3: Description of the Affected Environment

CONTENTS

3 DESCRIPTION OF THE AFFECTED ENVIRONMENT

This chapter provides an overview of the affected environment and local planning context (including surrounding land uses) for the proposed Ubuntu Wind Energy Project. A broad understanding is given to the term 'environment', which includes the biophysical, socio-economic and heritage environment. This chapter, therefore, assists the reader in identifying potential impacts on the environment (positive or negative); and opportunities or constraints which the affected environment may present to the development.

3.1 SITE LOCALITY

The proposed Ubuntu wind energy facility would be situated on a coastal plateau approximately 120 m to 200 m above sea level, inland of the N2 national road. The facility will extend over two farms, Farms Zuurbron and Vlakteplaas. The farm Zuurbron extends from approximately 6 to 15 km from the coast; and the farm Vlakteplaas extends from approximately 4 to 6 km from the coast, with the southern border of the latter farm being on the N2.

These farms have a combined area of approximately 4 200 ha. Wind turbines will be situated on the northern half of Vlakteplaas and eastern half of Zuurbron. After construction, the turbine mast footprints will cover approximately 0.003 % of the total area.

3.2 BIOPHYSICAL ENVIRONMENT

3.2.1 Climate

Rainfall in the Kouga region is bimodal where both summer and winter rainfall occurs, a feature typical of the south-east coastal region of the country. The mean annual rainfall is approximately 400 mm. The weather is mild without extreme conditions with an average summer temperature of 24°C and a winter temperature of 17°C. During winter the prevailing wind is from a westerly to south westerly direction and during summer the wind is predominantly easterly. A high frequency of wind occurs daily in the area.

3.2.2 Landscape and Geology

The topography of the region is dominated by a flat coastal plain which gradually rises to the north and west to form the Cape Fold Belt mountains. The mountains and palaeo-marine deposits of the region have been deeply incised by the Gamtoos River system. The wind farm will be located on a palaeo-marine terrace adjacent to, and above, the Gamtoos River valley.

Dairy and stock farming is the main land use type in the surrounding region. The Gamtoos River floodplain is under intensive irrigated cultivation. Settlements such as Hankey and Humansdorp have developed as service centres for the agricultural industry. Humansdorp lies to the west of the site. Towns and villages along the coast are holiday resorts with seasonal variations in population. Jeffreys Bay is the largest of these and is rapidly expanding with light and medium industrial sectors. Other holiday resorts that potentially will be affected by the wind farm include Aston Bay, Paradise Beach and St Francis Bay.

There are various power line, road and railway networks covering the area. A 132 kV power line crosses the site, in an east-west direction north of the N2 highway, with the Melkhoutbosch substation (Figure 3.1) located on this power line north of the N2-R330 interchange. The electricity generated at the Ubuntu wind energy project will feed into the 132 kV line and into the Melkhoutbosch substation.

The N2 is a main freight and tourist route between Port Elizabeth and Cape Town. Other main roads are the R102 between Jeffreys Bay and Humansdorp and the R330 between Hankey and St Francis Bay. A number of relatively large structures are visible in the wind farm area, such as communication towers and chicken broiler housing. Various quarries are also present in the area. In addition there are viewpoints in protected areas which potentially will be affected by the wind farm. Of these, the Kabeljous River Nature Reserve and the Kabeljous River Natural Heritage Site are most likely to be affected.

3.2.3 Ecology

The habitat is dominated by grazed grassy fynbos, or pastures containing fynbos elements that structurally resemble natural grassland. These areas of old farmland are now overgrown with grass and used for grazing, with dams and thicket in the kloofs and drainage lines. The majority of the land consists of cultivated fields, mainly producing fodder for livestock but used historically for crop production. A number of farm dams are present on the site and seasonal/ephemeral wetlands occur in the rainy season in flat areas, especially towards the northern part of the site. Ecological barriers in the area consist of fences, gravel farm roads, culverts and power lines. Biotic interactions are concentrated around pollination, seed dispersal, herbivory and predation. Utility lines and roads form corridors for bird mediated seed dispersal as well as vehicle mediated dispersal, in the case of roads.

A few scattered alien plant species are present, although these do not occur in abundance.

Figure 3.1: Melkhoutbosch substation, near the N2-R330 interchange north of Humansdorp

3.2.4 Flora and Fauna

The Vegetation map of the study area is provided in Figure 3.2 and Figure 3.3. The latter map also shows the transformed areas. The present vegetation consists of:

- Gamtoos Thicket restricted to kloofs and valleys along drainage lines, of which the latter are dominated by trees.
- Humansdorp Shale Renosterveld and Loerie Conglomerate Fynbos, which includes shrubby fynbos communities and low-lying seep and wetland/pan areas dominated by grasses and herbs with scattered thicket clumps, where not cultivated or transformed. Rocky outcrop communities also present on ridges with a mix of succulent and fynbos elements.
- Dams, streams and drainage lines of natural or anthropogenic origin with typical associated aquatic and riparian flora.

The Vegetation of Southern Africa Conservation Status (Mucina and Rutherford, 2006) of the vegetation types ranges from Least Threatened (Gamtoos Thicket and Loerie

Conglomerate Fynbos) to Endangered (Humansdorp Shale Renosterveld). The site is located outside the eastern extent of the Garden Route Biodiversity Sector Plan for the Kouga Municipality.

Terrestrial animal species that may occur in the study area mostly have a conservation status of Least Concern to Vulnerable and No Endangered or Critically Endangered terrestrial fauna are expected to occur within the site. The site does not host any butterflies of special concern and does not fall within an area of any Endangered or Critically Endangered reptiles as presented in Branch (1988). Vulnerable Blue Duiker (*Philantomba monticola*) and Endangered Oribi (*Ourebia ourebi*) have distributions that overlap with the locations of the wind farm, but due to the absence of preferred habitat, are not expected to occur on the proposed site. Hewitt's Ghost Frog (*Heleophryne hewitti*), which is regarded as Critically Endangered (Branch, 1988) is known to be present within a limited number of catchments within the Elandsberg mountains and no individuals of this species are expected to be present at the proposed site. It is, however, not impossible that they might occur as the presence of the species in the area has not been determined. A number of protected and endemic plant species are likely to occur in intact areas of natural vegetation.

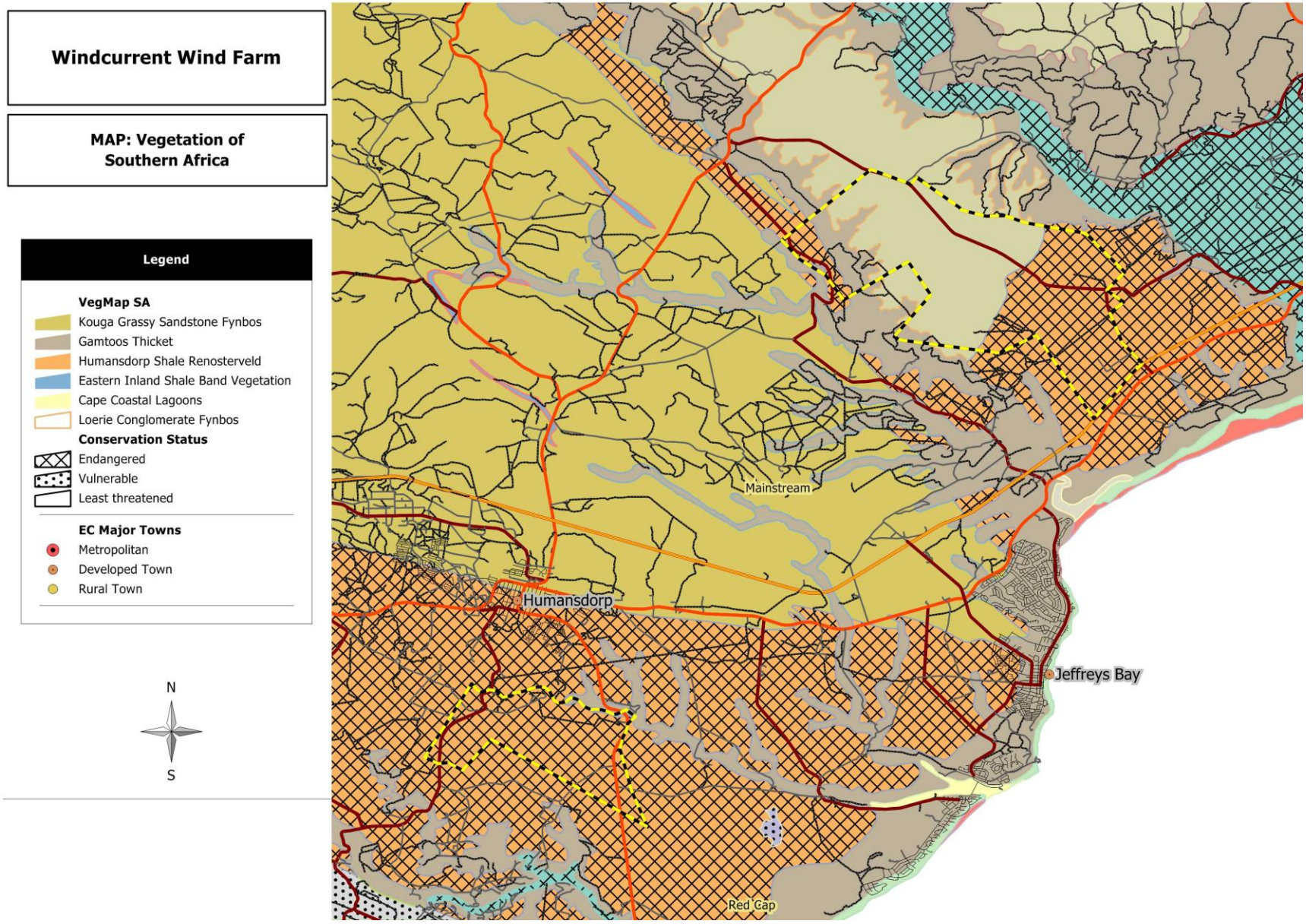


Figure 3.2: Vegetation map of the study area

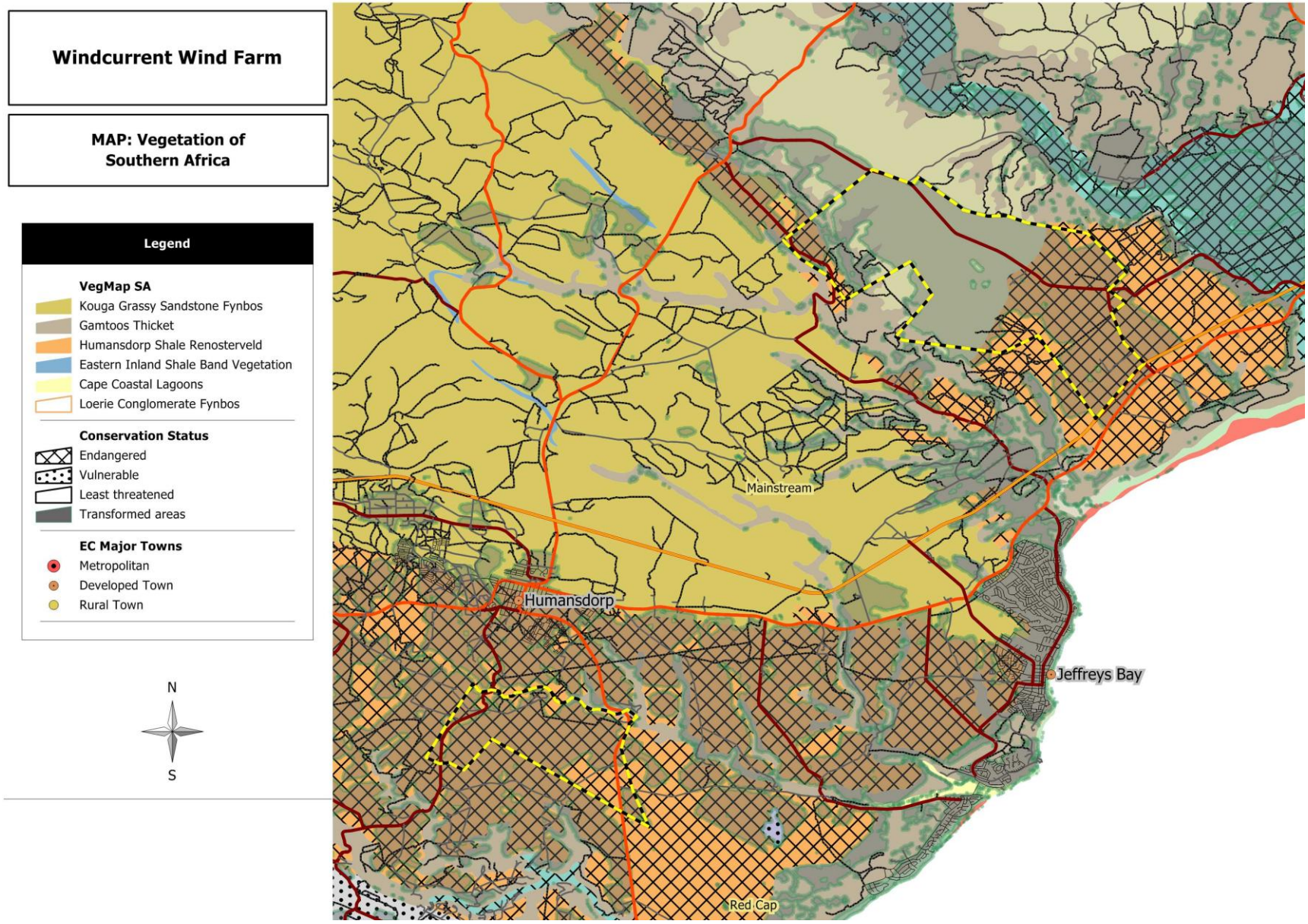


Figure 3.3: Vegetation map of the study area (including transformed land)

3.2.5 Birds

The species that are most likely to be impacted are raptors (birds of prey) that use the favourable wind conditions on the ridges to forage. The site contains highly suitable habitat for Red List species, particularly the southern African sub-species of the Denham's Bustard, the South African endemic Blue Crane, Secretarybird, the southern African sub-species of the White-bellied Korhaan, the endemic Black Harrier and the Lanner Falcon. It is also an important area for the White Stork (Palaearctic migrant).

The micro habitats recorded in this study area are described below.

- **Natural fynbos**. The remaining areas of fynbos are mostly situated on slopes which have not been cleared for cultivation in the past, due to it being too rocky or steep for agricultural activity. These remaining areas of natural fynbos in the study area are potentially important for Red listed species such as Lanner Falcon, Peregrine Falcon, Martial Eagle, Secretary bird, Denham's Bustard and Black Harrier. Other priority species that that could be encountered here are mostly raptors such as Rock Kestrel, Jackal Buzzard, and Steppe Buzzard (see Table 3.1).

- **Old lands**. The majority of the study area consists of old agricultural lands where the natural fynbos vegetation was cleared when agriculture was practiced at some stage in the past (mostly cereal crops). These areas are now used for grazing and have reverted to a form of grassland, consisting of a mixture of indigenous and exotic grasses, with clumps of fynbos. This constitutes optimal habitat for Red listed Blue Crane, Denham's Bustard, White-bellied Korhaan and Secretarybird (see Table 3.1). These old lands are also very suitable for various raptors e.g. Black Harrier, Peregrine Falcon, Lanner Falcon, Steppe Buzzard, Jackal Buzzard and Amur Falcon. White Storks are also attracted to these areas.

- **Dams**. The area contains several dams and water bodies, mostly man made but also some natural and seasonal wetlands. These dams and pans, depending on the shape, can be important for some bird species. Dams with shallow sloping sides are suitable for a wider range of species. In the context of this study, shallow dams with sloping sides potentially could be roost sites for Blue Cranes and White Storks. Water bodies are also frequented by a variety of waders and ducks, and could attract the Red listed Black Stork (see Table 3.1).

- **Drainage lines**. The study area contains one prominent seasonal drainage line. The banks of the drainage line show evidence of infestation by alien plants. Some of the larger trees in the drainage lines may be used by Secretary Birds for breeding and/or roosting.

- **Wetlands**. The drainage line and some of the dams in the study area have associated wetland areas, which may be of importance to Blue Cranes and the Red listed African Marsh Harrier (see Table 3.1).

Table 3.1 below shows the list of priority species that have been recorded in the QDGC overlapping with the study area, namely 3324DD. **Only species that are likely to occur on site (to be confirmed by pre-construction surveys) based on the identification of habitat and avifauna during the reconnaissance site visit has been included.**

The following abbreviations and acronyms are used to indicate conservation significance:

VU = Nationally vulnerable (Barnes 2000)
NT = Nationally near threatened (Barnes 2000)
AEWA = Listed in Annexure 2 of the African-Eurasian Waterbird Agreement
Ra = Raptor
SS = Special regional significance
CS = Cultural significance

Table 3.1: Priority species recorded in 3324DD QDGC (Harrison et al 1997; http://sabap2.adu.org.za, Young *et al*. 2003, Young 2008, Young 2009a, Young 2009b, Young 2010*; pers. obs*).

Common Name	Scientific Name	Conservation Status (Barnes 2000)	Likelihood of occurrence in the study area	Habitat requirements (Barnes 1998; Barnes 2000; Hockey *et al* 2005; Young *et al* 2003; Harrison *et al* 1997; personal observations)
Black Stork	*Ciconia nigra*	NT, AEWA	Low	Cliffs for roosting and breeding, and rivers and dams for foraging.
Secretarybird	*Sagittarius serpentarius*	NT, Ra	High	Grassland, old lands, open woodland. Most likely to be encountered in fynbos and old agricultural areas.
African Marsh-Harrier	*Circus ranivorus*	VU, Ra	Medium	Large permanent wetlands with dense reed beds. Sometimes forages over smaller wetlands and grassland. Could be foraging at wetlands associated with dams in the study area.
Black Harrier	*Circus maurus*	NT, Ra	Confirmed	Highest expected densities in remnant patches of fynbos and old agricultural lands.
Peregrine Falcon	*Falco peregrinus*	NT, Ra	Low	A wide range of habitats, but cliffs (or tall buildings) are a prerequisite for breeding. May hunt over old agricultural areas. Immature birds are most likely to be encountered foraging over old lands.
Lanner Falcon	*Falco biarmicus*	NT, Ra	High	Generally prefers open habitat, but exploits a wide range of habitats. May hunt over old agricultural areas and fynbos.
Amur Falcon	*Falco amurensis*	Ra	Confirmed	Summer migrant most likely to be encountered hunting over agricultural areas.

Common Name	Scientific Name	Conservation Status (Barnes 2000)	Likelihood of occurrence in the study area	Habitat requirements (Barnes 1998; Barnes 2000; Hockey *et al* 2005; Young *et al* 2003; Harrison *et al* 1997; personal observations)
Blue Crane	*Anthropoides paradiseus*	VU, CS	Confirmed	Recorded in old wheat fields in the study area during the site visit.
Denham's Bustard	*Neotis denhami*	VU	Confirmed	Recorded in old wheat fields in the study area during the site visit. May also forage in fynbos.
Little Grebe	*Tachybaptus ruficollis*	AEWA	High	Any of the larger water bodies.
Little Egret	*Egretta garzetta*	AEWA	High	Any of the water bodies and drainage lines.
Grey Heron	*Ardea cinerea*	AEWA	High	Any of the larger water bodies and drainage lines.
Purple Heron	*Ardea purpurea*	AEWA	Low	Mostly in thick vegetation along drainage lines.
Black-headed Heron	*Ardea melanocephala*	AEWA	Confirmed	Old lands, edges of fynbos, drainage lines and water bodies.
Great Egret	*Egretta alba*	AEWA	Low	Any of the larger water bodies and drainage lines.
Cattle Egret	*Bubulcus ibis*	AEWA	Confirmed	Lands, drainage lines and water bodies.
Black-crowned Night-Heron	*Nycticorax nycticorax*	AEWA	Low	Mostly in thick vegetation along drainage lines.
Little Bittern	*Ixobrychus minutus*	AEWA	Low	Mostly in thick vegetation along drainage lines.
White Stork	*Ciconia ciconia*	AEWA	Confirmed	Old agricultural lands and water bodies.
African Sacred Ibis	*Threskiornis aethiopicus*	AEWA	High	Margins of wetlands, dams, old lands
African Spoonbill	*Platalea alba*	AEWA	Medium	Any of the larger water bodies and drainage lines.
Egyptian Goose	*Alopochen aegyptiacus*	AEWA	Confirmed	Old lands, drainage lines and water bodies.
South African Shelduck	*Tadorna cana*	AEWA	Medium	Any of the water bodies
Yellow-billed Duck	*Anas undulata*	AEWA	Confirmed	Any of the water bodies
Cape Teal	*Anas capensis*	AEWA	Medium	Drainage lines and water bodies.
Spur-winged Goose	*Plectropterus gambensis*	AEWA	Confirmed	Old lands, drainage lines and water bodies and open fields
Red-billed Teal	*Anas erythrorhyncha*	AEWA	Medium	Drainage lines and water bodies.
Cape Shoveler	*Anas smithii*	AEWA	Medium	Drainage lines and water bodies.
Red-knobbed Coot	*Fulica cristata*	AEWA	High	Any of the water bodies.
Common Moorhen	*Gallinula chloropus*	AEWA	High	Any of the water bodies.
African Rail	*Rallus caerulescens*	AEWA	Low	Mostly in thick vegetation along drainage lines.
Black Crake	*Amaurornis flavirostris*	AEWA	Low	Mostly in thick vegetation along drainage lines.
Black-winged Stilt	*Himantopus himantopus*	AEWA	Medium	Margins of the water bodies.
Kittlitz's Plover	*Charadrius pecuarius*	AEWA	Medium	Margins of water bodies.
Crowned Lapwing	*Vanellus coronatus*	AEWA	Confirmed	Old lands
Three-banded Plover	*Charadrius tricollaris*	AEWA	High	Open shorelines at a wide range of water bodies.
Common Sandpiper	*Actitis hypoleucos*	AEWA	Medium	Drainage lines and water bodies.

Common Name	Scientific Name	Conservation Status (Barnes 2000)	Likelihood of occurrence in the study area	Habitat requirements (Barnes 1998; Barnes 2000; Hockey *et al* 2005; Young *et al* 2003; Harrison *et al* 1997; personal observations)
Common Greenshank	*Tringa nebularia*	AEWA	Medium	Drainage lines and water bodies.
Marsh Sandpiper	*Tringa stagnatilis*	AEWA	Medium	Any of the water bodies
Wood Sandpiper	*Tringa glareola*	AEWA	Medium	Any of the water bodies
Black-shouldered Kite	*Elanus caeruleus*	Ra	Confirmed	Fynbos and old agricultural areas.
Booted Eagle	*Aquila pennatus*	Ra	Medium	Old lands and fynbos. Ridges important for slope soaring.
African Fish-Eagle	*Haliaeetus vocifer*	Ra	Low	Any of the water bodies.
Steppe Buzzard	*Buteo vulpinus*	Ra	Confirmed	Old agricultural areas and fynbos. Ridges important for slope soaring.
Jackal Buzzard	*Buteo rufofuscus*	Ra	High	Wide variety of habitats, mostly near rocky outcrops in fynbos and old lands. Ridges important for slope soaring.
African Harrier-Hawk	*Polyboroides typus*	Ra	Low	In natural vegetation along drainage lines.
Osprey	*Pandion haliaetus*	Ra	Low	Any of the water bodies
Rock Kestrel	*Falco rupicolus*	Ra	High	Wide variety of habitats, mostly in old lands and fynbos near rocky outcrops. Ridges important for slope soaring.
Spotted Eagle-Owl	*Bubo africanus*	Ra	High	Wide range of habitats, but mostly in fynbos and in alien stands of trees.
Yellow-billed Kite	*Milvus aegyptius*	Ra	High	Wide variety of habitats, mostly old lands and fynbos. Ridges important for slope soaring.
Martial Eagle	*Polemaetus bellicosus*	VU, Ra	Low	Wide range of habitats, but mostly in fynbos and in alien stands of trees.
White-bellied Korhaan	*Eupodotis senegalensis*	VU, SS	Confirmed	Old agricultural areas and fynbos

3.2.6 Bats

Twelve bat species have a geographical distribution that includes the study area. Four of these species are listed as Near-Threatened locally and one is Near-Threatened globally (Friedmann & Daly 2004; Monadjem, et al. 2010), whereas all other species are listed as Least Concern (see Table 3.2).

Although there are no nearby caves or cliffs, some of these species are known to disperse over long distances (e.g. Schreibers' Long-fingered Bat disperses over 250 km). Species most likely to be affected are the aerial insectivorous bats (e.g. Egyptian Free-tailed Bat) which forage quite high above the ground and are thus at risk of barotrauma from the turning turbine blades. The wind turbines could pose a potential hazard to at least six of the 12 species, on account of their foraging habits. Furthermore some species are known to cover large distances when foraging at night or when moving between winter and summer roosts. No migration patterns have been recorded for bats in South Africa and the wind turbines will pose a risk to all bats whose migration routes cross the potential site.

Table 3.2: Bat species that are likely to occur on the proposed Ubuntu wind farm (Friedmann & Daly 2004; Monadjem, *et al*. 2010)

Species	Common Name	SA conservation status	Global conservation status (IUCN)
Epomophorus wahlbergi	Wahlberg's epauletted fruit bat	Least Concern	Least Concern
Eptesicus hottentotus	Long-tailed serotine (endemic)	Least Concern	Least Concern
Kerivoula lanosa	Lesser woolly bat	Near Threatened	Least Concern
Miniopterus natalensis	Natal long-fingered bat	Near Threatened	Near Threatened
Myotis tricolor	Temminck's myotis	Near Threatened	Least Concern
Neoromicia capensis	Cape serotine	Least Concern	Least Concern
Nycteris thebaica	Egyptian slit-faced bat	Least Concern	Least Concern
Rousettus aegyptiacus	Egyptian Rousette (endemic)	Least Concern	Least Concern
Rhinolophus capensis	Cape horseshoe bat (endemic)	Near Threatened	Least Concern
Rhinolophus clivosus	Geoffroy's horseshoe bat (endemic)	Near Threatened	Least Concern
Taphozous mauritianus	Mauritian tomb bat	Least Concern	Least Concern
Tadarida aegyptiaca	Egyptian free-tailed bat	Least Concern	Least Concern

3.2.7 Heritage

The site is more than five kilometres from the coast, and therefore shell middens are not expected to be found this far inland (Binneman 1996, 2001, 2005). The site might have had low cultural activity in the past, but it is unlikely that any archaeological or historical material would be located during development. Nonetheless, it must be recognised that there are several archaeological sites in the wider region that are of international significance and the developers should observe for any archeologically valuable features during the construction phase.

3.3 SOCIO-ECONOMIC

The study area falls within the Kouga Municipal area in the Cacadu District. The Kouga Municipality has a population of 62 542 people (as indicated in the Kouga Municipality revised IDP 2005/2006), with a low proportion of young people, 38 % being between the ages of 0 and 20 years (census 2001). The Municipality is a top performer in the Eastern Cape with low rates of dependency (1.29), unemployment (25 %) and poverty (31 %). Some 47 % of households in Kouga have members who receive social grants. This is the

lowest percentage of households in the District (Kouga Municipality Annual Report 2005-2006).

Agriculture is one of the major contributors to Geographical Value Add (GVA) and employment in the area. However, this lucrative market is adversely affected by high numbers of people (including farm workers) infected with HIV/AIDS within the municipal area. Considering the district average of 17 %, the Kouga municipality has an estimate of 12 000 persons living with HIV/AIDS. Kouga currently has 14 330 patients with Tuberculosis (TB), 20 % of the total local population. As a consequence of the linkages between TB and HIV/AIDS, this should raise concerns for the delivery of primary health care.

A district survey indicated that Kouga is performing above average in terms of access to good roads, clinic services and public schools. Unfortunately the municipal area is doing particularly poorly in terms of access to hospitals and ambulance services.

Kouga has among the highest Formal Economy Performance scores, with positive factors including the positive trade balance, a fairly diversified economy, low financial grant dependence, and strong GDP and employment growth performance. The local economy has experienced a positive shift increase in employment and GDP from 1996 to 2004, and is one of only two municipalities in the Province to emerge as leading economies in respect of both GDP and formal employment, provincially and nationally.

Kouga municipality is predominantly a rural area with seasonal influx of visitors to the popular coastal tourist destinations such as Jeffrey's Bay and Cape St Francis. It offers a wide range of tourist activities and attractions. These include historical and heritage sites, the Kouga Cultural Centre, surfing, fishing, hiking, biking, sand boarding, birding and game viewing, and various other outdoor and adventure activities (Kouga Municipality Annual Report 2005-2006).

3.3.1 Demographics

The total population in Jeffreys Bay in 2001 was 14 772 (see Table 3.3). In terms of the racial composition Jeffrey's Bay has a relatively similar proportion of coloureds, black Africans and whites. The population of the Kouga Municipality was 70 693 in 2001 while that of the wider Cacadu District was 388 204.

More recently the 2007 Community Survey was conducted by Statistics SA. Although the sample size used in this survey is a fraction of that used in the 2001 Census, making estimates far more tentative, it can nevertheless provide indicative estimates worth noting. The 2007 Survey estimated that the total population in Kouga has grown slightly since 2001 to 73 274 and decreased slightly in the Cacadu District to 363 485 (StatsSA, 2008). Estimates in the Kouga IDP argue for a substantially higher population estimate of up to 86 000 people fuelled by a population growth rate of 2,4 % per annum between 2000 to 2010 (Kouga Municipality, 2007).

Table 3.3: Population numbers in the wider study area (2001)

	Cacadu District	Kouga Municipality	Humansdorp	Jeffreys Bay	KwaNomzamo
Black African	202 541	23 747	879	4 030	6 412
Coloured	140 851	33 619	11 984	4 124	141
Indian or Asian	730	102	36	30	-
White	44 082	13 225	2 436	6 588	3
Total	388 204	70 693	15 335	14 772	6 556

Source: StatsSA, 2002

3.3.2 Employment

As with the rest of the country, unemployment is a major problem in the area. "Jobless" growth remains a feature of the economy and it is likely that the current deterioration in economic conditions will result in further pressure on employment. Based on the 2001 Census figures in Table 3.4 below, the Kouga Municipality had an unemployment rate of approximately 27 % which was similar to the national average at the time. However, KwaNomzamo (43 % unemployed), Humansdorp (29 % unemployed) and the Cacadu District (35 % unemployed) all had higher unemployment rates by comparison indicating an above-average level of need for employment. More recent estimates from the 2007 Community Survey indicate that unemployment remains a major problem in the Kouga Municipality and has stayed at 27 % for 2007 (StatsSA, 2008). More recent unemployment statistics for the individual towns in the municipal area are unfortunately not available.

Table 3.4: Unemployment in the wider study area (2001)

	Cacadu District	Kouga Municipality	Humansdorp	Jeffreys Bay	KwaNomzamo
Employed	94 975	20 143	4 043	4 497	1 674
Unemployed	52 030	7 289	1 671	1 793	1 275
% unemployed	35.4%	26.6%	29.2%	28.5%	43.2%

Source: StatsSA, 2002

The dominant employment sectors in the Cacadu District and Kouga Municipal areas are agriculture, forestry and fishing (see Table 3.5). Other important sectors in the Kouga Municipality include wholesale and retail trade (15 % of employment) and community/social/personal services (14 % of employment). By comparison with the wider Kouga municipal area, Humansdorp and Jeffreys Bay have particularly high portions of workers in the wholesale and retail trade as well as construction sectors reflecting their status as service centres with relatively high levels of construction at the time.

Table 3.5: Employment per industry in the wider study area (2001)

	Cacadu District	Kouga Municipality	Humansdorp	Jeffreys Bay	KwaNomzamo
Agric, hunting; forestry & fishing	36%	33%	6%	7%	24%
Mining and quarrying	0%	0%	0%	0%	0%
Manufacturing	5%	7%	7%	10%	10%
Electricity; gas and water supply	1%	0%	0%	0%	0%
Construction	6%	11%	23%	14%	11%
Wholesale and retail trade	13%	15%	24%	21%	14%
Transport; storage and comms	2%	2%	3%	2%	2%
Finl, insure, real est. & business serv.	4%	6%	8%	11%	5%
Community, social and personal serv.	18%	14%	18%	19%	18%
Other and not adequately defined	0%	0%	0%	0%	0%
Private Households	14%	11%	10%	16%	16%
Total	100%	100%	100%	100%	100%

Source: StatsSA, 2002

The number of jobs in the Kouga Municipality increased the most in the construction sector between 1996 and 2001 reflecting the rapid development of the area (see Figure 3.4). The agriculture, forestry and fisheries sectors lost the most jobs during the same period in keeping with trends such as increased mechanisation.

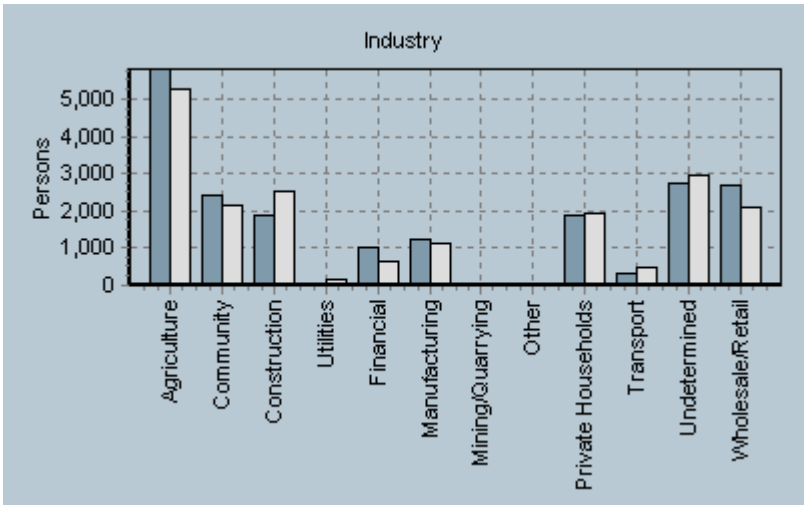


Figure 3.4: Jobs per sector for the Kouga Municipality (1996 – dark bars, 2001 – lighter bars)
Source: Demarcation Board using Census 2001 & 1996

3.3.3 Income levels

Household income levels in the study area are presented in Table 3.6 below. Approximately 44 % of households in the Cacadu District and 33 % in the Kouga municipal area had incomes below R9 600.00 per year in 2001. Jeffreys Bay and Humansdorp fared substantially better than the District and slightly better than the wider Kouga municipal area.

Table 3.6: Household incomes in the wider study area (2001)

	Cacadu District	Kouga Municipality	Humansdorp	Jeffreys Bay	KwaNomzamo
No income	14%	11%	9%	10%	17%
R1 - R4 800	7%	5%	3%	3%	8%
R4 801 - R9 600	23%	17%	13%	13%	21%
R9 601 - R19 200	23%	24%	20%	17%	29%
R19 201 - R38 400	15%	19%	26%	17%	18%
R38 401 - R76 800	8%	12%	15%	18%	5%
R76 801 - R153 600	5%	8%	9%	14%	1%
R153 601 - R307 200	2%	3%	4%	6%	0%
R307 201 - R614 400	1%	1%	1%	1%	0%
R614 401 - R1 228 800	0%	0%	0%	1%	0%
R1 228 801 - R2 457 600	0%	0%	0%	0%	0%
R2 457 601 and more	0%	0%	0%	0%	0%
Total	100%	100%	100%	100%	100%

Source: StatsSA, 2002

The 2007 Kouga IDP notes that the proportion of households living in poverty has increased by 6.4 % from 26.6 % to 33 %. (Kouga Municipality, 2007).

3.3.4 Economic growth and development

Economic development faces many challenges in the Kouga municipal area although its performance relative to other areas in the Cacadu District and Eastern Cape is encouraging. The Kouga IDP points out that municipal productivity is higher than the average for the Cacadu District and province principally due to high growth in value creation relative to employment and labour remuneration. Growth in GDP and employment, from 1996 to 2004, and skills available to the local economy, are both higher than the Provincial average. Kouga also has among the highest Formal Economy Performance scores in the province, with positive factors including the positive trade balance, a fairly diversified economy, and strong GDP and employment growth performance. The Municipality fares well on Economic Absorption Capacity, considering the high total disposable income, employment multiplier and informal sector capacity to generate economic opportunities relative to formal employment.

3.4 PLANNING CONTEXT AND SURROUNDING LAND USES

The economy of the Kouga Municipal area has grown considerably over the last 10 years and has become a major holiday destination. The tourism market is growing tremendously and will further benefit from the establishment of a game reserve near Jeffrey's Bay. A Tourism Forum, where all the local tourism organisations are represented, was established to drive tourism in the Kouga region.

Agricultural production is on the increase and as the benefits of intensive land utilisation are becoming apparent its growth is constantly gaining momentum. Jeffrey's Bay is earmarked for intensive industrial development. A R1,2 billion commercial, residential and industrial development, known as The Fountains Estate, has recently been established in Jeffrey's Bay.

The site for the proposed Ubuntu wind farm is presently zoned for agriculture. Farms Zuurbron and Vlakteplaas comprise old wheatfields that have been planted with indigenous grasses which now structurally resemble natural grassland.

Activities on the land surrounding the wind farm sites include:

- Stock farming
- Crop farming and
- Untransformed land (natural vegetation).

The area is not pristine and has been transformed by various human activities over the last two centuries. Nevertheless development should only proceed with due cognisance of environmental features.

Environmental Impact Assessment for the proposed Ubuntu Wind Energy Project near Jeffrey's Bay, Eastern Cape: Draft Scoping Report

Chapter 4: Approach to EIA Process and Public Participation

CONTENTS

4 INTRODUCTION

This chapter presents the EIA process for the proposed development with particular attention to the steps in the Scoping and public participation component of the EIA.

4.1 LEGAL CONTEXT FOR THIS EIA

The EIA process is a planning, design and decision making tool used to demonstrate to the responsible authority, DEA, and the project proponent, WKN Windcurrent, what the consequences of their choices will be in biophysical, social and economic terms. As such it enables the identification of potential impacts (negative and positive) that the project may have on the environment. The EIA contains recommendations to mitigate negative impacts and enhance positive impacts associated with the project.

It is noted that **Amended NEMA EIA Regulations** (Notices GN R. 543, 544, 545, and 546) were published in the Government Gazette No. 33306 of 18 June 2010, and came into effect from 2 August 2010 (referred to as the ***2010 EIA Regulations***). This EIA application by WKN Windcurrent was initiated in December 2009, prior to the enactment of the Amended Regulations, and will therefore be dealt with in terms of GN R 385, 386 and 387 of 2006. However, in line with Regulation 76 (3) of the Amended EIA Regulations regarding transitional arrangements, any impacts associated with listed activities which are included in the Amended listing notices, which were not listed under the listing notices GN R386 and 387, would need to be assessed as part of this EIA process. The CSIR has therefore checked the new activities and have included the listing notices which may be triggered by this project in Table 4.1 below. These activities have been included in this environmental assessment process. Apart from these new activities, the activities which were initially listed in GN 386 and GN 387 that potentially form part of the proposed Ubuntu Wind Energy Project are also listed in Table 4.1 below.

Table 4.1: Listed activities in GN R386 and GN R387 of 2006 and new listed activities in Government Gazette No. 33306 of 2010 (2010 EIA Regulations) that potentially form part of the proposed Ubuntu Wind Energy Project near Jeffrey's Bay

Listed activities in GN R386 and GN R387 of 2006	
Government Notice R387 Activity No(s); 21 April 2006:	**Describe the relevant Scoping and EIA Activity in writing**
1	The construction of facilities of infrastructure, including associated structures or infrastructure, for- (a) the generation of electricity where- i.) the electricity output is 20 megawatts or more; or ii.) the elements of the facility cover a combined area in excess of 1 hectare; (l) the transmission of and distribution of above ground electricity with a capacity of

	120 kilovolts or more
10	Any process or activity identified in terms of Section 53 (1) of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)
Government Notice R386 Activity No(s); 21 April 2006:	**Describe the relevant Basic Assessment Activity in writing**
15	The construction of a road that is wider than 4 metres or that has a reserve wider than 6 metres, excluding roads that fall within the ambit of another listed activity or which are access roads of less than 30 metres long.
Listed activities in Government Gazette No. 33306 of 2010	
Government Notice R545, 18 June 2010	**Describe the relevant Scoping and EIA Activity in writing**
15	Physical alteration of undeveloped, vacant or derelict land for residential, retail, commercial, recreational, industrial or institutional use where the total area to be transformed is 20 ha or more. This activity may apply if the physical alteration exceeds 20 ha.
Government Notice R546, 18 June 2010	**Describe the relevant Activity in writing**
13 (a)	The clearance of an area of 1 ha or more of vegetation where 75 % or more of the vegetative cover constitutes indigenous vegetation…..This may apply if the area consists of critical biodiversity areas. This does not seem to be the case but will be confirmed by the botanical study that will be undertaken.
14a (i)	The clearance of an area of 5 ha or more of vegetation where 75 % or more of the vegetative cover constitutes indigenous vegetation….. This will depend on the amount of indigenous vegetation to be cleared, the site falls outside of the urban edge.
16 (iii) & (iv); (ff)	16 (iii)-Buildings with a footprint exceeding 10 square metres in size; or (iv)-infrastructure covering 10 square metres or more Where such construction occurs within a water course or within 32 m of a watercourse, measured from the edged of a watercourse.. This may apply depending on the location of roads, electrical and other project infrastructure and if it would cross a water course (s) on the site.

4.2 LEGISLATION AND GUIDELINES PERTINENT TO THIS EIA

The scope and content of this Draft Scoping Report has been informed by the following legislation, guidelines and information series documents:

4.2.1 National Legislation

- National Environmental Management Act (NEMA) (Act 107 of 1998);
- EIA Regulations published under Chapter 5 of the NEMA on 21st April 2006 (GN R385, GN R 386 and GN R387 in *Government Gazette* 28753);
- Guidelines published in terms of the NEMA EIA Regulations, in particular:
    - Guideline 3: General Guide to Environmental Impact Regulations, 2006 (DEAT, June 2006)

  - Guideline 4: Public Participation in support of the Environmental Impact Assessment Regulations, 2006 (DEAT, May 2006)
  - Guideline 5: Assessment of alternatives and impacts in support of the Environmental Impact Assessment Regulations, 2006 (DEAT, June 2006)
  - Integrated Environmental Management Information Series (Booklets 0 to 21) published by DEAT over the period 2002 to 2005;
- Land Use Planning Ordinance (Ordinance 15 of 1985);
- National Environmental Management: Biodiversity Act (NEMBA) (Act 10 of 2004);
- Conservation of Agricultural Resources Act (CARA) (Act 43 of 1983);
- National Heritage Resources Act (NHRA) (Act 25 of 1999);
- National Water Act (Act 36 of 1998);
- Municipal Systems Act (Act 32 of 2000);
- Subdivision of Agricultural Land Act (SALA) (Act 70 of 1970);
- Animal Health Act (Act 7 of 2002); and the
- Electricity Act (Act 41 of 1987).

A review of relevant legislation applicable to the various specialist studies and this EIA will be undertaken as part of the EIA process.

4.3 PRINCIPLES FOR SCOPING AND PUBLIC PARTICIPATION

The public participation process for this Scoping and EIA process is being driven by a stakeholder engagement process that will include inputs from authorities, interested and affected parties (I&APs), technical specialists and the project proponent. Guideline 4 on "Public Participation in support of the EIA Regulations" published by DEAT in May 2006, states that public participation is one of the most important aspects of the environmental authorisation process. This stems from the requirement that people have a right to be informed about potential impacts that may affect them and that they must be afforded an opportunity to comment on those impacts. Effective public participation also improves the ability of the competent authority to make informed decisions and results in improved decision-making as the view of all parties are considered (DEAT, 2006: pg 9).

According to The DEAT (2006) Guideline on Public Participation, an effective public participation process:

- Provides an opportunity for interested and affected parties (I&APs) to obtain clear, accurate and comprehensive information about the proposed activity, its alternatives or the decision and the environmental impacts thereof;
- Provides I&APs with an opportunity to indicate their viewpoints, issues and concerns regarding the activity, alternatives and /or the decision;
- Provides I&APs with the opportunity of suggesting ways of avoiding, reducing or mitigating negative impacts of an activity and for enhancing positive impacts;

- Enables the proponent to incorporate the needs, preferences and values of affected parties into the activity;
- Provides opportunities to avoid and resolve disputes and reconcile conflicting interests; and
- Enhances transparency and accountability in decision making.

To the above, one can add the following universally recognised principles for public participation:

- Inclusive consultation that enables all sectors of society to participate in the consultation and assessment processes;
- Provision of accurate and easily accessible information in a language that is clear and sufficiently non-technical for I&APs to understand, and that is sufficient to enable meaningful participation;
- Active empowerment of grassroots people to understand concepts and information with a view to active and meaningful participation;
- Use of a variety of methods for information dissemination in order to improve accessibility, for example, by way of discussion documents, meetings, workshops, focus group discussions, and the printed and broadcast media;
- Affording I&APs sufficient time to study material, to exchange information, and to make contributions at various stages during the assessment process;
- Provision of opportunities for I&APs to provide their inputs via a range of methods, for example, via briefing sessions, public meetings, written submissions or direct contact with members of the Environmental Impact Assessment (EIA) Team; and
- Public participation is a process and vehicle to provide sufficient and accessible information to I&APs in an objective manner to assist them to identify issues of concern, to identify alternatives, to suggest opportunities to reduce potentially negative or enhance potentially positive impacts, and to verify that issues and/or inputs have been captured and addressed during the assessment process.

At the outset it is important to highlight two key aspects of public participation:

- There are practical and financial limitations to the involvement of all individuals within a public participation programme (PPP). Hence, public participation aims to generate issues that are representative of societal sectors, not each individual. Hence, the PPP will be designed to be inclusive of a broad range of sectors relevant to the proposed project; and

- The PPP will aim to raise a diversity of perspectives and will not be designed to force consensus amongst I&APs. Indeed, diversity of opinion rather than consensus building is likely to enrich ultimate decision making. Therefore where possible, the public participation process will aim to obtain an indication of trade-offs that all stakeholders (i.e. I&APs, technical specialists, the authorities and the development proponent) are willing to accept with regard

to the ecological sustainability, social equity and economic growth associated with the project.

4.4 OBJECTIVES OF THE SCOPING PROCESS

This Scoping process is being planned and conducted in a manner that is intended to provide sufficient information to enable the authorities to reach a decision regarding the scope of issues to be addressed in this EIA process, and in particular to convey the range of specialist studies that will be included as part of the Environmental Impact Reporting Phase of the EIA, as well as the approach to these specialist studies.

Within this context, the objectives of this Scoping process are to:

- Identify and inform a broad range of stakeholders about the proposed development;
- Clarify the scope and nature of the proposed activities and the alternatives being considered;
- Conduct an open, participatory and transparent approach and facilitate the inclusion of stakeholder concerns in the decision-making process;
- Identify and document the key issues to be addressed in the forthcoming Environmental Impact Reporting Phase of the EIA, through a process of broad-based consultation with stakeholders; and
- Ensure due consideration of alternative options in regard to the proposed development, including the "No development" option.

4.5 TASKS IN THE SCOPING PHASE

This section provides an overview of the tasks being undertaken in the Scoping Phase, with a particular emphasis on providing a clear record of the public participation process followed.

Task 1: I&AP identification, registration and the creation of an electronic database

Prior to advertising the EIA process in the local and regional print media an initial database of I&APs was developed for the Scoping process. This was supplemented with input from the EIA Project Managers, CSIR and the Project Proponent, WKN Windcurrent. A total of **49 I&APs** was included on the project database in this manner. The identification of I&APs included landowners and tenants within 100 metres of the boundaries of the site. Mechanisms used to identify surrounding landowners include a deeds search and telephonic follow ups.

Appendix F contains the current I&AP database, which has been updated to include participation by I&APs in response to requests to register their interest in the project and through comments received. At the time of producing this report, the database stands at **64 registered I&APs**.

While I&APs have been encouraged to register their interest in the project from the start of the process, following the public announcements (see Task 2), the identification and registration of I&APs will be ongoing for the duration of the study. Stakeholders from a variety of sectors, geographical locations and/or interest groups can be expected to show an interest in the development proposal, for example:

- Provincial and Local Government Departments
- Adjacent/ surrounding landowners
- Local interest groups, for example, Councillors and Rate Payers associations
- Farmers Organisations
- Environmental Groups and NGO's
- Grassroots communities and structures

In terms of the electronic database, I&AP details are being captured and automatically updated as and when information is distributed to or received from I&APs. This ongoing and up-to-date record of communication is an important component of the public participation process. It is important to note that I&APs proactively identified and included on the project database at the outset of the process will remain on the database unless they specifically request to deregister their interest in the project.

Task 2: Announcement of the Scoping process

In order to notify and inform the public of the proposed project and invite members of the public to register as I&APs, the project and EIA process was advertised in one regional and one local newspaper, as shown below. Copies of the advertisements placed are contained in Appendix D of this report. Included in this media announcement was information on the website address where information available on the project could be downloaded, namely, www.publicprocess.co.za.

- Regional Newspaper – *The Herald*, 4 November 2010
- Local Newspaper - *Our Times*, 4 November 2010

In addition to the newspaper advertisements, letters with personal notification regarding the EIA process were mailed to all pre-identified key stakeholders on the database. I&APs were provided a 30-day period within which to raise issues and/or register their interest on the project database, this period extended from the 4 November 2010 to the 3 December 2010.

Appendix G contains copies of correspondence and information distributed to I&APs prior to the release of the Draft Scoping Report. Letter 1 to I&APs included the Background Information Document (BID) developed for the project as well as a comment form. The purpose of the BID is to inform the public of the proposed project, the EIA process and provide an overview of the opportunities and mechanisms for public participation.

The EIA Regulations require that a notice board providing information on the project and EIA process is placed at the site. Four notice boards were placed at various locations around the boundary of the site. Photographs of the notice boards placed, including the geographical coordinates of the locations of the notice boards are contained in Appendix C.

Task 3: Ongoing Communication and Capacity Building

In accordance with the principles of bodies such as the International Association for Public Participation (IAP2), the process for this EIA aims to ensure that people are involved from the outset, that we proactively solicit the involvement of stakeholders representing all three dimensions of sustainability (i.e. biophysical, social and economic dimensions), and that we provide them with sufficient and accessible information to contribute meaningfully to the process. In this manner, the public participation process aims to build the capacity of stakeholders to participate.

Within the context of the EIA process, capacity building is not viewed as a "once off" event, but rather a series of events and/or information sharing which provides information on a continuous basis thereby building the capacity and knowledge of I&APs to participate effectively in the EIA process and raise issues of concern.

One of the challenges facing the participation process is the diversity of South African society. Public participation by its very nature is a dynamic process with various sectors of society having varying needs, values and interests. The core question for public participation is "How can I, the interested and affected party, meaningfully participate in the process?" This varies according to the needs of I&APs. The public participation process should be inclusive of all I&APs, and afford them the opportunity to raise their issues and concerns in a manner that suits them. Coupled with this, South African society is characterized by varying socio-economic, literacy and language levels all of which need to be considered in the participation process. For example, certain I&APs may want to receive documentation only and not attend meetings, some I&APs may want to only attend meetings, other I&APs may not want to attend meetings and send their comments in writing, and some I&APs may want to be actively involved throughout the process.

In order to accommodate the varying needs of I&APs and develop their capacity to participate in the process, **information sharing** forms an integral and ongoing component of the EIA process to ensure effective public participation. The following provides an overview of information sharing throughout the EIA process in order to develop the capacity of I&APs to effectively engage in the public participation process:

- *Website* – placing EIA related project information on the website www.publicprocess.co.za;
- *Language* – encouraging I&APs to use the language of their choice at meetings and providing translations at meetings in English, Afrikaans and Xhosa when required;
- *Background Information Document* (November 2010; Appendix E) –contains information on the project, EIA and public participation process;
- *Newspaper Advertisements* requesting I&APs to register their interest in the project and raise issues of concern;

- *Letters to I&APs* notifying them of the various stages of the EIA process, availability of reports for comment and inviting them to attend public meetings to be held;
- *Report Distribution* – providing hard copies of the Scoping and EIA reports at local libraries and on the project website for viewing by I&APs;
- *Public Meetings* – where representatives of the project proponent and EIA team are present to interact and engage with members of the public; and
- *Focus Group Meetings* – to target I&AP groups (e.g. Councillors, ratepayers association, surrounding landowners, affected organs of state, environmental organisations) and proactively invite them to attend a meeting where they are provided with an overview of the project and EIA process.

Documents will be posted onto the website (www.publicprocess.co.za) as and when they become available and I&APs will be notified accordingly.

Task 4: Consultation with authorities

All public participation documentation will be supplied to the lead authority (National DEA) as well as other relevant authorities included on the I&AP database. Additionally, consultation with relevant authorities on a one-on-one basis will be effected where necessary. The CSIR EIA project leader and manager and the client team will seek to hold meetings as necessary with the authorities at various milestones throughout the process. The following provides an overview of authorities included on the project database:

- Provincial Department of Economic Development and Environmental Affairs
- Provincial and Local Department of Water Affairs
- National and Provincial Department of Agriculture
- SA Heritage Resources Agency
- Kouga Local Municipality
- National Energy Regulator
- Eastern Cape Department of Roads and Transport
- SA National Roads Agency Limited

Task 5: Technical Scoping with project proponent and EIA team

The Scoping process has been designed to incorporate two complementary components: a stakeholder engagement process that includes the relevant authorities and wider interested and affected parties (I&APs); and a technical process involving the EIA team and the project proponent (WKN Windcurrent).

The purpose of the technical Scoping process is to draw on the past experience of the EIA team and the project proponent to identify environmental issues and concerns related to the

proposed project at the outset, and confirm that the necessary specialist studies have been identified. Consequently, an initial site visit and meeting were held with the EIA team and the project proponent on 19 and 20 January 2011. The results from this site visit and meeting have informed the scope and Terms of Reference for the project including the specialist studies. Based on the experience of the EIA team in working on several similar projects, combined with the experience of the project proponent and their technical team (who also have extensive experience in working with similar projects locally and internationally), the specialist studies are being initiated in parallel with the Scoping process. This enables the specialists to analyse baseline information and conduct field work that will assist the EIA team in understanding the key issues raised during the public Scoping phase. The EIA project team, members of the project proponent and specialists conducted a site visit on 19 January 2011. The findings of the Scoping process with the public and the authorities will inform the specialist studies, which will only be completed after the Scoping process has been finalised.

Task 6: Consultation with I&APs (public) to identify issues and concerns

In order to accommodate the varying needs of I&APs as well as capture their views, issues and concerns regarding the project, a comment and registration period extending from the 4 November to 3 December 2010 was provided.

The comments received from I&APs, via fax or email, have been captured in the Issues and Responses Trail contained in Chapter 5 of this report. The comments trail includes comments received from affected authorities in response to the first notification distributed on the project. Appendix H contains copies of all the comments received.

Various opportunities have been provided for I&APs to have their issues noted prior to the release of the Draft Scoping Report. These include:

- Letter 1 to I&APs (dated 3 November 2010) notifying them of the initiation of the Scoping process and providing them with a Background Information Document (BID) to inform them about the project and a comment form;
- Newspaper advertisements placed;
- Site notice board;
- Website information; and
- Written, faxed or email correspondence.

Task 7: Focus Group Meetings

One-on-one focus group meetings will be held with stakeholders during the review of the Draft Scoping Report where necessary. The purpose of these meetings will be to inform the key stakeholders of the proposed project, the EIA process and obtain their issues and concerns for inclusion in the Final Scoping Report. It is further intended for these meetings

to develop their capacity to participate in the process as well as identify issues for inclusion in the Final Scoping Report and later phases of the EIA process.

Task 8: Identification of Issues and Concerns

Issues and concerns raised by I&APs have been synthesized in the Issues and Responses Trail (Chapter 5). The issues and concerns were identified through the following mechanisms:

- written submissions in response to advertisements and communications with I&APs; and
- issues raised through written correspondence received from I&APs (fax, email and mail).

The Issues Trail (Chapter 5) also includes responses from the EIA Team (and, in some cases, the project proponent) to the issues raised. In general, the responses indicate how the issues will be addressed in the EIA process. In some cases, immediate responses and clarification were provided. Where issues were raised that the EIA team considers beyond the scope and purpose of this EIA process, clear reasoning for this view is provided.

The Scoping process is currently at this stage, when I&APs are invited to review the Draft Scoping Report. This stage and the forthcoming steps in the Scoping process are presented below:

Task 9: Review of the Draft Scoping Report (current stage)

This stage in the process entails the release of the Draft Scoping Report for a 40-day period for public review. All I&APs on the project database will be notified in writing of the release of the Draft Scoping Report for review and will be invited to attend a public meeting that will be held during the review period.

The following mechanisms and opportunities will be utilised to notify I&APs of the release of the Draft Scoping Report for comment:

- Letter 2: to notify I&APs of the release of the Draft Scoping Report, the comment period and to include an executive summary of the report, comment form and invitation to attend the public meeting;
- Placement of Draft Scoping Report on project website (www.publicprocess.co.za);
- Placement of Draft Scoping Report at the Jeffreys Bay and Humansdorp Municipal Libraries;
- A public meeting, to which all I&APs on the project database will receive written notification;
- One-on-one focus group meetings with I&AP groups where necessary.

All issues and concerns identified through the review of the Draft Scoping Report will be captured in the updated Issues and Responses Trail, which will be included in the Final Scoping Report for submission to DEA for decision making.

Task 10: Final Scoping Report

Letter 3 to I&APs will include notification of the submission of the Final Scoping Report to DEA for their decision making. To ensure ongoing access to information, copies of the Final Scoping Report will be placed in the Jeffreys Bay and Humansdorp Municipal Libraries and be placed on the project website (www.publicprocess.co.za).

This step marks the end of the public participation process for the Scoping Phase. The publication participation programme for the subsequent Environmental Impact Reporting Phase is presented in the Plan of Study for EIA (Chapter 6).

4.6 APPROACH TO THE ASSESSMENT OF ALTERNATIVES

As per Guideline 5: Assessment of Alternatives and Impacts (DEAT, June 2006), the EIA Regulations require that alternatives to a proposed activity be considered. Alternatives are different means of meeting the general purpose and need of a proposed activity. This may include the assessment of site alternatives, activity alternatives, process or technology alternatives, temporal alternatives and/or the no-go alternative.

The EIA Regulations indicate that alternatives that are considered in an assessment process be reasonable and feasible. Interested and Affected Parties must also be provided with an opportunity to provide inputs into the process of formulating alternatives. The assessment of alternatives should, as a minimum, include the following:

- The consideration of the no-go alternative as a baseline scenario;
- A comparison of the selected alternatives; and
- The providing of reasons for the elimination of an alternative i.e. selection criteria.

4.6.1 No-go alternative

This alternative will be included in the EIA as a benchmark against which to assess the impacts (positive and negative) of the proposed Ubuntu Wind Energy Project. The main implications of the no-go option are, among others, a lack of additional power supply to the local area, increased electrical losses due to the large distances between power generation and consumption in the Kouga area, and increased environmentally harmful emissions due to the necessity of coal-fired power generation.

4.6.2 Land use alternatives

At present the proposed site is zoned for Agriculture, and is mainly used for extensive cattle grazing. No other viable activities have been identified for the site.

4.6.3 Location Alternatives

During the pre-feasibility for the project, WKN Windcurrent reviewed a range of potential sites in the Jeffrey's Bay Region. These sites were evaluated based on a range of criteria such as:

- Local wind climate, using data from local weather stations in the area
- Local power line network, including existing grid availability, stability and capacity, local power utilisation, future developments and planned power line upgrades;
- Road access for construction and operational maintenance and the topography of the site;
- Engagement with landowners; and
- The visibility of the project with regard to local habitation and tourism.

Based on the above review, WKN Windcurrent selected the Ubuntu site located near Jeffrey's Bay (subject of this EIA) as its option. Following site selection WKN Windcurrent moved forward towards a feasibility study. An environmental screening study for the Ubuntu site was undertaken by the CSIR in November 2009. Based on this preliminary screening, it was concluded that there were no fatal flaws identified from an environmental perspective that would necessitate termination of the project at this stage, provided that the exclusion criteria are reviewed in more detail as part of the forthcoming planning in the EIA phase.
It is recognized that wind energy developments are being planned for other sites in the Jeffrey's Bay and Humansdorp regions, and these would require their own EIA processes. The cumulative impact of these other wind projects will be considered and addressed in this EIA. The projects that will be considered are other wind project proposals in the local area (within approximately 20 km of the proposed Ubuntu project) that have received a positive Environmental Authorisation or with EIAs in progress in the public domain, based on an internet search.

4.6.4 Technology alternatives as part of the development

The following technology alternatives have been considered:

- The proponent is considering a multitude of turbine suppliers. The preferred supplier will be chosen later in the EIA process.
- The turbine capacity will range between 2 MW and 3 MW. Once additional wind measurement data have been collected, the proponent will choose the most suitable turbine for the development.

4.6.5 Activity and layout alternatives as part of the development

- The proposed project will utilise up to 25 wind turbines in phase 1 with a combined generation capacity of 50 MW. Phase 2 consists of additional turbines, to bring the total number of turbines from both phases up to 50, depending on the capacity of the turbines to be used (i.e. 2 MW or 3 MW). The total installed capacity will be 100 MW;

- A provisional turbine layout was prepared by WKN Windcurrent. This layout will be reviewed and will be informed by various factors such as the proximity to the dwellings, proximity to roads, linking to access road, undisturbed natural areas, proximity to wetlands, the botanical sensitivity of the proposed area as well as the sensitivity of the area from a birds and bats perspective.
- The turbine layout will also be informed by the wind regime (climate); a high average wind-speed would be able to accommodate a more flexible layout (using areas lower on the wind farm) while the opposite will be applicable having a lower average wind speed, which would further reduce the number and the related placing of turbines and the outlay;
- The wind measurement data will be obtained from the wind measuring mast (s) which will inform the alignment of the turbines to ensure maximum wind absorption; and
- The proposed wind farm will be undertaken in two phases. The phases are dependent on the upcoming tenders for wind energy.

4.7 SCHEDULE FOR THE EIA

The proposed schedule for the EIA, based on the legislated EIA process, is presented in Table 4.2. It should be noted that this schedule could be revised during the EIA process, depending on factors such as the time required for decisions from authorities.

Table 4.2: EIA Schedule for the proposed Ubuntu Wind Energy Project

TASKS		EIA SCHEDULE (MONTHS)																		
		2010 Nov	Dec	2011 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	2012 Jan	Feb	Mar	Apr
2	Establish I&AP database, prepare BID and announce EIA																		
3	I&AP registration & meetings with key stakeholders to source issues																		
4	Prepare Draft Scoping Report (DSR) and Plan of Study for EIA (PSEIA)																		
5	Public comments period (40 days) on DSR and stakeholder meetings																		
6	Submit Final Scoping Report (FSR) and PSEIA to authorities for decision (30 days)																		
7	Communicate authority decision to I&APs and process for next phase																		
8	Specialist studies (including fieldwork)																		
9	Prepare Draft EIA Report and EMP																		
10	Public review of Draft EIA Report and EMP (40 days)																		
11	Submit Final EIA Report and Draft EMP to authorities																		
12	Decision by authorities (115 days plus Xmas holiday closed period)																		
13	Appeal process																		

Key:

BID: Background Information Document
DEA: National Department of Environmental Affairs
DEIA: Draft EIA report
DSR: Draft Scoping Report
PSEIA: Plan of Study for EIA
EMP: Environmental Management Plan

Environmental Impact Assessment for the proposed Ubuntu Wind Energy Project near Jeffrey's Bay, Eastern Cape: Draft Scoping Report

Chapter 5: Issues and Responses Trail

CONTENTS

5. ISSUES AND RESPONSES TRAIL

5.1 IDENTIFICATION OF ISSUES

An important element of the Scoping process is to evaluate the issues raised through the Scoping interactions with authorities, the public, the specialists on the EIA team and the project proponent. In accordance with the philosophy of Integrated Environmental Management, it is important to focus the EIA on the key issues.

To assist in the identification of key issues, a decision-making process is applied to the issues and concerns raised, based on the following criteria (Figure 5.1):

1. Whether or not the issue falls within the scope and responsibility of the Ubuntu Wind Energy EIA process; and
2. Whether or not sufficient information is available to respond to the issue or concern raised without further specialist investigation.

Issues were sourced by the project team from the following Scoping interactions:

- *Meetings* – issues raised at a project team meeting on 19 January 2011; between CSIR, WKN Windcurrent and specialist consultants;
- *Telephone* – issues raised by I&APs during telephonic consultations;
- *Letters and faxes* – issues sent to Public Process Consultants (PPC) via fax or posted correspondence;
- *Email* – issues sent to PPC via email correspondence; and
- *Comment Form* – issues submitted to PPC via the Comment Form that was provided with Letter 1 and the BID mailed to I&APs.

Where I&APs have raised the same issue via different means (e.g. same issues raised in writing and by e-mail) these issues have been grouped together in Section 5.2 and the source of the issue provided. The Appendices of the Draft Scoping Report (DSR) contain the supporting meeting notes and all detailed correspondence received. Comments received that are not relevant to or part of this EIA process have not been included in the Issues Trail below, but are included in the Appendices. The issues are grouped according the following categories (number in brackets indicates the number of issues raised):

1. Issues related to Noise Impacts (2)
2. Issues related to Birds and Bats (1)
3. Issues related to Visual Impacts (2)
4. Issues related to Agricultural land (4)
5. Issues related to Biophysical impacts (vegetation, fauna and wetlands) (7)
6. Issue related to Heritage related impacts (1)
7. Issue related to Socio-Economic impacts (1)
8. Project details required (2)
9. Environmental Assessment Process and Public Participation (7)
10. General Issues and Project Motivation (1).

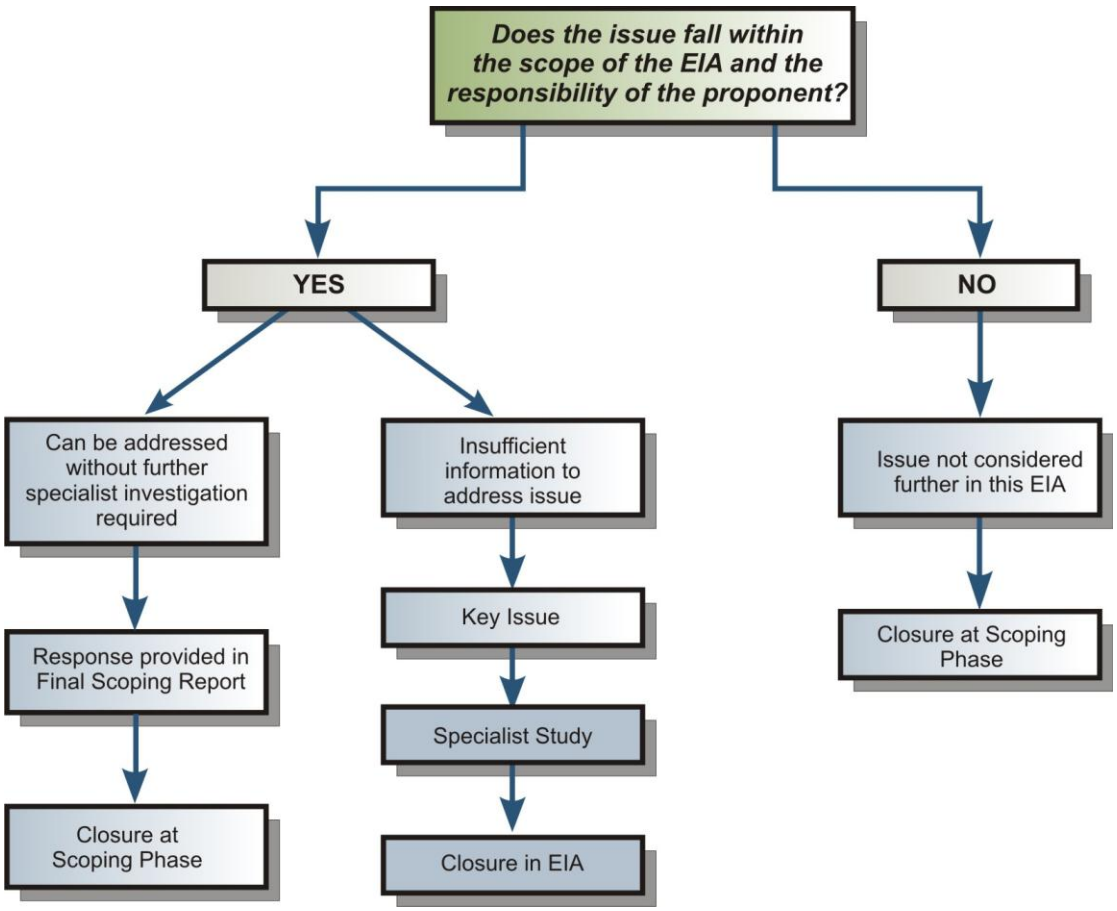


Figure 5.1: Decision-making framework for identification of key issues for the EIA

5.2 ISSUES AND RESPONSES TRAIL

Issues raised to date in the Scoping processes are provided below, together with a response from the EIA team and/or WKN Windcurrent. A synthesis of issues to be addressed in the Specialist Studies is provided in the Plan of Study for EIA (Chapter 6). The results of the Specialist Studies will be made available to I&APs for comment as part of the Draft EIA Report. All comments received prior to the release of the Draft Scoping Report, through meetings and written correspondence, are attached as Appendices to this report.

Issues raised by I&APs prior to the review of the Draft Scoping Report are indicated below (please note the issues are quoted verbatim).

1. Noise related Impacts

	Issue	*Commentator*	Date	Response
1.1	We are directly affected because we are the neighbours of Frank Luther and J Steenkamp, what impacts will this have on us as direct neighbours with regards to noise?	Andre Cilliers Direct neighbour (Farm 865)	fax, incorrect date on fax (date on fax is 26 April 2011)	The noise specialist study in the EIA will address this concern. A buffer zone of at least 500 m radius between the wind turbines and farm dwellings will be established to ensure that the requirements of the SANS noise guidelines 10103:2008 are adhered to. All neighbours will be identified as noise sensitive areas and the noise impact modelled at the residents house. It should be noted that the neighbour to Mr Cilliers is Frank Lotter and not Frank Luther as indicated in the fax received from Mr Cilliers.
1.2	We would like to raise our concern regarding the proposed establishment of a wind energy facility between the Gamtoos and Kabeljauws Rivers. Our home on the Kabeljauws River faces North in the direction of the project and we fear that our peace and tranquility will be disturbed. Will you please add our concern onto the project register.	Dave and Carole Barkes, Kabeljauws	Email, 5/11/2010	See response to 1.1 above. This concern is noted.

2. Potential impacts on birds and bats

	Issue	*Commentator*	Date	Response
2.1	We are directly affected because we are the neighbours of Frank Luther and J Steenkamp, what impacts will this have on us as direct neighbours, e.g. wildlife and birds.	Andre Cilliers Direct neighbour (Farm 865)	fax, incorrect date on fax (date on fax is 26 April 2011)	The avifaunal and faunal specialist studies in the EIA will address these issues.

3. Potential visual impacts

	Issue	*Commentator*	Date	Response
3.1	How will this project impact on the view that we currently have from our farm towards the sea and the mountains?	Andre Cilliers Direct neighbour (Farm 865)	fax, incorrect date on fax (date on fax is 26 April 2011)	A visual specialist study will be undertaken and will address this issue. The specialist will view the farm in question (Farm 865) in relation to the wind turbines. If it is found that Mr Cilliers will experience a high visual impact based on visual exposure and visual intrusion then the visual specialist will go and take photos from his viewpoints and create photomontage images so Mr Cilliers can see what the effect will be. The visual specialist study will provide mitigatory measures to reduce the visual impact of the turbines on the neighbouring properties.
3.2	We would like to raise our concern regarding the proposed establishment of a wind energy facility between the Gamtoos and Kabeljauws Rivers. Our home on the Kabeljauws River faces North in the direction of the project and we fear that our beautiful view will be disturbed. Will you please add our concern onto the project register. If you visit our website www.kabeljauws.co.za you can see the view we are referring too.	Dave and Carole Barkes, Kabeljauws	Email, 5/11/2010	Please see response to 3.1 above. This concern is noted.

4. Impacts on Agricultural land

	Issue	*Commentator*	Date	Response
4.1	We are directly affected because we are the neighbours of Frank Luther and J Steenkamp, what impacts will this have on us as direct neighbours and the cattle on our farm?	Andre Cilliers Direct neighbour (Farm 865)	fax, incorrect date on fax (date on fax is 26 April 2011)	After the turbines have been erected, agricultural activities will continue amongst them. No effects are predicted for cattle on neighbouring farms, or on the farms where the turbines are proposed. International experience shows that wind farms and cattle farming can co-exist harmoniously. The Environmental Management Plan (EMP), that will accompany the EIA, will provide guidelines to minimize the negative effects during construction and operation. The applicant is responsible to appoint an Environmental Control Officer, who is monitored by the authority, in order to oversee compliance of the EMP during construction.
4.2	I wish to inform you that this Department is in the process of drafting a wind development and farming guidelines and therefore all wind development application will be put on hold and only evaluated when the process has been finalized. All applicants will be informed accordingly in due course once the guidelines have been finalized.	Ms MC Marubini, Dept of Agriculture Forestry and Fisheries	Email and letter, 12/10/2010	The EIA team has not received any notification regarding the finalisation of the guidelines yet. It should be noted by the Dept of Agriculture Forestry and Fisheries and other authorities that the 2006 and 2010 EIA Regulations both require that the competent authority must make a decision on specified submissions within the time periods specified in the Regulations (e.g. refer to section 9 of EIA Regulations, in GN 543 of Government Gazette of 18 June 2010).
4.3	Neighbouring property, Vrede Farm, concerns regarding environmental impacts to general farming.	Ockert Strumpher, Flashcor 158, neighbour Vrede Farm	No date, comment form	Please see response to 4.1 above.
4.4	Attached is a completed form for a representative from DAFF. This indicates an interest of DAFF to be involved in the above mentioned EIA process.	Revival Mnguni, National Dept of Agriculture, Subdivision of Agricultural Land	Email, 26/11/2010	This I&AP has been placed on the project database.

5. Biophysical (vegetation, fauna and wetlands)

	Issue	*Commentator*	Date	Response
5.1	Neighboring property, Vrede Farm, concerns regarding environmental impacts to fauna and flora.	Ockert Strumpher, Flashcor 158, neighbour Vrede Farm	No date, comment form	A study will be undertaken to assess possible impacts of the wind farm on the fauna and flora. A bird and a bat specialist study will also be undertaken.
5.2	If the proposed development will be carried out below the 1:100 year floodline or riparian zone (whichever is the greatest), a water use authorization will be required.	Lizna Fourie via, Lorna Ntsheba, Resource Protection, Dept of Water Affairs	Email, 8/12/2010	The requirements of the National Water Act, 1998 (Act 36 of 1998) pertaining to the proposed activities undertaken in the Ubuntu wind energy project will be identified and adhered to. All relevant applications will be submitted to the Department of Water Affairs, if required.
5.3	If the Ubuntu Wind Energy project is likely to affect any wetlands, a water use license application in terms of Section 21 (c) & (i) of the National Water Act, 1998 (Act 36 of 1998) must be submitted to the department. Therefore, wetlands, if any, must be delineated and a technical report reflecting such should be submitted to the department.	Lizna Fourie via, Lorna Ntsheba, Resource Protection, Dept of Water Affairs	Email, 8/12/2010	Please see response to 5.2 above.
5.4	If the proposed development will require any removal of vegetation and/or excavation of river banks, an authorization from the department will be required in terms of Section 21 (i) of the National Water Act, 1998 (Act 36 of 1998)	Lizna Fourie via, Lorna Ntsheba, Resource Protection, Dept of Water Affairs	Email, 8/12/2010	Please see response to 5.2 above.
5.5	Any pipelines crossing a watercourse need to be authorized by the department in terms of Section 21 (c) & (i) of the National Water Act, 1998 (Act 36 of 1998)	Lizna Fourie via, Lorna Ntsheba, Resource Protection, Dept of Water Affairs	Email, 8/12/2010	Please see response to 5.2 above.

5.6	If the access gravel roads will cross any watercourse, and/or have any impact whatsoever on the watercourse, a water use authorization will be required.	Lizna Fourie via, Lorna Ntsheba, Resource Protection, Dept of Water Affairs	Email, 8/12/2010	Please see response to 5.2 above.
5.7	Look at any water use legislation requirements for the project.	Nsamile Dweni, Scientist Production, Dept of Water Affairs PE	Email and comment form, 7/12/2010	This comment is noted. Also see response to 5.2 above.

6. Heritage Related Impacts

	Issue	*Commentator*	Date	Response
6.1	SAHRA acknowledges that CSIR has appointed both an archaeologist and a paeleontologist to undertake an impact assessment on the possible heritage resources present in the area. Please note that other heritage resources must also be addressed in a Heritage Impact Assessment such as built structures over 60 years old, sites of cultural significance associated with oral histories, burial ground and graves, graves of victims of conflict and cultural landscapes.	Mariagrazia Galimberti APM Impact Assessor South African Heritage Resources Agency	Letter, 03/12/2010	The comment from SAHRA is noted. The EIA phase will include a review of the built historical environment and sites of cultural significance, in order ascertain if there are any such heritage features within the immediate vicinity of the proposed project.

7. Socio-Economic

	Issue	*Commentator*	Date	Response
7.1	Neighbouring property, Vrede Farm, concerns regarding possible increase in crime during the construction phase due to increased human activity – currently very good.	Ockert Strumpher, Flashcor 158, neighbour Vrede Farm	No date, comment form	Contractors will be obliged to implement strategies to reduce the risk of such effects, for example having a formalised employment office for employment of locals at the main offices.

8. Project Detail Requested

	Issue	*Commentator*	Date	Response
8.1	How will the maintenance of the wind energy affect us?	Andre Cilliers Direct neighbour (Farm 865)	fax, incorrect date on fax (date on fax is 26 April 2011)	On average two days per turbine per year will be needed for planned maintenance. This will generally be performed by two engineers in a delivery vehicle van or similar. Existing access roads to and on the farms will be used.
8.2	Neighboring property, Vrede Farm, concerns regarding future expansion with additional turbines.	Ockert Strumpher, Flashcor 158, neighbour Vrede Farm	No date, comment form	Any future expansions would be subject to separate Environmental Impact Assessments including public consultations, as well as all other licensing procedures necessary.

9. Environmental Assessment Process and Public Participation

	Issue	*Commentator*	Date	Response
9.1	We are direct neighbours of the project, what are all the advantages and disadvantages for us from this project?	Andre Cilliers Direct neighbour (Farm 865)	fax, incorrect date on fax (date on fax is 26 April 2011)	The positive and negative impacts of the project will be discussed in the Draft and Final EIA reports.
9.2	Please register the St Francis Kromme Trust as an I&A party: Chairman: Chris Barratt. P.O.Box 76, St Francis Bay, 6312, tel 042 294 0596, e-mail: krommetrust@barratt.co.za	Bridget Elton, St Francis Kromme Trust	Email, 17/11/2010	The St Francis Kromme Trust has been registered as an interested and affected party on the project database.
9.3	Kindly register Mr Donald McGillivray as an interested party for the Ubuntu Wind Energy Project.	Elsabe Koen, AFricoast Engineers	Email, 10/10/2010	This interested and affected party has been placed on the project database.
9.4	As the chamber we ask that you keep us updated of any information regarding the proposed wind farm. We would also like to have a key focus group	John Bouwer, President, Kouga Black Chamber of	Email, 03/12/2010	The public participation consultant (PPC) is currently in discussion with the Chamber of Commerce regarding a suitable date for a focus group meeting.

	meeting between you, the developers and the Executive members of the chamber as a matter of urgency. Please don't hesitate to contact us in this regard.	Commerce		
9.5	We will have a board meeting on Thursday and then we will surely indicate on how we will participate in the project, what our interest and concerns are and the questions we have. I hope you find this in order.	John Bouwer, President, Kouga Black Chamber of Commerce	Email, 03/12/2010	No additional comments have yet been received, The public participation consultant (PPC) is currently arranging a focus group meeting with Chamber of Commerce.
9.6	Please can you register me as an I&AP for the Ubuntu Windcurrent wind farm.	Leila Mahomed-Weideman, Director, Mainstream Renewable Power	Email, 22/11/2010	This interested and affected party has been placed on the project database.
9.7	Will you keep both myself and Chris informed in this regard	Mark Ralph, Sovereign Foods	Email, 29/11/2010	Mr Mark Ralph and Mr Chris Coombes have been placed on the project database.

10. General and Project Motivation

	Issue	***Commentator***	**Date**	**Response**
10.1	Wind developer active in the region	Mark Tanton, Director, Red Cap	Email, 16/11/2010	This comment is noted.

Environmental Impact Assessment for the proposed Ubuntu Wind Energy Project near Jeffrey's Bay, Eastern Cape: Draft Scoping Report

Chapter 6: Plan of Study for EIA

CONTENTS

6. PLAN OF STUDY FOR EIA

6.1 IDENTIFICATION OF ISSUES

The DEA *General Guide* to the EIA Regulations (Guideline 3, 2006) states that when the competent authority has accepted the Final Scoping Report and Plan of Study for EIA, the EIA phase may commence. The purpose of the EIA phase is to:

- Address issues that have been raised through the Scoping Process;
- Assess alternatives to the proposed activity in a comparative manner;
- Assess all identified impacts and determine the significance of each impact; and
- Formulate mitigation measures.

The Plan of Study for EIA (PSEIA) sets out the process to be followed in the EIA phase and is shaped by the findings of the Scoping process. The EIA phase consists of three parallel and overlapping processes:

- Central assessment process involving the authorities where inputs are integrated and presented in documents that are submitted for approval by authorities (Sections 6.2 and 6.4);
- Public participation process whereby findings of the EIA phase are communicated and discussed with I&APs and responses are documented (Section 6.3); and
- Specialist studies that provide additional information required to address the issues raised in the Scoping phase (Sections 6.5 and 6.6).

6.2 OVERVIEW OF APPROACH TO PREPARING THE EIA REPORT AND EMP

The results of the specialist studies and other relevant project information will be summarized and integrated into the Draft EIA Report. The Draft EIA Report will be released for a 40-day I&AP and authority review period, as outlined in Sections 6.3 and 6.4 below. All I&APs on the project database will be notified in writing of the release of the Draft EIA for review. It is proposed that during this review period a public meeting is held as well as focus group meetings with key I&APs. The purpose of these meetings will be to provide an overview of the outcomes and recommendations from, the specialist studies, as well as to provide the opportunity for comment. Comments raised, through written correspondence (emails, comments, forms) and at meetings (public meeting and focus group meetings) will be captured in a Comments and Responses Trail for inclusion in the Final EIA Report. Comments raised will be responded to by the CSIR EIA team and/or the project proponent. These responses will indicate how the issue has been dealt with in the EIA process. Should the comment received fall beyond the scope of this EIA, clear reasoning will be provided. All comments received will be attached as an appendix to the Final EIA Report.

The Draft EIA Report will include a draft Environmental Management Plan (EMP), which will be prepared in compliance with the relevant regulations. This EMP will be based broadly on the environmental management philosophy presented in the ISO 14001 standard, which embodies an approach of continual improvement. Actions in the EMP will be drawn primarily from the management actions in the specialist studies for the construction and operational phases of the project. If the project components are decommissioned or re-developed, this will need to be done in accordance with the relevant environmental standards and clean-up/remediation requirements applicable at the time.

6.3 PUBLIC PARTICIPATION PROCESS

The key steps in the public participation process for the EIA phase are described below. This approach will be confirmed with the DEA through their review of the PSEIA. The participation process for the Scoping Process is described in Chapter 4 of this report.

Task 1: Review of Draft EIA Report and EMP

The first stage in the process will entail the release of a Draft EIA Report for a 40-day public and authority review period. Relevant organs of state and I&APs will be informed of the review process in the following manner:

- Advertisements placed in one local and one regional newspaper, e.g. *Our Times* and *The Herald*;
- Letter 4 to all I&APs (including authorities), with notification of the 40-day public review period for the Draft EIA and invitation to attend the public meeting (this letter will include the summary of the Draft EIA Report and a Comment Form);
- Public Meeting on the Draft EIA Report, where key findings of the EIA report will be communicated and I&APs will have the opportunity to provide comments and engage with the EIA team and project proponent;
- Focus Group Meeting(s) with I&APs, if requested; and
- Meeting(s) with key authorities involved in decision-making for this EIA.

The Draft EIA Report and EMP will be made available and distributed through the following mechanisms to ensure access to information on the project and to communicate the outcome of specialist studies:

- Copies of the report will be placed at the Jeffrey's Bay and Humansdorp Municipal Libraries;
- Relevant organs of state and key I&APs will be provided with a hard copy or CD version of the report;
- The report will be placed on the project website: www.publicprocess.co.za

Task 2: Comments and Responses Trail

A key component of the EIA process is documenting and responding to the comments received from I&APs and the authorities. The following comments on the Draft EIA Report and EMP will be documented:

- Written and email comments (e.g. letters and completed comment forms);
- Comments made at public meetings;
- Comments made at focus group meetings;
- Telephonic communication with the CSIR contact person; and
- One-on-one meetings with key authorities and/or I&APs.

The comments received will be compiled into a Comments and Responses Trail for inclusion in the Final EIA Report. The Comments and Responses Trail will indicate the nature of the comment, when and who raised the comment. The comments received will be considered by the EIA team and appropriate responses provided by the relevant member of the team and/or specialist. The response provided will indicate how the comment received has been considered in the Final EIA Report, in the project design or EMP for the project.

Task 3: Compilation of Final EIA Report for submission to Authorities

The Final EIA Report, including the Comments and Responses Trail and EMP, will be submitted to the authorities for decision making. Letter 5 will be sent to all I&APs on the project database notifying them of the submission of the final report. The Final EIA Report will be distributed as follows:

- Copies of the report will be placed at the Jeffrey's Bay and Humansdorp Municipal Libraries;
- Relevant organs of state and key I&APs will be provided with a hard copy or CD version of the report; and the
- The report will be placed on the project website, www.publicprocess.co.za.

Task 4: Environmental Authorisation and Appeal Period

All I&APs on the project database will be notified of the issuing of the Environmental Authorisation and the Appeal period. The following process will be followed for the distribution of Environmental Authorisation and notification of appeal period:

- Copies of the Environmental Authorisation will be placed at Jeffrey's Bay and Humansdorp Municipal Libraries;
- Letter 6 to be sent to all I&APs (including organs of state), with a copy of the Environmental Authorisation and information on the Appeal Period; and
- The Environmental Decision will be placed on the project website.

All I&APs on the project database will be notified of the outcome of the appeal period, this notification will be included in Letter 7 to I&APs.

6.4 AUTHORITY CONSULTATION DURING THE EIA PHASE

Authority consultation is integrated into the public consultation process, with additional one-on-one meetings held with the lead authorities where necessary. It is proposed that the competent authority (DEA) as well as other lead authorities be consulted at various stages during the EIA process. The authority consultation process for the Scoping Process is outlined in Chapter 4 of this report. The Table below indicates the proposed consultation schedule for the EIA phase.

Table 6.1: Authority consultation schedule for the EIA phase

Stage in EIA Phase	Form of Consultation (including provisional dates)
SCOPING PHASE	**Review of draft reports:** Authorities, together with other stakeholders, will have the opportunity to review the Draft Scoping Report during the 40-day review period; and to attend the public meeting planned following the release the Draft Scoping Report.
REVIEW OF DRAFT EIA REPORT AND DRAFT EMP	**Review of draft reports:** Authorities, together with other stakeholders, will have the opportunity to review the Draft EIA and EMP reports during the 40 day review period; and to attend the public meeting planned following the release of the Draft EIA Report. If requested, CSIR can present the Draft EIA and EMP reports to the authorities at a dedicated authority meeting during this review period. **Site visit:** Offer a site visit for authorities, as and when required. We suggest that, if required, this take place at the same time of the public meeting for the Draft EIA and EMP reports.
FINAL EIA REPORT PHASE	Meetings with dedicated departments, if requested by DEA, with jurisdiction over particular aspects of the project (e.g. Local Authority) and potentially including relevant specialists.

6.5 APPROACH TO SPECIALIST STUDIES AND IMPACT ASSESSMENT

This section outlines the assessment methodology and legal context for specialist studies, in accordance with Section 3: Assessment of Impacts, in DEA Guideline 5, June 2006.

6.5.1 Generic Terms of Reference for the assessment of impacts

The identification of potential impacts should include impacts that may occur during the construction and operational phases of the activity. The assessment of impacts is to include direct, indirect as well as cumulative impacts.

In order to identify potential impacts (both positive and negative) it is important that the nature of the proposed activity is well understood so that the impacts associated with the

activity can be understood. The process of identification and assessment of impacts will include:

- Determine the current environmental conditions in sufficient detail so that there is a baseline against which impacts can be identified and measured;
- Determine future changes to the environment that will occur if the activity does not proceed;
- An understanding of the activity in sufficient detail to understand its consequences; and
- The identification of significant impacts which are likely to occur if the activity is undertaken.

As per DEA *Guideline 5*: *Assessment of Alternatives and Impacts* the following methodology is to be applied to the predication and assessment of impacts. Potential impacts should be rated in terms of the direct, indirect and cumulative:

- **Direct impacts** are impacts that are caused directly by the activity and generally occur at the same time and at the place of the activity. These impacts are usually associated with the construction, operation or maintenance of an activity and are generally obvious and quantifiable.

- **Indirect impacts** of an activity are indirect or induced changes that may occur as a result of the activity. These types of impacts include all the potential impacts that do not manifest immediately when the activity is undertaken or which occur at a different place as a result of the activity.

- **Cumulative impacts** are impacts that result from the incremental impact of the proposed activity on a common resource when added to the impacts of other past, present or reasonably foreseeable future activities. Cumulative impacts can occur from the collective impacts of individual minor actions over a period of time and can include both direct and indirect impacts.

- **Spatial extent** – The size of the area that will be affected by the impact:
  - Site specific
  - Local (<2 km from site)
  - Regional (within 30 km of site)
  - National.

- **Intensity** –The anticipated severity of the impact:
  - High (severe alteration of natural systems, patterns or processes)
  - Medium (notable alteration of natural systems, patterns or processes)
  - Low (negligible alteration of natural systems, patterns or processes).

- **Duration** –The timeframe during which the impact will be experienced:
  - Temporary (less than 1 year)
  - Short term (1 to 6 years)
  - Medium term (6 to 15 years)
  - Long term (the impact will cease after the operational life of the activity)

- Permanent (mitigation will not occur in such a way or in such a time span that the impact can be considered transient).

Using the criteria above, the impacts will further be assessed in terms of the following:

- **Probability** –The probability of the impact occurring:
  - Improbable (little or no chance of occurring)
  - Probable (<50% chance of occurring)
  - Highly probable (50 – 90% chance of occurring)
  - Definite (>90% chance of occurring).

- **Significance** – Will the impact cause a notable alteration of the environment?
  - Low to very low (the impact may result in minor alterations of the environment and can be easily avoided by implementing appropriate mitigation measures, and will not have an influence on decision-making)
  - Medium (the impact will result in moderate alteration of the environment and can be reduced or avoided by implementing the appropriate mitigation measures, and will only have an influence on the decision-making if not mitigated)
  - High (the impacts will result in major alteration to the environment even with the implementation on the appropriate mitigation measures and will have an influence on decision-making).

- **Status** - Whether the impact on the overall environment will be:
  - positive - environment overall will benefit from the impact
  - negative - environment overall will be adversely affected by the impact
  - neutral - environment overall not be affected.

- **Confidence** – The degree of confidence in predictions based on available information and specialist knowledge:
  - Low
  - Medium
  - High.

- Management Actions and Monitoring of the Impacts (EMP);
- Where negative impacts are identified, mitigatory measures will be identified to avoid or reduce negative impacts. Where no mitigatory measures are possible this will be stated
- Where positive impacts are identified, augmentation measures will be identified to enhance potentially positive impacts;
- Quantifiable standards for measuring and monitoring mitigatory measures; and enhancements will be set. This will include a programme for monitoring and reviewing the recommendations to ensure their ongoing effectiveness.

The Table below is to be used by specialists for the rating of impacts.

Table 6.2: Table for rating of impacts

Direct Impacts							
Mitigation	**Spatial Extent**	**Intensity**	**Duration**	**Probability**	**Significance & Status**		**Confidence**
					Without Mitigation	**With Mitigation**	
Avifauna: Impact of the turbine blades on bird mortality							
Include best practice in blade visibility as well as deterring mechanisms for birds.	Site	Medium	Permanent	High	Medium	Low	High

Other aspects to be taken into consideration in the assessment of impact significance are:

- Impacts will be evaluated for the construction and operation phases of the development. The assessment of impacts for the decommissioning phase will be brief, as there is limited understanding at this stage of what this might entail. The relevant rehabilitation guidelines and legal requirements applicable at the time will need to be applied.
- The impact evaluation will, where possible, take into consideration the cumulative effects associated with this and other facilities/projects which are either developed or in the process of being developed in the local area.
- The impact assessment will attempt to quantify the magnitude of potential impacts (direct and cumulative effects) and outline the rationale used. Where appropriate, national standards are to be used as a measure of the level of impact.

6.6 SPECIFIC ISSUES TO BE ADDRESSED IN SPECIALIST STUDIES

Based on an evaluation of issues to date, the following Specialist Studies are proposed as part of the EIA phase:

Specialist Team		
Jamie Pote	Private Consultants	Ecology (Flora and Fauna)
Chris van Rooyen	Chris van Rooyen Consultants	Avifauna (birds)
Stephanie Dippenaar Anna Doty	CSIR Nelson Mandela Metro University	Bats
Henry Holland	Mapthis	Visual impacts
Brett Williams	SafeTech	Noise
Dr Johan Binneman	Albany Museum	Archaeology
Dr John Almond	NaturaViva	Palaeontology

The Terms of Reference (ToRs) for the specialist studies essentially will consist of the generic assessment requirements and the specific issues identified for each study. These issues have been identified through the baseline studies, I&AP and authority consultation, as well as input from the proposed specialists based on their experience. As part of the review of the Draft Scoping Report, specialists are to propose any additional issues for inclusion in the specialist studies. Additional issues, identified through public and authority consultation during the Scoping phase, as well as specialist inputs, will be included in the final Terms of Reference for specialists (i.e. in the PSEIA of the Final Scoping Report).

6.6.1 Fauna and Flora

The specialist study will include the following:

- Describe the vegetation in the study area;
- Determine species composition of each vegetation type, and the presence of potential protected species;
- Describe the current state of the vegetation on site;
- Describe the conservation status and value of the vegetation;
- Describe transformations and invasive alien plant species;
- Provide a vegetation sensitivity map of the site;
- Include Faunal Assessment (Mammal; amphibian and reptile);
- Identify and assess potential impacts on fauna and flora, outline mitigatory measures and outline additional management guidelines;
- Indicate potential no go areas;
- Identify management actions to avoid or reduce negative impacts on fauna and flora for inclusion in the EMP.

6.6.2 Birds

The specialist study will include the following:

- A desktop review of available information that can support and inform the specialist study i.e. potential impacts on avifauna.
- Identification of issues and potential impacts related to avifaunal impacts, which are to be considered in combination with any additional relevant issues that may be raised through the public consultation process.
- Assessment of the potential, as well as potential cumulative, impacts on avifauna, both positive and negative, associated with the proposed project for the construction, operation and decommissioning phases.
- Identification of management actions to avoid or reduce negative impacts; and to enhance positive benefits of the project on avifauna.
- In addition to the specialist study, a pre-construction bird monitoring programme is being undertaken. The results and recommendations of this monitoring programme will be included in the specialist study.

6.6.3 Bats

The specialist study will include the following:

- Identify and assess the potential impacts of the wind project on bats and bat mortality.
- Establish which species may occur in the area and their relevant conservation status.
- Conduct field work to assess bat species presence at the proposed site, the presence of any large bat roosts or maternity colonies, and areas of foraging activity.
- Identify potential management plans to reduce the impact of the wind farm on the local bat community.
- In addition to the specialist study, a pre-construction bat monitoring programme will be undertaken. The results and recommendations of this monitoring programme will be included in the specialist study.

6.6.4 Visual

The specialist study will include the following:

- Conduct a desktop review of available information that can support and inform the specialist study.
- Identify issues and potential visual impacts for the proposed project, which are to be considered in combination with any additional relevant issues that may be raised through the public consultation process.
- Identify possible cumulative impacts related to the visual aspects for the proposed project.
- Assess the potential impact/impacts, both positive and negative, associated with the proposed project for the construction, operation and decommissioning phases.
- Identify management actions to avoid or reduce negative visual impacts; and to enhance positive benefits of the project.

6.6.5 Noise

The specialist study will include the following:

- Conduct a desktop study of available information that can support and inform the specialist noise study.
- Identify issues and potential impacts, as well a possible cumulative impacts, related to the noise aspects for the proposed project.
- The measurement of the existing ambient noise (day and night time).
- A noise study of the future impact during construction and operation of the proposed project, taking into consideration sensitive receptors.
- Identify and assess the potential impacts associated with the proposed project for the construction, operation and decommissioning phases.
- Identify management actions to avoid or reduce negative noise impacts for inclusion in the EMP.

6.6.6 Archaeology

The specialist study will include the following:

- Describe the type and location of known archaeological features in the study area.
- Evaluate the potential for occurrence of archaeological features at the turbine sites.
- Specify the potential impact as well as potential cumulative impact of the development.
- Provide management actions (mitigation) to avoid or reduce potential impacts on archaeological features for inclusion in the EMP for the construction of the turbines.

6.6.7 Palaeontology (a desktop study will be undertaken)

The specialist study will include the following:

- Describe the type and location of known fossil occurrences in the study area.
- Confirm the importance of any palaeontological features at the turbine sites.
- Specify the potential impact as well as potential cumulative impact of the development.
- Provide management actions (mitigation) to avoid or reduce potential impacts on palaeontological features for inclusion in the EMP for the construction of the turbines.

6.7 SUPPORTING TECHNICAL STUDIES

A technical analysis and input **on shadow and flicker effects** will be provided by WKN Windcurrent for inclusion in the EIA Report.

A technical study on **radar and aviation impacts** will be conducted by WKN Windcurrent in parallel with the specialist studies, and results incorporated into the EIA report. The scope of this study will include the following:

- Provide an overview of relevant South African aviation regulations, policies and acts regarding obstacles in general and wind turbines in particular. Also include international best practice where appropriate;
- Determine the operational and technical impact of the wind energy project on radar systems(both primary and secondary) and what measures are available to mitigate potential impacts;
- Determine the operational and technical impact of the wind energy project on aviation operations, including flight paths;
- Determine the operational and technical impact of the wind energy project on navigational and communications systems, and what measures could mitigate such potential impacts;

- Determine the operational and technical impacts of the wind energy project on aviation safety; and
- Indicate all possible mitigations that can be applied to minimise potential impacts and/or create acceptable co-existence with Aviation Stakeholders.

Environmental Impact Assessment for the proposed Ubuntu Wind Energy Project near Jeffrey's Bay, Eastern Cape: Draft Scoping Report

Chapter 7: References

7 REFERENCES

Almond, J.E., de Klerk, W.J. & Gess, R. 2008. Palaeontological heritage of the Eastern Cape. Interim SAHRA technical report, 20 pp. *Natura Viva cc.*, Cape Town.

Barnes, K.N. (1998). The Important Bird Areas of southern Africa*. BirdLife South Africa:* Johannesburg.

Barnes, K.N. (ed.) 2000. The Eskom Red Data Book of Birds of South Africa, Lesotho and Swaziland*. BirdLife South Africa*, Johannesburg.

Binneman, J.N.F. 2001. An introduction to a Later Stone Age coastal research project along the south-eastern Cape coast. *Southern African Field Archaeology* 10:75-87.

Binneman, J.N.F. 2005. Archaeological research along the south-eastern Cape coast part1: open-air shell middens. *Southern African Field Archaeology* 13 & 14:49-77.

Binneman, J.N.F. 1996. The symbolic construction of communities during the Holocene Later Stone Age in the south-eastern Cape. Unpublished D.Phil. thesis: University of the Witwatersrand.

Friedmann, Y. & Daly, B. (eds.) 2004. Red Data Book of the Mammals of South Africa: A Conservation Assessment. CBSG Southern Africa, Conservation Breeding Specialist Group (SSG/IUCN), Endangered Wildlife Trust, South Africa. 722 pp.

Harrison, J.A., Drewitt, D.G., Underhill, L.G., Herremans, M., Tree, A.J., Parker, V & Brown, C.J. (eds). 1997. The atlas of southern African birds. Vol. 1&2. BirdLife South Africa, Johannesburg.

Hockey P.A.R., Dean W.R.J., and Ryan P.G. 2005. Robert's Birds of Southern Africa, seventh edition. Trustees of the John Voelcker Bird Book Fund, Cape Town.

http://www.cbd.int/doc/lega

http://www.info.gov.za/aboutgovt/symbols/bird.htm

http://www.unep-aewa.org

Kouga Municipality. 2005/2006. Revised Integrated Development Plan: 2005/2006. Kouga Municipality, Jeffreys Bay.

Kouga Municipality. 2007. Integrated Development Plan: 2007 - 2012. Kouga Municipality, Jeffreys Bay.

Monadjem, A., Taylor, P.J., Cotterill, F.P.D., Schoeman, M.C., 2010. *Bats of Southern and Central Africa: A Biogeographic and Taxonomic Synthesis*. In press with University of the Witwatersrand, Johannesburg.

Municipal Demarcation Board. 2003. Municipal Profiles. Available at http://www.demarcation.org.za/municprofiles2003/index.html.

Statistics SA. 2002. Census 2001. Stats SA, Pretoria.

Statistics SA. 2008. Community Survey 2007. Stats SA, Pretoria

Young, D.J. 2008. Coordinated Avifaunal Roadcounts. Newsletter 25. Animal Demography Unit. University of Cape Town.

Young, D.J. 2009a. Coordinated Avifaunal Roadcounts. Newsletter 26. Animal Demography Unit. University of Cape Town.

Young, D.J. 2009b. Coordinated Avifaunal Roadcounts. Newsletter 27. Animal Demography Unit. University of Cape Town.

Young, D.J. 2010. Coordinated Avifaunal Roadcounts. Newsletter 28. Animal Demography Unit. University of Cape Town.

Young, D.J. Harrison, J.A. Navarro, R.A. Anderson, M.D. & B.D. Colahan (ed). 2003. Big Birds on Farms: Mazda CAR Report 1993 - 2001. Avian Demography Unit. University of Cape Town.

Environmental Impact Assessment for the proposed Ubuntu Wind Energy Project near Jeffrey's Bay, Eastern Cape: Draft Scoping Report

Appendices:

Appendix A: Curriculum Vitae Paul Lochner & Minnelise Levendal

Appendix B: NEMA-DEA Application Form

Appendix C: Site notice boards

Appendix D: Advertisements

Appendix E: Background Information Document

Appendix F: Database of Interested and Affected Parties

Appendix G: Correspondence to Interested and Affected Parties

Appendix H: Correspondence from Interested and Affected Parties

Environmental Impact Assessment for the proposed Ubuntu Wind Energy Project near Jeffrey's Bay, Eastern Cape: Draft Scoping Report

Appendix A: Curriculum Vitae

Paul Lochner & Minnelise Levendal

CSIR
Jan Cilliers Street
PO Box 320
Stellenbosch 7600
South Africa

Phone: +27 21 888 2400
Fax: +27 21 888 2693
Email: plochner@csir.co.za

Curriculum Vitae

Paul Lochner

Name of firm	CSIR
Name of staff	Paul Andrew Lochner
Profession	Environmental Assessment and Management
Position in firm	Project Leader in Environmental Assessment & Management
Date of birth	13 June 1969
Years with firm	18 years
Nationality	South African

Biographical sketch

Paul Lochner commenced work at CSIR in 1992, after completing a degree in Civil Engineering and a Masters in Environmental Science, both at the University of Cape Town. His initial work at CSIR focused on sediment dynamics and soft engineering applications in the coastal zone, in particular, beach and dune management. He conducted several shoreline erosion analyses and prepared coastal zone management plans for beaches. He also prepared wetland management plans.

As the market for environmental assessment work grew, he led Environmental Impact Assessments (EIAs), in particular for coastal resort developments and large-scale industrial developments located on the coast; and Environmental Management Plans (EMPs), in particular for wetlands, estuaries and coastal developments. He has also been involved in researching and applying higher-level approaches to environmental assessment and management, such as Strategic Environmental Assessment (SEA). In 1998 and 1999, he coordinated the SEA research programme within the CSIR, and was a lead author of the Guideline Document

for SEA in South Africa, published jointly by CSIR and the national Department of Environmental Affairs and Tourism in February 2000.

In 1999 and 2000, he was the project manager for the legal, institutional, policy, financial and socio-economic component of the Cape Action Plan for the Environment ("CAPE"), a large-scale multi-disciplinary study to ensure the sustainable conservation of the Cape Floral Kingdom. This was funded by the Global Environmental Fund (GEF) and prepared for WWF-South Africa. The study required extensive stakeholder interaction, in particular with government institutions, leading to the development of a Strategy and Action Plan for regional conservation.

In July 2003, he was certified as an Environmental Assessment Practitioner by the Interim Certification Board for Environmental Assessment Practitioners of South Africa. In 2004 he was lead author of the *Overview of IEM* document in the updated Integrated Environmental Management (IEM) Information Series published by national Department of Environmental Affairs and Tourism (DEAT). In 2004-2005 he was project manager for an Environmental and Social Impact Assessment (ESIA) conducted for a bauxite mine and alumina refinery in the Komi Republic (Russia), prepared in accordance with World Bank and EU policies, guidelines and standards.

In 2004-2005, he was part of the CSIR team that coordinated the preparation of the series of *Guidelines for involving specialists in EIA processes* prepared for the Western Cape Department of Environmental Affairs and Development Planning (DEADP); and authored the *Guideline for Environmental Management Plans* published by the Western Cape government in 2005.

Over the past 6 years has been closely involved with several environmental studies for industrial and port-related projects in Coega Industrial Development Zone (IDZ), near Port Elizabeth. This included an EIA and EMP for a proposed aluminium smelter, and assistance with environmental permit applications for air, water and waste. He has also conducted environmental assessments for port development, manganese export and rail development at the Coega IDZ and port.

He is currently leading the EIA for a desalination plant in Namibia; an EIA for a wind energy facility near Jeffreys Bay, South Africa; and an EIA for a proposed crude oil refinery at Coega.

Education

1990	B.Sc. Civil Engineering (awarded with Honours)	University of Cape Town
1992	M. Phil. Environmental Science	University of Cape Town

Employment record

January 1992 to June 1992: Completed Masters thesis, working in conjunction with the Environmental Evaluation Unit at the University of Cape Town. The thesis investigated the potential future ecological and socio-economic impacts resulting from the closure of a large diamond mining operation, and developed actions to mitigate these impacts.

October 1992 to present: Employed by the CSIR in Stellenbosch. Involved in coastal engineering studies; and various forms of environmental assessment and management studies. (A track record of experience is listed below).

PROFESSIONAL INVOLVEMENT IN COMMITTEES:

1996/97:	Committee Member of the Western Cape Branch of the International Association for Impact Assessment (IAIA)
1997/98:	Chairperson of the Western Cape Branch of IAIA and member of the national IAIA committee
1998/99:	Committee Member of the Western Cape Branch of IAIA
1996 to present:	Chairperson of the Intaka Island/Blouvlei Environmental Committee at Century City, Cape Town (This committee is tasked with overseeing the management of a wetland in the midst of a new mixed-use urban development)

Experience record

The following table presents an abridged list of projects that Paul Lochner has been involved in, indicating his role in each project:

Completion Date	Project description	Role	Client
2011 *(in progress)*	**EIA for the proposed Ubuntu wind energy project,** Eastern Cape, South Africa	Project leader	Windcurrent SA (Pty) Ltd in a Joint Venture with WKN Windkraft Nord AG
2011 *(in progress)*	**EIA for the proposed Banna ba pifhu wind energy project,** Eastern Cape, South Africa	Project leader	Windcurrent SA (Pty) Ltd in a Joint Venture with WKN Windkraft Nord AG
2009/2010 *(in progress)*	**EIA for the proposed BioTherm wind energy project,** Overberg region, South Africa	Project leader	Biotherm South Africa (Pty) Ltd
2009/2010 *(in progress)*	**Basic Assessment (BA) for monitoring masts for the proposed Biotherm wind energy project,** Overberg region, South Africa	Project leader	Biotherm South Africa (Pty) Ltd
2009/2010 *(in progress)*	**EIA for the proposed InnoWind wind energy project,** Western Cape, South Africa	Project leader	InnoWind South Africa (Pty) Ltd
2009/2010 *(in progress)*	**BA for the proposed InnoWind test turbines and monitoring masts,** Western Cape, South Africa	Project leader	InnoWind South Africa (Pty) Ltd
2009/2010 *(in progress)*	**EIA for the proposed Electrawinds Phase 2 wind energy facility,** Coega IDZ, Eastern Cape	Project leader	Electrawinds N.V. (Belgium)

Completion Date	Project description	Role	Client
2009/2010 *(in progress)*	**BA for the national wind Atlas for South Africa**	Project leader	SANERI and SA Wind Energy Programme, Dept of Energy
2009/2010 *(in progress)*	**EIA for the proposed Gecko soda plant,** Otjivalunda and Arandis, Namibia	Project leader	Gecko, Namibia
2009	**BA for the proposed Electrawinds test turbine and monitoring mast,** Coega IDZ, Eastern Cape	Project leader	Electrawinds N.V. (Belgium)
2009	**EIA for the proposed desalination plant** at Swakopmund, Namibia	Project leader	NamWater, Namibia
2009	**EMP for the Operational Phase of the Berg River Dam**, Franschoek, South Africa	Project leader and report co-author	TCTA, South Africa
2009/2010 *(in progress)*	**EIA for the proposed crude oil refinery** at Coega, South Africa	Project leader and lead author	PetroSA, South Africa
2008	**Environmental Risk Review** for proposed LNG/CNG import to Mossel Bay, South Africa	Project leader and lead author	PetroSA, South Africa
2008	**Review of the Business Plan** for catchment management for the Berg Water Dam Project, Franschoek, South Africa	Project reviewer and co-author	TCTA, South Africa
2007 – 2008 *(in progress)*	**EIA for proposed Jacobsbaai Tortoise Reserve eco-development**, Saldanha, Western Cape	Project Leader and co-author	Jacobsbaai Tortoise Reserve (Pty) Ltd
2007 – 2008 *(in progress)*	**Independent reviewer** for the EIA proposed Amanzi lifestyle development, Port Elizabeth	Independent reviewer appointed to advise EAP	Public Process Consultants and Pam Golding
2007 – 2008 *(in progress)*	**EIA for proposed Kouga wind energy and pumped storage scheme**, Eastern Cape	Project Leader and co-author	Genesis Eco-Energy
2007	**Review of EIA for the proposed Hanglip Eco-Development**, Plettenberg Bay, Western Cape	Co-author of review of EIA, undertaken on behalf of DEADP	Dept of Environmental Affairs & Development Planning, Western Cape
2006-2007 *(in progress)*	**Environmental Impact Assessment for the proposed Coega LNG-to-Power Project** at the Port of Ngqura, Coega IDZ	Project Leader and co-author	Eskom and iGas
2006-2007 *(in progress)*	**Guideline** for Scoping, Environmental Impact Assessment and Environmental Management Plans for mining in South Africa	Project leader and co-author	Dept of Minerals and Energy (DME), South Africa
2006	**Environmental Impact Assessment** (**EIA)** for the extension of the Port of Ngqura, Eastern Cape	Project Leader and co-author	Transnet
2006	**Integrating Sustainability Into Strategy: Handbook** (Version 1)	Project Leader and co-author	CSIR (STEP research report)
2005	**Technology Review** for the proposed aluminium smelter at Coega, South Africa	Project Leader and lead author	Alcan, Canada
2005	**Environmental and Social Impact Assessment (ESIA) report** for the proposed alumina refinery near Sosnogorsk, Komi Republic, Russia	Project manager and co-author	Komi Aluminium, Russia, IFC, EBRD
2005	**Guideline for Environmental Management Plans (EMPs)** for the Western Cape province, including conducting a training course for provincial government	Author	Dept of Environmental Affairs & Development Planning, Western Cape
2005	**Guideline for the review of specialist studies** undertaken as part of environmental assessments	Member of Steering Committee and project facilitator	Dept of Environmental Affairs & Development Planning, Western Cape
2004	**Review of Strategic Management Plan** for Table Mountain National Park (2001-2004)	Reviewer and co-author	South African National Parks

Completion Date	Project description	Role	Client
2004	**Strategic Needs Assessment Process** for mainstreaming sustainable development into business operations	Researcher and co-author	CSIR (internal research)
2004	**Environmental Monitoring Committees** booklet in the IEM Information Series for DEAT	Contributing author	Department of Environmental Affairs and Tourism (DEAT)
2004	**Overview of Integrated Environmental Management** (IEM) booklet in the IEM Information Series	Lead author and researcher	DEAT
2003	**Environmental Screening Study** for gas power station, South Africa	Project Manager and lead author	Eskom, iGas and Shell
2003	**Environmental Management Programme** (EMP) Framework for the proposed Coega Aluminium Smelter; and assistance with preparing permit and licence applications	Project Manager and lead author	Pechiney, France
2003	**Environmental Management Plan** for the Operational Phase of the wetlands and canals at Century City, Cape Town	Project leader and lead author	Century City Property Owners' Association
2002	**Environmental Impact Assessment** for the proposed Pechiney aluminium smelter at Coega, South Africa	Project Manager and lead author	Pechiney, France
2002 - 2003	**Research project:** Ecological impact of large-scale groundwater abstraction on the Table Mountain Group aquifer	Project Manager	Water Research Commission
2002	**Environmental Management Plan** for the Eskom Wind Energy Demonstration Facility in the Western Cape	Co-author	Eskom
2001-2002	**Environmental Impact Assessment** for the Eskom Wind Energy Demonstration Facility in the Western Cape	Quality control & co-author	Eskom
2001	**Environmental Due Diligence** study of four strategic oil storage facilities in South Africa	Project manager and co-author	SFF Association
2000	**Cape Action Plan for the Environment**: a biodiversity Strategy and Action Plan for the Cape Floral Kingdom - legal, institutional, policy, financial and socio-economic component	Project manager and contributing writer	World Wide Fund for Nature (WWF): South Africa
1999	**Environmental Management Plan** for the establishment phase of the wetlands and canals at Century City, Cape Town	Project manager and lead author	Monex Development Company
1999	**Environmental Management Programme** for the Thesen Islands development, Knysna	Process design and Co-author	Chris Mulder Associates Inc; Thesen and Co.
1999	***Management Plan*** *for the coastal zone between the Eerste and Lourens River, False Bay, South Africa*	Project manager and lead author	Heartland Properties and Somchem (a Division of Denel)
1998	**Environmental Assessment** of the Mozal Matola Terminal Development proposed for the Port of Matola, Maputo, Mozambique	Project manager and author.	*SNC-Lavalin-EMS*
1998	**Strategic Environmental Assessment (SEA)** for the Somchem industrial complex at Krantzkop, South Africa	Project manager and co-author	Somchem, a Division of Denel
1997	**Strategic Environmental Assessment (SEA)** for the proposed Industrial Development Zone and Harbour at	SEA project manager and report writer	Coega IDZ Initiative Section 21 Company

Completion Date	Project description	Role	Client
	Coega, Port Elizabeth, South Africa		
1996	**Environmental Impact Assessment** of Development Scenarios for Thesen Island, Knysna, South Africa	Project manager and report writer	Thesen and Co.
1996	**Environmental Impact Assessment** of the Management Options for the Blouvlei wetlands, Cape Town	Project manager and report writer	Ilco Homes Ltd (now Monex Ltd)
1995	**Environmental Impact Assessment** for the Saldanha Steel Project, South Africa	Report writing and management of specialist studies	Saldanha Steel Project
1994	**Environmental Impact Assessment** for the upgrading of resort facilities on Frégate Island, Seychelles	Member of the project management team, co-author, process facilitator	Schneid Israelite and Partners
1994	**Environmental Impact Assessment** for exploration drilling in offshore Area 2815, Namibia	Project manager and co-author	Chevron Overseas (Namibia) Limited
1994	**Management Plan** for the Rietvlei Wetland Reserve, Cape Town	Project manager and lead author	Southern African Nature Foundation (now WWF-SA)
1993	**Beach management plan** for Stilbaai beachfront and dunes, South Africa	Project manager and lead author	Stilbaai Municipality
1993	**Beach and dune management plan for Sedgefield** for the beach east of the mouth of the Swartvlei estuary	Project manager and lead author	Nel and De Kock Planners, George
1993	**Coastal Stability analysis and beach management plan** for the Table View coastline north of Blaauwberg Road, Cape Town	Project manager and lead author	Milnerton Municipality

Publication record

A comprehensive list of publications, book chapters and contract reports is available upon request, with a summary provided below.

Publications in journals, peer reviewed conference proceedings and CSIR internal research reports:

Lochner P, Munster F and Burns M, 2006. Integrating Sustainability into Strategy (ISIS): a process to inform sustainability strategies and frameworks, *In:* IAIA South Africa Annual Conference proceedings, South Africa.

Rossouw N and Lochner P, 2006. Environmental Monitoring Committees (EMCs): purpose, function and structure. *In:* IAIA South Africa Annual Conference proceedings, South Africa.

Munster F and Lochner P, 2006, Integrating Sustainability Into Strategy: Handbook (Version 1) – describing a process to inform sustainability strategies, frameworks and reports, *CSIR Report ENV-S-I 2005-001*, ISBN 0-7988-5560-6, Stellenbosch.

Van Zyl H, de Wit M, Munster F, Lochner P, Gerber G, 2005. Economics in Environmental Impact Assessment: demystifying the

theory and practice, *In:* Conference Proceedings of the IAIA South Africa 2005 Annual National Conference. South Africa.

Lochner P, Weaver A, Gelderblom C, Peart R, Sandwith T and Fowkes S, 2003. Aligning the diverse: the development of a biodiversity conservation strategy for the Cape Floristic Region. *Biological Conservation Vol. 112, ISSN:* 0006-3207.

Lochner P, Münster F, Msutu M, Wren S, 2003. The role of stakeholder engagement in the EIA for the Coega Aluminium Smelter. *In:* Conference Proceedings of the IAIA South Africa 2003 Annual National Conference. ISBN 1-919891-04-8. South Africa.

Lochner P, Brooks W, Pesch P & Münster M. 2003, Stakeholder engagement process in the EIA of an aluminium smelter, Published in *Light Metals* 2003 (Ed. Paul Crepeau), Published by TMS (the Minerals, Metals & Materials Society), ISBN Number 0-87339-531-X, USA.

Rossouw N, Audouin M, Lochner P, Heather-Clark S and Wiseman K, 2000. Development of strategic environmental assessment in South Africa. *Impact Assessment and Project Appraisal.* Vol 18, no. 3, pp 217-223. United Kingdom.

Lochner P and Fowkes S, 2000. Building partnerships for the conservation of the biodiversity of the Cape Floral Kingdom: experiences and lessons learnt from the Cape Action Plan for the Environment. IAIA-SA Conference Proceedings 2000. South Africa.

Lochner P and Rossouw N, 1997. The development of an Environmental Management Plan for incorporating a wetland into a large mixed use development: the Century City example. IAIA-SA Conference Proceedings 1997. South Africa.

Language capability

	Speaking	*Reading*	*Writing*
English	Excellent	Excellent	Excellent
Afrikaans	Average	Average	Average

Paul Lochner
February 2011

CSIR
Jan Cilliers Street
PO Box 320
Stellenbosch 7600
South Africa

Phone: +27 21 888 2400
Fax: +27 21 888 2693
Email: mlevendal@csir.co.za

Curriculum Vitae

Minnelise Rouchelle-Ann Levendal

Name of firm	CSIR
Name of staff	Minnelise Levendal
Profession	Environmental Assessment and Management
Gender:	Female
Years with firm	Seven years
Nationality	South African
Languages	Afrikaans and English

CONTACT DETAILS:

Postal Address:	P O Box 320, Stellenbosch, 7599
Telephone Number:	021-888 2495/2661
Cell:	0833098159
Fax:	0865051341
e-mail:	mlevendal@csir.co.za

EDUCATION

- M.Sc. (Botany) Stellenbosch University 1998
- B.Sc. (Hons.) (Botany) University of the Western Cape 1994
- B.Sc. (Education) University of the Western Cape 1993

MEMBERSHIPS:

- International Association for Impact Assessment (IAIA), Western Cape (member of their steering committee from 2001-2003)
- IUCN Commission on Education and Communication (CEC); World Conservation Learning Network (WCLN)
- American Association for the Advancement of Science (AAAS)
- Society of Conservation Biology (SCB)

EMPLOYMENT RECORD:

- **1995:** Peninsula Technicon. Lecturer in the Horticulture Department.
- **1996:** University of the Western Cape. Lecturer in the Botany Department.
- **1999:** University of Stellenbosch. Research assistant in the Botany Department
- (3 months)
- **1999:** Bengurion University (Israel). Research assistant (Working in the Arava valley, Negev – Israel; 2 months). Research undertaken was published (see first publication in publication list)
- **1999-2004:** Assistant Director at the Department of Environmental Affairs and Development Planning (DEA&DP). Work involved assessing Environmental Impact Assessments and Environmental Management Plans; promoting environmental management and sustainable development.
- **2004 to present:** Employed by the CSIR in Stellenbosch:
- September 2004 – May 2008: Biodiversity and Ecosystems Services Group
- May 2008 to present: Environmental Management Services Group (EMS)

PROJECT EXPERIENCE RECORD:

The following table presents a list of projects undertaken at the CSIR as well as the role played in each project:

Completion Date	Project description	Role	Client
2011 *(in progress)*	EIA for the proposed Ubuntu wind energy project, Eastern Cape, South Africa	Project Manager	Windcurrent SA (Pty) Ltd in a Joint Venture with WKN Windkraft Nord AG
2011 *(in progress)*	EIA for the proposed Banna ba pifhu wind energy project, Eastern Cape, South Africa	Project Manager	Windcurrent SA (Pty) Ltd in a Joint Venture with WKN Windkraft Nord AG
2011 (in progress)	BA for a powerline near Swellendam	Project Manager	BioTherm Energy (Pty Ltd
2010 (in progress)	EIA for a proposed wind farm near Swellendam in the Western Cape	Project Manager	BioTherm Energy (Pty Ltd
2010 (in progress)	BA for a powerline as part of the proposed wind farm project near Swellendam in the Western Cape	Project Manager	BioTherm Energy (Pty Ltd
2010 (complete)	Basic Assessment for the erection of two wind monitoring masts near Swellendam and Bredasdorp in the Western Cape	Project Manager	BioTherm Energy (Pty Ltd
2010 (complete)	EIA for the erection of two wind monitoring masts near Jeffrey's Bay in the Eastern Cape	Project Manager	Windcurrent (Pty Ltd

Completion Date	Project description	Role	Client
2010 (in progress)	EIA for a proposed wind farm near Jeffrey's Bay in the Eastern Cape	Project Manager	Windcurrent (Pty Ltd
2010 (complete)	Basic Assessment Process for the proposed erection of wind monitoring masts as part of the national wind atlas project	Project Manager	Department of Energy and SANERI
2010 (complete)	South Africa's Second National Communication under the United Nations Framework Convention on Climate Change	Project Manager	SANBI
2009 (complete)	Basic Assessment Report for a proposed boundary wall at the Port of Port Elizabeth, Eastern Cape	Project Manager	Transnet Ltd
2008	Developing an Invasive Alien Plant Strategy for the Wild Coast, Eastern Cape, South Africa	Co-author	Eastern Cape Parks Board
2006-2008	Monitoring and Evaluation of aspects of Biodiversity	Project Leader	Internal project awarded through the Young Researchers Fund
2006	Integrated veldfire management in South Africa. An assessment of current conditions and future approaches.	Co- author	Working on Fire
2004-2005	Biodiversity Strategy and Action Plan Wild Coast, Eastern Cape, SA	Co-author	Wilderness Foundation
2005	Western Cape State of the Environment Report: Biodiversity section. (Year One).	Co- author and Project Manager	Department of Environmental Affairs and Development Planning

PUBLICATIONS:

Bowie, M. (néé Levendal) and Ward, D. (2004). Water status of the mistletoe Plicosepalus acaciae parasitic on isolated Negev Desert populations of Acacia raddiana differing in level of mortality. Journal of Arid Environments 56: 487-508.

Wand, S.J.E., Esler, K.J. and **Bowie, M.R** (2001). Seasonal photosynthetic temperature responses and changes in ^{13}C under varying temperature regimes in leaf-succulent and drought-deciduous shrubs from the Succulent Karoo, South Africa. South African Journal of Botany 67:235-243.

Bowie, M.R., Wand, S.J.E. and Esler, K.J. (2000). Seasonal gas exchange responses under three different temperature treatments in a leaf-succulent and a drought-deciduous shrub from the Succulent Karoo. South African Journal of Botany 66:118-123.

LANGUAGES

Language	***Speaking***	***Reading***	***Writing***
English	*Good*	*Good*	*Good*
Afrikaans	*Excellent*	*Excellent*	*Excellent*

Minnelise Levendal

February 2011

Environmental Impact Assessment for the proposed Ubuntu Wind Energy Project near Jeffrey's Bay, Eastern Cape: Draft Scoping Report

Appendix B: NEMA-DEA Application Form

environment & tourism

Department:
Environmental Affairs and Tourism
REPUBLIC OF SOUTH AFRICA

(For official use only)

File Reference Number:						
Application Number:						
Date Received:						

Application for authorisation in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Environmental Impact Assessment Regulations, 2005

Kindly note that:

1. This application form is current as of 1 July 2006. It is the responsibility of the EAP to ascertain whether subsequent versions of the form have been published or produced by the competent authority.
2. The application must be typed within the spaces provided in the form. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. It is in the form of a table that can extend itself as each space is filled with typing.
3. Where applicable **black out** the boxes that are not applicable in the form.
4. Incomplete applications may be returned to the applicant for revision.
5. The use of "not applicable" in the form must be done with circumspection as if it is used in respect of material information that is required by the competent authority for assessing the application, and may result in the rejection of the application as provided for in the regulations.
6. This application must be handed in at the offices of the relevant competent authority as determined by each authority.
7. No faxed or e-mailed applications will be accepted.
8. The application must be completed by an independent environmental practitioner.
9. Unless protected by law, all information filled in on this application will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this application on request, during any stage of the application process.

SITE IDENTIFICATION AND LINKAGE

Please indicate all the Surveyor-general 21 digit site (erf/farm/portion) reference numbers for all sites (including portions of sites) that are part of the application.

C	0	3	4	0	0	0	0	0	0	0	0	0	8	6	8	0	0	0	0	1
C	0	3	4	0	0	0	0	0	0	0	0	0	6	8	9	0	0	0	0	2
C	0	3	4	0	0	0	0	0	0	0	0	0	6	8	9	0	0	0	1	5
C	0	3	4	0	0	0	0	0	0	0	0	0	8	5	4	0	0	0	0	2
C	0	3	4	0	0	0	0	0	0	0	0	0	8	5	4	0	0	0	0	3
C	0	3	4	0	0	0	0	0	0	0	0	0	8	5	4	0	0	0	0	4
C	0	3	4	0	0	0	0	0	0	0	0	0	8	5	4	0	0	0	0	5
C	0	3	4	0	0	0	0	0	0	0	0	0	8	5	4	0	0	0	0	6
C	0	3	4	0	0	0	0	0	0	0	0	0	8	5	4	0	0	0	0	7
C	0	3	4	0	0	0	0	0	0	0	0	0	8	3	0	0	0	0	0	0
C	0	3	4	0	0	0	0	0	0	0	0	0	3	0	7	0	0	0	0	5
C	0	3	4	0	0	0	0	0	0	0	0	0	3	0	7	0	0	0	0	6
C	0	3	4	0	0	0	0	0	0	0	0	0	3	0	7	0	0	0	0	7
C	0	3	4	0	0	0	0	0	0	0	0	0	3	0	7	0	0	0	0	5

1. BACKGROUND INFORMATION

Project applicant:	WindCurrent SA (Pty) Ltd		
Trading name (if any):	WindCurrent SA (Pty) Ltd		
Contact person:	Mr Alan Wolfromm		
Physical address:			
Postal address:	PO Box 762, Wilderness		
Postal code:	6560	**Cell:**	082 341 7721
Telephone:	(044) 877 0564	**Fax:**	
E-mail:	mrwolf@mweb.co.za/ wolfgang.paulsen@butendiek.de		

Project consultant:	Council for Scientific and Industrial Research (CSIR)		
Contact person:	Paul Lochner		
Postal address:	P.O. Box 320, Stellenbosch		
Postal code:	7599	**Cell:**	084 442 3646
Telephone:	(021) 888 2486	**Fax:**	(021) 888 2693
E-mail:	plochner@csir.co.za		
Professional affiliation(s) (if any)	Registered as an EAP for South Africa as from 14 July 2003 Member of IAIAsa		

Landowner:	David Masterson Family Trust and Saragossa Farms (Pty) Ltd		
Contact person:	Mr David Masterson		
Postal address:	PO Box 162 Humansdorp		
Postal code:	6300		
Telephone:	042 2952052	**Cell:**	0837021895
E-mail:	saragosa@telkomsa.net	**Fax:**	

Landowner:	Peet Steenkamp Familie Trust and Graafwater Trust		
Contact person:	Mr Jacques Steenkamp		
Postal address:	PO Box 915 Humansdorp		
Postal code	6330		
Telephone:	042 2952734	**Cell:**	0829253932
E-mail:	njalasafaris@xsinet.co.za	**Fax:**	

In instances where there is more than one local authority involved, please attach a list of local authorities with their contact details to this application.

Project title:	EIA for the proposed Windcurrent Wind Energy Project on two farms near Humansdorp in the Eastern Cape

Property description:	**Site 1: Broadlands/Geelhoutboom farm near Hermanus:** Portion 1 of Farm 868 (Farm Broadlands) Remaining extent of farm 688, Humansdorp Portion 2 of farm 689, Humansdorp Potion 15 of farm 689, Humansdorp **Site 2: Farm Zuurbron and farm Vlakteplaas near Hermanus:** Remainder of farm 830, Kransplaas, (Farm Zuurbron) Portions 2/3/4/5/6/7of farm 854 (Vlakteplaas) Farms 307/5; Div Humansdorp 307/6; Div Humansdorp 307/7 Div Humansdorp farm 845, Div Humansdorp

(Farm name, portion etc.) Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application.

Town(s) or district(s):	Humansdorp
Physical address:	

In instances where there is more than one town or district involved, please attach a list of towns or districts to this application.

Current land-use zoning:	Agriculture

In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to , to this application.

Is a change of land-use or a consent use application required?	~~**YES**~~	**NO**
Must a building plan be submitted to the local authority?	~~**YES**~~	**NO**

Locality map: A locality map must be attached to the back of this document, as **Appendix A**. The scale of the locality map must be at least 1:50 000. The scale must be indicated on the map. The map must indicate the following:

- an accurate indication of the project site position as well as the positions of the alternative sites, if any;
- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow.

Owners consent: In line with the requirements of the EIA regulations, letters of consent of all landowners or a detailed explanation by the applicant explaining why consent is not possible must be attached to the back of this document as **Appendix B**.

2. Activities applied for

An application may be made for more than one listed or specified activity that, together, make up one development proposal. All the listed activities that make up this application must be listed.

Indicate the number and date of the relevant notice:	**Activity No (s) (in terms of the relevant or notice):**	**Describe each listed activity:**
GN R 386, Government Gazette No. 28753, 21 April 2006	15	The construction of a road that is wider than 4 metres or that has a reserve wider than 6 metres, excluding roads that fall within the ambit of another listed activity or which are access roads of less than 30 metres long.
GN R 387, Government Gazette No. 28753, 21 April 2006	1	The construction of facilities or infrastructure, including associated structures or infrastructure, for – (a) the generation of electricity where - (i) the electricity output is 20 megawatts or more; or (ii) the elements of the facility cover a combined area in excess of 1 hectare; (l) the transmission and distribution of above ground electricity with a capacity of 120 kilovolts or more;
	10	Any process or activity identified in terms of section 53(1) of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)

<u>Note from CSIR:</u> Where it is not certain (at this early stage of the project planning process) whether or not an activity is included in the proposed project, a precautionary approach is used and the potential activity is listed above.

Please note that any authorisation that may result out of this application will only cover activities applied for. Omissions may render any authorisation that is based on incomplete information to be nil and void.

3. Type of application

3.1 Application for Basic Assessment

Is this an application for conducting a basic assessment (as defined in the regulations)?	~~**YES**~~	**NO**
If, YES, is a basic assessment report attached?	~~**YES**~~	**NO**

If, NO, please indicate when the basic assessment report will be submitted:

3.2 Application for Scoping and Environmental Impact Assessment (EIA)

Is this an application for Scoping and EIA (as defined in the regulations)?	**YES**	~~**NO**~~
If, YES, is a Scoping Report and Plan of Study for EIA attached?	~~**YES**~~	**NO**

If, NO, please indicate when the Scoping Report and Plan of Study for EIA will be submitted:

The Final Scoping Report and Plan of Study for EIA is planned to be submitted to the authorities by latest June-July 2010.

The scoping report and/or the plan of study for EIA will be submitted after consultation with the competent authority:	**YES**	~~**NO**~~
A consultation with the competent authority is hereby requested:	**YES**	~~**NO**~~

APPLICATION FORM

4. Declarations

4.1 The independent Environmental Assessment Practitioner

I, PAUL LOCHNER , declare under oath that I –

- act as the independent environmental practitioner in this application ;
- do not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the Environmental Impact Assessment Regulations, 2005;
- have and will not have no vested interest in the proposed activity proceeding;
- have no, and will not engage in, conflicting interests in the undertaking of the activity;
- undertake to disclose, to the competent authority, any material information that have or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the Environmental Impact Assessment Regulations, 2005;
- will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;
- will ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the competent authority in respect of the application, provided that comments that are made by interested and affected parties in respect of a final report that will be submitted to the competent authority may be attached to the report without further amendment to the report;
- will keep a register of all interested and affected parties that participated in a public participation process; and
- will provide the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not.

Signature of the environmental practitioner:

CSIR

Name of company:

10 December 2009

Date:

Signature of the Commissioner of Oaths:

10 December 2009

Date:

Human Resources Practitioner.

Designation:

Official stamp (below)

COMMISSIONER OF OATHS
EX OFFICIO: MARITA GUASCO
C.S.I.R. P.O. BOX 320 STELLENBOSCH

5

APPLICATION FORM

4.2 The Applicant

I, Wolfgang Paulsen ,declare under oath that I -

- Am, or represent, the applicant in this application;
- appointed the environmental assessment practitioner as indicated under point 4.1 above to act as the independent environmental assessment practitioner for this application;
- will provide the environmental assessment practitioner and the competent authority with access to all information at my disposal that is relevant to the application;
- will be responsible for the costs incurred in complying with the Environmental Impact Assessment Regulations, 2005, including but not limited to –
  - costs incurred in connection with the appointment of the environmental assessment practitioner or any person contracted by the environmental assessment practitioner;
  - costs incurred in respect of the undertaking of any process required in terms of the regulations;
  - costs in respect of any fee prescribed by the Minister or MEC in respect of the regulations;
  - costs in respect of specialist reviews, if the competent authority decides to recover costs; and
  - the provision of security to ensure compliance with conditions attached to an environmental authorisation, should it be required by the competent authority;
- will ensure that the environmental assessment practitioner is competent to comply with the requirements of these regulations;
- am responsible for complying with the conditions of any environmental authorisation issued by the competent authority;
- hereby indemnify, the government of the Republic, the competent authority and all its officers, agents and employees, from any liability arising out of the content of any report, any procedure or any action for which the applicant or environmental assessment practitioner is responsible in terms of these regulations; and
- will not hold the competent authority responsible for any costs that may be incurred by the applicant in proceeding with an activity prior to an appeal being decided in terms of these regulations.

W. Paulsen

Signature of the applicant:

Wind Current SA (Pty) Ltd.

Name of company:

4.12.09

Date:

Signature of the Commissioner of Oaths:

Husum, d. 04.12.2009

Date:

Notar Uwe Jens Burmeister, Husum

Designation:

Official stamp (below):

UWE JENS BURMEISTER NOTAR IN HUSUM

6

APPENDIX A

LOCALITY MAPS

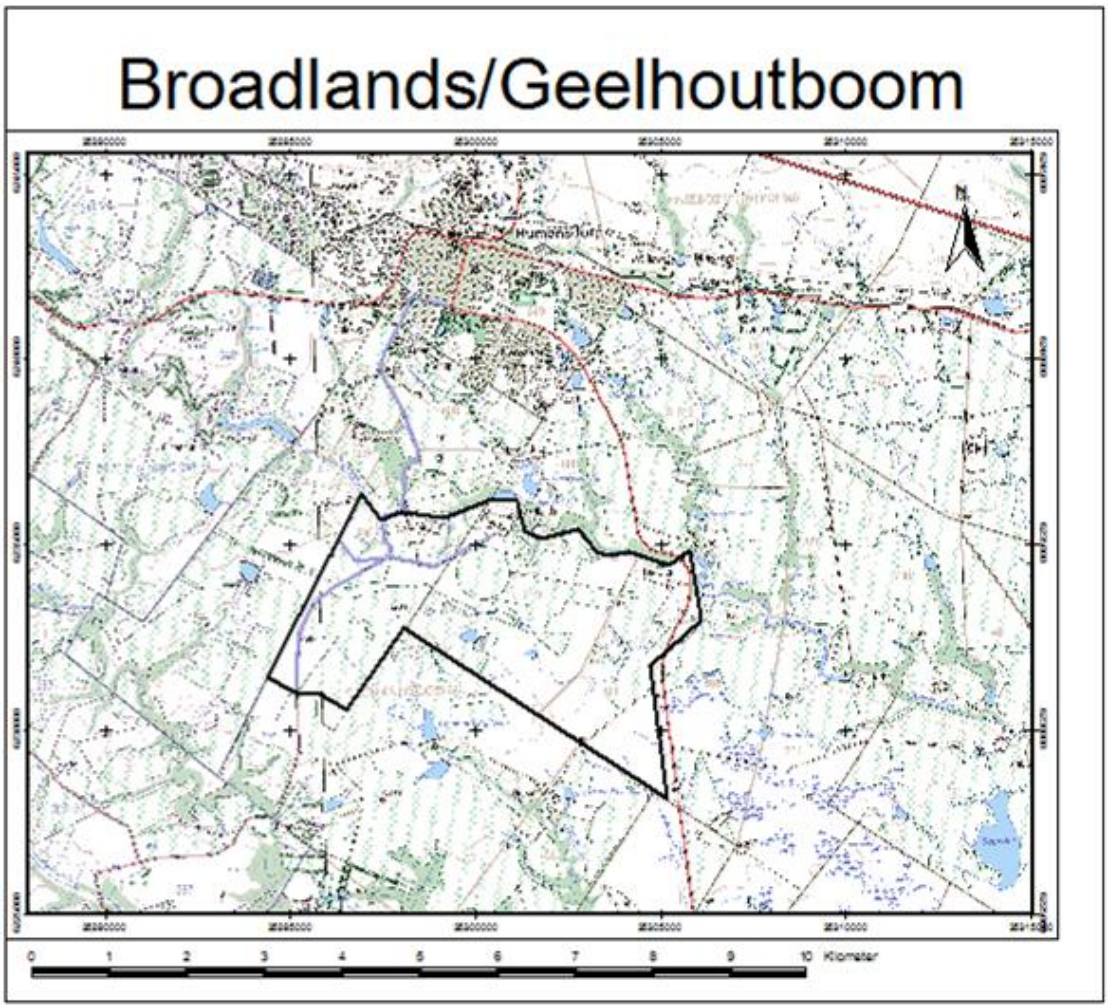


Figure 1: Location of farm Broadlands/Geelhoutboom (1138 ha) south of Humansdorp,

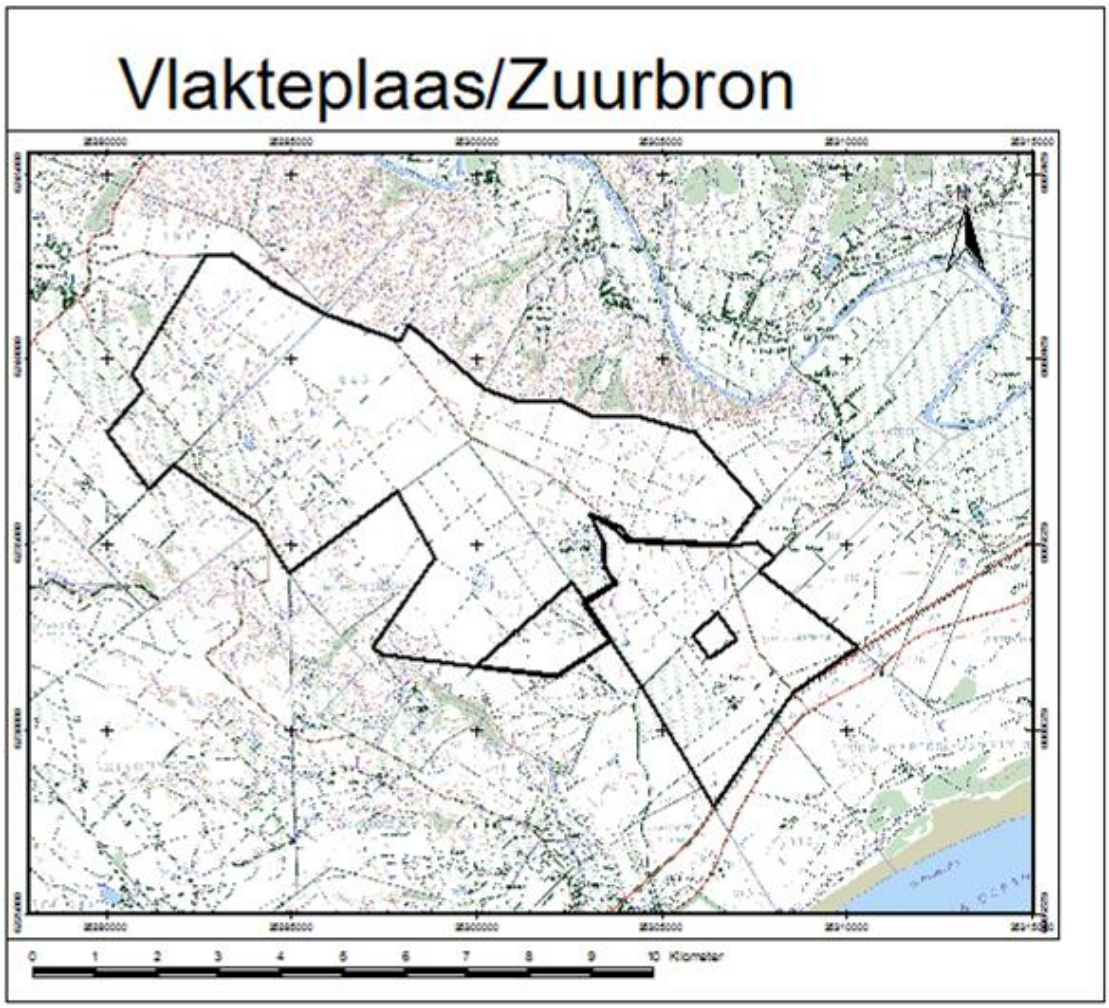


Figure 2: Location of the proposed wind farm project on Farms Suurbron and Vlakteplaas (total area ~4200 ha) approximately 10km from Humansdorp

APPENDIX B

LETTERS OF CONSENT FROM LAND OWNERS

LETTER OF CONSENT

ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED WINDCURRENT WIND PROJECT NEAR HUMANSDORP IN THE EASTERN CAPE

CONTACT INFORMATION

Name of land owner	Saragossa Farms Pty Ltd.		
Trading name (if any):			
Contact person:	David Masterson		
Physical address:	Broadlands, Humansdorp		
Postal address:	P O Box 162, Humansdorp		
Postal code:	6330	**Cell:**	083 702-1895
Telephone:	042 295-2052	**Fax:**	
E-mail:	saragosa@telkomsa.net		
	If there is more than one landowner, please attach a list of their contact details to this application and tick the box		

1. I/we the undersigned *(insert the name/s of the owner/s of the land)*
Saragossa Farms Pty Ltd

of identity number/registration number *(insert the owner/s ID number/s or the registration number of the legal entity)*
Nr. 94/02263/07

am/ are the registered owner/s of the property *(insert description of the property/ies and title deed numbers)*
Remaining extend of Farm 688, Hummansdorp, Title Deed No. T11122/1997
Portion 2 of the Farm 689, Humansdorp, Titel Deed No. T90155/1996
Portion 15 of the Farm 689, Humansdorp, Title Deed No. T90155/1996

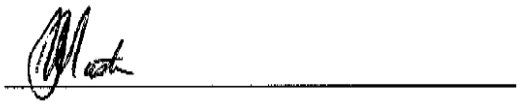
located at *(insert physical address or a brief description of the location of the property): property coordinates:*
Broadlands Farm
Humansdorp

2. I/ we hereby give consent to the applicant *(insert the name/s of the applicant/s)*
Windcurrent SA (Pty) Ltd

of identity number/registration number *(insert the owner/s ID number/s or the registration number of the legal entity)*
2009/008605/07

to undertake the following activity/ies on the property *(insert a brief description of the project and identified activity/ies that will be applied for):*
Environmental Impact Assessment for the erection of Wind Turbine Generators

Signature of land owner or authorised representative



Name of authorised person if the landowner is a legal entity, **David Masterson**

Date: 7/11/2009

LETTER OF CONSENT

ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED WINDCURRENT WIND PROJECT NEAR HUMANSDORP IN THE EASTERN CAPE

CONTACT INFORMATION

Name of land owner	Dave Masterson Family Trust		
Trading name (if any):			
Contact person:	David Masterson		
Physical address:	Broadlands, Humansdorp		
Postal address:	P O Box 162, Humansdorp		
Postal code:	6330	**Cell:**	083 702-1895
Telephone:	042 295-2052	**Fax:**	
E-mail:	saragosa@telkomsa.net		
	If there is more than one landowner, please attach a list of their contact details to this application and tick the box		

1. I/we the undersigned *(insert the name/s of the owner/s of the land)*
Dave Masterson Family Trust

of identity number/registration number *(insert the owner/s ID number/s or the registration number of the legal entity)*
Nr. IT 5012/94

am/ are the registered owner/s of the property *(insert description of the property/ies and title deed numbers)*
Portion 1 of Farm 868

located at *(insert physical address or a brief description of the location of the property): property coordinates:*
Broadlands Farm Humansdorp

2. I/ we hereby give consent to the applicant *(insert the name/s of the applicant/s)*
Windcurrent SA (Pty) Ltd

I

of identity number/registration number *(insert the owner/s ID number/s or the registration number of the legal entity)*
2009/008605/07

to undertake the following activity/ies on the property *(insert a brief description of the project and identified activity/ies that will be applied for):*
Environmental Impact Assessment for the erection of Wind Turbine Generators

Signature of land owner or authorised representative

Name of authorised person if the landowner is a legal entity, **David Masterson**

Date: 7/11/2009

LETTER OF CONSENT

ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED WINDCURRENT WIND PROJECT NEAR HUMANSDORP IN THE EASTERN CAPE

CONTACT INFORMATION

Name of land owner	Graafwater Trust		
Trading name (If any):			
Contact person:	Jacques Steenkamp		
Physical address:	~~Suurbron,~~ Humansdorp Zuurbron		
Postal address:	P O Box 915, Humansdorp		
Postal code:	6330	**Cell:**	082 925-3932
Telephone:	042 295-2734	**Fax:**	
E-mail:	~~njalasafaris@xsinet.co.za~~ njalasafaris@xsinet.co.za		
	If there is more than one landowner, please attach a list of their contact details to this application and tick the box		

1. I/we the undersigned *(insert the name/s of the owner/s of the land)*
Graafwater Trust

of identity number/registration number *(insert the owner/s ID number/s or the registration number of the legal entity)*
IT 998/03

am/ are the registered owner/s of the property *(insert description of the property/ies and title deed numbers)*
RemainInder of Farm 830, Kransplaas, Humansdorp

located at *(insert physical address or a brief description of the location of the property)*:
property coordinates:
~~Suurbron~~, Humansdorp
Zuurbron

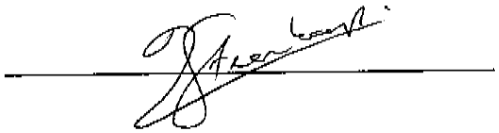
2. I/ we hereby give consent to the applicant *(insert the name/s of the applicant/s)*
Windcurrent SA (Pty) Ltd

1

of identity number/registration number *(insert the owner/s ID number/s or the registration number of the legal entity)*
2009/008605/07

to undertake the following activity/ies on the property *(insert a brief description of the project and identified activity/ies that will be applied for):*
Environmental Impact Assessment for the erection of Wind Turbine Generators

Signature of land owner or authorised representative



Name of authorised person if the landowner is a legal entity, **Jacques Steenkamp**

Date: 7/11/2009

LETTER OF CONSENT

ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED WINDCURRENT WIND PROJECT NEAR HUMANSDORP IN THE EASTERN CAPE

CONTACT INFORMATION

Name of land owner	Peet Steenkamp Familie Trust		
Trading name (if any):			
Contact person:	Jacques Steenkamp		
Physical address:	~~Suurbron~~, Humansdorp Zuurbron		
Postal address:	P O Box 915, Humansdorp		
Postal code:	6330	**Cell:**	082 925-3932
Telephone:	042 295-2734	**Fax:**	
E-mail:	~~njalasafaris@exmet.co.za~~ njalasafaris@xsinet.co.za		
	If there is more than one landowner, please attach a list of their contact details to this application and tick the box		

1. I/we the undersigned *(insert the name/s of the owner/s of the land)*
Peet Steenkamp Familie Trust

of identity number/registration number *(insert the owner/s ID number/s or the registration number of the legal entity)*
IT 722/83

am/ are the registered owner/s of the property *(insert description of the property/ies and title deed numbers)*
Farms: 307/5; 307/6; 307/7 and Farm 845, Div Humansdorp

located at *(insert physical address or a brief description of the location of the property):*
property coordinates:
~~Suurbron~~, Hummansdorp
Zuurbron

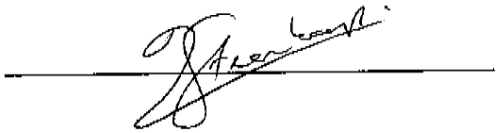
2. I/ we hereby give consent to the applicant *(insert the name/s of the applicant/s)*
Windcurrent SA (Pty) Ltd

1

of identity number/registration number *(insert the owner/s ID number/s or the registration number of the legal entity)*
2009/008605/07

to undertake the following activity/ies on the property *(insert a brief description of the project and identified activity/ies that will be applied for):*
Environmental Impact Assessment for the erection of Wind Turbine Generators

Signature of land owner or authorised representative



Name of authorised person if the landowner is a legal entity, **Jacques Steenkamp**

Date: 7/11/2009

LETTER OF CONSENT

ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED WINDCURRENT WIND PROJECT NEAR HUMANSDORP IN THE EASTERN CAPE

CONTACT INFORMATION

Name of land owner	Krantz Plaas Trust		
Trading name (if any):			
Contact person:	Cornelius Frank Lotter		
Physical address:	Vlakteplaas, Jeffreys Bay		
Postal address:	P O Box 138, Jeffreys Bay		
Postal code:	6330	**Cell:**	082 574-9396
Telephone:	042 293-1898	**Fax:**	
E-mail:	frank@truewan.co.za		
	If there is more than one landowner, please attach a list of their contact details to this application and tick the box		

1. I/we the undersigned *(insert the name/s of the owner/s of the land)*
Krantz Plaas Trust

of identity number/registration number *(insert the owner/s ID number/s or the registration number of the legal entity)*
TM 4807

am/ are the registered owner/s of the property *(insert description of the property/ies and title deed numbers)*
Portions 2/3/4/5/6 /7 of Farm 854

located at *(insert physical address or a brief description of the location of the property): property coordinates:*
Vlakteplaas, Jeffreys Bay

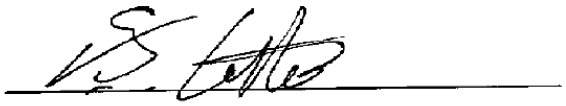
2. I/ we hereby give consent to the applicant *(insert the name/s of the applicant/s)*
Windcurrent SA (Pty) Ltd

1

of identity number/registration number *(insert the owner/s ID number/s or the registration number of the legal entity)*
2009/008605/07

to undertake the following activity/ies on the property *(insert a brief description of the project and identified activity/ies that will be applied for):*
Environmental Impact Assessment for the erection of Wind Turbine Generators

Signature of land owner or authorised representative



Name of authorised person if the landowner is a legal entity, **Frank Lőtter**

Date: 7/11/2009

Environmental Impact Assessment for the proposed Ubuntu Wind Energy Project near Jeffrey's Bay, Eastern Cape: Draft Scoping Report

Appendix C: Site notice boards

R102 – Jeffreys Bay Road (33 57 48 S and 24 57 19 E)

33 56 21 S and 24 56 30 E

33 54 29 S and 24 52 58 E

R330 Humansdorp/Hankey Road (33 53 45 S and 24 49 52 E)

Environmental Impact Assessment for the proposed Ubuntu Wind Energy Project near Jeffrey's Bay, Eastern Cape: Draft Scoping Report

Appendix D: Advertisements

NOTICE OF SCOPING AND ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

Windcurrent SA (Pty) Ltd, in a Joint Venture with WKN Windkraft Nord AG (the project applicants), are proposing the establishment of a wind energy facility, with a maximum generation capacity of 100MW, on the Farms Zuurbron and Vlakteplaas in the Kouga Municipal area, Eastern Cape Province. It is proposed that the project, referred to as the Ubuntu Wind Energy Project, be developed in two phases, each consisting of approximately 25 wind turbines of 2 to 3MW each (50MW), both of which are covered in this EIA process. The wind energy facility is to be established on farms Zuurbron and Vlakteplaas, approximately 3km north of the town of Jeffreys Bay, as follows:

- Remainder of farm 830, Kransplaas, (Farm Zuurbron)
- Portions 2/3/4/5/6/7 of farm 854 (Vlakteplaas)
- Farms 307/5; Div Humansdorp
- 307/6; Div Humansdorp
- 307/7 Div Humansdorp
- Farm 845, Div Humansdorp

An application for Scoping and Environmental Impact Assessment was submitted to the National Department of Environmental Affairs on **12 December 2009** and as such this EIA process is subject to the 2006 NEMA EIA regulations, as outlined below. DEA has allocated the following reference number to this application: **12/12/20/1752.** In terms of the regulations GN R 385, 386 and 387 promulgated under Chapter 5 of the National Environmental Management Act (Act 107 of 1998) in Government Gazette 28753 published on 21 April 2006, Scoping and Environmental Assessment is required, as the project includes, amongst others, the following activities listed in GN R 387:

1. The construction of facilities or infrastructure, including associated structures or infrastructure, for:–

(a) the generation of electricity where:-
(i) the electricity output is 20 megawatts or more; or
(ii) the elements of the facility cover a combined area in excess of 1 hectare;
(l) the transmission and distribution of above ground electricity with a capacity of 120 kilovolts or more;

10. Any process or activity identified in terms of section 53(1) of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)

And the following activity listed in GN R 386;

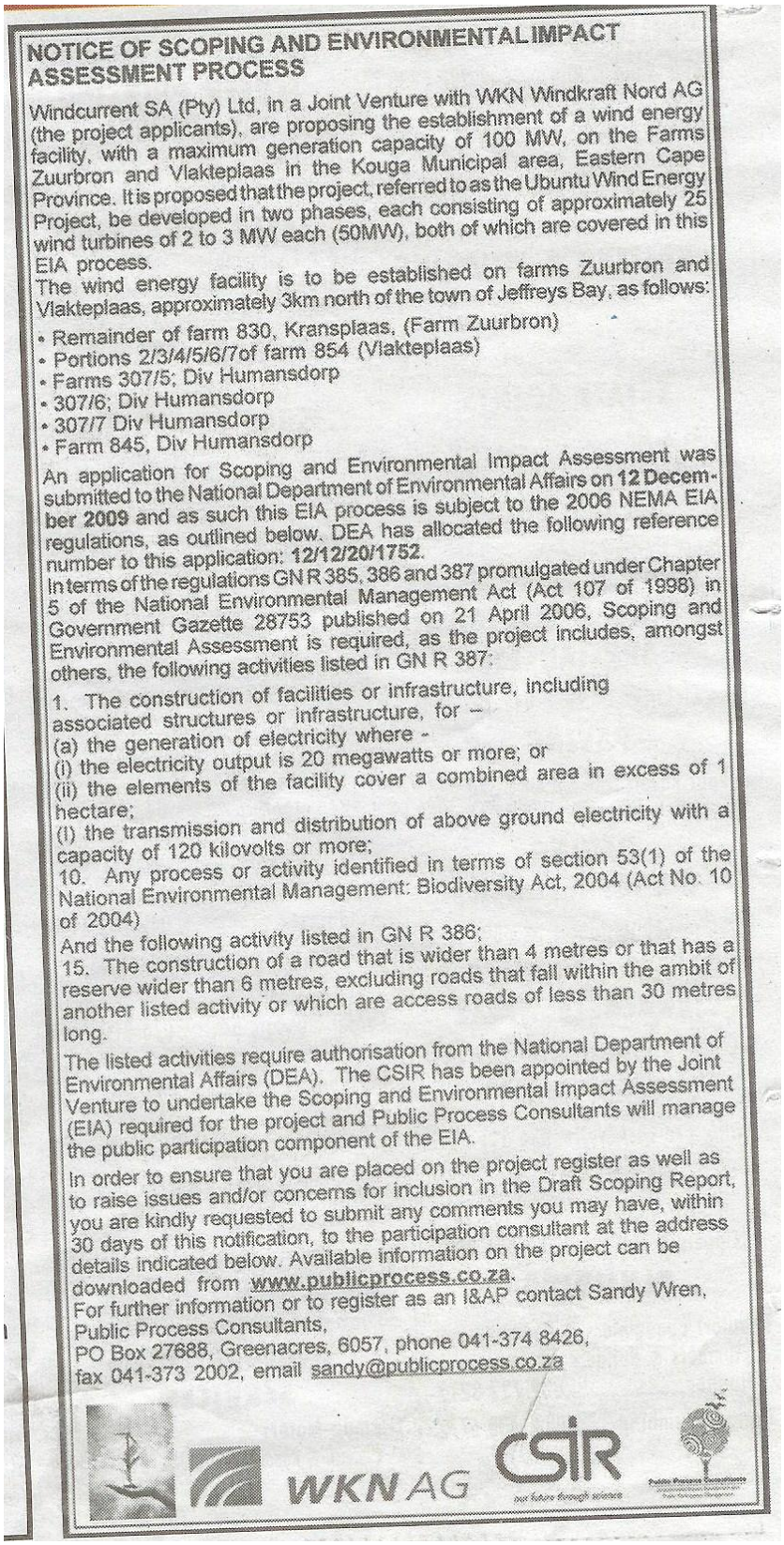
15. The construction of a road that is wider than 4 metres or that has a reserve wider than 6 metres, excluding roads that fall within the ambit of another listed activity or which are access roads of less than 30 metres long.

The listed activities require authorisation from the National Department of Environmental Affairs (DEA). The CSIR has been appointed by the Joint Venture to undertake the Scoping and Environmental Impact Assessment (EIA) required for the project and Public Process Consultants will manage the public participation component of the EIA.

In order to ensure that you are placed on the project register as well as to raise issues and/or concerns for inclusion in the Draft Scoping Report, you are kindly requested to submit any comments you may have, within 30 days of this notification, to the participation consultant at the address details indicated below. Available information on the project can be downloaded from **www.publicprocess.co.za**. For further information or to register as an I&AP contact Sandy Wren, Public Process Consultants, P.O. Box 27688, Greenacres, 6057, phone 041 374 8426, fax 041 373 2002, e-mail: sandy@publicprocess.co.za.

041 1H59913\BJ

Herald, 4 November 2010



NOTICE OF SCOPING AND ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

Windcurrent SA (Pty) Ltd, in a Joint Venture with WKN Windkraft Nord AG (the project applicants), are proposing the establishment of a wind energy facility, with a maximum generation capacity of 100 MW, on the Farms Zuurbron and Vlakteplaas in the Kouga Municipal area, Eastern Cape Province. It is proposed that the project, referred to as the Ubuntu Wind Energy Project, be developed in two phases, each consisting of approximately 25 wind turbines of 2 to 3 MW each (50MW), both of which are covered in this EIA process.

The wind energy facility is to be established on farms Zuurbron and Vlakteplaas, approximately 3km north of the town of Jeffreys Bay, as follows:

- Remainder of farm 830, Kransplaas, (Farm Zuurbron)
- Portions 2/3/4/5/6/7of farm 854 (Vlakteplaas)
- Farms 307/5; Div Humansdorp
- 307/6; Div Humansdorp
- 307/7 Div Humansdorp
- Farm 845, Div Humansdorp

An application for Scoping and Environmental Impact Assessment was submitted to the National Department of Environmental Affairs on **12 December 2009** and as such this EIA process is subject to the 2006 NEMA EIA regulations, as outlined below. DEA has allocated the following reference number to this application: **12/12/20/1752**.

In terms of the regulations GN R 385, 386 and 387 promulgated under Chapter 5 of the National Environmental Management Act (Act 107 of 1998) in Government Gazette 28753 published on 21 April 2006, Scoping and Environmental Assessment is required, as the project includes, amongst others, the following activities listed in GN R 387:

1. The construction of facilities or infrastructure, including associated structures or infrastructure, for –
(a) the generation of electricity where -
(i) the electricity output is 20 megawatts or more; or
(ii) the elements of the facility cover a combined area in excess of 1 hectare;
(l) the transmission and distribution of above ground electricity with a capacity of 120 kilovolts or more;

10. Any process or activity identified in terms of section 53(1) of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)

And the following activity listed in GN R 386;

15. The construction of a road that is wider than 4 metres or that has a reserve wider than 6 metres, excluding roads that fall within the ambit of another listed activity or which are access roads of less than 30 metres long.

The listed activities require authorisation from the National Department of Environmental Affairs (DEA). The CSIR has been appointed by the Joint Venture to undertake the Scoping and Environmental Impact Assessment (EIA) required for the project and Public Process Consultants will manage the public participation component of the EIA.

In order to ensure that you are placed on the project register as well as to raise issues and/or concerns for inclusion in the Draft Scoping Report, you are kindly requested to submit any comments you may have, within 30 days of this notification, to the participation consultant at the address details indicated below. Available information on the project can be downloaded from www.publicprocess.co.za.

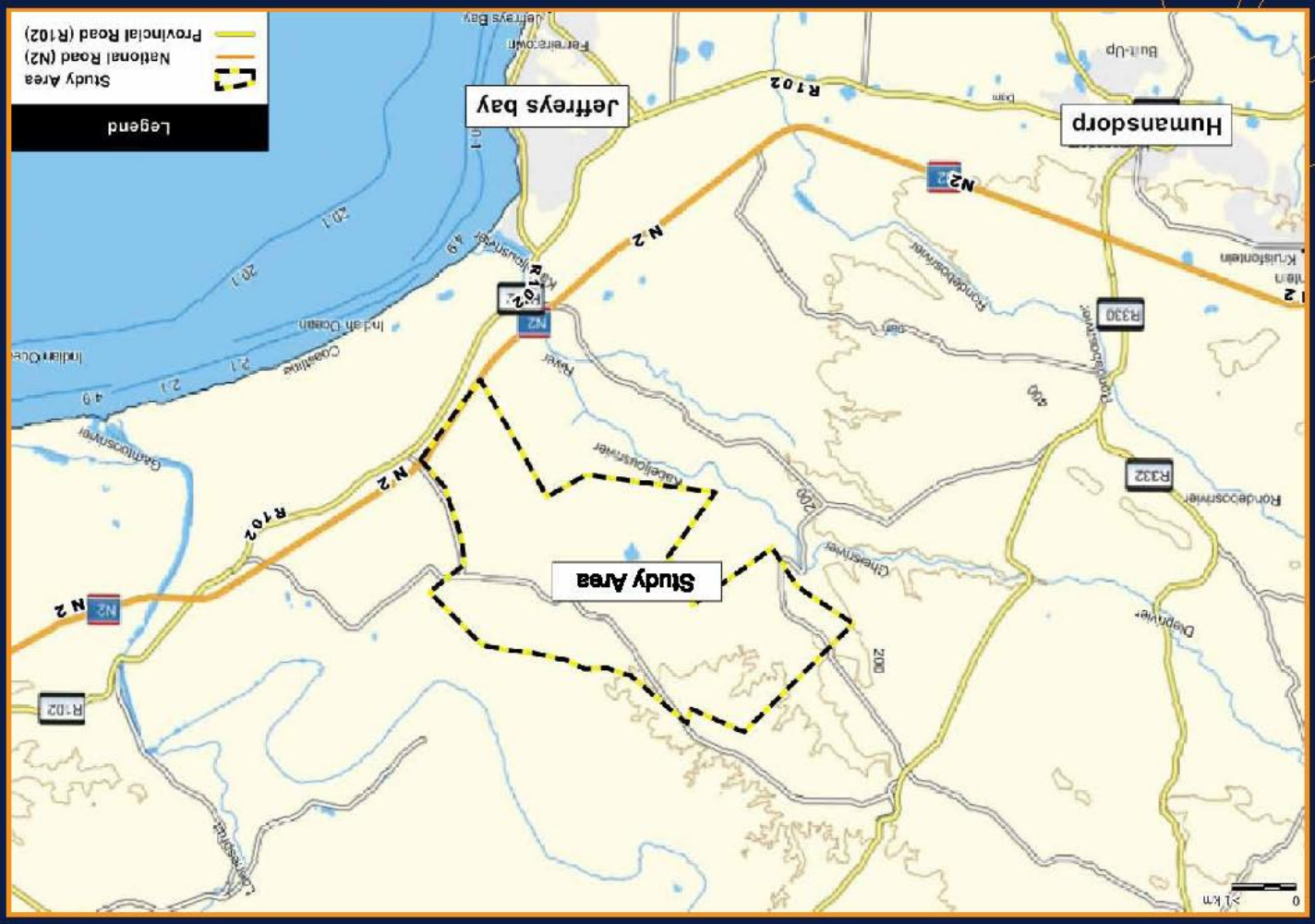
For further information or to register as an I&AP contact Sandy Wren, Public Process Consultants,
PO Box 27688, Greenacres, 6057, phone 041-374 8426,
fax 041-373 2002, email sandy@publicprocess.co.za

WKN AG CSIR

Our Times, 4 November 2010

Environmental Impact Assessment for the proposed Ubuntu Wind Energy Project near Jeffrey's Bay, Eastern Cape: Draft Scoping Report

Appendix E: Background Information Document



The Final Scoping Report will include the Plan of Study for EIA (PoS EIA) and Terms of Reference for specialist studies to be undertaken as part of the EIA process. The PoS EIA is subject to the approval of the authorities and may require amendment.

Step 5: Draft Environmental Impact Assessment and EMP

When the DEA accepts the Final Scoping Report and PoS EIA, the environmental assessment phase may commence. The purpose of the EIA is to:

- Address issues that have been raised through the Scoping Process;
- Assess reasonable and feasible alternatives that form part of the proposed activity (including the No Go Option);
- Assess potential impacts; and
- Recommend management actions to enhance benefits or avoid/minimise potential negative impacts.

This stage in the process entails the compilation and release of a Draft Environmental Impact Assessment for a 40-day I&AP review period. A key component of the EIA process is documenting and responding to the comments received from I&APs and authorities. The comments received through meetings held or via written correspondence are compiled into a Comments and Responses Trail for inclusion in the Final Environmental Impact Assessment. The Comments and Responses Trail will indicate the nature of the comment, when and who raised the comment as well as indicate how the comment received has been considered in the Final EIA, in the project design or EMP for the project.

Step 6: Final Environmental Impact Assessment and Draft EMP

The Final Environmental Impact Assessment, including the Comments and Responses Trail and draft EMP will be compiled for submission to the authorities for decision making (DEA). All I&APs on the project database will be notified in writing of the submission of the Final EIA as well as any additional comment period if applicable.

Step 7: Notification of Environmental Decision and Appeal Period

All I&APs on the project database will be notified in writing regarding the environmental decision for the project and the appeal period, as well as the manner of appeal.

HOW CAN YOU GET INVOLVED?

1. By responding to our invitation for your involvement advertised in local newspapers.
2. By mailing or faxing a comment form to the participation consultant indicated below.
3. By telephonically contacting the participation consultant if you have a query, comment, or require further project information.
4. By reviewing the various reports within the comment periods provided.
5. By attending any feedback meetings, which may be held during the review period. Should you be registered as an I&AP you will be invited to attend these meetings.

Public Process Consultants
Environmental Impact Assessment and Public Participation Management

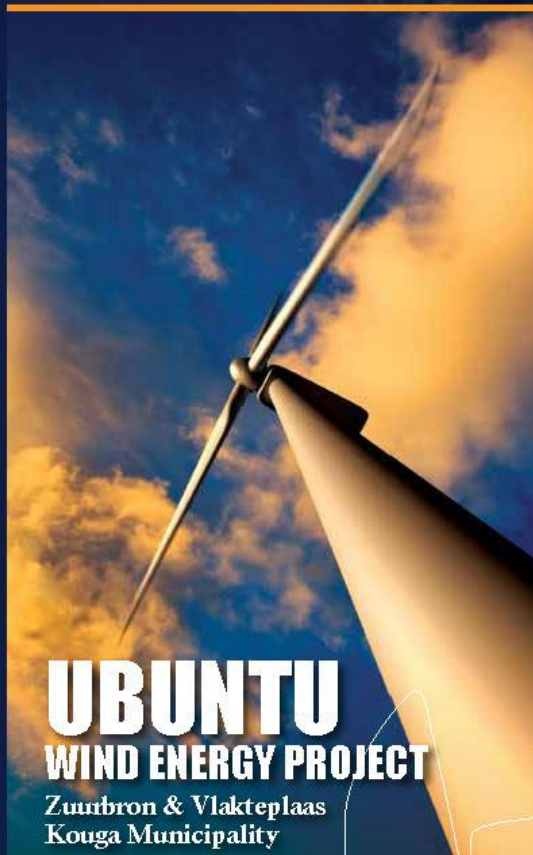
Sandy Wren, Public Process Consultants
PO Box 27688, Greenacres, 6057
Phone 041 - 374 8426
Fax 041 - 373 2002
Cell 082 4909 828
Email sandy@publicprocess.co.za

Information on this project can be accessed through the website:
www.publicprocess.co.za

CSIR
our future through science

www.csir.co.za

November 2010
Background Information Document



UBUNTU
WIND ENERGY PROJECT

Zuurbron & Vlakteplaas
Kouga Municipality

WKN AG | Windcurrent SA (Pty) Ltd.

Environmental Impact Assessment
DEA Reference Number: 12/12/20/1752

PROJECT OVERVIEW

Windcurrent SA (Pty) Ltd, in a Joint Venture with WKN Windkraft Nord AG, is proposing the construction of a 100 MW wind energy facility on the Farms Zuurbron and Vlakteplaas in the Kouga Municipal area, Eastern Cape Province. WKN Windkraft Nord AG (WKN) was founded in 1990, and is one of the pioneers of the German wind energy market. With international experience in the sectors of development, financing, erection and operation of wind farms, WKN has, as of 2009, a realised capacity of 972.5 MW wind power.

The Joint Venture Company, presently being formed, will be a South African based renewable energy company that develops, builds and operates renewable energy projects. The proposed project, referred to as the Ubuntu Wind Energy Project, will be developed in two phases.

The Eastern Cape does not generate bulk power and is thus reliant on electricity imports from other provinces (e.g. Mpumalanga). The existing transmission capacity to the province is fully utilised, which restricts the province from realising its industrial and rural development potential. Due to the length of the Eskom power lines from the power stations to the Kouga area and the inherent characteristics of the Kouga network, the area experiences power quality and voltage instability. This results in secondary agricultural processing companies, small and commercial scale farmers, experiencing an intermittent and sometimes unreliable supply of electricity. The project could thus assist in stabilising energy supply to the Eastern Cape and in particular the Kouga Municipal area.

WHAT DOES THIS DOCUMENT TELL YOU?

This document provides you, as an interested and or affected party (I&AP) with background information on the proposed project as well as the Environmental Assessment and Public Participation process that will be undertaken for the project. It indicates how you can become involved in the project, receive information and raise issues that may interest and/or concern you. The sharing of information forms an important component of the Public Participation process and provides you with the opportunity to become actively involved in the environmental assessment process from the outset. The input received from I&APs together with scientific investigations assists the responsible authority, in this instance the National Department of Environmental Affairs (DEA), with their decision-making.

PROJECT LOCATION AND DETAIL

The Ubuntu Wind Energy project is located on the farms Zuurbron and Vlakteplaas, Kouga Municipal Area approximately 3km north of the town of Jeffreys Bay, as follows:

- Remainder of farm 830, Kransplaas, (Farm Zuurbron)
- Portions 2/3/4/5/6/7of farm 854 (Vlakteplaas)
- Farms 307/5; Div Humansdorp
- 307/6; Div Humansdorp
- 307/7 Div Humansdorp
- Farm 845, Div Humansdorp

The locality map included with this Background Information Document provides an overview of the erven included in this application.

The Ubuntu Wind Energy Project is proposed to be developed in two phases, both of which are covered in this EIA:

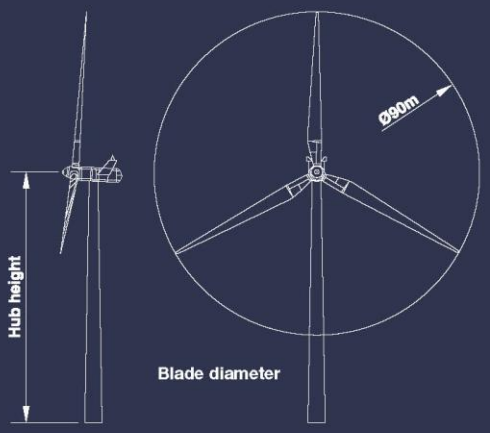
- Phase 1 (2013): approximately 25 turbines x 2 MW = 50 MW
- Phase 2 (2014): approximately 25 turbines x 2 MW = 50 MW

While the total capacity of this project is capped at 100 MW, the capacity of each phase is dependent on progress with other projects in the region and may be amended during the EIA process. The key components of the project will include the following:

- Construction of hard standing surfaces of approximately 16m diameter and 2.7m depth
- The installation of approximately 33 to 50 wind turbines of approximately 2 to 3 MW each with a hub height of up to 105 meters and a blade diameter of approximately 90 meters
- Three wind monitoring masts of up to 100m high
- Gravel access roads to the turbines, with the intent being to upgrade existing roads as far as possible
- Construction of hard standing areas for use by cranes during construction. These areas will be retained for future maintenance use
- Power line connections between the wind turbines and the Eskom grid

- **Construction is undertaken in three distinct components:**
  - civil construction,
  - electrical installation and wind turbine erection, and
  - commissioning.

The construction and commissioning phase of the project will typically require a period of 8 to 12 months. The operational life span of the wind turbines is expected to be a minimum of 25 years which can be extended through regular maintenance and/or upgrades in technology. The project is implemented in such a manner which allows other activities (such as farming) to continue around the turbine. Typically in a wind farm, the turbines and supporting infrastructure (e.g. roads) occupy up to 5% of the total area of the wind farm.



ENVIRONMENTAL ASSESSMENT PROCESS

An application for Environmental Impact Assessment was submitted to the National Department of Environmental Affairs on 12 December 2009 and as such is subject to the 2006 NEMA EIA regulations as outlined below. DEA has allocated the following reference number to this application 12/12/20/1752.

In terms of Regulations 385, 386 and 387 promulgated under Chapter 5 of the National Environmental Management Act (NEMA, Act 107 of 1998) in Government Gazette 28753 on 21 April 2006, an environmental assessment process is being conducted for the proposed wind farm. The proposed project requires full Scoping and Environmental Impact Assessment, in particular because it includes the following activities listed under GN R 387:

1. The construction of facilities or infrastructure, including associated structures or infrastructure, for –
(a) the generation of electricity where -
(i) the electricity output is 20 megawatts or more; or
(ii) the elements of the facility cover a combined area in excess of 1 hectare;
(l) the transmission and distribution of above ground electricity with a capacity of 120 kilovolts or more;

10. Any process or activity identified in terms of section 53(1) of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)

And the following activity listed in GN R 386;
15. The construction of a road that is wider than 4 metres or that has a reserve wider than 6 metres, excluding roads that fall within the ambit of another listed activity or which are access roads of less than 30 metres long.

The listed activities require authorisation from the National Department of Environmental Affairs (DEA). The environmental assessment needs to show the responsible authority, DEA, and the project proponent, Windcurrent SA (Pty) Ltd and WKN Windkraft Nord AG, what the consequences of their choices will be in biophysical, social and economic terms. The CSIR has been appointed by the Joint Venture to undertake the Environmental Assessment (EIA) required for the project and Public Process Consultants will manage the public participation component of the EIA. Public involvement forms an important component of this process, by assisting in the identification of issues and alternatives to be evaluated.

The Amended NEMA EIA Regulations (Notices GN R. 543, 544, 545, and 546) were published in Government Gazette No. 33306 of 18 June 2010, and came into effect on 2 August 2010. This application was initiated in December 2009, prior to the enactment of the Amended Regulations, and will therefore be dealt with in terms of GN R 385, 386 and 387 as outlined above. However in line with Regulation 76 (3) of the Amended EIA Regulations, any impacts associated with listed activities which are included in the Amended listing notices, which were not listed under the listing notices GN R386 and 387, will be assessed as part of this EIA process.

The Environmental Assessment Process being implemented can be summarised as follows:

Stage 1: Environmental Scoping
(proposed dates: end of 2010 until mid-2011)

This Scoping process is being planned and conducted in a manner that is intended to provide sufficient information to enable the authorities to reach a decision regarding the scope of issues to be addressed in the EIA, and in particular to convey the range of specialist studies that will be included as part of the Environmental Impact Reporting Phase of the EIA, as well as the approach to these specialist studies. Within this context, the objectives of this Scoping process are to:

- Identify and inform a broad range of stakeholders about the proposed development;
- Clarify the scope and nature of the proposed activities and the alternatives being considered;
- Through a process of broad-based consultation with stakeholders, conduct an open, participatory and transparent participation process and facilitate the inclusion of stakeholders' concerns in the decision-making process; and
- Identify and document the key issues to be addressed in the forthcoming Environmental Impact Reporting Phase of the EIA.

Stage 2: Environmental Impact Assessment
(proposed dates: mid-2011 until end of 2011)

The purpose of this stage of the EIA is to undertake specialist investigations to address the issues of concern identified through the Scoping Process. This includes the assessment of alternatives, identification of impacts and the determination of the significance of impacts. Specialists will, where appropriate, formulate mitigatory measures to maximise positive benefits or avoid/ minimise potential negative impacts. The following specialist assessments have been identified, at this stage, to form part of the environmental assessment phase of the project:

- Ecological Assessment (flora and terrestrial fauna) – Jamie Pote
- Avifauna Assessment (Birds) – Chris van Rooyen, Chris van Rooyen Consulting
- Bats Assessment – Dr Samantha Stoffberg, University of Stellenbosch and Stephanie Dippenaar, CSIR
- Visual Impact Assessment –Henry Holland, Mapthis Trust
- Noise Impact Assessment – Brett Williams, Safetech
- Archaeology Assessment –Dr Johan Binneman, Albany Museum
- Palaeontolgy– Dr John Almond, Natura Viva cc

PUBLIC PARTICIPATION PROCESS

Public Participation forms an integral component of the scoping and environmental impact assessment process. The following outlines the steps in the public participation process which will be undertaken to run in parallel to stage one and two of the EIA process.

Step 1: Notify Authorities of Environmental Impact Assessment Process

An application for Scoping and EIA was submitted to the National Department of Environmental Affairs on 12 December 2009 and DEA EIA reference no 12/12/20/1752 allocated to this application.

Step 2: Notification to I&APs and Identification of Issues

Step two entails providing notification to I&APs of the project proposal as well as the identification of any issues/concerns they may have. I&APs are provided with a Background Information Document (BID) on the project, including a locality map and a comment form. One-on-one meetings will be conducted with relevant stakeholders, where required, during this phase of the process. I&APs will be provided with a minimum of a 30-day period within which to raise any issues of concern for inclusion in the Draft Scoping Report.

Step 3: I&AP Review of the Draft Scoping Report

All issues and concerns raised by I&APs are compiled into an Issues and Responses Trail for inclusion in the Draft Scoping Report which is released for a 40-day comment period. This report will also include the Plan of Study for EIA. All I&APs on the project database will be notified in writing of the opportunity to comment on the report, which will include an executives summary of the Draft Scoping Report and comment form. Copies of the report can be downloaded from the website www.publicprocess.co.za In order to assist I&APs with their understanding of the project and to facilitate the identification of issues and concerns for inclusion in the Final Scoping Report, it is proposed that a public meeting, to which all I&APs are invited, is held during the review period.

Step 4: Final Scoping Report

The comments received from I&APs during the review process are considered in the compilation of the Final Scoping Report before it is submitted to the DEA for their decision making. All I&APs on the project database will be notified in writing of the submission of the Final Scoping Report, to the authorities (DEA) and will be informed of any additional comment period if applicable.

Environmental Impact Assessment for the proposed Ubuntu Wind Energy Project near Jeffrey's Bay, Eastern Cape: Draft Scoping Report

Appendix F:

Database of Interested and Affected Parties

Appendix F: I& APs database

Title	First Name	Last Name	Organisation	Capacity	I&AP Sector	Town	Code	Phone	Fax	Cell	Email	Let 1: Notice of Scoping	Req to Register	Comment Pre Scoping	Let 2: Draft SR
Ms	Carolyn	Ah Shene-Verdoorn	Birdlife EC	Policy and Advocacy Manager	Environmental NGO	Randburg	2125	011 789 1122		082 776 8333	advocacy@birdlife.org.za	x			
Mr/ Mrs	Dave & Carole	Barkes	Resident Kabeljouws	Homeowner	Homeowner	Humewood	6013	041 368 5816	041 368 6257	079 505 3390	info@kabeljauws.co.za	x	x	x	
Mr	Chris	Barratt	St Francis Kromme Trust		Environmental NGO	St Francis Bay	6312	042 294 0596			kronnetrust@barratt.co.za	x			
Mr	Chris	Barratt	St Francis Kromme Trust	Chairperson	Environmental NGO	St Francis Bay	6312	042 294 0596			krommetrust@barratt.co.za	x	x		
Mr	John	Bouwer	Kouga Black Chamber of Commerce	President	Business	Jeffreys Bay	6330	042 293 1994	042 293 5324		kbcc@live.co.za/ john@bouwercorp.com	x	x		
Mr	Andre	Cilliers		Landowner	Adjacent Landowner 865	Fichardt Park	9317	051 522 4690		082 773 2163	andre.cilliers@yahoo.com	x	x	x	
Mr	Chris	Coombes	Crown Chickens	Landowner	Adjacent Landowner 1/854	Uitenhage	6230	041 9951700			ccoombes@sovfoods.co.za	x	x		
Mr	Patrick	Cull	Times Media		Media	Walmer	6065			082 893 2870	pdhcull@iafrica.com	x	x		
Mr	Philip	Darne	Flashcor 158 cc	Landowner	Adjacent Landowner 4/341 and Re 845	Sunridge Park	6008			082 327 0134	philip@darne.co.za	x			
	Jacobus Johannes	Du Plessis		Landowner	Adjacent Landowner 8/341 Mooi Draai &2/307	Port Elizabeth	6001	041 3738129				x			
Mr	Kenneth	Du Preez	Kouga Municipality	Engineering & Electrical	Local Authority	Humansdorp	6300			082 894 9352		x			

Title	First Name	Last Name	Organisation	Capacity	I&AP Sector	Town	Code	Phone	Fax	Cell	Email	Let 1: Notice of Scoping	Req to Register	Comment Pre Scoping	Let 2: Draft SR
Mr/ Ms	Gcinile	Dumse	Dept of Agriculture, Forestry Management : Land Use and Soil Management EL	Resource Auditor	Provincial Authority	East London	5214	043 704 6810		78418172 3	GcinileD@nda.agric.za	x			
Ms	Lorraine	Egan	Kouga Municipality	Conservation Division	Local Authority	Loerie	6370	042 287 0674	042 291 1705	082 898 5125	eganb@eastcape.net;loregan @mweb.co.za	x			
Mr/ Mrs	Edmund&Bri dget	Elton	Private		Private	St Francis Bay	6312	042 296 0416		083 282 0017	eltonem@telkomsa.net	x	x		
Mr	Greg	Ferguson	Cobcreek	Manager	Business	Noorfkloof	6331			082 822 5315	greg@cobcreek.com		x		
Mr	Daniel Theodore	Ferreira	Sonop Boerdery Trust	Re/310, 1/310	Adjacent landowner to Re/845	Patensie	6335	042 283 0635		082 653 4960	spitzbak@gamtoos.co.za	x			
Ms	Lizna	Fourie	DWAF, East London	Permit officer	National Dept. for NWA, 1998	East London	5200	082 886 1746	043 748 5352	082 886 1746	FourieL@dwaf.gov.za	x	x	x	
Dr	Mariagrazia	Galimberti	SA Heritage Resources Agency	CEO Archaeology, Palaeontology & Meteorite Unit	SAHRA	Cape Town	8000	021 462 4502	021 462 4509		mgalimberti@sahra.org.za	x		x	
Mr	John	Geeringh	National Authority		National Authority	Pretoria	0001	012 310 3491	012 320 7539	083-6327663	jgeeringh@deat.gov.za	x			
Mr	Shaun	Geswindt	Kouga Chamber of Business	Vice Chairperson	Business	Jeffreys Bay	6330			072 905 0972	s.geswindt@hotmail.com	x	x		
Ms	Nanna	Gouws	SA National Roads Agency Limited	Statutory Control Officer	SA National Roads Agency 10/319, 4/320, 31/321	Greenacres	6057	041 398 3200	041 398 3211		gouwsj@nra.co.za	x			

Title	First Name	Last Name	Organisation	Capacity	I&AP Sector	Town	Code	Phone	Fax	Cell	Email	Let 1: Notice of Scoping	Req to Register	Comment Pre Scoping	Let 2: Draft SR
Mr	Dayalan	Govender	Department of Economic Development and Environmental Affairs (DEDEA)	Deputy Director	Environmental Authority	Greenacres	6057	041 508 5800	041 585 1958		dayalan.Govender@deaet.ecape.gov.za	x			
Mr	Morgan	Griffiths	Wildlife & Environment Society of South Africa, EP Region	Environmental Officer	Environmental NGO	Centrahil	6006	041 585 9606	041 586 3228	072 417 5793	morgan@wessaep.co.za	x			
Mr	Iqbal	Hoosen	SANRAL - Southern Region	Project Manager		Greenacres	6057	041 398 3200	041 398 3222		hooseng@nra.co.za	x			
	Willem	Jansen Van Vuuren	Kransplaas and the Backbone	Landowner	Adjacent Landowner 343 & 344	Humansdorp	6300	0422932180				x			
Mr	Marius	Keyser	District Roads Engineer	EC Dept. of Roads and Transport	Provincial Authority	Algoa Park	6005	041 452 2073	041 456 1666	083 666 1598	wilma.snyman@dot.ecprov.gov.za;marius.keyser@dot.ecprov.gov.za	x			
Mr	Eddie	Leach	Eskom Southern Region	Sales & Marketing	Eskom	Beacon Bay	5241				eddie.leach@eskom.co.za	x			
Ms	Minnelise	Levendal	EIA	CSIR	Project Management	Stellenbosch	7599	021 888 2495			mlevendal@csir.co.za	x			
Mr	Paul	Lochner	EIA Project Manager	CSIR	Project Manager	Stellenbosch	7599	021 - 888 2486	021 - 888 2693		plochner@csir.co.za	x			
Mr	Frank	Lotter	Vlakteplaas	Landowner	854/2/3/4/5/6/7	Jeffreys Bay	6300	042 293 1898		082 574 9396	frank@truewan.co.za	x			
Mr	Theo	Madatt	Kouga Municipality	Electricity Department	Local Authority	Jeffrey's Bay	6330	042 2002 242	086 536 4360		tmadatt@ec108.org.za	x			
Mr	Donald	Mc Gillivray	Africoast	Director	Business	Port Elizabeth	6065	041 505 8000	041 585 3437		donaldmc@africoast.com		x		

Title	First Name	Last Name	Organisation	Capacity	I&AP Sector	Town	Code	Phone	Fax	Cell	Email	Let 1: Notice of Scoping	Req to Register	Comment Pre Scoping	Let 2: Draft SR
Mr	HB	Meyer	Groen Akkers	Landowner	Adjacent landowner	Jeffreys Bay	6330	042 293 2337		082 651 5415	manus@agnet.co.za	x			
Ms	Yvonne	Nhlapo	National Energy Regulator	PA	National Authority	Pretoria	0007	012 401 4002	012 401 4700		yvonne.nhlapo@nersa.org.za	x			
Mr	Hermann	Oelsner	African Wind Energy Association	President	NGO	Cape Town	7345	022 492 3095	022 492 3096		oelsnergrp@wcaccess.co.za	x			
Ms	Elizabeth	Pereira	Papiesfontein	Landowner	Adjacent Landowner 8/319	Jeffrey's Bay	6331	042 292 0031		082 447 5645	nuplant@vodamail.co.za	x	x		
Mr	Jerome Quinton	Pereira	Farm 5/320	Adjacent Landowner	Adjacent Landowner - 5/320	Pretoria	0043	012 346 8974		082 882 4782	jerome@evergreens.co.za	x	x		
Mr	Russell	Phillips	FAPX - Secretary Airfield Association	Paradise Beach Airfield	Aviation	Walmer	6065				russellphillips@nmmu.ac.za	x			
Dr	Eddie	Rankwana	Kouga Municipality	Municipal Manager	Adjacent Landowner 4/346	Jeffreys Bay	6330	042 200 2212	042 293 3606			x			
Mr	Danie	Rautenbach	Kouga Development Agency	Planning & Development Manager	Local Authority	Jeffrey's Bay	6330	042 200 6400	042 293 1322	082 804 7608	danie@kougadevelopent.co.za	x			
Mr	Kobus	Reichert	Gamtkwa First Nation		Heritage NGO	Jeffery's Bay	6330			072 800 6322		x			
Mr	Kaptein	Slamdeel	Demascus Farming Trust	Landowner	Adjacent Landowner Re/307	Port Elizabeth	6059			073 304 0115		x			

Title	First Name	Last Name	Organisation	Capacity	I&AP Sector	Town	Code	Phone	Fax	Cell	Email	Let 1: Notice of Scoping	Req to Register	Comment Pre Scoping	Let 2: Draft SR
Mr	Jaques	Steenkamp	Peet Steenkamp Familie Trust and Graafwater Trust	Affected Landowner - Re/845	Affected Landowner & adjacent owner 6/307, 7/307 , 830, 845, 8/307, 191, 3/191	Humansdorp	6300	042 295 2734		082 925 3932	njalasafaris@xsinet.co.za	x	x		
Ms	Lizelle	Stroh		Obstacle Specialist	Civil Aviation Authority	Halfway House	1685	011 545 1232		083 461 6660	strohl@caa.co.za	x			
Mr	Ockert	Strumpher	Flashcor 158 cc	Landowner	Adjacent Landowner 4/341 and Re 845	Walmer	6070	041 581 2462		082 8068 973	Ockie.strumpher@sappi.com	x	x	x	
Mr	Andries	Struwig	Dept of Economic Affairs Environment and Tourism	Deputy Director	Affected Organ of State	Greenacres	6057	041 508 5815	041 585 1958		Andries.Struwig@deaet.ecape.gov.za	x			
Ms	Carina	Strydom	Kouga Municipality	LED Manager	Local Authority	Jeffrey's Bay	6330		042 293 1114	082 894 8111		x			
Mr	Vonnie	Thalwitzer	Orchard Bounty Pty Ltd	Adjacent Landowner	Adjacent Landowner - 4/319	Jeffries Bay	6330			0422932521	vonnie@capefruits.co.za	x			
Ms	Henda	Thiart	Jeffrey's Bay Rate Payers Association	Chairperson	Ratepayers Association	Jeffrey's Bay	6330	042 296 1976	042 296 1976		johhen@telkomsa.net	x			
Ms	Mercia	Ungerer	Kouga Municipality	Councillor, Ward 8	Councillor Gamtoos River	Jefferey's Bay	6330	042 295 1155	042 296 1546	083 409 8776		x			
Mr	Thinus	Visser	Applefields Enterprizes Pty Ltd	1/316	Adjacent landowner to Re/845	Jeffreys Bay	6330	0422930681		0832725764	thinus@grasslands.co.za	x			
Mr	Pieter	Walsh	Demascus Farming Trust	Landowner	Adjacent Landowner Re/307	Port Elizabeth	6059			082 334 4396		x			

Title	First Name	Last Name	Organisation	Capacity	I&AP Sector	Town	Code	Phone	Fax	Cell	Email	Let 1: Notice of Scoping	Req to Register	Comment Pre Scoping	Let 2: Draft SR
Mr	Alan	Wolfromm	Windcurrent	Director	Applicant	Wilderness	6560	044 877 0564	082 341 7721		mrwolf@mweb.co.za	x			
Mr	Ross	Zietsman	Birdlife EC	Chairperson	Environmental NGO						zietsmanfamily@imaginet.co.za	x			
Ms/ Mr	Siphesihle	Zwane	Department of Agriculture	ActingDeputy Director	Provincial Authority	Pretoria	0001	012 319 7567	012 329 5938			x			
	The Director		Cathcart Road View Pty Ltd	Adjacent Landowner	Adjacent Landowner 1/320	Port Elizabeth	6000					x			
Mr	MC	Marubini	Dept of Agriculture, Forestry Management : Land Use and Soil Management EL	Delegate of the Minister	National Government Agriculture	Pretoria	0001	012 319 7678					x	x	
Ms	Leila	Mohomed-Weideman	Mainstream Renewable Power South Africa	Director	Business	Claremont	7735	021 657 4043		083 789 2923	leila.mahomed-weideman@mainstreamrp.com	x	x		
Ms	Zanele	Sishuba	DWAF, East London	Permit officer	Provincial Dept.WA	East London	5200					x	x	x	
Ms	Marisa	Bloem	DWAF, Port Elizabeth		Provincial Dept.WA	Port Elizabeth	6000	041 586 4884		083 232 9822	bloemm@dwa.gov.za	x	x		
Mr	Mark	Ralph	Crown Chickens	EIA	Adjacent Landowner 1/854	Uitenhage	6230	041 9951700			MRalph@sovfoods.co.za	x	x		
Mr	Mark	Tanton	Red Cap	Managing Director	Business	Hout Bay	7806	021 790 1382			mark@red-cap.co.za	x	x	x	
Mr	Ncamile	Dweni	DWAF, Port Elizabeth	Scientist Production	Provincial Dept.WA	Port Elizabeth	6000	041 586 4884		082 800 8363	dwenin@dwa.gov.za	x	x	x	
Mr	Revival	Mnguni	Dept of Agriculture	Land Use Advisor	National Agriculture	Pretoria	0001	012 319 7439		078 475 3274	RevivalM@daff.gov.za	x	x		

Title	First Name	Last Name	Organisation	Capacity	I&AP Sector	Town	Code	Phone	Fax	Cell	Email	Let 1: Notice of Scoping	Req to Register	Comment Pre Scoping	Let 2: Draft SR
Mr	Stephanus Jacobus	Theron		Adjacent Landowner	Adjacent Landowner - RE/8/321			0422931584							
	The Director	IT1672/1996	Rooikraal Game Ranch Trust	Adjacent Landowner	Adjacent Landowner - 1/186										

Reports must also be sent to:

Jeffrey's Bay Library; 22 Da Gama Rd; Jeffrey's Bay; 6330 Tel: 042 - 200 2257

Humansdorp Library; 9 Bureau Street; Humansdorp; 6300 Tel: 042 - 200 3316

Environmental Impact Assessment for the proposed Ubuntu Wind Energy Project near Jeffrey's Bay, Eastern Cape: Draft Scoping Report

Appendix G:

Correspondence to Interested and Affected Parties

APPENDIX G:

CORRESPONDENCE SENT TO I&APS PRIOR TO THE RELEASE OF THE DRAFT SCOPING REPORT

Letter 1: To I&APs providing a 30 day registration and comment period

PO Box 27688 Greenacres 6057
120 Diaz Road Adcockvale, PE 6001
Phone 041 374 8426 Fax 041 373 2002
Email sandy@publicprocess.co.za

Ck 97/32984/23 VAT 44601 68273

Public Process Consultants
Environmental Impact Assessment and Public Participation Management

3 November 2010

Dear

RE: NOTICE OF SCOPING AND ENVIRONMENTAL IMPACT ASSESSMENT PROCESS FOR THE PROPOSED UBUNTU WIND ENERGY PROJECT, FARMS ZUURBRON AND VLAKTEPLAAS, KOUGA MUNICIPALITY, EASTERN CAPE PROVINCE (*DEA REFERENCE NUMBER: 12/12/20/1752)*

In terms of Regulations 385, 386 and 387 promulgated under Chapter 5 of the National Environmental Management Act (NEMA, Act 107 of 1998) in Government Gazette 28753 on 21 April 2006, you have been identified as an interested and/ or affected party (I&AP) for the above project and have been included on the project I&AP database. An application for Scoping and Environmental Impact Assessment was submitted to the National Department of Environmental Affairs on **12 December 2009** and as such this EIA process is subject to the 2006 NEMA EIA regulations, as outlined in this correspondence and the attached Background Information Document. DEA has allocated the following reference number to this project: 12/12/20/1752.

Windcurrent SA (Pty) Ltd, in a Joint Venture with WKN Windkraft Nord AG (the project applicants), is proposing the establishment of a wind energy facility, with a maximum generation capacity of 100 MW, on the Farms Zuurbron and Vlakteplaas in the Kouga Municipal area, Eastern Cape Province. It is proposed that the project, referred to as the Ubuntu Wind Energy Project, be developed in two phases, each consisting of approximately 25 wind turbines of 2 to 3 MW each (50MW), both of which are covered in this EIA process. The Ubuntu Wind Energy project is located on the farms Zuurbron and Vlakteplaas, approximately 3km north of the town of Jeffreys Bay, as follows:

- Remainder of farm 830, Kransplaas, (Farm Zuurbron)
- Portions 2/3/4/5/6/7of farm 854 (Vlakteplaas)
- Farms 307/5; Div Humansdorp
- 307/6; Div Humansdorp
- 307/7 Div Humansdorp
- Farm 845, Div Humansdorp

In terms of Regulations 385, 386 and 387 promulgated under Chapter 5 of the National Environmental Management Act (NEMA, Act 107 of 1998) in Government Gazette 28753 on 21 April 2006, an

environmental assessment process is being conducted for the proposed wind farm. The proposed project requires full Scoping and Environmental Impact Assessment, in particular because it includes the following activities listed under GN R 387: Activity 1. (a) (i), (ii) and (l) and 10; and Activity 15 listed in GN R386.

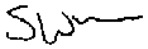
The listed activities require authorisation from the National Department of Environmental Affairs (DEA). The CSIR has been appointed by the Joint Venture to undertake the Scoping and Environmental Impact Assessment (EIA) required for the project and Public Process Consultants will manage the public participation component of the EIA.

In terms of regulation 56 (1) (b) of Government Notice R 385 interested and affected parties are to request, in writing, that their names be placed on the I&AP register. In order to ensure that you are placed on the project register as well as to raise issues and or concerns for inclusion in the Draft Scoping Report, you are kindly requested to submit any comments you may have to the participation consultant at the address details indicated above, by no later than **3 December 2010.**

To assist you in the submission of your comments we have enclosed with this correspondence a Background Information Document (BID) on the project as well as a comment form. Copies of the BID and comment form can be downloaded from the following website www.publicprocess.co.za. Additional issues and concerns may be raised once the Draft Scoping Report is released for a 40 day I&AP review, anticipated to be early in 2011. As a registered I&AP on the project database you will be notified of this comment period in writing.

Should you have any queries or require additional information please contact Sandy Wren or Paul-Pierre Steyn using the contact details provided above.

Yours sincerely



SANDY WREN

Comment form mailed with Letter 1 to I&APs

SCOPING AND ENVIRONMENTAL IMPACT ASSESSMENT PROCESS UBUNTU WIND ENERGY PROJECT, FARMS ZUURBRON AND VLAKTEPLAAS, KOUGA MUNICIPALITY

Windcurrent SA (Pty) Ltd, in a Joint Venture with WKN Windkraft Nord AG (the project applicants), are proposing the establishment of a wind energy facility, with a maximum generation capacity of 100 MW, on the Farms Zuurbron and Vlakteplaas in the Kouga Municipal area, Eastern Cape Province

Listed Activities: **GN R387 Activity 1. (a) (i), (ii) and (l); and 10 and in GN R386 Activity 15.**

Return Completed Reply Form by to:

Public Process Consultants, PO Box 27688, Greenacres 6057
Phone: 041 – 374 8426 or Fax 041-373 2002 or Email sandy@publicprocess.co.za

Please Complete all Relevant Sections Below and Return By:

3 December 2010

Please provide your full contact details:

FIRST NAME:	*SURNAME:*
ORGANISATION:	*DESIGNATION:*
POSTAL ADDRESS:	
CODE:	
PHONE:	*FAX:*
CELL:	*EMAIL:*
Email:	

Would you like to register as an interested and affected party? (please tick the appropriate box)

NOTE: You are required to register as an I&AP in order to receive further correspondence regarding the EIA process.

YES
NO

Please clearly state any interest you may have in the project and/or list your issues and concerns or questions you may have (use additional pages if required)

Background Information Document Mailed with Letter 1 to I&APs

The Final Scoping Report will include the Plan of Study for EIA (PoS EIA) and Terms of Reference for specialist studies to be undertaken as part of the EIA process. The PoS EIA is subject to the approval of the authorities and may require amendment.

Step 5: Draft Environmental Impact Assessment and EMP

When the DEA accepts the Final Scoping Report and PoS EIA, the environmental assessment phase may commence. The purpose of the EIA is to:

- Address issues that have been raised through the Scoping Process;
- Assess reasonable and feasible alternatives that form part of the proposed activity (including the No Go Option);
- Assess potential impacts; and
- Recommend management actions to enhance benefits or avoid/minimise potential negative impacts.

This stage in the process entails the compilation and release of a Draft Environmental Impact Assessment for a 40-day I&AP review period. A key component of the EIA process is documenting and responding to the comments received from I&APs and authorities. The comments received through meetings held or via written correspondence are compiled into a Comments and Responses Trail for inclusion in the Final Environmental Impact Assessment. The Comments and Responses Trail will indicate the nature of the comment, when and who raised the comment as well as indicate how the comment received has been considered in the Final EIA, in the project design or EMP for the project.

Step 6: Final Environmental Impact Assessment and Draft EMP

The Final Environmental Impact Assessment, including the Comments and Responses Trail and draft EMP will be compiled for submission to the authorities for decision making (DEA). All I&APs on the project database will be notified in writing of the submission of the Final EIA as well as any additional comment period if applicable.

Step 7: Notification of Environmental Decision and Appeal Period

All I&APs on the project database will be notified in writing regarding the environmental decision for the project and the appeal period, as well as the manner of appeal.

HOW CAN YOU GET INVOLVED?

1. By responding to our invitation for your involvement advertised in local newspapers.
2. By mailing or faxing a comment form to the participation consultant indicated below.
3. By telephonically contacting the participation consultant if you have a query, comment, or require further project information.
4. By reviewing the various reports within the comment periods provided.
5. By attending any feedback meetings, which may be held during the review period. Should you be registered as an I&AP you will be invited to attend these meetings.

Public Process Consultants
Environmental Impact Assessment and Public Participation Management

Sandy Wren, Public Process Consultants
PO Box 27688, Greenacres, 6057
Phone 041 - 374 8426
Fax 041 - 373 2002
Cell 082 4909 828
Email sandy@publicprocess.co.za

Information on this project can be accessed through the website:
www.publicprocess.co.za

CSIR
our future through science

www.ubuntuwef.co.za

November 2010
Background Information Document

UBUNTU
WIND ENERGY PROJECT
Zuurbron & Vlakteplaas
Kouga Municipality

WKN AG | Windcurrent SA (Pty) Ltd.

Environmental Impact Assessment
DEA Reference Number: 12/12/20/1752

PROJECT OVERVIEW

Windcurrent SA (Pty) Ltd, in a Joint Venture with WKN Windkraft Nord AG, is proposing the construction of a 100 MW wind energy facility on the Farms Zuurbron and Vlakteplaas in the Kouga Municipal area, Eastern Cape Province. WKN Windkraft Nord AG (WKN) was founded in 1990, and is one of the pioneers of the German wind energy market. With international experience in the sectors of development, financing, erection and operation of wind farms, WKN has, as of 2009, a realised capacity of 972.5 MW wind power.

The Joint Venture Company, presently being formed, will be a South African based renewable energy company that develops, builds and operates renewable energy projects. The proposed project, referred to as the Ubuntu Wind Energy Project, will be developed in two phases.

The Eastern Cape does not generate bulk power and is thus reliant on electricity imports from other provinces (e.g. Mpumalanga). The existing transmission capacity to the province is fully utilised, which restricts the province from realising its industrial and rural development potential. Due to the length of the Eskom power lines from the power stations to the Kouga area and the inherent characteristics of the Kouga network, the area experiences power quality and voltage instability. This results in secondary agricultural processing companies, small and commercial scale farmers, experiencing an intermittent and sometimes unreliable supply of electricity. The project could thus assist in stabilising energy supply to the Eastern Cape and in particular the Kouga Municipal area.

WHAT DOES THIS DOCUMENT TELL YOU?

This document provides you, as an interested and or affected party (I&AP) with background information on the proposed project as well as the Environmental Assessment and Public Participation process that will be undertaken for the project. It indicates how you can become involved in the project, receive information and raise issues that may interest and/or concern you. The sharing of information forms an important component of the Public Participation process and provides you with the opportunity to become actively involved in the environmental assessment process from the outset. The input received from I&APs together with scientific investigations assists the responsible authority, in this instance the National Department of Environmental Affairs (DEA), with their decision-making.

PROJECT LOCATION AND DETAIL

The Ubuntu Wind Energy project is located on the farms Zuurbron and Vlakteplaas, Kouga Municipal Area approximately 3km north of the town of Jeffreys Bay, as follows:

- Remainder of farm 830, Kransplaas, (Farm Zuurbron)
- Portions 2/3/4/5/6/7of farm 854 (Vlakteplaas)
- Farms 307/5; Div Humansdorp
- 307/6; Div Humansdorp
- 307/7 Div Humansdorp
- Farm 845, Div Humansdorp

The locality map included with this Background Information Document provides an overview of the erven included in this application.

The Ubuntu Wind Energy Project is proposed to be developed in two phases, both of which are covered in this EIA:

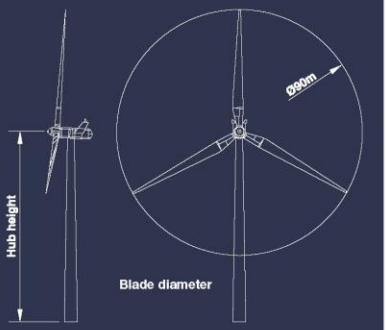
- Phase 1 (2013): approximately 25 turbines x 2 MW = 50 MW
- Phase 2 (2014): approximately 25 turbines x 2 MW = 50 MW

While the total capacity of this project is capped at 100 MW, the capacity of each phase is dependent on progress with other projects in the region and may be amended during the EIA process. The key components of the project will include the following:

- Construction of hard standing surfaces of approximately 16m diameter and 2.7m depth
- The installation of approximately 33 to 50 wind turbines of approximately 2 to 3 MW each with a hub height of up to 105 meters and a blade diameter of approximately 90 meters
- Three wind monitoring masts of up to 100m high
- Gravel access roads to the turbines, with the intent being to upgrade existing roads as far as possible
- Construction of hard standing areas for use by cranes during construction. These areas will be retained for future maintenance use
- Power line connections between the wind turbines and the Eskom grid

- **Construction is undertaken in three distinct components:**
  - civil construction,
  - electrical installation and wind turbine erection, and
  - commissioning.

The construction and commissioning phase of the project will typically require a period of 8 to 12 months. The operational life span of the wind turbines is expected to be a minimum of 25 years which can be extended through regular maintenance and/or upgrades in technology. The project is implemented in such a manner which allows other activities (such as farming) to continue around the turbine. Typically in a wind farm, the turbines and supporting infrastructure (e.g. roads) occupy up to 5% of the total area of the wind farm.



ENVIRONMENTAL ASSESSMENT PROCESS

An application for Environmental Impact Assessment was submitted to the National Department of Environmental Affairs on 12 December 2009 and as such is subject to the 2006 NEMA EIA regulations as outlined below. DEA has allocated the following reference number to this application 12/12/20/1752.

In terms of Regulations 385, 386 and 387 promulgated under Chapter 5 of the National Environmental Management Act (NEMA, Act 107 of 1998) in Government Gazette 28753 on 21 April 2006, an environmental assessment process is being conducted for the proposed wind farm. The proposed project requires full Scoping and Environmental Impact Assessment, in particular because it includes the following activities listed under GN R 387:

1. The construction of facilities or infrastructure, including associated structures or infrastructure, for –
(a) the generation of electricity where -
(i) the electricity output is 20 megawatts or more; or
(ii) the elements of the facility cover a combined area in excess of 1 hectare;
(l) the transmission and distribution of above ground electricity with a capacity of 120 kilovolts or more;

10. Any process or activity identified in terms of section 53(1) of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)

And the following activity listed in GN R 386;
15. The construction of a road that is wider than 4 metres or that has a reserve wider than 6 metres, excluding roads that fall within the ambit of another listed activity or which are access roads of less than 30 metres long.

The listed activities require authorisation from the National Department of Environmental Affairs (DEA). The environmental assessment needs to show the responsible authority, DEA, and the project proponent, Windcurrent SA (Pty) Ltd and WKN Windkraft Nord AG, what the consequences of their choices will be in biophysical, social and economic terms. The CSIR has been appointed by the Joint Venture to undertake the Environmental Assessment (EIA) required for the project and Public Process Consultants will manage the public participation component of the EIA. Public involvement forms an important component of this process, by assisting in the identification of issues and alternatives to be evaluated.

The Amended NEMA EIA Regulations (Notices GN R. 543, 544, 545, and 546) were published in Government Gazette No. 33306 of 18 June 2010, and came into effect on 2 August 2010. This application was initiated in December 2009, prior to the enactment of the Amended Regulations, and will therefore be dealt with in terms of GN R 385, 386 and 387 as outlined above. However in line with Regulation 76 (3) of the Amended EIA Regulations, any impacts associated with listed activities which are included in the Amended listing notices, which were not listed under the listing notices GN R386 and 387, will be assessed as part of this EIA process.

The Environmental Assessment Process being implemented can be summarised as follows:

Stage 1: Environmental Scoping (proposed dates: end of 2010 until mid-2011)

This Scoping process is being planned and conducted in a manner that is intended to provide sufficient information to enable the authorities to reach a decision regarding the scope of issues to be addressed in the EIA, and in particular to convey the range of specialist studies that will be included as part of the Environmental Impact Reporting Phase of the EIA, as well as the approach to these specialist studies. Within this context, the objectives of this Scoping process are to:

- Identify and inform a broad range of stakeholders about the proposed development;
- Clarify the scope and nature of the proposed activities and the alternatives being considered;
- Through a process of broad-based consultation with stakeholders, conduct an open, participatory and transparent participation process and facilitate the inclusion of stakeholders' concerns in the decision-making process; and
- Identify and document the key issues to be addressed in the forthcoming Environmental Impact Reporting Phase of the EIA.

Stage 2: Environmental Impact Assessment (proposed dates: mid-2011 until end of 2011)

The purpose of this stage of the EIA is to undertake specialist investigations to address the issues of concern identified through the Scoping Process. This includes the assessment of alternatives, identification of impacts and the determination of the significance of impacts. Specialists will, where appropriate, formulate mitigatory measures to maximise positive benefits or avoid/ minimise potential negative impacts. The following specialist assessments have been identified, at this stage, to form part of the environmental assessment phase of the project:

- Ecological Assessment (flora and terrestrial fauna) – Jamie Pote
- Avifauna Assessment (Birds) – Chris van Rooyen, Chris van Rooyen Consulting
- Bats Assessment – Dr Samantha Stoffberg, University of Stellenbosch and Stephanie Dippenaar, CSIR
- Visual Impact Assessment –Henry Holland, Mapthis Trust
- Noise Impact Assessment – Brett Williams, Safetech
- Archaeology Assessment –Dr Johan Binneman, Albany Museum
- Palaeontolgy– Dr John Almond, Natura Viva cc

PUBLIC PARTICIPATION PROCESS

Public Participation forms an integral component of the scoping and environmental impact assessment process. The following outlines the steps in the public participation process which will be undertaken to run in parallel to stage one and two of the EIA process.

Step 1: Notify Authorities of Environmental Impact Assessment Process

An application for Scoping and EIA was submitted to the National Department of Environmental Affairs on 12 December 2009 and DEA EIA reference no 12/12/20/1752 allocated to this application.

Step 2: Notification to I&APs and Identification of Issues

Step two entails providing notification to I&APs of the project proposal as well as the identification of any issues/concerns they may have. I&APs are provided with a Background Information Document (BID) on the project, including a locality map and a comment form. One-on-one meetings will be conducted with relevant stakeholders, where required, during this phase of the process. I&APs will be provided with a minimum of a 30-day period within which to raise any issues of concern for inclusion in the Draft Scoping Report.

Step 3: I&AP Review of the Draft Scoping Report

All issues and concerns raised by I&APs are compiled into an Issues and Responses Trail for inclusion in the Draft Scoping Report which is released for a 40-day comment period. This report will also include the Plan of Study for EIA. All I&APs on the project database will be notified in writing of the opportunity to comment on the report, which will include an executives summary of the Draft Scoping Report and comment form. Copies of the report can be downloaded from the website www.publicprocess.co.za In order to assist I&APs with their understanding of the project and to facilitate the identification of issues and concerns for inclusion in the Final Scoping Report, it is proposed that a public meeting, to which all I&APs are invited, is held during the review period.

Step 4: Final Scoping Report

The comments received from I&APs during the review process are considered in the compilation of the Final Scoping Report before it is submitted to the DEA for their decision making. All I&APs on the project database will be notified in writing of the submission of the Final Scoping Report, to the authorities (DEA) and will be informed of any additional comment period if applicable.

Environmental Impact Assessment for the proposed Ubuntu Wind Energy Project near Jeffrey's Bay, Eastern Cape: Draft Scoping Report

Appendix H:

Correspondence from Interested and Affected Parties

APPENDIX H:

Correspondence received from I&APs prior to the release of the Draft Scoping Report

FROM : CILLIERS--- PHONE NO. : 0515224690 APR. 26 2011 02:02AM P1

SCOPING PHASE

PUBLIC INVOLVEMENT PROCESS REPLY FORM

SCOPING AND ENVIRONMENTAL IMPACT ASSESSMENT PROCESS
UBUNTU WIND ENERGY PROJECT, FARMS ZUURBRON AND VLAKTEPLAAS, KOUGA MUNICIPALITY

Windcurrent SA (Pty) Ltd, in a Joint Venture with WKN Windkraft Nord AG (the project applicants), are proposing the establishment of a wind energy facility, with a maximum generation capacity of 100 MW, on the Farms Zuurbron and Vlakteplaas in the Kouga Municipal area, Eastern Cape Province

Listed Activities: GN R387 Activity 1. (a) (i), (ii) and (l); and 10. and in GN R386 Activity 15.

Return Completed Reply Form by to:

Public Process Consultants, PO Box 27688, Greenacres 6057

Phone: 041 – 374 8426 or Fax 041-373 2002 or Email sandy@publicprocess.co.za

Please Complete all Relevant Sections Below and Return By:

3 December 2010

Please provide your full contact details:

FIRST NAME:	ANDRÉ	SURNAME:	CILLIERS
ORGANISATION:		DESIGNATION:	PENSIOENAR
POSTAL ADDRESS:	P.O. Box 32072,		FICHARDT PARK
CODE:	9317		
PHONE:	051: 5224690	FAX:	051: 5224690
CELL:	082: 7732163	EMAIL:	andre.cilliers@yahoo.com

Email:

Would you like to register as an interested and affected party? (please tick the appropriate box)

NOTE: You are required to register as an I&AP in order to receive further correspondence regarding the EIA process.

~~YES~~ YES.
NO

Please clearly state any interest you may have in the project and/or list your issues and concerns. (If insufficient space, you may wish to use additional pages if required)

1. DIRECTLY AFFECTED, BECAUSE I AM THE NEIGHBOUR OF J. Steenkamp and Frank Luther.
2. WHAT IMPACT WILL THIS HAVE ON US AS DIRECT NEIGHBOURS, E.G. (a) WILD LIFE, BIRDS AND NOISE-WISE, OUR CATTLE ON FARM?
3. ~~WHAT~~ WILL IMPACT BE ON OUR VIEW TOWARDS THE SEA AND MOUNTAINS?
4. HOW WILL MAINTENANCE OF WIND ENERGY AFFECT US?
5. PLEASE TELL US (A) ALL ADVANTAGES FOR US
   (B) ALL DISADVANTAGES FOR US.

Registration and comments form for Issues & Concerns

agriculture, forestry & fisheries

Department:
Agriculture, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

Private Bag X120, Pretoria (Tshwane), 0001
Delpen Building, c/o Annie Botha & Union Street, Riviera, 0084

From: Directorate Land Use and Soil Management
Tel: 012-319-7678 **Fax:** 012-329-5938 **e-mail:**
Enquiries: Help Desk **Ref:** 2010_06_0056

CSIR
PO Box 320
STELLENBOSCH
7599

2010 -10- 12

Dear Sirs

PROPOSED REZONING AND LEASE APPLICATIONS: ON THE ERECTION OF WIND MONITORING MASTS

Your letter dated 16 March 2010 refers.

With reference to the above-mentioned matter I wish to inform you that this Department is in the process of drafting a wind development and farming guidelines and therefore all wind development applications will be put on hold and only evaluated when the process has been finalized.

All applicants will be informed accordingly in due course once the guidelines have been finalized.

Yours faithfully

Ms. M.C. Marubini

DELEGATE OF THE MINISTER: LAND USE AND SOIL MANAGEMENT

ML Brenchley 2010/ rezoning Wind Farms Rezoning & Lease

SCOPING PHASE

PUBLIC INVOLVEMENT PROCESS REPLY FORM

SCOPING AND ENVIRONMENTAL IMPACT ASSESSMENT PROCESS UBUNTU WIND ENERGY PROJECT, FARMS ZUURBRON AND VLAKTEPLAAS, KOUGA MUNICIPALITY

Windcurrent SA (Pty) Ltd, in a Joint Venture with WKN Windkraft Nord AG (the project applicants), are proposing the establishment of a wind energy facility, with a maximum generation capacity of 100 MW, on the Farms Zuurbron and Vlakteplaas in the Kouga Municipal area, Eastern Cape Province

Listed Activities: GN R387 Activity 1. (a) (i), (ii) and (l); and 10. and in GN R386 Activity 15.

Return Completed Reply Form by to

Public Process Consultants, PO Box 27688, Greenacres 6057

Phone: 041 – 374 8426 or Fax 041-373 2002 or Email sandy@publicprocess.co.za

Please Complete all Relevant Sections Below and Return By: 3 December 2010

Please provide your full contact details:

FIRST NAME: Elizabeth	SURNAME: Pereira
ORGANISATION: Private	DESIGNATION:
POSTAL ADDRESS: P.O. Box 2015 Jeffreysbay	
CODE: 6331	
~~PHONE~~: 082-447-3645	FAX: 0866534489
CELL: →	EMAIL: nuplant@sada.mail.co.za
Email:	

Would you like to register as an interested and affected party? (please tick the appropriate box)

NOTE: You are required to register as an I&AP in order to receive further correspondence regarding the EIA process.

YES ✓

NO

Please clearly state any interest you may have in the project and/or list your issues and concerns or questions you may have (use additional pages if required)

29/11/2010 11:48 0123241237 EVERGREENS PAGE 01/02

SCOPING PHASE

PUBLIC INVOLVEMENT PROCESS REPLY FORM

SCOPING AND ENVIRONMENTAL IMPACT ASSESSMENT PROCESS UBUNTU WIND ENERGY PROJECT, FARMS ZUURBRON AND VLAKTEPLAAS, KOUGA MUNICIPALITY

Windcurrent SA (Pty) Ltd, in a Joint Venture with WKN Windkraft Nord AG (the project applicants), are proposing the establishment of a wind energy facility, with a maximum generation capacity of 100 MW, on the Farms Zuurbron and Vlakteplaas in the Kouga Municipal area, Eastern Cape Province

Listed Activities: GN R387 Activity 1. (a) (i), (ii) and (i); and 10. and in GN R386 Activity 15.

Return Completed Reply Form by to:

Public Process Consultants, PO Box 27688, Greenacres 6057

Phone: 041 – 374 8426 or Fax 041-373 2002 or Email sandy@publicprocess.co.za

Please Complete all Relevant Sections Below and Return By:

3 December 2010

Please provide your full contact details:

FIRST NAME: Jacques	SURNAME: Steenkamp
ORGANISATION: Piet Steenkamp Fam. Trust	DESIGNATION:
POSTAL ADDRESS: Box 915 Humansdorp	
CODE: 6300	
PHONE: 042 - 295 2734	FAX: 042 - 295 1283
CELL: 082 925 3932	EMAIL: djalasafaris@xsinet.co.za
Email:	

Would you like to register as an interested and affected party? (please tick the appropriate box)

NOTE: You are required to register as an I&AP in order to receive further correspondence regarding the EIA process.

YES	✓
NO	

Please clearly state any interest you may have in the project and/or list your issues and concerns or questions you may have (use additional pages if required)

8. Nov. 2010 8:40 JACQUES STEENKAMP 0422952283 No. 0763 P. 1

Registration and comments form for Issues & Concerns

SCOPING PHASE

PUBLIC INVOLVEMENT PROCESS REPLY FORM

SCOPING AND ENVIRONMENTAL IMPACT ASSESSMENT PROCESS UBUNTU WIND ENERGY PROJECT, FARMS ZUURBRON AND VLAKTEPLAAS, KOUGA MUNICIPALITY

Windcurrent SA (Pty) Ltd, in a Joint Venture with WKN Windkraft Nord AG (the project applicants), are proposing the establishment of a wind energy facility, with a maximum generation capacity of 100 MW, on the Farms Zuurbron and Vlakteplaas in the Kouga Municipal area, Eastern Cape Province

Listed Activities: GN R387 Activity 1. (a) (i), (ii) and (l); and 10. and in GN R386 Activity 15.

Return Completed Reply Form by to:

Public Process Consultants, PO Box 27688, Greenacres 6057

Phone: 041 – 374 8426 or Fax 041-373 2002 or Email sandy@publicprocess.co.za

Please Complete all Relevant Sections Below and Return By:

3 December 2010

Please provide your full contact details:

FIRST NAME: JEROME	SURNAME: PEREIRA .
ORGANISATION: PRIVATE!	DESIGNATION:
POSTAL ADDRESS: P.O. Box 39187 FAERIE-GLEN PTA.	
CODE: 0043.	
PHONE: 012 346 - 8974	~~FAX~~ 012 - 323 - 6556 - & Mail
CELL: 082 - 882 - 4728.	EMAIL: jerome@evergreens.co.za.
Email:	

Would you like to register as an interested and affected party? (please tick the appropriate box)

NOTE: You are required to register as an I&AP in order to receive further correspondence regarding the EIA process.

YES ✓

NO

Please clearly state any interest you may have in the project and/or list your issues and concerns or questions you may have (use additional pages if required)

Registration and comments form for Issues & Concerns

29/11/2010 11:48 0123241237 EVERGREENS PAGE 02/02

111 HARRINGTON STREET, CAPE TOWN, 8000
PO BOX 4637, CAPE TOWN, 8000
TEL: (021) 462 4502 FAX: (021) 462 4509

DATE: 03 December 2010
ENQUIRIES: Mariagrazia Galimberti
Archaeology, Palaeontology and Meteorite Unit
E-mail: mgalimberti@sahra.org.za
Web site: www.sahra.org.za

Our Ref. Number: 9/2/044/0001
DEA Ref. Number: 12/12/20/1752

Ms Sandy Wren
PO Box 27688
Greenacres 6057
Port Elizabeth
6001

Dear Ms Wren,

NOTICE OF SCOPING AND ENVIRONMENTAL IMPACT ASSESSMENT PROCESS FOR THE PROPOSED UBUNTU WIND ENERGY PROJECT, FARM ZUURBRON AND VLAKTEPLAAS, KOUGA MUNICIPALITY, EASTERN CAPE PROVINCE (DEA Reference Number 12/12/20/1752).

We received notification for intention to develop in this area wind energy facilities in two phases in this area.

SAHRA acknowledges that CSIR has appointed both an archaeologist and a palaeontologist to undertake a impact assessment on the possible heritage resources present in the area. Please note that other heritage resources must also be addressed in a Heritage Impact Assessment such as built structures over 60 years old, sites of cultural significance associated with oral histories, burial grounds and graves, graves of victims of conflict and cultural landscapes.

Many thanks for your co-operation
Kind regards

pp Mrs Nonofho Ndobochani
SAHRA: Archaeology, Palaeontology and Meteorite Unit
For: CHIEF EXECUTIVE OFFICE

Copies: PHRA Eastern Cape Office

SCOPING PHASE

PUBLIC INVOLVEMENT PROCESS REPLY FORM

SCOPING AND ENVIRONMENTAL IMPACT ASSESSMENT PROCESS UBUNTU WIND ENERGY PROJECT, FARMS ZUURBRON AND VLAKTEPLAAS, KOUGA MUNICIPALITY

Windcurrent SA (Pty) Ltd, in a Joint Venture with WKN Windkraft Nord AG (the project applicants), are proposing the establishment of a wind energy facility, with a maximum generation capacity of 100 MW, on the Farms Zuurbron and Vlakteplaas in the Kouga Municipal area, Eastern Cape Province

Listed Activities: GN R387 Activity 1. (a) (i), (ii) and (l); and 10. and in GN R386 Activity 15.

Return Completed Reply Form by to:

Public Process Consultants, PO Box 27688, Greenacres 6057

Phone: 041 – 374 8426 or Fax 041-373 2002 or Email sandy@publicprocess.co.za

Please Complete all Relevant Sections Below and Return By:

3 December 2010

Please provide your full contact details:

FIRST NAME: OCKERT	SURNAME: STRUMPHER
ORGANISATION: FLASHCOR 158 cc	DESIGNATION: MANAGING MEMBER
POSTAL ADDRESS: P.O. BOX 5469	
CODE: 6070	
PHONE: 041 - 5812462	FAX: 041 - 5817799
CELL: 0828068973	EMAIL: ockie.strumpher@sappi.com
Email:	

Would you like to register as an interested and affected party? (please tick the appropriate box)

NOTE: You are required to register as an I&AP in order to receive further correspondence regarding the EIA process.

YES	✓
NO	

Please clearly state any interest you may have in the project and/or list your issues and concerns or questions you may have (use additional pages if required)

Neighbouring Property – Vrede Farm:-

1) Concerns regarding environmental impact to Fauna & Flora and general farming.
2) Possible increase in crime during construction phase due to increased human activity – currently very good!
3) Future expansion with additional turbines?

Registration and comments form for Issues & Concerns

SCOPING PHASE

PUBLIC INVOLVEMENT PROCESS REPLY FORM

SCOPING AND ENVIRONMENTAL IMPACT ASSESSMENT PROCESS
UBUNTU WIND ENERGY PROJECT, FARMS ZUURBRON AND VLAKTEPLAAS, KOUGA MUNICIPALITY

Windcurrent SA (Pty) Ltd, in a Joint Venture with WKN Windkraft Nord AG (the project applicants), are proposing the establishment of a wind energy facility, with a maximum generation capacity of 100 MW, on the Farms Zuurbron and Vlakteplaas in the Kouga Municipal area, Eastern Cape Province

Listed Activities: GN R387 Activity 1. (a) (i), (ii) and (l); and 10. and in GN R386 Activity 15.

Return Completed Reply Form by to:

Public Process Consultants. PO Box 27688, Greenacres 6057

Phone: 041 – 374 8426 or Fax 041-373 2002 or Email sandy@publicprocess.co.za

Please Complete all Relevant Sections Below and Return By:

3 December 2010

Please provide your full contact details:

FIRST NAME: CHRIS SURNAME: COOMBES

ORGANISATION: SOVEREIGN FOODS DESIGNATION: CFO

POSTAL ADDRESS: PO BOX 124, UITENHAGE

CODE: 6230

PHONE: 041 995 1823 FAX: 086 653 0105

CELL: 082 805 6363 EMAIL: CCOOMBES@SOVFOODS.CO.ZA

Email:

Would you like to register as an interested and affected party? (please tick the appropriate box)

NOTE: You are required to register as an I&AP in order to receive further correspondence regarding the EIA process

YES ✓

NO

Please clearly state any interest you may have in the project and/or list your issues and concerns or questions you may have (use additional pages if required)

PUBLIC INVOLVEMENT PROCESS REPLY FORM

SCOPING AND ENVIRONMENTAL IMPACT ASSESSMENT PROCESS UBUNTU WIND ENERGY PROJECT, FARMS ZUURBRON AND VLAKTEPLAAS, KOUGA MUNICIPALITY

Windcurrent SA (Pty) Ltd, in a Joint Venture with WKN Windkraft Nord AG (the project applicants), are proposing the establishment of a wind energy facility, with a maximum generation capacity of 100 MW, on the Farms Zuurbron and Vlakteplaas in the Kouga Municipal area, Eastern Cape Province

Listed Activities: GN R387 Activity 1. (a) (i), (ii) and (l); and 10. and in GN R386 Activity 15.

Return Completed Reply Form by to:

Public Process Consultants, PO Box 27688, Greenacres 6057

Phone: 041 – 374 8426 or Fax 041-373 2002 or Email sandy@publicprocess.co.za

Please Complete all Relevant Sections Below and Return By:

3 December 2010

Please provide your full contact details:

FIRST NAME: REVIVAL	SURNAME: MNGUNI
ORGANISATION: Dept of Agriculture	DESIGNATION: LAND USE ADVISOR
POSTAL ADDRESS: P/Bag X120, PRETORIA, 0001	
CODE: 0001	
PHONE: 012 - 319 7439	FAX: 012 - 329 5938
CELL: 078 475 3274	EMAIL: revivalm@daff.gov.za

Email:

Would you like to register as an interested and affected party? (please tick the appropriate box)

NOTE: You are required to register as an I&AP in order to receive further correspondence regarding the EIA process.

YES	✓
NO	

Please clearly state any interest you may have in the project and/or list your issues and concerns or questions you may have (use additional pages if required)

Registration and comments form for Issues & Concerns

From: Sandy Wren [sandy@publicprocess.co.za]
Sent: 17 November 2010 07:53 AM
To: 'Elton'
Subject: RE: UBUNTU 12/12/20/1752

Hi Bridget, we will ensure that the St Francis Kromme Trust remains on the database for the project.

Sandy Wren
Public Process Consultants
PO Box 27688, Greenacres, 6057
120 Diaz Road, Adcockvale, PE, 6001
Phone: 041 374 8426
Fax: 041 373 2002
Cell: 082 4909 828
www.publicprocess.co.za

From: Elton [mailto:eltonem@telkomsa.net]
Sent: 16 November 2010 04:55 PM
To: Sandy Wren
Subject: UBUNTU 12/12/20/1752

Dear Sandy

Please register the St Francis Kromme Trust as an I&A party:

Chairman: Chris Barratt. P.O.Box 76, St Francis Bay, 6312, tel 042 294 0596, e-mail: krommetrust@barratt.co.za

Regards
Bridget Elton

From: Sandy Wren [sandy@publicprocess.co.za]
Sent: 05 November 2010 10:15 AM
To: 'davidbarkes'
Subject: RE: Windcurrent SA (Pty) Ltd
Attachments: PProcess Ubuntu WindEnergy - for web.pdf; Zuurbron EIA - comment form pre scoping - final - 28Oct2010.pdf; Zuurbron EIA - Letter 1 Notice to IAPs - final for merging - 28Oct10.pdf

HI Dave and Carol

Thank you for providing us with your input. We will ensure that the issues you have raised are included in the Draft Scoping Report and the specialist studies that will form part of the EIA phase of the Assessment, this will include, amongst others, a Visual Impact Assessment and a Noise Impact

Assessment. Pleased find attached project documentation that is available. We will ensure that you are included on the project database and provided with notification of reports available for public comment. The first stage of the process, Scoping, entails identifying issues and concerns for inclusion in the specialists studies that will form part of the next phase of the project.

Sandy Wren
Public Process Consultants
PO Box 27688, Greenacres, 6057
120 Diaz Road, Adcockvale, PE, 6001
Phone: 041 374 8426
Fax: 041 373 2002
Cell: 082 4909 828
www.publicprocess.co.za

From: davidbarkes [mailto:info@kabeljauws.co.za]
Sent: 05 November 2010 09:03 AM
To: sandy@publicprocess.co.za
Subject: Windcurrent SA (Pty) Ltd

Dear Sir,
We would like to raise our concern regarding the proposed establishment of a wind energy facility between the Gamtoos and Kabeljauws Rivers.
Our home on the Kabeljauws River faces North in the direction of the project and we fear that our beautiful view , peace and tranquility will be disturbed.
Will you please add our concern onto the project register. If you visit our website www.kabeljauws.co.za you can see the view we are referring too.
Yours sincerely,

Dave and Carole Barkes
16 Lagune View
Jeffreys Bay
Tel 041-368 5816
Fax 041- 368 6257
mobile 079 505 3390
www.kabeljauws.co.za

From: Sandy Wren [sandy@publicprocess.co.za]
Sent: 11 November 2010 07:38 AM
To: 'Elsabe Koen'
Subject: RE: Ubuntu Wind Energy Project
Attachments: Zuurbron EIA - comment form pre scoping - final - 28Oct2010.doc; Zuurbron EIA - Letter 1 Notice to IAPs - final for merging - 28Oct10.pdf; PProcess Ubuntu WindEnergy - for web.pdf

Hi Elsabe

We will ensure that Donald is placed on the project database, attached are documents that are available on the project.

Sandy Wren
Public Process Consultants
PO Box 27688, Greenacres, 6057
120 Diaz Road, Adcockvale, PE, 6001
Phone: 041 374 8426
Fax: 041 373 2002
Cell: 082 4909 828
www.publicprocess.co.za

From: Elsabe Koen [mailto:elsabek@africoast.com]
Sent: 10 November 2010 09:28 AM
To: sandy@publicprocess.co.za
Cc: 'Donald McGillivray (Donald McGillivray)'
Subject: Ubuntu Wind Energy Project

Dear Sandy

Kindly register Mr Donald McGillivray as an interested party for the Ubuntu Wind Energy Project.

Regards

Elsabé Koen
Personal Assistant

Afri-Coast Engineers SA (Pty) Ltd PO Box 5104 E-Mail:elsabek@africoast.com
Cnr Rose & Havelock Street Walmer URL: www.africoast.com
Central 6065 Tel: +27 (41) 505 8000
Port Elizabeth South Africa Fax: +27 (41) 585 3437

Fax to Email: 086 295 7815

From: Sandy Wren [sandy@publicprocess.co.za]
Sent: 04 November 2010 02:41 PM
To: 'greg@cobcreek.com'
Subject: Windcurrent Wind Farm
Attachments: PProcess Ubuntu WindEnergy - for web.pdf; Zuurbron EIA - comment form pre scoping - final - 28Oct2010.doc; Zuurbron EIA - Letter 1 Notice to IAPs - final for merging - 28Oct10.pdf

Hi Greg

As discussed please find attached the documentation available on the project at this stage. I will ensure that you are placed on the project database and receive written notification of the various stages in the EIA process.

Please don't hesitate to contact me if you have any queries at any stage.

Sandy Wren
Public Process Consultants
PO Box 27688, Greenacres, 6057
120 Diaz Road, Adcockvale, PE, 6001
Phone: 041 374 8426
Fax: 041 373 2002
Cell: 082 4909 828
www.publicprocess.co.za

From: John Bouwer [john@bouwercorp.com]
Sent: 03 December 2010 01:38 PM
To: Sandy Wren
Cc: Danny Benson; Godfrey Africa; >
Subject: Re: Zuurbron Wind Energy

Dear Sandy

As the chamber we ask that you keep us updated of any information regarding the proposed wind farm.
We would also like to have a key focus group meeting between yourselves, the developers and the Executive
members of the chamber as a matter of urgency.

Please dont hesitate to contact us in this regard.

Kind Regards
J Bouwer
President
Kouga Black Chamber of Commerce
----- Original Message -----
From: Sandy Wren
To: 'John Bouwer'
Sent: Wednesday, November 17, 2010 9:44 AM
Subject: RE: Zuurbron Wind Energy

Hi John

Please see attached.

Sandy Wren
Public Process Consultants
PO Box 27688, Greenacres, 6057
120 Diaz Road, Adcockvale, PE, 6001
Phone: 041 374 8426
Fax: 041 373 2002
Cell: 082 4909 828
www.publicprocess.co.za

From: John Bouwer [mailto:john@bouwercorp.com]
Sent: 17 November 2010 09:25 AM
To: Sandy Wren
Subject: Re: Zuurbron Wind Energy

Dear Sandy

We reviewed the documents that you sended through to Shaun, However the attatced documents that you sended where you require us to state.
Would you like to register as an interested and affected party? (please tick the appropriate box)
Would you kindly send that one in another format please.We want the Kouga Black Chamber of Commerce to be place on your list as
a I/ AP.
I trust that you find the above-mentioned in order.
Kind Regards
John Bouwer
President
KBCC

----- Original Message -----
From: Sandy Wren
To: john@bouwercorp.com
Sent: Wednesday, November 10, 2010 12:24 PM
Subject: FW: Zuurbron Wind Energy

Information for Shaun

Sandy Wren
Public Process Consultants
PO Box 27688, Greenacres, 6057
120 Diaz Road, Adcockvale, PE, 6001
Phone: 041 374 8426
Fax: 041 373 2002
Cell: 082 4909 828
www.publicprocess.co.za

From: Sandy Wren [mailto:sandy@publicprocess.co.za]
Sent: 08 November 2010 03:09 PM
To: 's.geswindt@hotmail.com'
Subject: Zuurbron Wind Energy

Hi Shaun

Will ensure that you are registered on the database, I have attached some documentation that is available on the project at the moment.

I you have any queries at any stage please give me a call.

Sandy Wren
Public Process Consultants
PO Box 27688, Greenacres, 6057
120 Diaz Road, Adcockvale, PE, 6001
Phone: 041 374 8426
Fax: 041 373 2002
Cell: 082 4909 828
www.publicprocess.co.za

From: Sandy Wren [sandy@publicprocess.co.za]
Sent: 23 November 2010 08:49 AM
To: 'Leila Mahomed-Weideman'
Subject: RE: register as an I&AP for Ubuntu Windcurrent wind farm
Attachments: Zuurbron EIA - comment form pre scoping - final - 28Oct2010.doc; Zuurbron EIA - Letter 1 Notice to IAPs - final for merging - 28Oct10.pdf; PProcess Ubuntu WindEnergy - for web.pdf

Hi Leila

Will do, please find attached public participation documentation which is available at this stage of the process.

Regards

Sandy Wren
Public Process Consultants
PO Box 27688, Greenacres, 6057
120 Diaz Road, Adcockvale, PE, 6001
Phone: 041 374 8426
Fax: 041 373 2002
Cell: 082 4909 828
www.publicprocess.co.za

From: Leila Mahomed-Weideman [mailto:Leila.Mahomed-Weideman@mainstreamrp.com]
Sent: 22 November 2010 05:42 PM
To: sandy@publicprocess.co.za
Cc: Shahida Misbach
Subject: register as an I&AP for Ubuntu Windcurrent wind farm

Hi Sandy
Please can you register me as an I&AP for the Ubuntu Windcurrent wind farm.
Thanks
Leila

Leila Mahomed-Weideman
Director

Mainstream Renewable Power South Africa
1st Floor, St Albans on Cavendish,
Corner Osborne and Cavendish Roads, Claremont, 7708
alt. PO Box 45063, Claremont, 7735
Cape Town

Tel: +27 (0) 21-657 4043
Tel: +27 (0) 21-657 4040
Fax: +27 (0) 21-671 5665
Mob: +27 (0) 83 789 2923
leila.mahomed-weideman@mainstreamrp.com

please consider the environment - do you really need to print this email?

From: Fourie Lizna (ELS) [FourieL4@dwa.gov.za]
Sent: 08 December 2010 11:29 AM
To: Sandy Wren
Subject: FW: Ubuntu Wind Energy Project

Importance: High

Sandy

Herewith comments from our Resource Protection section

Regards

Lizna

From: Ntshebe Lorna
Sent: 08 December 2010 11:24 AM
To: Fourie Lizna (ELS)
Cc: Tshatshu Portrait; Sishuba Zanele (ELS)
Subject: FW: Ubuntu Wind Energy Project
Importance: High

Dear Lizna

Please receive Resource Protection comments regarding the above-mentioned development:

If the proposed development will be carried out below the 1:100 year floodline or riparian zone (whichever is the greatest), a water use authorization will be required,
If the Ubuntu Wind Energy project is likely to affect any wetlands, a water use license application in terms of Section 21 (c) & (i) of the National Water Act, 1998 (Act 36 of 1998) must be submitted to the department. Therefore, wetlands, if any, must be delineated and a technical report reflecting such should be submitted to the department,
If the proposed development will require any removal of vegetation and/or excavation of river banks, an authorization from the department will be required in terms of Section 21 (i) of the National Water Act, 1998 (Act 36 of 1998),
Any pipelines crossing a watercourse need to be authorized by the department in terms of Section 21 (c) & (i) of the National Water Act, 1998 (Act 36 of 1998) and
If the access gravel roads will cross any watercourse, and/or have any impact whatsoever on the watercourse, a water use authorization will be required.

Regards,

From: Fourie Lizna (ELS)
Sent: Monday, December 06, 2010 3:17 PM
To: Tshatshu Portrait; Ntshebe Lorna; Dweni Ncamile (PLZ)
Cc: Jacobs Joseph (PLZ); Bloem Marisa
Subject: FW: Ubuntu Wind Energy Project

Please see new development in WMA 15.

Regards

Lizna

From: Sandy Wren [mailto:sandy@publicprocess.co.za]
Sent: 06 December 2010 03:10 PM
To: Fourie Lizna (ELS)
Subject: Ubuntu Wind Energy Project

Hi Lizna

As discussed attached copies of the Ubuntu Wind Energy documents.

Sandy Wren
Public Process Consultants
PO Box 27688, Greenacres, 6057
120 Diaz Road, Adcockvale, PE, 6001
Phone: 041 374 8426
Fax: 041 373 2002
Cell: 082 4909 828
www.publicprocess.co.za

SCOPING AND ENVIRONMENTAL IMPACT ASSESSMENT PROCESS UBUNTU WIND ENERGY PROJECT, FARMS ZUURBRON AND VLAKTEPLAAS, KOUGA MUNICIPALITY

Windcurrent SA (Pty) Ltd, in a Joint Venture with WKN Windkraft Nord AG (the project applicants), are proposing the establishment of a wind energy facility, with a maximum generation capacity of 100 MW, on the Farms Zuurbron and Vlakteplaas in the Kouga Municipal area, Eastern Cape Province

Listed Activities: **GN R387 Activity 1. (a) (i), (ii) and (l); and 10. and in GN R386 Activity 15.**

Return Completed Reply Form by to:

Public Process Consultants, PO Box 27688, Greenacres 6057

Phone: 041 – 374 8426 or Fax 041-373 2002 or Email sandy@publicprocess.co.za

Please Complete all Relevant Sections Below and Return By: 3 December 2010

Please provide your full contact details:

FIRST NAME: Marisa	*SURNAME: Bloem*
ORGANISATION: Department of Water Affairs	*DESIGNATION:*
POSTAL ADDRESS: 140 Govan Mbeki Avenue, Starport building, Port Elizabeth	
CODE: 6000	
PHONE: 041 586 4884	*FAX: 086 560 5042*
CELL: 083 232 9822	*EMAIL: bloemm@dwa.gov.za*

Email:

Would you like to register as an interested and affected party? (please tick the appropriate box)

NOTE: You are required to register as an I&AP in order to receive further correspondence regarding the EIA process.

YES	√
NO	

Please clearly state any interest you may have in the project and/or list your issues and concerns or questions you may have (use additional pages if required)

From: Sandy Wren [sandy@publicprocess.co.za]
Sent: 30 November 2010 09:33 AM
To: 'Mark Ralph'
Subject: RE: Proposed Ubuntu Wind Engery Project
Attachments: PProcess Ubuntu WindEnergy - for web.pdf; Zuurbron EIA - comment form pre scoping - final - 28Oct2010.doc; Zuurbron EIA - Letter 1 Notice to IAPs - final for merging - 28Oct10.pdf

Hi Mark

Will do, please find attached documents that are available at this stage of the process.

Sandy Wren
Public Process Consultants
PO Box 27688, Greenacres, 6057
120 Diaz Road, Adcockvale, PE, 6001
Phone: 041 374 8426
Fax: 041 373 2002
Cell: 082 4909 828
www.publicprocess.co.za

From: Mark Ralph [mailto:MRalph@sovfoods.co.za]
Sent: 29 November 2010 05:37 PM
To: sandy@publicprocess.co.za
Subject: RE: Proposed Ubuntu Wind Engery Project

Hi Sandy

Hope you are well.

Will you keep both myself and Chris informed in this regard.

Thanks Mark

SCOPING AND ENVIRONMENTAL IMPACT ASSESSMENT PROCESS
UBUNTU WIND ENERGY PROJECT, FARMS ZUURBRON AND VLAKTEPLAAS, KOUGA MUNICIPALITY

Windcurrent SA (Pty) Ltd, in a Joint Venture with WKN Windkraft Nord AG (the project applicants), are proposing the establishment of a wind energy facility, with a maximum generation capacity of 100 MW, on the Farms Zuurbron and Vlakteplaas in the Kouga Municipal area, Eastern Cape Province
Listed Activities: **GN R387 Activity 1. (a) (i), (ii) and (l); and 10. and in GN R386 Activity 15.**

Return Completed Reply Form by to:

Public Process Consultants, PO Box 27688, Greenacres 6057
Phone: 041 – 374 8426 or Fax 041-373 2002 or Email sandy@publicprocess.co.za

Please Complete all Relevant Sections Below and Return By:

3 December 2010

Please provide your full contact details:

FIRST NAME:Mark	*SURNAME: Tanton*
ORGANISATION: Red Cap	*DESIGNATION: MD*
POSTAL ADDRESS: 24 Kestrel Way, Kenrock Estate, Hout Bay ,	
CODE: 7806	
PHONE:021 790 1382	*FAX:*
CELL:	*EMAIL:mark@red-cap.co.za*
Email:	

Would you like to register as an interested and affected party? (please tick the appropriate box)

NOTE: You are required to register as an I&AP in order to receive further correspondence regarding the EIA process.	**yes**

Please clearly state any interest you may have in the project and/or list your issues and concerns or questions you may have (use additional pages if required)

Wind developer active in region.

SCOPING AND ENVIRONMENTAL IMPACT ASSESSMENT PROCESS
UBUNTU WIND ENERGY PROJECT, FARMS ZUURBRON AND VLAKTEPLAAS, KOUGA MUNICIPALITY

Windcurrent SA (Pty) Ltd, in a Joint Venture with WKN Windkraft Nord AG (the project applicants), are proposing the establishment of a wind energy facility, with a maximum generation capacity of 100 MW, on the Farms Zuurbron and Vlakteplaas in the Kouga Municipal area, Eastern Cape Province
Listed Activities: **GN R387 Activity 1. (a) (i), (ii) and (l); and 10. and in GN R386 Activity 15.**

Return Completed Reply Form by to:

Public Process Consultants, PO Box 27688, Greenacres 6057
Phone: 041 – 374 8426 or Fax 041-373 2002 or Email sandy@publicprocess.co.za

Please Complete all Relevant Sections Below and Return By:

3 December 2010

Please provide your full contact details:

FIRST NAME: NCAMILE	*SURNAME:DWENI*
ORGANISATION:DWA	*DESIGNATION:SCIENTIST PRODUCTION*
POSTAL ADDRESS:P/BAG X6041, Port Elizabeth,	
CODE:6000	
PHONE:041 586 4884	*FAX:086 617 5223*
CELL:082 800 8363	*EMAIL:*
Email:dwenin@dwa.gov.za	

Would you like to register as an interested and affected party? (please tick the appropriate box)

NOTE: You are required to register as an I&AP in order to receive further correspondence regarding the EIA process.	**YES** X
	NO

Please clearly state any interest you may have in the project and/or list your issues and concerns or questions you may have (use additional pages if required)

TO LOOK TO ANY WATER USE LEGISLATION REQUIREMENT OF THIS PROJECT

From: Patrick Cull [mailto:pdhcull@iafrica.com]
Sent: 05 November 2010 07:59 AM
To: sandy@publicprocess.co.za
Subject: ubuntu wind energy project

Hullo Sandy

Trust you're well. As you may know I have left the Herald - doing some stuff for Weekend Post and planning to produce a business magazine for Nelson Mandela Bay in February next year.

Will you register as an interested party for the above project - the Eastern cape landscape is going to be one long windfarm!

Keep very well

Patrick

From: RevivalM [RevivalM@nda.agric.za]
Sent: 26 November 2010 08:48 AM
To: sandy@publicprocess.co.za
Cc: SiphesihleZ; MashuduMa
Subject: EIA - Ubuntu wind energy project, farms Zuurbron and vlakteplaas Kouga Municipality
Attachments: KMBT25020101126065932.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Sandy

Attached is a completed form for a representative from DAFF. This indicates an interest of DAFF to be involved in the above mentioned EIA process. Kindly confirm the receipt of this e-mail.

Many Thanks

Revival Mnguni
Subdivision of Agricultural Land

Tel: 012 - 319 7439
Fax: 012 - 329 5938
Mobile: 078 475 3274
E-mail: RevivalM@daff.gov.za

From: Sandy Wren [sandy@publicprocess.co.za]
Sent: 08 November 2010 03:09 PM
To: 's.geswindt@hotmail.com'
Subject: Zuurbron Wind Energy
Attachments: PProcess Ubuntu WindEnergy - for web.pdf; Zuurbron EIA - comment form pre scoping - final - 28Oct2010.doc; Zuurbron EIA - Letter 1 Notice to IAPs - final for merging - 28Oct10.pdf

Hi Shaun

Will ensure that you are registered on the database, I have attached some documentation that is available on the project at the moment.

I you have any queries at any stage please give me a call.

Sandy Wren
Public Process Consultants
PO Box 27688, Greenacres, 6057
120 Diaz Road, Adcockvale, PE, 6001
Phone: 041 374 8426
Fax: 041 373 2002
Cell: 082 4909 828
www.publicprocess.co.za