## 3 EIA PROCESS AND METHODOLOGY

#### 3.1 Introduction

The Environmental Impact Assessment (EIA) process for the proposed 1 GW Upington Solar Park comprises of two main phases, namely the Scoping and Impact Assessment phase. This report documents the tasks which were undertaken as part of the Scoping phase of the EIA. These tasks include the public participation process and the documentation of the issues that were identified as a result of these activities.

The Scoping Phase of an EIA serves to define the scope of the detailed assessment of the potential impacts of a proposed Project. The Environmental Scoping Phase was undertaken in accordance with the requirements of sections 24 and 24D of the National Environmental Management Act (NEMA) (Act 107 of 1998), as read with Government Notices R 543 (Regulations 26-30), 544, 545 and 546 of the NEMA. The objectives of the Scoping Phase are to:

- Ensure that the process is open and transparent and involves the Authorities, proponent (developer) and stakeholders (see Chapter 1 and 3);
- Identify the important characteristics of the affected environment (see Chapter 4 and 5);
- Ensure that feasible and reasonable alternatives are identified and selected for further assessment (see **Chapter 2**);
- Assessment and determination of possible impacts of the proposed Project on the biophysical and socio-economic environment and associated mitigation measures (see Chapter 5); and
- Ensure that there is compliance to the relevant and applicable legislation (see Chapter
   3).

### 3.2 Authority Consultation

#### 3.2.1 Consultation with Authorities

The relevant authorities required to review the proposed Project and provide an Environmental Authorisation were consulted from the outset of this study, and are engaged throughout the project process. The competent authority for this project is the National Department of Environmental Affairs (DEA). The Northern Cape Department of Environment and Nature Conservation (DENC) and the //Khara Hais Local Municipality are noted as the key commenting authorities.

Authority consultation included the following activities:

 Submission of an application for authorisation in terms of NEMA (Act 107 of 1998) to DEA. Authorisation to continue with the Scoping Phase of the project was granted when the application was accepted and acknowledged by the DEA under the following reference number allocated by DEA: **14/12/16/3/3/2/588.** The DENC reference number allocated is **NC/NAT/ZFM///KHA/UPI/2014.** 

Authority site visit and meeting took place on the 2<sup>nd</sup> of April 2014 with National,
 Provincial and local government including the Department of Water Affairs.

A record of the consultation or engagement with authorities prior to and during the Scoping Phase is listed in **Appendix A** of this report.

### 3.2.2 Consultation with other Relevant Authorities

Background information regarding the proposed Project was provided to the other relevant authorities, together with a registration and comment form formally requesting their input into the EIA process. The authorities include *inter alia*:

- National, provincial and local government departments (including DEA, DENC, Department of Water Affairs (DWA), South African Heritage Resources Agency (SAHRA), Department of Agriculture and Land Reform, SANRAL, Department of Agriculture Forestry and Fisheries (DAFF), Rural Development and Land Reform, Northern Cape Provincial Heritage Resource Agency (PHRA), Finance Economic Affairs and Tourism, Social Development, Sports and Arts and Culture, Transport, Safety and Liaison and Nature Conservation.
- Government Structures (including Department of Roads and Public Works, Town & Regional Planning, Department of Co-operative Governance Human Settlements & Traditional Affairs, Department of Labour: Inspection & Enforcement Services, Department of Home Affairs, SA Army, Department of Education, Department of Health, Department of Land Affairs and Department of Government Communication & Information System.
- //Khara Hais Local Municipality and ZF Mqcawu District Municipality; and
- Department of Energy (DoE).

## 3.3 Environmental Scoping Study

### 3.3.1 Overview of the Public Participation Process

A comprehensive Public Participation Process (PPP) was implemented as part of the Scoping Phase of the EIA. The PPP aims to:

- Ensure all relevant stakeholders and I&APs are identified and invited to engage in the scoping process;
- Raise awareness, educate and increase understanding of stakeholders and I&APs about the proposed Project, the affected environment and the environmental process being undertaken;
- Create open channels of communication between stakeholders and the project team;
- Provide opportunities for stakeholders to identify issues or concerns and suggestions for enhancing potential benefits and to prevent or mitigate impacts;

- Accurately document all opinions, concerns and queries raised regarding the Project;
   and
- Ensure the identification of the significant alternatives and issues related to the Project.

## (a) Identification of stakeholders or I&APs

The identification and registration of I&APs is an ongoing activity during the course of the EIA. Please note however that only a registered I&AP is entitled to comment, in writing, on all written submissions made to the competent authority by the applicant or the EAP managing an application, and to bring to the attention of the competent authority any issues which that party believes may be of significance to the consideration of the application, provided that comments are submitted within the timeframes that have been approved or set by the competent authority or any extension of a timeframe agreed to by the applicant or Environmental Assessment Practitioner (EAP). Lidwala EPS will develop, maintain and constantly update an electronic I&AP database for the Project (see **Appendix C**). The I&APs for this Project have been identified using the following:

- Existing I&APs databases from other projects in the area;
- I&APs identified through networking by the project team;
- Placement of newspaper advertisements in the Sunday Times, Volksblad and the Gemsbok. The advertisements were placed during the week of 2 – 7 February 2014;
- Placement of site notices at the proposed site locations;
- Distribution of Background Information Documents (BIDs);
- Discussions with community leaders and relevant ward councillors;
- Completed comments sheets; and
- Attendance registers at meetings.

All comments and issues submitted by I&APs during the course of the EIA will be recorded in a comment and response report.

### (b) Notification and Advertisements

In accordance with the requirements of the NEMA EIA Regulations, the Project was advertised in regional newspapers. The purpose of the advertisement was to notify the public about the proposed Project and to invite them to register as I&APs (see **Appendix D**). The relevant advertisement dates undertaken during Scoping is listed in **Table 3.1** below.

Table 3.1: Date on which the EIA notification adverts were published

Newspaper	Publication Date	Language
Sunday Times	2 February 2014	English
Volksblad	5 February 2014	English and Afrikaans
Gemsbok	7 February 2014	Afrikaans and English

The Project, the environmental impact assessment process was widely announced with an invitation to the general public to register as I&APs and to actively participate in the PPP. This will be achieved by using:

- Print media advertisements in English and Afrikaans that were placed in the Sunday Times, Volksblad and the Gemsbok newspapers;
- Key Stakeholders were either contacted telephonically or notified in writing and informed of the Project and the EIA process (refer to **Appendix E** for the proof of notification and also the authority database);
- A Background Information Document (BID) and comment sheet were produced in English and Afrikaans detailing the proposed Project and explaining the EIA process.
   The BID was emailed and posted to I&APs;
- Copies of the BID were made available to I&APs as and when requested. Public documents were also made available in public libraries and other local public venues.

General project notices were erected at various public places in and around the study area. The official site notices were erected as per the NEMA EIA Regulations at the proposed Solar Park site.

A second round of advertisements was published in order to notify the public about the availability of the Draft Scoping Report as well as to invite the public to attend the Public Meetings. The advertisement reflected the date and venue where the Public Meetings were to take place (see **Appendix D**).

### (c) Background Information Document

The Background Information Document (BID) that briefly describes the proposed Project was compiled in English and Afrikaans and was distributed to all identified I&APs. The BID introduces the proposed Project and contains background information on the Project, the proponent, consultants and proposed process to be followed. It also includes a locality map, and a registration/comment sheet inviting I&APs to submit details of any issues, concerns or inputs they might have with regards to the proposed Project. The BID was distributed via e-mail and post to the I&APs identified through networking and was also distributed to the attendees at the Public Meetings. The BID was also placed at public venues such as the municipality, clinic and library. A copy of the BID is included in **Appendix G.** 

### (d) Meetings

Public meetings are to be held during the review period of the draft Scoping Report. Oneon-one interactions will also be held as required. The purpose of these meetings is to present the I&APs with information pertaining to the Project and the process being followed, as well as to document and discuss any issues which the public wish to raise. Invitations to the Public Meetings were extended in advertisements, letters, telephone and public notices at numerous relevant public places. **Table 3.2** provides the date and venue where the public meetings are to be held.

Table 3.2: Public Meetings

Date		Type of meeting	Time	Venue
Thursday,	24	Authorities/Stakeholders	10:00 -	Tol Speelman Hall, Clarkia
July 2014		Focus Group Meeting	12:00	Road, Upington
Thursday,	24	Landowner Focus Group	15:00 -	Tol Speelman Hall, Clarkia
July 2014		Meeting	17:00	Road, Upington
Thursday,	24	Public Meeting	18:00 -	Tol Speelman Hall, Clarkia
July 2014			20:00	Road, Upington

Minutes of meetings held with I&APs will be taken and will be forwarded to the attendees for verification of their issues. The minutes of the consultation will be included within the Final Scoping Report. The comments raised during the public participation process described above, will be recorded in the updated Comment and Response Report and will also be included in the Final Scoping Report.

## (e) Ongoing Consultation and Engagement

In addition to the public documents distributed to I&APs, there will be ongoing communication between the applicant, the EIA team and I&APs throughout the EIA process. These interactions include the following:

- In addition to the project announcement letters, a letter will be sent out to all registered I&APs providing them with an update of the Project once the Scoping report has been approved;
- Interactions with I&APs will take place in English and Afrikaans where required;
- Feedback to stakeholders, individually and collectively;
- Written responses (email, faxes and letters) will be provided to I&APs acknowledging issues and providing information requested (dependent on availability);
- As per the NEMA EIA regulations, particular attention will be paid to landowners, and neighbouring communities, specifically where literacy levels and language barriers may be an issue.

The consultation with all stakeholders and I&APs will continue into the Impact Assessment and EMP phase. Consultation will continue and will include:

- Distribution of all project information and findings to I&APs;
- EIA feedback open days and public meetings; and
- Information in the media and press.

## 3.3.2 Public Review of the Draft Environmental Scoping Report

The draft Environmental Scoping Report has been made available for review for a period of **40 calendar days** from **03 July 2014** to **12 August 2014** at the following public locations within the study area, which are readily accessible to I&APs:

- Upington Public Library
- Keimoes Public Library
- Lidwala Website

The availability of the draft Environmental Scoping Report was advertised in the following newspapers on  $\mathbf{3}^{rd}$  and the  $\mathbf{4}^{th}$  of **June 2014** (**Appendix D**):

- Volksblad
- Gemsbok

The review of the Final report will follow the same notification process as described above.

All registered I&APs were notified of the availability of the report in writing. Comments received during the review period will be\_included in the comment and response report.

## 3.3.3 Final Environmental Scoping Report

The final stage in the Environmental Scoping Study process entails the capturing of responses and comments from I&APs on the draft Scoping Report in order to refine the Environmental Scoping Report, and ensure that all issues of significance are addressed. The final Environmental Scoping Report will be submitted to DEA for review and decision-making.

#### 3.4 Regulatory and Legal Context

This section of the Draft Scoping Report details applicable legal provisions and the legal context for the EIA. It provides a preliminary review of relevant national legislation and regulations, which are applicable to (or have implications for) the proposed project in the Republic of South Africa.

The regulatory hierarchy for the Upington Solar Park consists of three tiers of authority (National, Provincial and Local). A Solar Park development involve different government sectors (economic, spatial, biophysical, and cultural) and for this reason a variety of statutory bodies are likely to be involved.

## 3.4.1 Regulatory Hierarchy

At National Level, the main regulatory agencies are:

- Department of Energy: This department is responsible for policy relating to all energy forms, including renewable energy, and is responsible for forming and approving the IRP (Integrated Resource Plan for Electricity).
- National Energy Regulator of South Africa (NERSA): This body is responsible for regulating all aspects of the electricity sector.
- Department of Environmental Affairs (DEA): This Department is responsible for environmental policy and is the controlling authority in terms of NEMA and the EIA Regulations. DEA is the competent authority for this project, and charged with granting the relevant environmental authorisation.
- The South African Heritage Resources Agency (SAHRA): The National Heritage Resources Act (Act No 25 of 1999) and the associated provincial regulations provides legislative protection for listed or proclaimed sites, such as urban conservation areas, nature reserves and proclaimed scenic routes.
- South African National Roads Agency Limited (SANRAL): This department is responsible for all National road routes.
- Department of Agriculture, Forestry and Fisheries (DAFF): This department is responsible for activities pertaining to subdivision and rezoning of agricultural land. The forestry section is responsible for the protection of tree species under the Forestry Act (Act No 84 of 1998).
- Department of Water Affairs (DWA). This department is the permitting authority for water resource protection, water use licensing and permitting. Water uses is authorised at a National level trough a Water Use License Application (WULA).
- Department of Transport Civil Aviation Authority: This department is responsible for aircraft movements and radar, which are aspects that influence the Solar Park development location and planning.
- Eskom: Commenting authority regarding Eskom infrastructure and grid connection.
- Department of Government Communication & Information System.

## At *Provincial* Level, the main regulatory agencies are:

- Northern Cape- Department of Environment and Nature Conversation (DENC). This
  department is the commenting authority for this project. This department is also the
  statutory custodian of biodiversity in the Northen Cape and commenting authority
  concerning potential impacts on biodiversity and protected plant species in the
  Northern Cape.
- Department of Transport and Public Works, Northern Cape. This department is responsible for roads and the granting of exemption permits for the conveyance of abnormal loads on public roads.
- Northern Cape Department of Water Affairs (DWA). This department is the permitting authority for water resource protection and water use licensing (water crossings etc.).
- Northern Cape Heritage Authority: This authority is responsible for heritage related issues in the Northern Cape.
- Northern Cape Department of Agriculture, Land Reform and Rural Development: This department is responsible for agricultural land in the Northern Cape.

• Department of Mineral Resources (DMR): This department is responsible for the management of Mineral Resources in terms of the Mineral Resources Development Act (Act No 28 of 2002). Approval of for example possible borrow pit or mining right applications will be trough the DMR.

At *Local* Level the local municipality is the principal regulatory authorities responsible for planning, land use and the environment.

- The proposed project is located within the //Khara Hais Local Municipality which is located within the ZF Mgcawu District Municipality.
- In terms of the Municipal Systems Act (Act No 32 of 2000) it is compulsory for all municipalities to go through an Integrated Development Planning (IDP) process to prepare a five-year strategic development plan for the area under their control.
- Local Spatial Development Frameworks has reference such as the ZF Mgcawu District Municipality SDF.
- By-laws and policies have been formulated by local authorities to protect visual and aesthetic resources relating to urban edge lines, scenic drives, special areas, signage, communication masts, etc.

Other Community Based Organisations (CBO's) and Non-Government Organisations (NGO's) also play a role in renewable energy projects for example Birdlife Africa.

## 3.4.2 Legislation and Guidelines

One of the main foci of this section is on the provisions of the National Environmental Management Act (NEMA). NEMA is the primary South African legislation governing the requirements for environmental impact assessment. In the context of the new proposed Upington Solar Park EIA, the provisions of NEMA and the associated EIA Regulations (regarding scoping and EIA) are of fundamental relevance.

The following legislation and guidelines have informed the scope and content of the Draft Scoping Report:

- Section 24 (2)(a) of the NEMA entitles the Minister to identify activities which may not commence without environmental authorisation from the competent authority. These activities were published in a Government Notice (i.e. GN No. R. 544 and GN No. R. 545) in the Government Gazette on 18 June 2010, together with a third Government Notice (GN No. R. 543) on regulations for the administration of EIAs.
- Companion to the National Environmental Act (NEMA) Environmental Impact Assessment (EIA) Regulations of 2010 (Draft Guideline; DEA, 2010).
- Public Participation in the EIA Process (DEA, 2012).
- Guideline on alternatives (August 2010 DEA&DP).
- Guidelines for involving specialists in EIA process (including Heritage, Biodiversity, Visual & Aesthetic, EMP) DEA&DP.
- Guideline on Need and Desirability (August 2010 DEA&DP).

# 3.4.3 General Legislative Overview

Various pieces of legislation are applicable to this project. A limited scoping of the relevant legislation was undertaken in order to identify any legal issues related to the proposed project. Applicable environmental legislation, which must be considered by the applicant during the implementation of the proposed project, is summarised in **Table 3.3** below. A full legal review will be conducted as part of the EIA Study.

**Table 3.3:** Summary of applicable national environmental legislation

Legislation	Sections	Relates to
The Constitution (Act No 108 of 1996)	Chapter 2	Bill of Rights.
	Section 24	Environmental rights.  "Everyone has the right –  (a) to an environment which is not harmful to their health or well-being; and  (b) to have the environment protected for the benefit of present and future generations, through reasonable legislative and other measures that-  i. prevent pollution and ecological degradation;  ii. promote conservation; and  iii. secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development"
	Section 25	Rights in property.
	Section 32	Right to access of information. the Constitution confers on every person the right of access to:  (a) any information held by the state; and (b) any information that is held by another person and that is required for the exercise or protection of any rights.
	Section 41	The principles of co-operative governance and intergovernmental relations

Legislation	Sections	Relates to
		The principal purpose of the Promotion of Administrative Justice Act ("PAJA") is "to give effect to the right to administrative action that is lawful, reasonable and procedurally fair and to the right to written reasons for administrative action as contemplated in section 33 of the Constitution and to provide for matters incidental thereto."
The Promotion of Administrative Justice Act (Act 3 of 2000)	-	Administrative law governs the relationships between public bodies, and between public and private bodies and/or individuals. Because so many activities which affect the environment require authorisation from a public body, and environmental conflicts might arise from the exercise of administrative decision-making powers, administrative law principles are of particular relevance to environmental law generally, and specifically in the context of the environmental authorisation requirements stipulated by the provisions of section 24 of the NEMA read together with the EIA regulations.
Promotion of Access to Information Act (Act 2 of 2000)	-	The purpose of the Promotion of Access to Information Act ("PAIA") is "(t)o give effect to the constitutional right of access to any information held by the State and any information that is held by another person and that is required for the exercise or protection of any rights, and to provide for matters connected therewith."  Under the Constitutional right of access to information, everyone has the right of access to all information held by the State, and any
Information Act (Act 2 of 2000)		information held by non-State parties which is required for the exercise or protection of rights. This right prevails over statutory provisions that unreasonably limit disclosure of information.  PAIA gives effect to the Constitutional right of access to information, and lays down detailed procedures in respect of access to the records of public and/or private bodies. Only in certain circumstances, laid down in PAIA, may access to information be refused

Legislation	Sections	Relates to
National Environmental	Section 2	Defines the strategic environmental management goals and objectives of the government. Applies throughout the Republic to the actions of all organs of state that may significantly affect the environment.
Management Act (No 107 of 1998)	Section 24(a) &(d) &24(5)	Listed activities and Regulations
	Section 28	The developer has a general duty to care for the environment and to institute such measures as may be needed to demonstrate such care.
National Environmental Management: Biodiversity Act No 10 of 2004	Section 56	The Act requires that organs of state manage, conserve and sustain South Africa's biodiversity and genetic resources. Act responsible to assist in management, conservation of biological diversity as well as\ ensuing sustainable use and equitable sharing of benefits derived.  A list of threatened & protected species has been published in terms of S56 (1) - Government Gazette 29657. Threatened and Protected Species Regulations, 2007), GN R 151 (Lists of critically endangered, vulnerable and protected species) and GN R 152 (Threatened or Protected Species Regulations). Provides for listing threatened or protected ecosystems, in one of four categories: critically endangered (CR), endangered (EN), and vulnerable (VU) or protected. The limitation of further loss of biodiversity and conserve endangered ecosystems.
		Specialist flora and fauna studies are required to be undertaken as part of the EIA process. A permit may be required should any protected plant species on site be disturbed or destroyed as a result of the proposed development.
National Environmental Management: Protected Areas Act No 57 of 2003	-	To provide for the protection and conservation of ecologically viable areas representative of South Africa's biological diversity and its natural landscapes and seascapes; for the establishment of a national register of all national, provincial and local protected areas; for the management of those areas in accordance with national norms and standards; for intergovernmental cooperation and public consultation in matters concerning protected areas; and for matters in connection therewith

Legislation	Sections	Relates to
National Environmental Management: Protected Areas Act No 31 of 2004	-	To amend the National Environmental Management: Protected Areas Act, 2003, to provide for the application of that Act in relation to national parks and marine protected areas; and to provide for matters connected therewith
	Section 2	General policy.
Environment Conservation Act (No 73 of 1989)	Section 19, 20	This Act deals with the effective protection of the environment and more specifically waste management (section 20), discarding of waste (section 20(6) and the prohibition of littering (section 19(1)).
	Section 25	In terms of section 25 of the ECA, the national noise-control regulations (GN R154 in Government Gazette No. 13717 dated 10 January 1992) were promulgated. The NCRs were revised under Government Notice Number R. 55 of 14 January 1994 to make it obligatory for all authorities to apply the regulations.
		There is no requirement for a noise permit in terms of the legislation. A Noise Impact Assessment is required to be undertaken as part of the EIA in accordance with SANS 10328.
The Conservation of Agricultural Resources Act (No 43 of 1983)	Section 5, 6	Implementation of control measures for alien and invasive plant species.  Regulation 15 of GNR1048 provides for the declaration of weeds and invader plants, and that these plants must not occur on land and that such plants must be controlled by the methods set out in Regulation 15E.  While no permitting or licensing requirements arise from this legislation, this Act will find application throughout the life cycle of the project. In this regard, soil erosion prevention and soil conservation strategies must be developed and implemented. In addition, a weed control and management plan must be implemented.
Subdivision of Agricultural Land Act (Act No 70 of 1970)	-	Details land subdivision requirements and procedures. Applies for subdivision of all agricultural land.
National Building Regulations (Government Gazette, 12 October 1990)	Section P	Section P of these regulations deals specifically with drainage requirements including the need to ensure that waterborne sewage is disposed in an appropriate manner. This includes ensuring that no sewage is discharged into any stormwater drains, river stream or natural

Legislation	Sections	Relates to
		watercourse.
National Heritage Resources Act (No 25 of 1999)	Section 38	Provides general principles for governing heritage resources management throughout South Africa including national and provincial heritage sites, burial grounds and graves; archaeological and palaeontological sites, and public monuments and memorials.  Section 38 states that Heritage Impact Assessments (HIAs) are required for certain kinds of development including any development or activity which will change the character of a site exceeding 5 000 m² in extent. Standalone HIAs are not required where an EIA is carried out as long as the EIA contains an adequate HIA component that fulfils the provisions of Section 38.  A permit may be required should Identified cultural/heritage sites on site be required to be
		disturbed or destroyed.  Protected trees: The prohibitions provide that ' no person may cut, damage, disturb, destroy or remove any
National Forest Act No 84 of 1998	Section 15	protected tree, or collect, remove, transport, export, purchase, sell, donate or in any other manner acquire or dispose of any protected tree, except under a licence granted by the Minister'. Forests:  Prohibits the destruction of indigenous trees in any natural forest without a licence.
		A permit or license is required for the destruction of protected tree species and/or indigenous tree species within a natural forest.

Legislation	Sections	Relates to
National Veld and Forest Fire Act 101 of 1998	Section 3,12,21	Section 1: The purpose of this Act is to prevent and combat veld, forest and mountain fires throughout the Republic and in this regard the Act provides for a variety of institutions, methods and practices for achieving the purpose. This includes the formation of fire protection associations (section 3) and the duty to prepare and maintain fire breaks (section 12).  In terms of Section 21 the applicant would be obliged to burn firebreaks to ensure that should a veld fire occur on the property, that it does not spread to adjoining land.  In terms of section 12 the applicant must ensure that the firebreak is wide and long enough to have a reasonable chance of preventing the fire from spreading, not causing erosion, and is reasonably free of inflammable material.  While no permitting or licensing requirements arise from this legislation, this act will find
National Water Act No 36 of 1998	Section 19	application during the operational phase of the project  Prevention and remedying effects of pollution  This section places a duty on the developer to establish whether any of its activities caused, causes or may cause pollution to a water resource. In order to do this, monitoring of water must be done on a regular basis. If any such pollution or possible pollution has been identified, reasonable measures must be taken to prevent the continuation or recurrence thereof. The effectiveness thereof must be monitored and if such pollution is not prevented, other measures must be investigated. Measures must also be taken for any future activities which may cause pollution to water resources.  Control of emergency incidents
	Section 20	The developer needs to identify the possibility of any substances used which may cause significant pollution of water resources during an accident or incident. Management procedures need to be implemented to prevent such accident or incident.
	Section 21	Water uses requiring water use license applications. Eleven different water uses are listed in Section 21 (a) to (k) for which some of them will apply to Solar Park.

Legislation	Sections	Relates to
Water Services Act (Act 108 of 1997)	Section 7	The general purpose of this act is the provision for access to basic water supply and sanitation frameworks for water service institutions and water service providers and the monitoring of water service providers. It includes industrial use of water and the discharge of industrial effluent.
National Environmental Management: Air Quality Act	Sections 26-27	Control of fuels.
(No 39 of 2004)	Section 32	Control of dust.
National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)	-	The purpose of this Act is to reform the law regulating waste management in order to protect health and the environment by providing for the licensing and control of waste management activities.  The Act provides listed activities requiring a waste license.
Aviation Act (Act No. 74 Of 1962)	-	Any structure exceeding 45m above ground level or structures where the top of the structure exceeds 150m above the mean ground level, the mean ground level considered to be the lowest point in a 3km radius around such structure. Structures lower than 45m, which are considered as a danger to aviation shall be marked as such when specified.
Nature Conservation Ordinance (Act 19 of 1974)	-	Article 63 prohibits the picking of certain flora (including cutting, chopping, taking, gathering, uprooting, damaging or destroying). Schedule 3 lists endangered flora and Schedule 4 lists protected flora.
Occupational Health and Safety Act (No 85 of 1993)	-	In general this act provides for the health and safety of persons at work. However, many regulations have been promulgated in terms of this act which is of an environmental nature.
National Road Traffic Act (Act No 93 of 1996)		An abnormal load/vehicle permit may be required to transport the various components to site for construction.  These include: Route clearances and permits will be required for vehicles carrying abnormally heavy or abnormally dimensioned loads.  Transport vehicles exceeding the dimensional limitations (length) of 22m.

Legislation	Sections	Relates to
Development Facilitation	Section 2-4	Provides for the overall framework and administrative structures for planning throughout the Republic.
Act (Act No 67 of 1995)		Section 2-4 provides general principles for land development and conflict resolution.
Hazardous Substances Act (Act No 15 of 1973)		This Act regulates the control of substances that may cause injury, or ill health, or death by reason of their toxic, corrosive, irritant, strongly sensitising or inflammable nature or the generation of pressure thereby in certain instances and for the control of certain electronic products. To provide for the rating of such substances or products in relation to the degree of danger; to provide for the prohibition and control of the importation, manufacture, sale, use, operation, modification, disposal or dumping of such substances and products.  It is necessary to identify and list all the Group I, II, III and IV hazardous substances that may be on the site and in what operational context they are used, stored or handled. If applicable, a license is required to be obtained from the Department of Health.
Fertilisers, Farm Feeds, Agricultural Remedies and Stock Remedies Act (No 36 of 1947)	Sections 3 to 10	Control of the use of registered pesticides, herbicides (weed killers) and fertilisers. Special precautions must be taken to prevent workers from being exposed to chemical substances in this regard.
Minerals and Petroleum Resources Development Act (Act No 28 of 2002)	Section 39,53	A mining permit or mining right may be required where a mineral in question is to be mined (e.g. material from a borrow pit) in accordance with the provisions of the Act.  Requirements for Environmental Management Programmes and Environmental Management Plans are set out in section 39 of the Act.

Legislation	Sections	Relates to
Astronomy Geographic Advantage Act (Act No 21 of 2007)		In terms of Section 7 (1) and 7(2) of this Act, the Minister declared core astronomy advantage areas on 20 August 2010 under regulation No 723 of G.N No 33462. All land within 3 kilometre radius from the centre of the South African large Telescope dome falls under Sutherland Core Astronomy Advantage Area. This also apply to the advantage areas of the MeerKAT and the planned Square Kilometre Array (SKA) radio telescopes.
	Section 7,22,23	Any transmitters that are to be established, or have been established, at the site for the purposes of voice and data communication will be required to comply with the relevant AGA regulations concerning the restriction of use of the radio frequency spectrum that applies in the area concerned. It should be noted that the establishment of any radio communication equipment is likely to represent a high risk of detrimental impact on the SKA, and that the developers are advised to coordinate with the SKA office on this matter.
Fencing Act No 31 of 1963		The purpose of this act is to consolidate the laws relating to fences and the fencing of farms and other holdings and matters incidental thereto.  Section 10: Repair of boundary fences  The Act does not include any erf, stand or lot situated within a municipality or borough or proclaimed town, village or township unless such erf, stand or lot is at least three morgen in extent and is one of a number contiguous to each other on which operations are carried on.

**Table 3.4:** Summary of applicable provincial environmental legislation and Guidelines

Legislation	Provisions & Applicability
Northern Cape Nature	To provide for the sustainable utilisation of wild
Conservation Act, 2009	animals, aquatic biota and plants.
Northern Cape Planning and	This Act regulates the following:
Development Act no 7 of 1998	Land use restrictions and rezoning; and
	Subdivision.
	This will be applicable to any planning
	and land development related activities
	and serves to guide the administration

	of any spatial plans, policies, etc.
	Application made in terms of this
	Ordinance must include a flood-line
	certificate indicating whether the land
	or any portion is or is not subject to a 1
	in 50 year flood-line.
Guidelines to minimise the impact on	Due to the high impact of renewable energy
birds of Solar Facilities and Associated	production on avifauna, Birdlife South Africa
Infrastructure in South Africa	developed a guideline titled "Guidelines to
	minimise the impact on birds of Solar Facilities
	and associated infrastructure in South Africa"
	which lists the possible impacts and proposed
	mitigation measures for both Photovoltaic (PV)
	and Concentrated Solar Power (CSP)
	technologies. The guideline indicate that CSP
	farms potentially have greater impacts on
	birds than PV farms because of the associated
	central receiver tower, standby focal points
	and heliostats, which should be taken into
	consideration during site selection.
Northern Cape Provincial Spatial	The development of a large scale renewable
Development Framework (2012)	energy supply is strategically important to
	increase the diversity of energy supplies in the
	Northern Cape Province and promote green
	economy.
ZF Mgcawu District Municipality	All future development in the ZF Mgcawu
Environmental Management Framework	District will need to fit in with the unique
(2008)	features and character of the area.

## 3.5 National Policy and Planning Context

# 3.5.1 White Paper on the Energy Policy of the Republic of South Africa

The White Paper on the Energy Policy of the Republic of South Africa (The Energy Policy) was published by the Department of Minerals and Energy (DME) in December 1998.

The Energy Policy governs development within the energy sector in South Africa, and has five policy objectives which are as follows:

Increased access to affordable energy services;

- Improved energy governance;
- Stimulating economic development;
- Managing energy related environmental and health impacts; and
- Securing supply through diversity.

In order to achieve a balance between energy demand and resource availability, the Energy Policy identifies the need to undertake an Integrated Energy Planning process, while also taking into account health, safety and environmental parameters. The need for the implementation of a National Integrated Resource Plan (NIRP) is also identified in the Energy Policy.

This approach would provide a long-term cost-effective recourse plan for meeting electricity demand that is consistent with reliable electricity supply and environmental, social and economic policies.

Investments in renewable energy projects are supported by this white paper.

## 3.5.2 White Paper on Renewable Energy (November 2003)

The White Paper on renewable energy sets out Government's vision, policy principles, strategic goals and objectives for promoting and implementing renewable energy in South Africa.

#### 3.5.3 Energy Security Master Plan – Electricity (2007-2025)

The Electricity Security Master Plan was compiled by the DME in 2007. The plan addresses all aspects of the electricity sector including generation, transmission and distribution as well as Demand Side Management and energy efficiency initiatives for the period 2007-2025. The goals of the Master Plan are as follows:

- Supporting economic growth and development;
- Improving the reliability of electricity infrastructure;
- Providing a reasonably priced electricity supply;
- Ensuring the security of electricity supply as set by a security of supply standard;
- Diversifying the primary energy sources of electricity;
- Meeting the renewable energy targets as set in the Energy White Paper;
- Increasing access to affordable energy services;
- Reducing energy usage through energy efficiency interventions;
- Accelerating household universal access to electricity; and
- Clarifying some of the policy issues in the context of an evolving electricity sector.

# 3.5.4 National Spatial Biodiversity Assessment ("NSBA")

The NSBA establishes protection and conservation priority status for terrestrial, inland water, estuarine and marine ecosystems at a 1:250,000 scale nationally and suggested implementation options for priority areas. It provides the national context for

development of biodiversity plans at the sub-national and local scale. For each vegetation type a defensible target has been determined, based on protecting 75% of species occurring in that vegetation type. Ecosystem status is thus based on the percentage of the original area remaining untransformed in relation to the biodiversity target, and a threshold for ecosystem functioning. Conservation priority areas indicate where there is a need for finer scale planning, expansion of the protected area system and integration of biodiversity-compatible development and resource management across the landscape and seascape, including on private and communal land.

## 3.5.5 Draft National Strategy for Sustainable Development

The (draft) National Strategy for Sustainable Development stems from Section 24 of the Constitution and particularly the phrase "secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development."

Although still in development, the final product is set to be used by government and stakeholders to enhance South Africa's long term planning capacity. It would specifically influence national and provincial development strategies, such as the National Spatial Development Perspective, the Provincial Growth and Development Strategies and other cross-sectoral development programmes. The (draft) National Strategy notes that the nation's biodiversity provides critical ecosystem services on which socio-economic systems depend.

### 3.6 Conclusion

This chapter discussed the various tasks that were undertaken as part of the scoping phase of the EIA process including the relevant regulatory and legal context. The main component includes the Public Participation Process that was undertaken as part of the scoping phase. The Environmental Scoping Phase was undertaken in accordance with the requirements of sections 24 and 24D of the National Environmental Management Act (Act 108 of 1998), as read with Government Notices R 543, 544, 545 and 546 of the NEMA.