

Zen Wind Energy Facility, Western Cape Province

DEA REF: 14/12/16/3/3/2/322

External Environmental Compliance Audit Report of
the Environmental Management Programme (EMPr),
in accordance with Regulation 54(A) of the EIA
Regulations (2017)

December 2019

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REPORT DETAILS

DEA Reference No.	:	14/12/16/3/3/2/322
Environmental Assessment Practitioner (EAP)	:	Karen Jodas (Savannah Environmental)
Title	:	External Environmental Compliance Report for the Zen Wind Energy Facility near Saron within the Drakenstein Local Municipality, Bedford, Western Cape Province
Author	:	Savannah Environmental (Pty) Ltd Kritanya Naidoo
Internal Review	:	Jo-Anne Thomas
Client	:	Zen Wind Farm (Pty) Ltd
Report Revision	:	Final
Date	:	December 2019

When used as a reference this report should be cited as: Savannah Environmental (2019) External Environmental Compliance Report for the Zen Wind Energy Facility near Saron within the Drakenstein Local Municipality, Western Cape Province.

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DECLARATION OF INTEREST

I, Kritanya Naidoo, declare that:

- » I act as the independent environmental auditor for the environmental compliance audit (November 2019).
- » I have performed the work relating to the audit in an objective manner, even if this results in views and findings that are not favourable to the applicant.
- » I declare that there are no circumstances that may compromise my objectivity in performing such work.
- » I have expertise in conducting independent environmental audits, including knowledge of NEMA, the 2014 EIA Regulations (GNR 326) and any guidelines that have relevance to the activity.
- » I have complied with NEMA, the 2014 EIA Regulations (GNR 326) and all other applicable legislation.
- » I have no, and have not engaged in, conflicting interests in the undertaking of the audit.
- » I have undertaken to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing – any decision to be taken with respect to the project by the competent authority; and – the objectivity of any report, plan or document prepared by myself for submission to the competent authority.
- » All the particulars furnished by me in this report are true and correct.
- » I realise that a false declaration is an offence in terms of Regulation 48 and is punishable in terms of section 24F of the Act.
- » I do not have and will not have any vested interest (either business, financial, personal or other) in the project other than remuneration for work performed.

Kritanya Naidoo (Auditor)



Signature

December 2019

Date

Jo-Anne Thomas (Internal Reviewer, SACNASP Membership No: 400024/2000)



Signature

December 2019

Date

ACRONYMS AND ABBREVIATIONS

CAA	Civil Aviation Authority
DEA	Department of Environmental Affairs (National)
DWS	Department of Water and Sanitation
DoE	Department of Energy
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
ECO	Environmental Control Officer
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme
GHG	Greenhouse Gas
GIIP	Good International Industry Practise
I&AP	Interested and Affected Party
IPP	Independent Power Producer
MW	Megawatts
NEMA	National Environmental Management Act (No. 107 of 1998)
NEM:BA	National Environmental Management: Biodiversity Act (No. 10 of 2004)
NHRA	National Heritage Resources Act (No. 25 of 1999)
NWA	National Water Act (No. 36 of 1998)
O&M	Operations and Maintenance
OEMPr	Operational Environmental Management Programme
OHS	Occupational Health and Safety
SAHRA	South African Heritage Resources Agency
WEF	Wind Energy Facility
WUL	Water Use License

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- Appendix B:** Advertisement of submission of the Audit Report
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- Appendix D:** Confirmation letter on current status of the project

1. INTRODUCTION AND BACKGROUND

Savannah Environmental (Pty) Ltd has been appointed by Zen Wind Farm (Pty) Ltd to undertake an external environmental compliance audit and prepare an external environmental compliance audit report in accordance with the requirements of Regulation 54(a) of the EIA Regulations, 2014, as amended, for the Zen Wind Energy Facility (WEF) near Saron located within the Drakenstein Local Municipality, Western Cape Province. The external environmental compliance audit was conducted to demonstrate Zen Wind Farm (Pty) Ltd's compliance with the EMPr applicable to the project.

1.1. Project Background

Zen Wind Farm (Pty) Ltd is proposing to establish a commercial wind energy facility and associated infrastructure on a site near Saron located within the Drakenstein Local Municipality. The site identified for consideration within an Environmental Impact Assessment (EIA) lies approximately 6 km south of Saron, in the Western Cape Province. Up to 46 wind turbines are proposed to be constructed over a broader area of approximately ~3 542 ha in extent. The proposed facility would be known as the Zen Wind Energy Facility.

The broader project area includes the following farm portions:

- » Portion 1 of the farm Bonne Esperance 83
- » Portion 2 of the farm Bonne Esperance 83
- » Portion 9 of the farm No. 88
- » Remainder of Portion 4 of the farm Kleinberggrivier No.1
- » Remainder of the farm Moolenaars Drift No. 85
- » Remainder of Portion 1 of the farm Moolenaars Drift No. 85

Depending on the final turbine selection, the estimated total installed capacity for the proposed facility is up to 140MW and will comprise of the following infrastructure:

- » The site is proposed to accommodate up to 46 wind turbines. The facility would be operated as a single facility with each turbine being up to 3MW in capacity.
- » Each wind turbine is expected to consist of a concrete foundation (20m x 20m x 4m), a steel tower, a hub (up to 110 above ground level, depending on the turbine size decided upon) and three blades.
- » Internal/ access roads (up to 6m in width) linking the wind turbines and other infrastructure on the site. Existing farm roads will be utilised and upgraded.
- » Workshop area / office for control, maintenance and storage (approximately 100m x 100m).
- » An on-site substation (200 m x 200 m) to facilitate grid connection.
- » A new 132 kV power line (up to 6.5 km in length) via a direct connection to the LeBonne Substation or a loop in and loop out connection to the LeBonne-Gouda power line which is located on the Farm LeBonne Esperance (adjacent to the Zen Wind Farm site). Two power line route alternatives were assessed in the EIA.

Construction has not yet commenced for the Zen Wind Energy Facility (refer to **Appendix D** for a letter from the applicant confirming in the project status). This external environmental compliance report was completed on the 27th of November 2019 and focuses on the pre-construction conditions of the project EMPr dated February 2015.

2. OBJECTIVE OF THE AUDIT

The objective of this environmental audit as contained in Appendix 7 of the 2014 Environmental Impact Assessment (EIA) Regulations (GNR 326) and Regulation 54(a) is to:

- » Report on:
 - * The level of compliance with the conditions of the EMPr.
 - * The extent to which the avoidance, management and mitigation measures provided for in the EMPr, achieve the objectives and outcomes of the EMPr.
- » Identify and assess any new impacts and risks as a result of undertaking the activity.
- » Evaluate the effectiveness of the EMPr.
- » Identify shortcomings in the EMPr.
- » Identify the need for any changes to the avoidance, management and mitigation measures provided for in the EMPr.

This Environmental Audit Report has been prepared in accordance with Appendix 7 of the 2014 EIA Regulations (GNR 326). An overview of the contents of the Environmental Compliance Audit Report, as prescribed by Appendix 7 of the 2014 EIA Regulations (GNR 326), and where the corresponding information can be found within the report is provided in **Table 1**.

Table 1: Summary of where the requirements of Appendix 7 of the 2014 EIA Regulations (GNR 326) are provided in this Environmental Compliance Audit Report.

Requirement	Location in Report
(a) Details of the – (i) Independent person who prepared the environmental audit report. (ii) Expertise of the independent person that compiled the environmental audit report.	Refer to Section 4 Refer to Appendix A
(b) A declaration that the independent auditor is independent in a form as may be specified by the competent authority.	Refer to Declaration of Interest
(c) An indication of the scope of, and the purpose for which, the environmental audit report was prepared.	Refer to Section 3
(d) A description of the methodology adopted in preparing the environmental audit report.	Refer to Section 6
(e) An indication of the ability of the EMPr, and where applicable, the closure plan to – (i) Sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity on an on-going basis. (ii) Sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the closure of the facility. (iii) Ensure compliance with the provisions of environmental authorisation, EMPr, and where applicable, the closure plan.	Refer to Section 10
(f) A description of any assumptions made, and any uncertainties or gaps in knowledge.	Refer to Section 5
(g) A description of any consultation process that was undertaken during the course of carrying out the environmental audit report.	Refer to Section 6

Requirement	Location in Report
(h) A summary and copies of any comments that were received during any consultation process.	Refer to Section 6
(i) Any other information requested by the competent authority.	N/A

3. PURPOSE AND SCOPE

This Environmental Audit has been conducted to determine Zen Wind Farm (Pty) Ltd compliance with applicable environmental management requirements, as per the requirements of Section 54(A)(3) of the EIA Regulations, GNR 326 of 2017. The scope of the Environmental Audit is confined to an assessment of those environmental management requirements contained within the project EMPr.

4. OVERVIEW OF THE INDEPENDENT ENVIRONMENTAL AUDITORS

Zen WEF was initially authorised through Karen Jodas of Savannah Environmental as the Environmental Assessment Practitioner. This independent environmental compliance audit was however undertaken by Kritanya Naidoo (refer to **Table 2**), and reviewed by Jo-Anne Thomas (refer to **Table 3**).

Table 2: Details of the Independent Environmental Auditors for this Section 54 audit report.

Name	Kritanya Naidoo
Position:	Environmental Consultant
Company:	Savannah Environmental (Pty) Ltd
Qualification:	BSS Honours Environmental Management
Professional Registration:	None
Experience:	1 year
Contact:	011 656 3237
Email:	kritanya@savannahsa.com

Table 3: Details of the Report Reviewer.

Name:	Jo-Anne Thomas
Position:	Project Manager and Director
Company:	Savannah Environmental (Pty) Ltd
Qualification:	M.Sc. Botany
Professional Registration:	Professional Natural Scientist (400166/11) (SACNASP)
Experience:	21 years
Contact:	011 656 3237
Email:	joanne@savannahsa.com

A signed Declaration of Interest confirming the auditors' independence is included in this Environmental Audit Report. CVs of the Independent Environmental Auditor and Report Reviewer are attached as **Appendix A** to this report.

5. ASSUMPTIONS AND LIMITATIONS

The following limitations are applicable to this Environmental Audit Report:

- » The results of the Environmental Audit Report are limited due to the fact that Zen WEF is currently not operational, and no construction activities have commenced to date (i.e. no authorised activities have commenced), and therefore all the conditions contained in the EMPr relating to any development phase of the facility are not currently applicable. Commenting on the compliance of the project is therefore limited.

6. APPROACH TO CONDUCTING THE AUDIT

6.1. Pre-audit planning

Prior to undertaking the audit, the scope and objectives of the audit were determined through a review of relevant information applicable to the project.

Following the review of existing information, an audit checklist was prepared for use as a tool during the audit to identify any issues of non-compliance and / or areas where action plans may be required to be implemented to address any identified issues of concern.

- » The audit checklist was prepared based on the licensing and management specifications contained within the Environmental Management Programme (EMPr) for Zen Wind Energy Facility (February 2015) (DEA Reference No.: 14/12/16/3/3/2/322).

As the Zen WEF is currently not operational, and no construction activities have commenced to date (i.e. no authorised activities have commenced), all the conditions contained in the EMPr relating to commencement, construction, operation and decommissioning of the facility are not currently applicable. **As such, these conditions have been omitted from the audit checklist and are not shown or reported on in this report.** Should these activities commence in future, these conditions must be included into future audit checklists and reported on within the audit.

6.2. Conducting the Audit

As no activities have commenced to date, a desktop audit was conducted of the relevant and applicable EMPr conditions only. This included a review of all information relating to the compliance of relevant EMPr pre-construction conditions.

6.3. Post Audit

Following the audit, an Environmental Compliance Audit Report was compiled in accordance with the requirements of Appendix 7 of the EIA Regulations, 2014, as amended (GNR326). A copy of this Audit Report was submitted to the Department of Environmental Affairs (DEA) in accordance with the requirements of Section 54(A)(3) prior to the 7th of December 2019.

7. FINDINGS OF THE AUDIT

Compliance ratings were provided for each element of the audit checklist using the 4-point rating scale described below:

Compliance status	Rating	Description of compliance
Compliant	3	Compliant with no further action required to maintain compliance
Compliant	2	Compliant apart from minor or immaterial recommendations to improve the strength internal controls to maintain compliance
Compliant	1	Compliant with major or material recommendations to improve the strength of internal controls to maintain compliance
Non-Compliant	0	Does not meet minimum requirements

Table 4 provide details of the findings of the audit.

Table 4: Audit Checklist for Compliance with the Conditions Contained in EMPr (February 2015) (DEA Reference No. 14/12/16/3/3/2/322).

Objective	Mitigation: Action/control	Responsibility	Timeframe	Compliance Rating (0 – 3)	Audit Finding
To ensure that the design of the facility responds to the identified environmental constraints and opportunities	Consider design level mitigation measures recommended by the specialists, especially with respect to visual aesthetics, noise, flora, ecology, avifauna and bats as detailed within the EIA report and relevant appendices.	Engineering Consultant / supplier Developer	Design turbine Tender design, design review stage	N/A	Action/control measure is not applicable considering the status of the project. This measure will become applicable once the project receives preferred bidder status.
	As far as possible, access roads and cable trenches which could potentially impact on sensitive areas should be shifted in order to avoid these areas of high sensitivity (i.e. best practice is impact avoidance). Where this is not possible, alternative mitigation measures as detailed in this report must be implemented.	Engineering Consultant Developer	Design Tender design, design review stage	N/A	Action/control measure is not applicable considering the status of the project. This measure will become applicable once the project receives preferred bidder status.
	A walk-through survey of final infrastructure positions for the wind energy facility and associated infrastructure (including the power line) should be undertaken by a specialist ecologist, avifaunal specialist and heritage specialist prior to the commencement of construction. The EMPr for construction must be updated to include site-specific information and specifications resulting from the final walk-through surveys. This EMPr must be submitted to DEA for approval prior to the commencement of construction.	Specialists	Final design phase	N/A	Action/control measure is not applicable considering the status of the project. This measure will become applicable once the project receives preferred bidder status.
	A comprehensive search for protected plant and animal populations must be undertaken within the footprint of the proposed	Developer	Planning Phase and/ prior to construction	N/A	Action/control measure is not applicable considering the status of the project. This

Objective	Mitigation: Action/control	Responsibility	Timeframe	Compliance Rating (0 – 3)	Audit Finding
	<p>infrastructure prior to construction, once the final position of infrastructure is known. For plants, this must take place during an appropriate season to maximise the likelihood of detecting plants of conservation concern. If any plants or animals of conservation concern are found within areas proposed for infrastructure, localised modifications in the position of infrastructure must be made (if possible) to avoid such populations and a suitable buffer zone around them applied, where applicable. Where it is not possible to relocate infrastructure, a permit may be required to be obtained in terms of Chapter 7 of the National Environmental Management: Biodiversity Act to carry out a restricted activity involving a specimen of a listed threatened or protected species. Should TOPS species be identified during the final ecological survey, in terms of the NEM:BA a permit (a TOPS permit) will be required for any activities/ removal of TOPS listed species. Plucking, relocation, or destruction of provincially protected species will require a permit in terms of the Nature and Environmental Conservation Ordinance of 1974 and the Western Cape Nature Conservation Laws Amendment Act, 2000 (Ordinance 3 of 2000).</p>				<p>measure will become applicable once the project receives preferred bidder status.</p>
	<p>Should the layout (or type of wind turbines used) change significantly during the final design, the</p>	<p>Developer</p>	<p>Design phase</p>	<p>3</p>	<p>There is currently a part two EA amendment being</p>

Objective	Mitigation: Action/control	Responsibility	Timeframe	Compliance Rating (0 – 3)	Audit Finding
	new layout must be submitted to the Department of Environmental Affairs				undertaken for an update on the layout and the draft motivation report and application has been submitted to DEFF on 13 November 2019
	It is recommended that any revised / updated layout be remodelled/ reviewed in terms of the potential environmental impacts by an independent acoustics specialist.	Developer	Design phase	3	An updated noise comparative assessment was undertaken on October 2019 for the part two amendment.
	The monitoring programme already implemented to document the effect of the wind turbines on birds and bats should be continued. This should continue during construction and during operation. The monitoring protocols as required by the EIA report should be implemented.	Developer in consultation with relevant Specialist	Pre-construction, construction, operation	3	Monitoring for bird and bat has been undertaken by Calidris and comments in 2019.
	Use bird-friendly power line tower and conductor designs.	Developer	Design phase	N/A	Action/control measure is not applicable considering the status of the project. This measure will become applicable once the project receives preferred bidder status.
	Anti-collision devices such as bird flappers must be installed where power lines cross avifaunal sensitive areas (e.g. grasslands, rivers, wetlands, and dams). The input of an avifaunal specialist must be obtained for the fitting of the anti-	Developer	Design phase	N/A	Action/control measure is not applicable considering the status of the project. This measure will become applicable once the project

Objective	Mitigation: Action/control	Responsibility	Timeframe	Compliance Rating (0 – 3)	Audit Finding
	collision devices onto specific sections of the line once the alignment has been confirmed through negotiation with the affected landowners, and the exact positions of the towers have been surveyed and pegged. Additional areas of high sensitivity along the preferred alignment must also be identified by the avifaunal specialist for the fitment of anti-collision devices. These devices must be according to Eskom's Transmission Guidelines.				receives preferred bidder status.
	Compile a comprehensive stormwater management plan for hard/compacted surfaces (e.g. substation footprints, roads) as part of the final design of the project.	Developer	Design phase	N/A	Action/control measure is not applicable considering the status of the project. This measure will become applicable once the project receives preferred bidder status.
	It is possible that in situ archaeological sites/remains, and human remains may be uncovered during construction. Therefore the ECO should be trained to identify heritage resources.	Relevant specialists Developer	Design phase	N/A	Action/control measure is not applicable considering the status of the project. This measure will become applicable once the project receives preferred bidder status.
	Make use of existing roads where possible.	Relevant specialists Developer	Design phase	N/A	Action/control measure is not applicable considering the status of the project. This measure will become applicable once the project

Objective	Mitigation: Action/control	Responsibility	Timeframe	Compliance Rating (0 – 3)	Audit Finding
					receives preferred bidder status.
	Applications for all other relevant and required permits if required to be obtained by the developer must be submitted to the relevant regulating authorities. This includes permits for the transporting of all components (abnormal loads) to site, water use licencing for disturbance to any water courses/ drainage lines and a permit to remove heritage artefacts and/ disturbance of protected vegetation.	The developer	Planning & Design Phase	N/A	Action/control measure is not applicable considering the status of the project. This measure will become applicable once the project receives preferred bidder status.
Undertake Bird and Bat Monitoring Programme during the Operational phase	Appoint advising consultant/s to undertake bird and bat monitoring during construction and operation of the wind energy facility.	Developer	Pre-construction	3	Monitoring for bird and bat has been undertaken by Calidris and comments in 2019.
Minimise storm water runoff (guideline for stormwater management plan)	A stormwater management plan which considers the recommendations below is to be submitted to the DEA prior to the commencement of construction.	Developer EPC contractor	Pre-construction	N/A	Action/control measure is not applicable considering the status of the project. This measure will become applicable once the project receives preferred bidder status..
	Ensure design aims to reduce the potential increase in surface flow velocities and the resultant impact on the localised drainage system through increased sedimentation.	Developer	Planning and design	N/A	Action/control measure is not applicable considering the status of the project. This measure will become applicable once the project receives preferred bidder status.

Objective	Mitigation: Action/control	Responsibility	Timeframe	Compliance Rating (0 – 3)	Audit Finding
	Appropriately plan hard-engineered bank erosion protection structures to minimise erosion potential.	Developer	Planning and design	N/A	Action/control measure is not applicable considering the status of the project. This measure will become applicable once the project receives preferred bidder status.
	Design measures for stormwater management needed to allow for surface and subsurface movement of water along drainage lines so as not to impede natural surface and subsurface flows.	Developer	Planning and design	N/A	Action/control measure is not applicable considering the status of the project. This measure will become applicable once the project receives preferred bidder status.
To ensure effective communication mechanisms	Compile and implement a grievance mechanism procedure for the public (as outlined in Appendix H of the EMPr) to be implemented during both the construction and operational phases of the facility. This procedure should include details of the contact person who will be receiving issues raised by interested and affected parties, and the process that will be followed to address issues.	Developer	Pre-construction (construction procedure) Pre-operation (operation procedure)	N/A	Action/control measure is not applicable considering the status of the project. This measure will become applicable once the project receives preferred bidder status.
	Develop and implement a grievance mechanism for the construction, operational and closure phases of the project for all employees, contractors, subcontractors and site personnel. This procedure should be in line with the South African Labour Law.	Developer	Pre-construction (construction procedure) Pre-operation (operation procedure)	N/A	Action/control measure is not applicable considering the status of the project. This measure will become applicable once the project receives preferred bidder status.

Objective	Mitigation: Action/control	Responsibility	Timeframe	Compliance Rating (0 – 3)	Audit Finding
	Water required for construction purposes to be sourced from legitimate sources such as the local municipality. If water to be abstracted from ground or surface water resources the relevant permit must be obtained from DWA.	Contractor	Pre-Construction	N/A	Action/control measure is not applicable considering the status of the project. This measure will become applicable once the project receives preferred bidder status.
Limit disturbance of vegetation and loss of faunal habitat during construction	Demarcate important or sensitive areas as no-go areas.	Specialist, ECO	Pre-construction	N/A	Action/control measure is not applicable considering the status of the project. This measure will become applicable once the project receives preferred bidder status.
To minimise traffic related impacts (Traffic Management Plan)	The contractor's plans, procedures and schedules, as well as the anticipated intrusion impacts should be clarified with affected parties prior to the construction phase.	Developer and Environmental Control Officer	Pre-Construction	N/A	Action/control measure is not applicable considering the status of the project. This measure will become applicable once the project receives preferred bidder status.
	All regulations and legislation pertaining to the use of provincial and local roads by abnormal vehicles to transport the wind turbines should be noted and adhered to.	Developer, Contractor and relevant government departments (national and provincial)	Pre-construction Construction	N/A	Action/control measure is not applicable considering the status of the project. This measure will become applicable once the project receives preferred bidder status.
	Employing local community members could minimise the potential for criminal activity or	Contractor	Pre-Construction	N/A	Action/control measure is not applicable considering the

Objective	Mitigation: Action/control	Responsibility	Timeframe	Compliance Rating (0 – 3)	Audit Finding
<p>To minimise the potential impact on safety and security</p>	<p>perceived perception of an increase in criminal activity due to the presence of an outside workforce.</p>				<p>status of the project. This measure will become applicable once the project receives preferred bidder status.</p>
	<p>Screening of workers that apply for work could be useful to lessen perceived negative perceptions about the outside workforce.</p>	<p>Contractor</p>	<p>Pre-Construction</p>	<p>N/A</p>	<p>Action/control measure is not applicable considering the status of the project. This measure will become applicable once the project receives preferred bidder status.</p>
<p>Management of impacts of the proposed facility on heritage resources and archaeological material</p>	<p>Train ECO and construction personnel regarding identification of heritage sites</p>	<p>Archaeologist</p>	<p>Pre-construction</p>	<p>N/A</p>	<p>Action/control measure is not applicable considering the status of the project. This measure will become applicable once the project receives preferred bidder status.</p>
	<p>Report exposed human remains to Heritage Western Cape and SAHRA to guide on removal process for heritage artefacts.</p>	<p>HWC, SAHRA, heritage consultant authority/archaeologist/ ECO</p>	<p>Pre-construction</p>	<p>N/A</p>	<p>Action/control measure is not applicable considering the status of the project. This measure will become applicable once the project receives preferred bidder status.</p>
<p>Appropriate handling and storage of chemicals, hazardous substances and waste</p>	<p>Construction contractors must provide specific detailed waste management plans to deal with all waste streams.</p>	<p>Contractor</p>	<p>Pre-construction</p>	<p>N/A</p>	<p>Action/control measure is not applicable considering the status of the project. This measure will become</p>

Objective	Mitigation: Action/control	Responsibility	Timeframe	Compliance Rating (0 – 3)	Audit Finding
	Where a registered waste site is not available close to the construction site, provide a method statement with regard to waste management.	Contractor	Pre-construction	N/A	<p>applicable once the project receives preferred bidder status.</p> <p>Action/control measure is not applicable considering the status of the project. This measure will become applicable once the project receives preferred bidder status.</p>

8. AUDIT RESULTS AND RECOMMENDATIONS

8.1. Overview of Audit Findings and Conclusion

Considering that Zen WEF is currently not operational, and no construction activities have commenced to date (i.e. no authorised activities have commenced), all the conditions contained in the EMPr relating to any development phase of the facility are not currently applicable. It is therefore not possible to comment on the compliance with these specifications until such time that the facility receives preferred bidder status under the Department of Energy's REIPPP Programme (or an alternative Power Purchase Agreement (PPA) as may be relevant) which would enable the commencement of the development phases for the project. However a Part Two EA amendment is currently underway and a draft copy of this application including the motivation report was submitted to DEA on 13 November 2019 as well as pre-construction bird and bat monitoring which was undertaken by Calidris in 2019.

Based on the fact that majority of the conditions contained in the EMPr are currently not applicable, there was only a score provided for conditions audited in table 4 and the rest of the conditioned being not applicable of the Zen WEF (refer to **Table 5**). A rating of N/A (not applicable at this time) has been allocated for some of the conditions.

Table 5: Overview of the Zen WEF overall compliance.

Compliance status	Rating	Description of compliance	EMPr	
			Results	%
Compliant	3	Compliant with no further action required to maintain compliance.	12	100
Compliant	2	Compliant apart from minor or immaterial recommendations to improve the strength internal controls to maintain compliance.	N/A	N/A
Compliant	1	Compliant with major or material recommendations to improve the strength of internal controls to maintain compliance.	N/A	N/A
Non-Compliant	0	Does not meet minimum requirements.	N/A	N/A
TOTAL:			12	100

9. EVALUATION OF THE EMPr

As per Appendix 7 of the EIA Regulations, GNR 326 of 2017, an external audit report must include "an indication of the ability of the EMPr to:

- (i) sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity on an on going basis;
- (ii) Sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the closure of the facility; and
- (iii) Ensure compliance with the provisions of the EMPr;"

9.1. Ongoing impact avoidance, management and mitigation

Based on the audit outcomes and results reported above, the auditor is satisfied that the EMPr is sufficient and able to provide for the avoidance, management and mitigation of the environmental impacts associated with the undertaking of the activity on an ongoing basis, and that no further amendment or

alteration to the EMPr is required in order to maintain this reliability of the EMPr. The recommendations of Chapter 10 of the EMPr regarding the inclusion of site-specific information into subsequent revisions of the EMPr must however be implemented once a final design has been completed and prior to construction.

9.2. Closure impact avoidance, management and mitigation

The facility has not started with any of the listed activities (i.e. no construction activities has commenced) and will therefore not be decommissioned or closed in the foreseeable future, and therefore no decommissioning activities are applicable to this audit.

9.3. Ensuring compliance with provisions of the EMPr

Based on the audit outcomes and results reported above, the auditor is satisfied that the EMPr is sufficient and able to ensure compliance with the provisions of the environmental authorisation and EMPr, and that no further amendment or alteration to the EMPr is required in order to maintain this reliability of the EMPr.

No additional impacts or risks have been identified to be associated with the undertaking of the proposed activities based on the desk-top audit.

Considering that Zen WEF is currently not operational, and no construction activities have commenced to date (i.e. no authorised activities have commenced), all the conditions contained in the EMPr relating to any development phase of the facility are not currently applicable. It is therefore not possible to comment on the compliance with these specifications until such time that the facility receives preferred bidder status under the Department of Energy's REIPPP Programme (or an alternative Power Purchase Agreement (PPA) as may be relevant) which would enable the commencement of the development phases for the project.

10. CONCLUSIONS AND RECOMMENDATIONS

This Chapter provides an overview of the results and recommendations of the environmental audit of the Zen WEF with the specifications of the project EMPr.

No non-compliances were recorded as part of the independent external environmental compliance audit. As a result, no recommendations are considered applicable.

It is the opinion of the independent auditor that the project EMPr (February 2015), and its supporting documentation sufficiently provides for the avoidance, management and mitigation of environmental impacts associated with the project, and ensures compliance with the provisions of EA (DEA Reference No.: 14/12/16/3/3/2/322) and the subsequent amendments thereto.

11. STAKEHOLDER CONSULTATION

11.1. Notification of all potential and registered interested and affected parties

In accordance with the requirements of Section 34(6) of the EIA Regulations (GNR 326 of 2017), the following consultation must form part of the audit report submission:

- » Within 7 days of the date of submission of an environmental audit report to the competent authority, the holder of an environmental authorisation must notify all potential and registered interested and affected parties of the submission of that report, and make such report immediately available
 - * (a) to anyone on request; and
 - * (b) on a publicly accessible website, where the holder has such a website.

In order to remain compliant with these requirements, all potential and registered interested and affected parties have been notified of the submission of the external compliance audit report by:

- » The placement of an advertisement with a local newspaper, the Witzenberg Herald, on the 29th of November 2019 and (**Appendix B**)
- » Notification of all registered I&APs via email on 3 December 2019 (refer to **Appendix C**); and
- » Uploading the audit report onto the Savannah Environmental website (www.savannahsa.com) for download upon request.

APPENDIX A:
CVS OF INDEPENDENT AUDITORS AND REPORT REVIEWER

CURRICULUM VITAE OF KRITANYA NAIDOO

- Profession:** Environmental Compliance Consultant
- Specialisation:** Environmental, Health and Safety compliance audits. ISO management system audits, implementation and monitoring, Compilation of monthly SHEQ reports for projects in the infrastructure and service provider sectors.
- Work Experience:** 4 years' experience in the SHEQ field.

VOCATIONAL EXPERIENCE

Kritanya hold a Master's degree in Population Studies and 4 years SHEQ experience in conducting Environmental Compliance Audits, Environmental, Quality and Health and Safety Management System Audits, implementation and maintenance of ISO 14001: 2015 and ISO 9001:2015 systems.

SKILLS BASE AND CORE COMPETENCIES

- Report writing
- Environmental Compliance and System Audits
- Understanding the implementation of NEMA and NEMWA
- Maintaining and implementation of ISO 14001 and ISO 9001 and OHSAS standards

EDUCATION AND PROFESSIONAL STATUS

Degrees:

- M. (Masters) Population Studies (2013), University of KwaZulu-Natal, KZN
- B.SS. (Hons.) Geography and Environmental Management (2011), University of KwaZulu-Natal, KZN
- B.SS. Geography and Environmental Management (2010), University of KwaZulu-Natal, KZN

Courses:

- First aider (2015)
- SHE Representative Course (2015)
- ISO 9001:2015 Internal Auditor Training (2016)
- ISO 14001:2015 Environmental Management System Training (2017)

EMPLOYMENT

Date	Company	Roles and Responsibilities
March 2019 - Current	Savannah Environmental (Pty) Ltd	<u>Environmental Compliance Consultant</u> Tasks include: Scheduled and Ad-hoc ECO audits and checklists. Statutory audits and audits against permits/licences in accordance with legislative requirements. Management system audits checklists & report writing. Environmental Management Programme Revisions. Environmental Authorisation amendments. Review and comment on monthly ECO reports. Review of permits and licences. Assist with identifying new opportunities
October 2017-August 2018	Stefanutti Stocks, KZN Building Division	<u>Environmental and Quality Officer</u> <i>Tasks included: Conduct Environmental Compliance and System Audits. Monitor/Review all environmental statistics. Implement and maintain the Quality Management Systems (QMS). Conduct QMS audits. Write monthly reports on the status of the Quality and Environmental Systems. SHEQ document controller. Involvement in the development and implementation of the Quality Electronic System (Plumbum).</i>
September 2016-September 2017	3 Energy Renewables	<u>Environmental Officer</u> <i>Tasks included: Carry out Environmental and Social Audits based on the Environmental Authorisation, Environmental Management Plan, Environmental Aspects and Social Concerns at various Renewable Energy Power Plants. Assist in conducting internal Health and Safety inspections and audits at various Renewable Energy Power Plants. Assist with HSE incidents at the Renewable Energy Power Plants. Develop and implement ISO 9001:2015, Quality Management System (QMS). Conduct QMS internal audits, document control and corrective action.</i>

PROJECT EXPERIENCE

Renewable Power Generation Projects: Wind Energy Facilities

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
Amakhala Emoyeni WEF, Eastern Cape	Cennergi	Environmental Officer
Tsitsikamma WEF, Eastern Cape	Cennergi	Environmental Officer
Koega WEF, Eastern Cape	Koega Wind Power	Environmental Officer
Metrowind Van Staadens WEF Eastern Cape	Rubicept	Environmental Officer
Roggeveld WEF, Northern and Western Cape	Building Energy	ECO

Infrastructure Development Projects (bridges, pipelines, roads, waste etc)

Basic Assessments

Project Name & Location	Client Name	Role
<i>Nigel Gas Pipeline and associated infrastructure, Gauteng Province</i>	<i>Energy Group</i>	<i>Compliance Consultant</i>



CURRICULUM VITAE OF JO-ANNE THOMAS

Profession:	Environmental Management and Compliance Consultant; Environmental Assessment Practitioner
Specialisation:	Environmental Management; Strategic environmental advice; Environmental compliance advice & monitoring; Environmental Impact Assessments; Policy, strategy & guideline formulation; Project Management; General Ecology
Work experience:	Twenty one (21) years in the environmental field

VOCATIONAL EXPERIENCE

Provide technical input for projects in the environmental management field, specialising in Strategic Environmental Advice, Environmental Impact Assessment studies, environmental auditing and monitoring, environmental permitting, public participation, Environmental Management Plans and Programmes, environmental policy, strategy and guideline formulation, and integrated environmental management. Key focus on integration of the specialist environmental studies and findings into larger engineering-based projects, strategic assessment, and providing practical and achievable environmental management solutions and mitigation measures. Responsibilities for environmental studies include project management (including client and authority liaison and management of specialist teams); review and manipulation of data; identification and assessment of potential negative environmental impacts and benefits; review of specialist studies; and the identification of mitigation measures. Compilation of the reports for environmental studies is in accordance with all relevant environmental legislation.

Undertaking of numerous environmental management studies has resulted in a good working knowledge of environmental legislation and policy requirements. Recent projects have been undertaken for both the public- and private-sector, including compliance advice and monitoring, electricity generation and transmission projects, various types of linear developments (such as National Road, local roads and power lines), waste management projects (landfills), mining rights and permits, policy, strategy and guideline development, as well as general environmental planning, development and management.

SKILLS BASE AND CORE COMPETENCIES

- Project management for a range of projects
- Identification and assessment of potential negative environmental impacts and benefits through the review and manipulation of data and specialist studies
- Identification of practical and achievable mitigation and management measures and the development of appropriate management plans
- Compilation of environmental reports in accordance with relevant environmental legislative requirements
- External and peer review of environmental reports & compliance advice and monitoring
- Formulation of environmental policies, strategies and guidelines
- Strategic and regional assessments; pre-feasibility & site selection
- Public participation processes for a variety of projects
- Strategic environmental advice to a wide variety of clients both in the public and private sectors
- Working knowledge of environmental planning processes, policies, regulatory frameworks and legislation

EDUCATION AND PROFESSIONAL STATUS

Degrees:

- B.Sc Earth Sciences, University of the Witwatersrand, Johannesburg (1993)
- B.Sc Honours in Botany, University of the Witwatersrand, Johannesburg (1994)
- M.Sc in Botany, University of the Witwatersrand, Johannesburg (1996)

Short Courses:

- Environmental Impact Assessment, Potchefstroom University (1998)
- Environmental Law, Morgan University (2001)
- Environmental Legislation, IMBEWU (2017)
- Mining Legislation, Cameron Cross & Associates (2013)
- Environmental and Social Risk Management (ESRM), International Finance Corporation (2018)

Professional Society Affiliations:

- Registered with the South African Council for Natural Scientific Professions as a Professional Natural Scientist: Environmental Scientist (400024/00)
- Registered with the International Association for Impact Assessment South Africa (IAIASa): 5601
- Member of the South African Wind Energy Association (SAWEA)

EMPLOYMENT

Date	Company	Roles and Responsibilities
January 2006 - Current	Savannah Environmental (Pty) Ltd	Director Project manager Independent specialist environmental consultant, Environmental Assessment Practitioner (EAP) and advisor.
1997 – 2005	Bohlweki Environmental (Pty) Ltd	Senior Environmental Scientist at. Environmental Management and Project Management
January – July 1997	Sutherland High School, Pretoria	Junior Science Teacher

PROJECT EXPERIENCE

Project experience includes large infrastructure projects, including electricity generation and transmission, wastewater treatment facilities, mining and prospecting activities, property development, and national roads, as well as strategy and guidelines development.

RENEWABLE POWER GENERATION PROJECTS: PHOTOVOLTAIC SOLAR ENERGY FACILITIES

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Christiana PV 2 SEF, North West	Solar Reserve South Africa	Project Manager & EAP
De Aar PV facility, Northern Cape	iNca Energy	Project Manager & EAP
Everest SEF near Hennenman, Free State	FRV Energy South Africa	Project Manager & EAP
Graafwater PV SEF, Western Cape	iNca Energy	Project Manager & EAP
Grootkop SEF near Allanridge, Free State	FRV Energy South Africa	Project Manager & EAP
Hertzogville PV 2 SEF with 2 phases, Free State	SunCorp / Solar Reserve	Project Manager & EAP
Karoshhoek CPV facility on site 2 as part of the larger Karoshhoek Solar Valley Development East of Upington, Northern Cape	FG Emvelo	Project Manager & EAP

Project Name & Location	Client Name	Role
Kgabalatsane SEF North-East for Brits, North West	Built Environment African Energy Services	Project Manager & EAP
Kleinbegin PV SEF West of Groblershoop, Northern Cape	MedEnergy Global	Project Manager & EAP
Lethabo Power Station PV Installation, Free State	Eskom Holdings SoC Limited	Project Manager & EAP
Majuba Power Station PV Installation, Mpumalanga	Eskom Holdings SoC Limited	Project Manager & EAP
Merapi PV SEF Phase 1 – 4 South-East of Excelsior, Free State	SolaireDirect Southern Africa	Project Manager & EAP
Sannaspos Solar Park, Free State	SolaireDirect Southern Africa	Project Manager & EAP
Ofir-Zx PV Plant near Keimoes, Northern Cape	S28 Degrees Energy	Project Manager & EAP
Oryx SEF near Virginia, Free State	FRV Energy South Africa	Project Manager & EAP
Project Blue SEF North of Kleinsee, Northern Cape	WWK Development	Project Manager & EAP
S-Kol PV Plant near Keimoes, Northern Cape	S28 Degrees Energy	Project Manager & EAP
Sonnenberg PV Plant near Keimoes, Northern Cape	S28 Degrees Energy	Project Manager & EAP
Tutuka Power Station PV Installation, Mpumalanga	Eskom Transmission	Project Manager & EAP
Two PV sites within the Northern Cape	MedEnergy Global	Project Manager & EAP
Two PV sites within the Western & Northern Cape	iNca Energy	Project Manager & EAP
Upington PV SEF, Northern Cape	MedEnergy Global	Project Manager & EAP
Vredendal PV facility, Western Cape	iNca Energy	Project Manager & EAP
Waterberg PV plant, Limpopo	Thupela Energy	Project Manager & EAP
Watershed Phase I & II SEF near Litchtenburg, North West	FRV Energy South Africa	Project Manager & EAP
Alldays PV & CPV SEF Phase 1, Limpopo	BioTherm Energy	Project Manager & EAP
Hyperion PV Solar Development 1, 2, 3, 4, 5 & 6	Building Energy	Project Manager & EAP

Basic Assessments

Project Name & Location	Client Name	Role
Aberdeen PV SEF, Eastern Cape	BioTherm Energy	Project Manager & EAP
Christiana PV 1 SEF on Hartebeestpan Farm, North-West	Solar Reserve South Africa	Project Manager & EAP
Heuningspruit PV1 & PV 2 facilities near Koppies, Free State	Sun Mechanics	Project Manager & EAP
Kakamas PV Facility, Northern Cape	iNca Energy	Project Manager & EAP
Kakamas II PV Facility, Northern Cape	iNca Energy	Project Manager & EAP
Machadodorp 1 PV SEF, Mpumalanga	Solar To Benefit Africa	Project Manager & EAP
PV site within the Northern Cape	iNca Energy	Project Manager & EAP
PV sites within 4 ACSA airports within South Africa, National	Airports Company South Africa (ACSA)	Project Manager & EAP
RustMo1 PV Plant near Buffelspoort, North West	Momentous Energy	Project Manager & EAP
RustMo2 PV Plant near Buffelspoort, North West	Momentous Energy	Project Manager & EAP
RustMo3 PV Plant near Buffelspoort, North West	Momentous Energy	Project Manager & EAP
RustMo4 PV Plant near Buffelspoort, North West	Momentous Energy	Project Manager & EAP
Sannaspos PV SEF Phase 2 near Bloemfontein, Free State	SolaireDirect Southern Africa	Project Manager & EAP
Solar Park Expansion within the Rooiwal Power Station, Gauteng	AFRKO Energy	Project Manager & EAP
Steynsrus SEF, Free State	SunCorp	Project Manager & EAP

Project Name & Location	Client Name	Role
Sirius Solar PV Project Three and Sirius Solar PV Project Four (BA in terms of REDZ regulations), Northern Cape	SOLA Future Energy	Project Manager & EAP

Screening Studies

Project Name & Location	Client Name	Role
Allemans Fontein SEF near Noupoot, Northern Cape	Fusion Energy	Project Manager & EAP
Amandel SEF near Thabazimbi, Limpopo	iNca Energy	Project Manager & EAP
Arola/Doornplaat SEF near Ventersdorp, North West	FRV & iNca Energy	Project Manager & EAP
Bloemfontein Airport PV Installation, Free State	The Power Company	Project Manager & EAP
Brakspruit SEF near Klerksorp, North West	FRV & iNca Energy	Project Manager & EAP
Carolus Poort SEF near Noupoot, Northern Cape	Fusion Energy	Project Manager & EAP
Damfontein SEF near Noupoot, Northern Cape	Fusion Energy	Project Manager & EAP
Everest SEF near Welkom, Free State	FRV & iNca Energy	Project Manager & EAP
Gillmer SEF near Noupoot, Northern Cape	Fusion Energy	Project Manager & EAP
Grootkop SEF near Allansridge, Free State	FRV & iNca Energy	Project Manager & EAP
Heuningspruit PV1 & PV 2 near Koppies, Free State	Cronimat	Project Manager & EAP
Kimberley Airport PV Installation, Northern Cape	The Power Company	Project Manager & EAP
Kolonnade Mall Rooftop PV Installation in Tshwane, Gauteng	Momentous Energy	Project Manager & EAP
Loskop SEF near Groblersdal, Limpopo	S&P Power Unit	Project Manager & EAP
Marble SEF near Marble Hall, Limpopo	S&P Power Unit	Project Manager & EAP
Morgenson PV1 SEF South-West of Windsorton, Northern Cape	Solar Reserve South Africa	Project Manager & EAP
OR Tambo Airport PV Installation, Gauteng	The Power Company	Project Manager & EAP
Oryx SEF near Virginia, Free State	FRV & iNca Energy	Project Manager & EAP
Rhino SEF near Vaalwater, Limpopo	S&P Power Unit	Project Manager & EAP
Rustmo2 PV Plant near Buffelspoort, North West	Momentous Energy	Project Manager & EAP
Spitskop SEF near Northam, Limpopo	FRV & iNca Energy	Project Manager & EAP
Steynsrus PV, Free State	Suncorp	Project Manager & EAP
Tabor SEF near Polokwane, Limpopo	FRV & iNca Energy	Project Manager & EAP
Upington Airport PV Installation, Northern Cape	The Power Company	Project Manager & EAP
Valeria SEF near Hartebeestpoort Dam, North West	Solar to Benefit Africa	Project Manager & EAP
Watershed SEF near Lichtenburg, North West	FRV & iNca Energy	Project Manager & EAP
Witkop SEF near Polokwane, Limpopo	FRV & iNca Energy	Project Manager & EAP
Woodmead Retail Park Rooftop PV Installation, Gauteng	Momentous Energy	Project Manager & EAP

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
ECO and bi-monthly auditing for the construction of the Adams Solar PV Project Two South of Hotazel, Northern Cape	Enel Green Power	Project Manager
ECO for the construction of the Kathu PV Facility, Northern Cape	REISA	Project Manager
ECO and bi-monthly auditing for the construction of the Pulida PV Facility, Free State	Enel Green Power	Project Manager
ECO for the construction of the RustMo1 SEF, North West	Momentous Energy	Project Manager
ECO for the construction of the Sishen SEF, Northern	Windfall 59 Properties	Project Manager

Project Name & Location	Client Name	Role
Cape		
ECO for the construction of the Upington Airport PV Facility, Northern Cape	Sublanary Trading	Project Manager
Quarterly compliance monitoring of compliance with all environmental licenses for the operation activities at the Kathu PV facility, Northern Cape	REISA	Project Manager
ECO for the construction of the Konkoonies II PV SEF and associated infrastructure, Northern Cape	BioTherm Energy	Project Manager
ECO for the construction of the Aggeneys PV SEF and associated infrastructure, Northern Cape	BioTherm Energy	Project Manager

Compliance Advice and ESAP Reporting

Project Name & Location	Client Name	Role
Aggeneys Solar Farm, Northern Cape	BioTherm Energy	Environmental Advisor
Airies II PV Facility SW of Kenhardt, Northern Cape	BioTherm Energy	Environmental Advisor
Kalahari SEF Phase II in Kathu, Northern Cape	Engie	Environmental Advisor
Kathu PV Facility, Northern Cape	Building Energy	Environmental Advisor
Kenhardt PV Facility, Northern Cape	BioTherm Energy	Environmental Advisor
Kleinbegin PV SEF West of Groblershoop, Northern Cape	MedEnergy	Environmental Advisor
Konkoonies II SEF near Pofadder, Northern Cape	BioTherm Energy	Environmental Advisor
Konkoonies Solar Farm, Northern Cape	BioTherm Energy	Environmental Advisor
Lephalale SEF, Limpopo	Exxaro	Environmental Advisor
Pixley ka Seme PV Park, South-East of De Aar, Northern Cape	African Clean Energy Developments (ACED)	Environmental Advisor
RustMo1 PV Plant near Buffelspoort, North West	Momentous Energy	Environmental Advisor
Scuitdrift 1 SEF & Scuitdrift 2 SEF, Limpopo	Building Energy	Environmental Advisor
Sirius PV Plants, Northern Cape	Aurora Power Solutions	Environmental Advisor
Upington Airport PV Power Project, Northern Cape	Sublunary Trading	Environmental Advisor
Upington SEF, Northern Cape	Abengoa Solar	Environmental Advisor
Ofir-ZX PV SEF near Keimoes, Northern Cape	Networx S28 Energy	Environmental Advisor
Steynsrus PV1 & PV2 SEF's, Northern Cape	Cronimet Power Solutions	Environmental Advisor
Heuningspruit PV SEF, Northern Cape	Cronimet Power Solutions	Environmental Advisor

Due Diligence Reporting

Project Name & Location	Client Name	Role
5 PV SEF projects in Lephalale, Limpopo	iNca Energy	Environmental Advisor
Prieska PV Plant, Northern Cape	SunEdison Energy India	Environmental Advisor
Sirius Phase One PV Facility near Upington, Northern Cape	Aurora Power Solutions	Environmental Advisor

Environmental Permitting, S53, Water Use Licence (WUL), Waste Management Licence (WML) & Other Applications

Project Name & Location	Client Name	Role
Biodiversity Permit & WULA for the Aggeneys SEF near Aggeneys, Northern Cape	BioTherm Energy	Project Manager & EAP
Biodiversity Permit for the Konkoonies II SEF near Pofadder, Northern Cape	BioTherm Energy	Project Manager & EAP
Biodiversity Permitting for the Lephalale SEF, Limpopo	Exxaro Resources	Project Manager & EAP

Project Name & Location	Client Name	Role
Environmental Permitting for the Kleinbegin PV SEF West of Groblershoop, Northern Cape	MedEnergy	Project Manager & EAP
Environmental Permitting for the Upington SEF, Northern Cape	Abengoa Solar	Project Manager & EAP
Environmental Permitting for the Kathu PV Facility, Northern Cape	Building Energy	Project Manager & EAP
Environmental Permitting for the Konkoonsies Solar Farm, Northern Cape	BioTherm Energy	Project Manager & EAP
Environmental Permitting for the Lephalale SEF, Limpopo	Exxaro Resources	Project Manager & EAP
Environmental Permitting for the Scuitdrift 1 SEF & Scuitdrift 2 SEF, Limpopo	Building Energy	Project Manager & EAP
Environmental Permitting for the Sirius PV Plant, Northern Cape	Aurora Power Solutions	Project Manager & EAP
Environmental Permitting for the Steynsrus PV1 & PV2 SEF's, Northern Cape	Cronimet Power Solutions	Project Manager & EAP
Environmental Permitting for the Heuningspruit PV SEF, Northern Cape	Cronimet Power Solutions	Project Manager & EAP
Permits for the Kleinbegin and UAP PV Plants, Northern Cape	MedEnergy Global	Project Manager & EAP
S53 Application for Arriesfontein Solar Park Phase 1 – 3 near Danielskuil, Northern Cape	Solar Reserve / SunCorp	Project Manager & EAP
S53 Application for Hertzogville PV1 & PV 2 SEFs, Free State	Solar Reserve / SunCorp	Project Manager & EAP
S53 Application for the Bloemfontein Airport PV Facility, Free State	Sublunary Trading	Project Manager & EAP
S53 Application for the Kimberley Airport PV Facility, Northern Cape	Sublunary Trading	Project Manager & EAP
S53 Application for the Project Blue SEF, Northern Cape	WWK Developments	Project Manager & EAP
S53 Application for the Upington Airport PV Facility, Free State	Sublunary Trading	Project Manager & EAP
WULA for the Kalahari SEF Phase II in Kathu, Northern Cape	Engie	Project Manager & EAP
Environmental Permitting for the Steynsrus PV1 & PV2 SEF's, Northern Cape	Cronimet Power Solutions	Project Manager & EAP
Environmental Permitting for the Heuningspruit PV SEF, Northern Cape	Cronimet Power Solutions	Project Manager & EAP

RENEWABLE POWER GENERATION PROJECTS: CONCENTRATED SOLAR FACILITIES (CSP)

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Ilanga CSP 2, 3, 4, 5, 7 & 9 Facilities near Upington, Northern Cape	Emvelo Holdings	Project Manager & EAP
Ilanga CSP near Upington, Northern Cape	Ilangethu Energy	Project Manager & EAP
Ilanga Tower 1 Facility near Upington, Northern Cape	Emvelo Holdings	Project Manager & EAP

Project Name & Location	Client Name	Role
Karoshhoek CPVPD 1-4 facilities on site 2 as part of the larger Karoshhoek Solar Valley Development East of Upington, Northern Cape	FG Emvelo	Project Manager & EAP
Karoshhoek CSP facilities on sites 1.4; 4 & 5 as part of the larger Karoshhoek Solar Valley Development East of Upington, Northern Cape	FG Emvelo	Project Manager & EAP
Karoshhoek Linear Fresnel 1 Facility on site 1.1 as part of the larger Karoshhoek Solar Valley Development East of Upington, Northern Cape	FG Emvelo	Project Manager & EAP

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
ECO for the construction of the !Khi CSP Facility, Northern Cape	Abengoa Solar	Project Manager
ECO for the construction of the Ilanga CSP 1 Facility near Upington, Northern Cape	Karoshhoek Solar One	Project Manager
ECO for the construction of the Solar Park, Northern Cape	Kathu Solar	Project Manager
ECO for the construction of the KaXu! CSP Facility, Northern Cape	Abengoa Solar	Project Manager
Internal audit of compliance with the conditions of the IWUL issued to the Karoshhoek Solar One CSP Facility, Northern Cape	Karoshhoek Solar One	Project Manager

Screening Studies

Project Name & Location	Client Name	Role
Upington CSP (Tower) Plant near Kanoneiland, Northern Cape	iNca Energy and FRV	Project Manager & EAP

Compliance Advice and ESAP reporting

Project Name & Location	Client Name	Role
Ilanga CSP Facility near Upington, Northern Cape	Ilangethu Energy	Environmental Advisor
Ilangaletu CSP 2, Northern Cape	FG Emvelo	Environmental Advisor
Kathu CSP Facility, Northern Cape	GDF Suez	Environmental Advisor
Lephalale SEF, Limpopo	Cennergi	Environmental Advisor
Solis I CSP Facility, Northern Cape	Brightsource	Environmental Advisor

Environmental Permitting, S53, Water Use Licence (WUL), Waste Management Licence (WML) & Other Applications

Project Name & Location	Client Name	Role
Environmental Permitting for the Ilanga CSP Facility near Upington, Northern Cape	Ilangethu Energy	Project Manager & EAP
Environmental Permitting for the Kathu CSP, Northern Cape	GDF Suez	Project Manager & EAP
WULA for the Solis I CSP Facility, Northern Cape	Brightsource	Project Manager & EAP

RENEWABLE POWER GENERATION PROJECTS: WIND ENERGY FACILITIES

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Sere WEF, Western Cape	Eskom Holdings SoC Limited	EAP

Project Name & Location	Client Name	Role
Aberdeen WEF, Eastern Cape	Eskom Holdings SoC Limited	Project Manager & EAP
Amakhala Emoyeni WEF, Eastern Cape	Windlab Developments	Project Manager & EAP
EXXARO West Coast WEF, Western Cape	EXXARO Resources	Project Manager & EAP
Goereesoe Wind Farm near Swellendam, Western Cape	iNca Energy	Project Manager & EAP
Hartneest WEF, Western Cape	Juwi Renewable Energies	Project Manager & EAP
Hopefield WEF, Western Cape	Umoya Energy	EAP
Kleinsee WEF, Northern Cape	Eskom Holdings SoC Limited	Project Manager & EAP
Klipheuwel/Dassiesfontein WEF within the Overberg area, Western Cape	BioTherm Energy	Project Manager & EAP
Moorreesburg WEF, Western Cape	iNca Energy	Project Manager & EAP
Oyster Bay WEF, Eastern Cape	Renewable Energy Resources Southern Africa	Project Manager & EAP
Project Blue WEF, Northern Cape	Windy World	Project Manager & EAP
Rheboksfontein WEF, Western Cape	Moyeng Energy	Project Manager & EAP
Spitskop East WEF near Riebeeck East, Eastern Cape	Renewable Energy Resources Southern Africa	Project Manager & EAP
Suurplaat WEF, Western Cape	Moyeng Energy	Project Manager & EAP
Swellendam WEF, Western Cape	IE Swellendam	Project Manager & EAP
Tsitsikamma WEF, Eastern Cape	Exxarro	Project Manager & EAP
West Coast One WEF, Western Cape	Moyeng Energy	Project Manager & EAP

Basic Assessments

Project Name & Location	Client Name	Role
Amakhala Emoyeni Wind Monitoring Masts, Eastern Cape	Windlab Developments	Project Manager & EAP
Beaufort West Wind Monitoring Masts, Western Cape	Umoya Energy	Project Manager & EAP
Hopefield Community Wind Farm near Hopefield, Western Cape	Umoya Energy	Project Manager & EAP
Koekenaap Wind Monitoring Masts, Western Cape	EXXARO Resources	Project Manager & EAP
Koingnaas WEF, Northern Cape	Just Palm Tree Power	Project Manager & EAP
Laingsburg Area Wind Monitoring Masts, Western Cape	Umoya Energy	Project Manager & EAP
Overberg Area Wind Monitoring Masts, Western Cape	BioTherm Energy	Project Manager & EAP
Oyster Bay Wind Monitoring Masts, Eastern Cape	Renewable Energy Systems Southern Africa (RES)	Project Manager & EAP

Screening Studies

Project Name & Location	Client Name	Role
Albertinia WEF, Western Cape	BioTherm Energy	Project Manager & EAP
Koingnaas WEF, Northern Cape	Just Pal Tree Power	Project Manager & EAP
Napier Region WEF Developments, Western Cape	BioTherm Energy	Project Manager & EAP
Tsitsikamma WEF, Eastern Cape	Exxarro Resources	Project Manager & EAP
Various WEFs within an identified area in the Overberg area, Western Cape	BioTherm Energy	Project Manager & EAP
Various WEFs within an identified area on the West Coast, Western Cape	Investec Bank Limited	Project Manager & EAP
Various WEFs within an identified area on the West Coast, Western Cape	Eskom Holdings Limited	Project Manager & EAP

Project Name & Location	Client Name	Role
Various WEFs within the Western Cape	Western Cape Department of Environmental Affairs and Development Planning	Project Manager & EAP
Velddrift WEF, Western Cape	VentuSA Energy	Project Manager & EAP
Wind 1000 Project	Thabo Consulting on behalf of Eskom Holdings	Project Manager & EAP
Wittekleibosch, Snylip & Doriskraal WEFs, Eastern Cape	Exxarro Resources	Project Manager & EAP

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
ECO for the construction of the West Coast One WEF, Western Cape	Aurora Wind Power	Project Manager
ECO for the construction of the Gouda WEF, Western Cape	Blue Falcon	Project Manager
EO for the Dassiesklip Wind Energy Facility, Western Cape	Group 5	Project Manager
Quarterly compliance monitoring of compliance with all environmental licenses for the operation activities at the Gouda Wind Energy facility near Gouda, Western Cape	Blue Falcon	Project Manager
Annual auditing of compliance with all environmental licenses for the operation activities at the West Coast One Wind Energy facility near Vredenburg, Western Cape	Aurora Wind Power	Project Manager
External environmental and social audit for the Amakhala Wind Farm, Eastern Cape	Cennergi	Project Manager
External environmental and social audit for the Tsitsikamma Wind Farm, Eastern Cape	Cennergi	Project Manager
ECO for the construction of the Excelsior Wind Farm and associated infrastructure, Northern Cape	BioTherm Energy	Project Manager
External compliance audit of the Dassiesklip Wind Energy Facility, Western Cape	BioTherm Energy	Project Manager

Compliance Advice

Project Name & Location	Client Name	Role
Amakhala Phase 1 WEF, Eastern Cape	Cennergi	Environmental Advisor
Dassiesfontein WEF within the Overberg area, Western Cape	BioTherm Energy	Environmental Advisor
Excelsior Wind Farm, Western Cape	BioTherm Energy	Environmental Advisor
Great Karoo Wind Farm, Northern Cape	African Clean Energy Developments (ACED)	Environmental Advisor
Hopefield Community WEF, Western Cape	African Clean Energy Developments (ACED)	Environmental Advisor
Rheboksfontein WEF, Western Cape	Moyeng Energy	Environmental Advisor
Tiqua WEF, Western Cape	Cennergi	Environmental Advisor
Tsitsikamma WEF, Eastern Cape	Cennergi	Environmental Advisor
West Coast One WEF, Western Cape	Moyeng Energy	Environmental Advisor

Due Diligence Reporting

Project Name & Location	Client Name	Role
Witteberg WEF, Western Cape	EDPR Renewables	Environmental Advisor
IPD Vredenburg WEF within the Saldanha Bay area, Western Cape	IL&FS Energy Development Company	Environmental Advisor

Environmental Permitting, S53, Water Use Licence (WUL), Waste Management Licence (WML) & Other Applications

Project Name & Location	Client Name	Role
Biodiversity Permitting for the Power Line between the Tsitikamma Community WEF & the Diep River Substation, Eastern Cape	Cennergi	Project Manager & EAP
Biodiversity Permitting for the West Coast One WEF, Western Cape	Aurora Wind Power	Project Manager & EAP
Environmental Permitting for the Excelsior WEF, Western Cape	BioTherm Energy	Project Manager & EAP
Plant Permits & WULA for the Tsitikamma Community WEF, Eastern Cape	Cennergi	Project Manager & EAP
S24G and WULA for the Rectification for the commencement of unlawful activities on Ruimsig AH in Honeydew, Gauteng	Hossam Soror	Project Manager & EAP
S24G Application for the Rhebokfontein WEF, Western Cape	Ormonde - Theo Basson	Project Manager & EAP
S53 Application & WULA for Suurplaat and Gemini WEFs, Northern Cape	Engie	Project Manager & EAP
S53 Application for the Hopefield Community Wind Farm near Hopefield, Western Cape	Umoya Energy	Project Manager & EAP
S53 Application for the Project Blue WEF, Northern Cape	WWK Developments	Project Manager & EAP
S53 for the Oyster Bay WEF, Eastern Cape	RES	Project Manager & EAP
WULA for the Great Karoo Wind Farm, Northern Cape	African Clean Energy Developments (ACED)	Project Manager & EAP

CONVENTIONAL POWER GENERATION PROJECTS (COAL)

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Mutsho Power Station near Makhado, Limpopo	Mutsho Consortium	Project Manager & EAP
Coal-fired Power Station near Ogies, Mpumalanga	Ruukki SA	Project Manager & EAP
Thabametsi IPP Coal-fired Power Station, near Lephallale, Limpopo	Axia	Project Manager & EAP
Transalloys Coal-fired Power Station, Mpumalanga	Transalloys	Project Manager & EAP
Tshivasho IPP Coal-fired Power Station (with WML), near Lephallale, Limpopo	Cennergi	Project Manager & EAP
Umbani Coal-fired Power Station, near Kriel, Mpumalanga	ISS Global Mining	Project Manager & EAP
Waterberg IPP Coal-Fired Power Station near Lephallale, Limpopo	Exxaro Resources	Project Manager & EAP

Basic Assessments

Project Name & Location	Client Name	Role
Coal Stockyard on Medupi Ash Dump Site, Limpopo	Eskom Holdings	Project Manager & EAP

Project Name & Location	Client Name	Role
Biomass Co-Firing Demonstration Facility at Arnot Power Station East of Middleburg, Mpumlanaga	Eskom Holdings	Project Manager & EAP

Screening Studies

Project Name & Location	Client Name	Role
Baseload Power Station near Lephallale, Limpopo	Cennergi	Project Manager & EAP
Coal-Fired Power Plant near Delmas, Mpumalanga	Exxaro Resources	Project Manager & EAP
Makhado Power Station, Limpopo	Mutsho Consortium, Limpopo	Project Manager & EAP

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
ECO for the Camden Power Station, Mpumalanga	Eskom Holdings	Project Manager

Compliance Advice

Project Name & Location	Client Name	Role
Thabametsi IPP Coal-fired Power Station, near Lephallale, Limpopo	Axia	Environmental Advisor

Environmental Permitting, S53, Water Use Licence (WUL), Waste Management Licence (WML) & Other Applications

Project Name & Location	Client Name	Role
Permit application for the Thabametsi Bulk Water Pipeline, near Lephallale, Limpopo	Axia	Project Manager & EAP
S53 & WULA for the Waterberg IPP Coal-Fired Power Station near Lephallale, Limpopo	Exxaro Resources	Project Manager & EAP
S53 Application for the Tshivasho Coal-fired Power Station near Lephallale, Limpopo	Cennergi	Project Manager & EAP

CONVENTIONAL POWER GENERATION PROJECTS (GAS)

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Ankerlig OCGT to CCGT Conversion project & 400 kV transmission power line between Ankerlig and the Omega Substation, Western Cape	Eskom Holdings SoC Limited	Project Manager & EAP
Gourikwa OCGT to CCGT Conversion project & 400 kV transmission power line between Gourikwa & Proteus Substation, Western Cape	Eskom Holdings SoC Limited	Project Manager & EAP
Richards Bay Gas to Power Combined Cycle Power Station, KwaZulu-Natal	Eskom Holdings SoC Limited	Project Manager & EAP
Richards Bay Gas to Power Plant, KwaZulu-Natal	Richards Bay Gas	Project Manager & EAP
Decommissioning & Recommissioning of 3 Gas Turbine Units at Acacia Power Station & 1 Gas Turbine Unit at Port Rex Power Station to the existing Ankerlig Power Station in Atlantis Industria, Western Cape	Eskom Holdings	Project Manager & EAP
Two 132kV Chickadee Lines to the new Zonnebloem Switching Station, Mpumalanga	Eskom Holdings	Project Manager & EAP

Screening Studies

Project Name & Location	Client Name	Role
Fatal Flaw Analysis for 3 area identified for the establishment of a 500MW CCGT Power Station	Globeleq Advisors Limited	Project Manager & EAP
Richards Bay Gas to Power Combined Cycle Power Station, KwaZulu-Natal	Eskom Holdings SoC Limited	Project Manager & EAP

GRID INFRASTRUCTURE PROJECTS

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Aggeneis-Oranjemond Transmission Line & Substation Upgrade, Northern Cape	Eskom Transmission	Project Manager & EAP
Ankerlig-Omega Transmission Power Lines, Western Cape	Eskom Transmission	Project Manager & EAP
Karoshhoek Grid Integration project as part of the Karoshhoek Solar Valley Development East of Upington, Northern Cape	FG Emvelo	Project Manager & EAP
Koeberg-Omega Transmission Power Lines,, Western Cape	Eskom Transmission	Project Manager & EAP
Koeberg-Stikland Transmission Power Lines, Western Cape	Eskom Transmission	Project Manager & EAP
Kyalami Strengthening Project, Gauteng	Eskom Transmission	Project Manager & EAP
Mokopane Integration Project, Limpopo	Eskom Transmission	Project Manager & EAP
Saldanha Bay Strengthening Project, Western Cape	Eskom Transmission	Project Manager & EAP
Steelpoort Integration Project, Limpopo	Eskom Transmission	Project Manager & EAP
Transmission Lines from the Koeberg-2 Nuclear Power Station site, Western Cape	Eskom Transmission	Project Manager & EAP
Tshwane Strengthening Project, Phase 1, Gauteng	Eskom Transmission	Project Manager & EAP

Basic Assessments

Project Name & Location	Client Name	Role
Dassenberg-Koeberg Power Line Deviation from the Koeberg to the Ankerlig Power Station, Western Cape	Eskom Holdings	Project Manager & EAP
Golden Valley II WEF Power Line & Substation near Cookhouse, Eastern Cape	BioTherm Energy	Project Manager & EAP
Golden Valley WEF Power Line near Cookhouse, Eastern Cape	BioTherm Energy	Project Manager & EAP
Karoshhoek Grid Integration project as part of the Karoshhoek Solar Valley Development East of Upington, Northern Cape	FG Emvelo	Project Manager & EAP
Konkoonsies II PV SEF Power Line to the Paulputs Substation near Pofadder, Northern Cape	BioTherm Energy	Project Manager & EAP
Perdekraal West WEF Powerline to the Eskom Kappa Substation, Western Cape	BioTherm Energy	Project Manager & EAP
Rheboksfontein WEF Powerline to the Aurora Substation, Western Cape	Moyeng Energy	Project Manager & EAP
Soetwater Switching Station near Sutherland, Northern Cape	African Clean Energy Developments (ACED)	Project Manager & EAP

Solis Power I Power Line & Switchyard Station near Upington, Northern Cape	Brightsource	Project Manager & EAP
Stormwater Canal System for the Ilanga CSP near Upington, Northern Cape	Karoshhoek Solar One	Project Manager & EAP
Tsitsikamma Community WEF Powerline to the Diep River Substation, Eastern Cape	Eskom Holdings	Project Manager & EAP

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
ECO for the construction of the Ferrum-Mookodi Transmission Line, Northern Cape and North West	Trans-Africa Projects on behalf of Eskom	Project Manager
EO for the construction of the Gamma-Kappa Section A Transmission Line, Western Cape	Trans-Africa Projects on behalf of Eskom	Project Manager
EO for the construction of the Gamma-Kappa Section B Transmission Line, Western Cape	Trans-Africa Projects on behalf of Eskom	Project Manager
EO for the construction of the Hydra IPP Integration project, Northern Cape	Trans-Africa Projects on behalf of Eskom	Project Manager
EO for the construction of the Kappa-Sterrekus Section C Transmission Line, Western Cape	Trans-Africa Projects on behalf of Eskom	Project Manager
EO for the construction of the Namaqualand Strengthening project in Port Nolloth, Western Cape	Trans-Africa Projects on behalf of Eskom	Project Manager
ECO for the construction of the Neptune Substation Soil Erosion Mitigation Project, Eastern Cape	Eskom	Project Manager
ECO for the construction of the Ilanga-Gordonia 132kV power line, Northern Cape	Karoshhoek Solar One	Project Manager

Environmental Permitting, S53, Water Use Licence (WUL), Waste Management Licence (WML) & Other Applications

Project Name & Location	Client Name	Role
Environmental Permitting and WULA for the Rockdale B Substation & Loop in Power Lines,	Eskom Holdings	Project Manager & EAP
Environmental Permitting and WULA for the Steelpoort Integration project, Limpopo	Eskom Holdings	Project Manager & EAP
Environmental Permitting for Solis CSP near Upington, Northern Cape	Brightsource	Project Manager & EAP

MINING SECTOR PROJECTS

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Elitheni Coal Mine near Indwe, Eastern Cape	Elitheni Coal	Project Manager & EAP
Groot Letaba River Development Project Borrow Pits	liso	Project Manager & EAP
Grootegeluk Coal Mine for coal transportation infrastructure between the mine and Medupi Power Station (EMPr amendment) , Limpopo	Eskom Holdings	Project Manager & EAP
Waterberg Coal Mine (EMPr amendment), Limpopo	Sesoko Resources	Project Manager & EAP
Aluminium Plant WML & AEL, Gauteng	GfE-MIR Alloys & Minerals	Project Manager & EAP

Basic Assessments

Project Name & Location	Client Name	Role
Rare Earth Separation Plant in Vredendal, Western Cape	Rareco	Project Manager & EAP

Decommissioning and Demolition of Kilns 5 & 6 at the Slurry Plant, Kwa-Zulu Natal	PPC	Project Manager & EAP
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Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
ECO for the construction of the Duhva Mine Water Recovery Project, Mpumalanga	Eskom Holdings SoC Limited	Project Manager
External compliance audit of Palesa Coal Mine's Integrated Water Use License (IWUL), near KwaMhlanga, Mpumalanga	HCI Coal	Project Manager
External compliance audit of Palesa Coal Mine's Waste Management License (WML) and EMP, near KwaMhlanga, Mpumalanga	HCI Coal	Project Manager
External compliance audit of Mbali Coal Mine's Integrated Water Use License (IWUL), near Ogies, Mpumalanga	HCI Coal	Project Manager
Independent External Compliance Audit of Water Use License (WUL) for the Tronox Namakwa Sands (TNS) Mining Operations (Brand se Baai), Western Cape	Tronox Namakwa Sands	Project Manager
Independent External Compliance Audit of Water Use License (WUL) for the Tronox Namakwa Sands (TNS) Mineral Separation Plant (MSP), Western Cape	Tronox Namakwa Sands	Project Manager
Independent External Compliance Audit of Water Use License (WUL) for the Tronox Namakwa Sands (TNS) Smelter Operations (Saldanha), Western Cape	Tronox Namakwa Sands	Project Manager
Compliance Auditing of the Waste Management Licence for the PetroSA Landfill Site at the GTL Refinery, Western Cape	PetroSA	Project Manager

Environmental Permitting, S53, Water Use Licence (WUL), Waste Management Licence (WML) & Other Applications

Project Name & Location	Client Name	Role
Waste Licence Application for the Rare Earth Separation Plant in Vredendal, Western Cape	Rareco	Project Manager & EAP
WULA for the Expansion of the Landfill site at Exxaro's Namakwa Sands Mineral Separation Plant, Western Cape	Exxaro Resources	Project Manager & EAP
S24G & WML for an Aluminium Plant, Gauteng	GfE-MIR Alloys & Minerals	Project Manager & EAP

INFRASTRUCTURE DEVELOPMENT PROJECTS (BRIDGES, PIPELINES, ROADS, WATER RESOURCES, STORAGE, ETC)

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Bridge across the Ngotwane River, on the border of South Africa and Botswana	Eskom Holdings	Project Manager & EAP
Chemical Storage Tanks, Metallurgical Plant Upgrade & Backfill Plant upgrade at South Deep Gold Mine, near Westonaria, Gauteng	Goldfields	Project Manager & EAP
Expansion of the existing Welgedacht Water Care Works, Gauteng	ERWAT	Project Manager & EAP

Project Name & Location	Client Name	Role
Golden Valley WEF Access Road near Cookhouse, Eastern Cape	BioTherm Energy	Project Manager & EAP
Great Fish River Wind Farm Access Roads and Watercourse Crossings near Cookhouse, Eastern Cape	African Clean Energy Developments (ACED)	Project Manager & EAP
Ilanga CSP Facility Watercourse Crossings near Upington, Northern Cape	Karoshok Solar one	Project Manager & EAP
Modification of the existing Hartebeestfontein Water Care Works, Gauteng	ERWAT	Project Manager & EAP
N10 Road Realignment for the Ilanga CSP Facility, East of Upington, Northern Cape	SANRAL	Project Manager & EAP
Nxuba (Bedford) Wind Farm Watercourse Crossings near Cookhouse, Eastern Cape	African Clean Energy Developments (ACED)	Project Manager & EAP
Pollution Control Dams at the Medupi Power Station Ash Dump & Coal Stockyard, Limpopo	Eskom	Project Manager & EAP
Qoboshane borrow pits (EMPr only), Eastern Cape	Emalahleni Local Municipality	Project Manager & EAP
Tsitsikamma Community WEF Watercourse Crossings, Eastern Cape	Cennergi	Project Manager & EAP
Clayville Central Steam Plant, Gauteng	Bellmall Energy	Project Manager & EAP
Msenge Emoyeni Wind Farm Watercourse Crossings and Roads, Eastern Cape	Windlab	Project Manager & EAP

Basic Assessments

Project Name & Location	Client Name	Role
Harmony Gold WWTW at Doornkop Mine, Gauteng	Harmony Doornkop Plant	Project Manager & EAP
Ofir-ZX Watercourse Crossing for the Solar PV Facility, near Keimoes, Northern Cape	Networx S28 Energy	Project Manager & EAP
Qoboshane bridge & access roads, Eastern Cape	Emalahleni Local Municipality	Project Manager & EAP
Relocation of the Assay Laboratory near Carletonville, Gauteng	Sibanye Gold	Project Manager & EAP
Richards Bay Harbour Staging Area, KwaZulu-Natal	Eskom Holdings	Project Manager & EAP
S-Kol Watercourse Crossing for the Solar PV Facility, East of Keimoes, Northern Cape	Networx S28 Energy	Project Manager & EAP
Sonnenberg Watercourse Crossing for the Solar PV Facility, West Keimoes, Northern Cape	Networx S28 Energy	Project Manager & EAP
Kruisvallei Hydroelectric Power Generation Scheme, Free State	Building Energy	Project Manager & EAP
Masetjaba Water Reservoir, Pump Station and Bulk Supply Pipeline near Nigel, Gauteng	Naidu Consulting Engineers	Project Manager & EAP
Access Road for the Dwarsug Wind Farm, Northern Cape Province	South Africa Mainsteam Renewable Power	Project Manager & EAP
Upgrade of the Cooling Water Treatment Facility at the Kriel Power Station, Mpumalanga	Eskom	Project Manager & EAP

Screening Studies

Project Name & Location	Client Name	Role
Roodepoort Open Space Optimisation Programme (OSOP) Precinct, Gauteng	TIMAC Engineering Projects	Project Manager & EAP
Vegetable Oil Plant and Associated Pipeline, Kwa-Zulu Natal	Wilmar Oils and Fats Africa	Project Manager & EAP

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
ECO and bi-monthly auditing for the construction of the Olifants River Water Resources Development Project (ORWRDP) Phase 2A: De Hoop Dam, R555 realignment and housing infrastructure	Department of Water and Sanitation	Project Manager Auditor
ECO for the Rehabilitation of the Blaaupan & Storm Water Channel, Gauteng	Airports Company of South Africa (ACSA)	Project Manager
Due Diligence reporting for the Better Fuel Pyrolysis Facility, Gauteng	Better Fuels	Project Manager
ECO for the Construction of the Water Pipeline from Kendal Power Station to Kendal Pump Station, Mpumalanga	Transnet	Project Manager
ECO for the Replacement of Low-Level Bridge, Demolition and Removal of Artificial Pong, and Reinforcement the Banks of the Crocodile River at the Construction at Walter Sisulu National Botanical Gardens, Gauteng Province	South African National Biodiversity Institute (SANBI)	Project Manager
External Compliance Audit of the Air Emission Licence (AEL) for a depot in Bloemfontein, Free State Province and in Tzaneen, Mpumalanga Province	PetroSA	Project Manager

Environmental Permitting, S53, Water Use Licence (WUL), Waste Management Licence (WML) & Other Applications

Project Name & Location	Client Name	Role
WULA for the Izubulo Private Nature Reserve, Limpopo	Kjell Bismeyer, Jann Bader, Laurence Saad	Project Manager & EAP
WULA for the Masodini Private Game Lode, Limpopo	Masodini Private Game Lodge	Environmental Advisor
WULA for the Ezulwini Private Nature Reserve, Limpopo	Ezulwini Investments	Project Manager & EAP
WULA for the Masodini Private Game Lode, Limpopo	Masodini Private Game Lodge	Project Manager & EAP
WULA for the N10 Realignment at the Ilanga SEF, Northern Cape	Karoshhoek Solar One	Project Manager & EAP
WULA for the Kruisvallei Hydroelectric Power Generation Scheme, Free State	Building Energy	Project Manager & EAP
S24G and WULA for the illegal construction of structures within a watercourse on EFF 24 Ruimsig Agricultural Holdings, Gauteng	Sorrow Language Services	Project Manager & EAP

HOUSING AND URBAN PROJECTS

Basic Assessments

Project Name & Location	Client Name	Role
Postmasburg Housing Development, Northern Cape	Transnet	Project Manager & EAP

Compliance Advice and reporting

Project Name & Location	Client Name	Role
Kampi ya Thude at the Olifants West Game Reserve, Limpopo	Nick Elliot	Environmental Advisor

Project Name & Location	Client Name	Role
External Compliance Audit of WUL for the Johannesburg Country Club, Gauteng	Johannesburg Country Club	Project Manager

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
Due Diligence Audit for the Due Diligence Audit Report, Gauteng	Delta BEC (on behalf of Johannesburg Development Agency (JDA))	Project Manager

ENVIRONMENTAL MANAGEMENT TOOLS

Project Name & Location	Client Name	Role
Development of the 3rd Edition Environmental Implementation Plan (EIP)	Gauteng Department of Agriculture and Rural Development (GDARD)	Project Manager & EAP
Development of Provincial Guidelines on 4x4 routes, Western Cape	Western Cape Department of Environmental Affairs and Development Planning	EAP
Compilation of Construction and Operation EMP for the Braamhoek Transmission Integration Project, Kwazulu-Natal	Eskom Holdings	Project Manager & EAP
Compilation of EMP for the Wholesale Trade of Petroleum Products, Gauteng	Munaca Technologies	Project Manager & EAP
Operational Environmental Management Programme (OEMP) for Medupi Power Station, Limpopo	Eskom Holdings	Project Manager & EAP
Operational Environmental Management Programme (OEMP) for the Dube TradePort Site Wide Precinct	Dube TradePort Corporation	Project Manager & EAP
Operational Environmental Management Programme (OEMP) for the Kusile Power Station, Mpumalanga	Eskom Holdings	Project Manager & EAP
Review of Basic Assessment Process for the Wittekleibosch Wind Monitoring Mast, Eastern Cape	Exxaro Resources	Project Manager & EAP
Revision of the EMPr for the Sirius Solar PV	Aurora Power Solutions	Project Manager & EAP
State of the Environment (SoE) for Emalahleni Local Municipality, Mpumalanga	Simo Consulting on behalf of Emalahleni Local Municipality	Project Manager & EAP
Aspects and Impacts Register for Salberg Concrete Products operations	Salberg Concrete Products	EAP
First State of Waste Report for South Africa	Golder on behalf of the Department of Environmental Affairs	Project Manager & EAP
Responsibilities Matrix and Gap Analysis for the Kruisvallei Hydroelectric Power Generation Scheme, Free State Province	Building Energy	Project Manager
Responsibilities Matrix and Gap Analysis for the Roggeveld Wind Farm, Northern & Western Cape Provinces	Building Energy	Project Manager

PROJECTS OUTSIDE OF SOUTH AFRICA

Project Name & Location	Client Name	Role
Advisory Services for the Zizabona Transmission Project, Zambia, Zimbabwe, Botswana & Namibia	PHD Capital	Advisor
EIA for the Semonkong WEF, Lesotho	MOSCET	Project Manager & EAP
EMP for the Kuvaninga Energia Gas Fired Power Project, Mozambique	ADC (Pty) Ltd	Project Manager & EAP
Environmental Screening Report for the SEF near Thabana Morena, Lesotho	Building Energy	EAP
EPBs for the Kawambwa, Mansa, Mwense and Nchelenge SEFs in Luapula Province, Zambia	Building Energy	Project Manager & EAP
ESG Due Diligence for the Hilton Garden Inn Development in Windhoek, Namibia	Vatange Capital	Project Manager
Mandahill Mall Rooftop PV SEF EPB, Lusaka, Zambia	Building Energy	Project Manager & EAP
Monthly ECO for the PV Power Plant for the Mocuba Power Station	Scatec	Project Manager

APPENDIX B:
ADVERTISEMENT OF SUBMISSION OF THE AUDIT REPORT

**NOTICE OF EXTERNAL COMPLIANCE AUDIT (SECTION 54)
PUBLIC PARTICIPATION PROCESS: ZEN WIND FARM,
DRAKENSTEIN LOCAL MUNICIPALITY, WESTERN CAPE PROVINCE**

DEA Reference(s): 14/12/16/3/3/2/322;

Activity: Zen Wind Farm (Pty) Ltd is proposing to establish a commercial wind energy facility, located near Saron within the Drakenstein Local Municipality, consisting of up to 46 wind turbine generators with a total capacity of up to 140 MW, in addition to an on-site substation and associated infrastructure. Construction has not yet commenced.

External Compliance Audit: In terms of Section 54(A)(3) of the EIA Regulations 2014 of GNR 326, an Independent External Compliance Audit ("S54 Audit") is required to verify compliance towards the Environmental Management Programme (EMPr) for the project. This advertisement hereby notifies all potential and registered interested and affected parties, including organs of state with applicable jurisdiction as well as the competent authority, of the submission of the external compliance audit report to the competent authority. This report is available at <https://www.savannahsa.com/public-documents/other/> for 14 days from the date of publication.

Please direct any queries, information requests or comments to the DEA compliance directorate, at the following: **Department of Environmental Affairs (DEA) Legal Authorisations and Compliance Inspectorate**
E-mail: compliance@environment.gov.za



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Die Witzenberg Herald word uitgegee vir die eienaars, Snyman, Vortrekkerstraat 35, Ceres en gedruk deur Paarlcoldset, Lynxstraat 5, Paarden Eiland. Geen advertensie/redaksionele materiaal mag sonder die verloop van die eienaars volgens Art. 12 (7) Wet op Outeursreg 1978 gereproduseer word nie.

Witzenberg

Sport Herald

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MOOI Uitsig primêr het Saterdag 9 November hul atletiekbyeenkoms aangebied. Die atleet wat die beste gevaar het was Saskia Booyen. Sy het die meeste punte vir meisies o/11 aangeteken, is aangewys as beste junior atleet en atleet met algehele die meeste punte (Victrix Ludorum).

Drie fietsryers pak tawwe Munga

DRIE plaaslike fietsryers is reeds op pad na Bloemfontein waar hulle van Woensdag die tawwe Munga oor 1070 kilometer aanpak. Die wedren eindig in Wellington.

Met die borgskap van Ceres Cycles gaan twee bergfietsryers, Riaan Potgieter en Pierre de Jager, saam met Boetie Hugo (Hugo Agri) die moordende bergfietswedren aanpak.

Boetie, Riaan en Pierre het die Munga reeds in die verlede suksesvol voltooi en hoop om vanjaar weer so te maak.

Die bergfietsuitdaging staan nie verniet bekend as "The Toughest Race on Earth" nie.

Die roete strek oor grondpaaie, jeep-tracks, gedeeltes teerpad en enkelspoor. Hitte, wind en die koue nag-temperatuur gaan plek-plek meer 'n uitdaging as die afstand wees. Die wenner van verlede jaar se uitdaging, Ramses Bekkend van Nederland, het die afstand in 2018 in 'n rekordtyd van 2 dae 2 ure en 30 minute voltooi.

Deelnemers het vyf dae om die roete te voltooi, sonder enige buite hulp van direkte ondersteuners.

Ondersteuners kan hulle volg op die webwerf <https://mtb.themunga.com>. Die roete strek vanaf Bloemfontein na Vanderkloofdam, Britstown, Loxton, Fraserburg, Sutherland, Ceres en Wellington.



TWEE bergfietsryers, Pierre de Jager en Riaan Potgieter (foto links) gaan saam met Boetie Hugo (Hugo Agri), die moordende Munga bergfietswedren aanpak.



DIE naweek van 23 en 24 November het daar 'n feestelike atmosfeer by Ceres rolbalklub geheers met die jaarlike Kersiefees rolbaltoernooi. Dit is die derde keer wat die toernooi aangebied word en 56 spelers het deelgeneem. Die gekombineerde Bredasdorp/Ceres/Caledon rolbalspan van Boetie Hugo, Engela Lambrechts, Ezile Fourie en Petula Fortuin, tesame met Edwill Adonis (afwesig) het vanjaar die toernooi gewen. By hulle staan Willem Coetzee (heel regs), hoof uitvoerende beampte van Dutoit Agri.

* Dutoit Agri word bedank vir die borgskap asook vir hul voortgesette ondersteuning van Ceres rolbalklub. Dankie ook aan Ceres Zip-slide en Matie Wessels vir die borg van pryse.

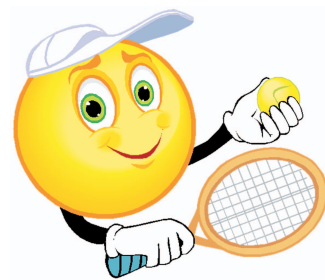
Tulbagh WITZENVILLE Faire
Denve Jacobs and the Rockstone Band • KR Records • 2 Pac • A1 Crew • Denver Vraagom

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5 - 7 Desember 2019

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Enkels en dubbels word in die ouderdomsgroepe gespeel

Inskrywings, toernooi inligting en reëlings kan gekry word op die webblad van: Tennisonline

Vir enige verdere navrae skakel: Alma Goosen by 083-443-0881

Borge nodig vir kriekettoer

AIDEN Hanekom, 'n leerder van Hoërskool Charlie Hofmeyr en belowende krieketspeler, is gekies om aan die Puntfest kriekettoernooi in Sri Lanka te gaan deelneem. Die toer vind van 16 tot 25 Junie 2020 plaas. Die koste vir die toer beloop R38 990 per speler. Indien daar enige individu, organisasie of besigheid is wat hom kan help om die droom te bewaarheid, sal dit waardeer word. Vir verdere navrae skakel Merylyne by 073-728-3104



NOTICE OF EXTERNAL COMPLIANCE AUDIT (SECTION 54) PUBLIC PARTICIPATION PROCESS: ZEN WIND FARM, DRAKENSTEIN LOCAL MUNICIPALITY, WESTERN CAPE PROVINCE

DEA Reference(s): 14/12/16/3/3/2/322;

Activity: Zen Wind Farm (Pty) Ltd is proposing to establish a commercial wind energy facility, located near Saron within the Drakenstein Local Municipality, consisting of up to 46 wind turbine generators with a total capacity of up to 140 MW, in addition to an on-site substation and associated infrastructure. Construction has not yet commenced.

External Compliance Audit: In terms of Section 54(A)(3) of the EIA Regulations 2014 of GNR 326, an Independent External Compliance Audit ("S54 Audit") is required to verify compliance towards the Environmental Management Programme (EMPr) for the project. This advertisement hereby notifies all potential and registered interested and affected parties, including organs of state with applicable jurisdiction as well as the competent authority, of the submission of the external compliance audit report to the competent authority. This report is available at <https://www.savannahsa.com/public-documents/other/> for 14 days from the date of publication.

Please direct any queries, information requests or comments to the DEA compliance directorate, at the following: **Department of Environmental Affairs (DEA) Legal Authorisations and Compliance Inspectorate**
E-mail: compliance@environment.gov.za

**APPENDIX C:
NOTIFICATION TO REGISTERED I&APS OF SUBMISSION OF THE
AUDIT REPORT**

29 November 2019

Dear Registered Interested and Affected Party,

**NOTICE OF AN EXTERNAL COMPLIANCE AUDIT (SECTION 54) AND PUBLIC PARTICIPATION PROCESS:
ZEN WIND ENERGY FACILITY NEAR SARON WITHIN THE DRAKENSTEIN LOCAL MUNICIPALITY,
BEDFORD, WESTERN CAPE PROVINCE**

Notification of Submission of Section 54(A)(3) Audit Reports to the Competent Authority

Development of Zen Wind Energy Facility and associated infrastructure located near Saron within the Drakenstein Local Municipality in the Western Cape has reference.

The Wind Energy Facility and associated infrastructure is authorised (DEA Ref no. 14/12/16/3/3/2/322). No construction activities related to the Zen Wind Energy Facility or associated infrastructure has commenced to date.

The site for the proposed Zen Wind Energy Facility falls within the Drakenstein Local Municipality in the Western Cape Province. The broader area (~3 542 ha in extent) includes the following farm portions:

- » Portion 1 of the farm Bonne Esperance 83
- » Portion 2 of the farm Bonne Esperance 83
- » Portion 9 of the farm No. 88
- » Remainder of Portion 4 of the farm Kleinberggrivier No.1
- » Remainder of the farm Moolenaars Drift No. 85
- » Remainder of Portion 1 of the farm Moolenaars Drift No. 85

In terms of Section 54(A)(3) of the EIA Regulations 2014 of GNR 326, Independent External Compliance Audits ("S54 Audit") are required to verify compliance towards the Environmental Management Programmes (EMPr) for the project. This advertisement hereby notifies all potential and registered interested and affected parties, including organs of state with applicable jurisdiction as well as the competent authority, of the submission of the external compliance audit report to the competent authority. The report is available at <https://www.savannahsa.com/public-documents/other/> for 14 days from date of this notification.

Please direct any queries, information requests or comments to the DEA compliance directorate, at the following:

Department of Environmental Affairs (DEA) Legal Authorisations and Compliance Inspectorate

E-mail: compliance@environment.gov.za

Kind regards

A handwritten signature in black ink, appearing to read 'Nicolene Venter'.

Nicolene Venter

Public Participation and Social Consultant

Email: publicprocess@savannahsa.com

APPENDIX D:
CONFIRMATION LETTER ON CURRENT STATUS OF THE PROJECT

22 November, 2019

To whom it may concern,

Dear Sir/Madam

**RE: CONFIRMATION OF NO COMMENCEMENT OF ACTIVITIES OF ENVIRONMENTAL
AUTHORISATION (DEA Ref: 14/12/16/3/3/2/322)**

This letter serves to confirm that no construction has commenced on Environmental Authorisation (DEA Ref: 14/12/16/3/3/2/322), and that there is currently no activity on the site.

As such, I Ralf GRAS, being the duly authorised representative acting on behalf of Fe Bonne Esperance, and duly authorised representative of Fe Bonne Esperance , hereby declare that the above statement is true to the best of my knowledge.

Should you require any further details or information, please do not hesitate to contact me.

Kind regards,



Name : Ralf GRASS

Designation :

Who warrants that he is duly authorised.