

## CURRICULUM VITAE OF KHOMOTJO REUBEN MAROGA

|                         |   |
|-------------------------|---|
| <b>Profession :</b>     | Environmental Consultant  |
| <b>Specialisation:</b>  | Environmental Impact Assessments, Basic Assessments, Site Visits, Compilation of Environmental Management Programmes and Liaison with authorities |
| <b>Work Experience:</b> | 2.5 years of experience in the environmental management field   |

### VOCATIONAL EXPERIENCE

Khomotjo Reuben Maroga has two years of experience in the environmental field. He has worked on a mining infrastructure project in compiling environmental control officer's reports and conducting air and groundwater monitoring using the DustTrak DRX Aerosol Monitor and a Bailer as apparatuses. Additionally, he has provided assistance to Eco-Elementum & Engineering on WUL applications and EIAs.

### SKILLS BASE AND CORE COMPETENCIES

- ECO Report writing
- Environmental monitoring
- Administrative tasks

### EDUCATION AND PROFESSIONAL STATUS

#### Degrees:

- B.Sc. (Hons) Geology, University of Johannesburg, 2016
- B.Sc. Geology and Environmental Management, University of Johannesburg, 2015

#### Courses:

- Business Communication, ProEarth Learning Academy (Pty) in Middelburg (2018)
- Describe the functions of a Health and Safety representative, Elite Training (Pty) Ltd in Middelburg (2017)
- Basic Fire Fighting, Elite Training (Pty) Ltd in Middelburg (2017)
- Combined OSHAS 18001: 2007 and ISO 14001: 2015 Introduction, NOSA in eMalahleni (2017)
- Combined OSHAS 18001: 2007 and ISO 14001: 2015 Implementation (2017), NOSA in eMalahleni (2017)
- Emotional Intelligence, LearnMe (Pty) Ltd in Middelburg (2017)

**EMPLOYMENT**

| <b>Date</b>                          | <b>Company</b>   | <b>Roles and Responsibilities</b>  |
|--------------------------------------|--|--|
| <b>October 2018 - current</b>        | Savannah Environmental (Pty) Ltd                             | Environmental Consultant<br><br><i>Tasks include:</i> Applying applicable legislation, research of related environmental policy documentation required for EIAs, efficient and quality report writing, liaison with relevant environmental authorities, site visits, compilation of application forms, environmental management programmes (EMPrs) and public participation include documentation. Other related tasks include undertaking water use license applications, environmental auditing (Environmental Control Officer – ECO work) and any other related authorisation, permitting and licensing tasks (on an as and when required basis). |
| <b>September 2016 - October 2018</b> | Yoctolux Collieries (Pty) Ltd                                | Environmental Management Intern<br><br><i>Tasks included:</i> Drafting monthly ECO reports, conducting monthly environmental monitoring, providing assistance on WULAs and EIAs to Eco-Elementum & Engineering (Pty) Ltd and providing oversight on IAPs eradication and management programme.   |
| <b>January – September 2016</b>      | University of Johannesburg<br>Auckland Park, Kingsway Campus | Second-year Practical Demonstrator<br><br><i>Tasks included:</i> Marking of practical's, attending to any ad-hoc administrative duties and liaising with designated lecturers.   |

**PROJECT EXPERIENCE****MINING PROJECTS: COAL MINING*****Water Use Licence Application***

| <b>Project Name &amp; Location</b>  | <b>Client Name</b>  | <b>Role</b> |
|---|---|-------------|
| Compiling a water use licence report for an underground coal mining development (Tala Bethal Coal) in Hendrina, Mpumalanga. | Diepsoils Investments (Pty) Ltd<br>Vernon Siemelink: 072 196 9928 | Assistant   |

**WASTE TREATMENT WORKS**

| <b>Project Name &amp; Location</b>                        | <b>Client Name</b>  | <b>Role</b> |
|---|---|-------------|
| Kriel Power Station Lime Plant Upgrade, Kriel, Mpumalanga | Eskom Holdings SOC Limited<br>Khuliso Rasimphi : 017 615 2634 | Junior EAP  |

## **RENEWABLE ENERGY**

### **Basic Assessments**

| <b>Project Name &amp; Location</b>   | <b>Client Name</b>   | <b>Role</b> |
|--|--|-------------|
| Basic Assessment Process for Sirius 2x 100MW Solar Photovoltaic facilities, Upington, Northern Cape    | SOLA Future Energy (Pty) Ltd<br>Tseliso Mahao: 076 067 8221                        | Junior EAP  |
| Basic Assessment Process for Aggeneys 2x 100MW Solar Photovoltaic facilities, Aggeneys, Northern Cape. | Atlantic Energy Partners (Pty) Ltd and ABO Wind AG<br>Sonia Miszczak: 021 418 2596 | Junior EAP  |

### **Section 53 Applications**

| <b>Project Name &amp; Location</b>   | <b>Client Name</b>   | <b>Role</b> |
|--|--|-------------|
| Section 53 applications for the Veld PV North and PV South, Northern Cape. | Veld Renewables (Pty) Ltd<br>Jason Cope: 021 020 1044/<br>082 598 1123 | EAP         |

### **Part 1 Amendments**

| <b>Project Name &amp; Location</b>  | <b>Client Name</b>  | <b>Role</b> |
|---|---|-------------|
| 20MW Konkoonsies Solar Photovoltaic facility, Pofadder, Northern Cape.          | Biotherm Energy (Pty) Ltd<br>Michael Barnes: 011 367 4600 | Junior EAP  |
| 10MW Aries Solar PV Photovoltaic facility, near Kenhardt, Northern Cape.        | Biotherm Energy (Pty) Ltd<br>Michael Barnes: 011 367 4600 | Junior EAP  |
| 27MW Klipheuwel/Dassiefontein Wind Energy facility near Calendon, Western Cape. | Biotherm Energy (Pty) Ltd<br>Michael Barnes: 011 367 4600 | Junior EAP  |
| Matzikama Solar PV Photovoltaic facility, near Vredendal, Western Cape.         | SolaireDirect (Pty) Ltd<br>Reggie Niemand: 082 674 1233   | EAP         |
| Grootspruit Solar PV Photovoltaic facility, near Welkom, Free State.            | SolaireDirect (Pty) Ltd<br>Reggie Niemand: 082 674 1233   | EAP         |
| Reddersburg Solar PV Photovoltaic facility, near Reddersburg, Free State.       | SolaireDirect (Pty) Ltd<br>Reggie Niemand: 082 674 1233   | EAP         |
| Graspan Solar PV Photovoltaic facility, near Hopetown, Northern Cape            | SolaireDirect (Pty) Ltd<br>Reggie Niemand: 082 674 1233   | EAP         |

## **INFRASTRUCTURE DEVELOPMENT**

### **Basic Assessments**

| <b>Project Name &amp; Location</b>  | <b>Client Name</b>  | <b>Role</b> |
|---|---|-------------|
| Basic Assessment Process for the Wilmar Vegetable Oil Pipeline, Richards Bay, Kwa-Zulu Natal. | Wilmar Processing (Pty) Ltd<br>Aidan Dowdle: 082 872 3628 | Junior EAP  |

## **WASTE MANAGEMENT**

### **Basic Assessments**

| <b>Project Name &amp; Location</b>   | <b>Client Name</b>  | <b>Role</b> |
|--|---|-------------|
| Decommissioning of the Asbestos landfill at the Kriel Power Station, Mpumalanga. . | Eskom Holdings SOC Limited<br>Khuliso Rasimphi : 017 615 2634 | EAP         |

## CURRICULUM VITAE OF JO-ANNE THOMAS

|                         |   |
|-------------------------|---|
| <b>Profession:</b>      | Environmental Management and Compliance Consultant; Environmental Assessment Practitioner   |
| <b>Specialisation:</b>  | Environmental Management; Strategic environmental advice; Environmental compliance advice & monitoring; Environmental Impact Assessments; Policy, strategy & guideline formulation; Project Management; General Ecology |
| <b>Work experience:</b> | 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<br>Project manager<br>Independent specialist environmental consultant,<br>Environmental Assessment Practitioner (EAP) and<br>advisor. |
| 1997 – 2005            | Bohlweki Environmental (Pty) Ltd | Senior Environmental Scientist at. Environmental<br>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 |

| <b>Project Name &amp; Location</b>                            | <b>Client Name</b>                        | <b>Role</b>           |
|---|---|-----------------------|
| 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

| <b>Project Name &amp; Location</b>                             | <b>Client Name</b>                   | <b>Role</b>           |
|--|--------------------------------------|-----------------------|
| 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  | Sublinary 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            | Sublinary 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 |



| <b>Project Name &amp; Location</b>   | <b>Client Name</b>       | <b>Role</b>           |
|--|--------------------------|-----------------------|
| 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**

| <b>Project Name &amp; Location</b>                                   | <b>Client Name</b> | <b>Role</b>           |
|--|--------------------|-----------------------|
| 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  |

| <b>Project Name &amp; Location</b>                                   | <b>Client Name</b>                         | <b>Role</b>           |
|--|--|-----------------------|
| 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**

| <b>Project Name &amp; Location</b>                         | <b>Client Name</b>                             | <b>Role</b>           |
|--|--|-----------------------|
| 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**

| <b>Project Name &amp; Location</b>  | <b>Client Name</b>     | <b>Role</b>           |
|---|------------------------|-----------------------|
| 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 Lephhalale, Limpopo           | Axia              | Project Manager & EAP |
| Transalloys Coal-fired Power Station, Mpumalanga                            | Transalloys       | Project Manager & EAP |
| Tshivasho IPP Coal-fired Power Station (with WML), near Lephhalale, 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 Lephhalale, 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**

| <b>Project Name &amp; Location</b>   | <b>Client Name</b>                       | <b>Role</b>     |
|--|--|-----------------|
| 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**

| <b>Project Name &amp; Location</b>   | <b>Client Name</b> | <b>Role</b>           |
|--|--------------------|-----------------------|
| 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**

| <b>Project Name &amp; Location</b>  | <b>Client Name</b>        | <b>Role</b>           |
|---|---------------------------|-----------------------|
| 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**

| <b>Project Name &amp; Location</b>                     | <b>Client Name</b> | <b>Role</b>           |
|--|--------------------|-----------------------|
| 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 |
|---|-----|-----------------------|

#### 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<br>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 |

| <b>Project Name &amp; Location</b>  | <b>Client Name</b>        | <b>Role</b>     |
|---|---------------------------|-----------------|
| External Compliance Audit of WUL for the Johannesburg Country Club, Gauteng | Johannesburg Country Club | Project Manager |

#### **Environmental Compliance, Auditing and ECO**

| <b>Project Name &amp; Location</b>                              | <b>Client Name</b>   | <b>Role</b>     |
|---|--|-----------------|
| Due Diligence Audit for the Due Diligence Audit Report, Gauteng | Delta BEC (on behalf of Johannesburg Development Agency (JDA)) | Project Manager |

#### **ENVIRONMENTAL MANAGEMENT TOOLS**

| <b>Project Name &amp; Location</b>  | <b>Client Name</b>  | <b>Role</b>           |
|---|---|-----------------------|
| 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**

| <b>Project Name &amp; Location</b>  | <b>Client Name</b> | <b>Role</b>           |
|---|--------------------|-----------------------|
| 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       |

## CURRICULUM VITAE OF LISA OPPERMAN

|                         |   |
|-------------------------|---|
| <b>Profession :</b>     | Environmental Assessment Practitioner and GIS Consultant  |
| <b>Specialisation:</b>  | Environmental Impact Assessments, Basic Assessments, Site Screening and Site Selection reporting, compilation of maps through the use of ArcGIS |
| <b>Work Experience:</b> | 4 years of experience in the environmental management and GIS field   |

### VOCATIONAL EXPERIENCE

Lisa Opperman has four years of experience in the environmental field. She has worked on a variety of EIA processes including renewable energy projects, as well as industrial developments. She has also been involved in the undertaking of public participation for projects located in South Africa which has included the undertaking of public meetings, focus group meetings and key stakeholder meetings in both Afrikaans and English. She also has experience in working with ArcGIS 10 for the compilation of maps, the manipulation of data and screening for environmental sensitivities within areas with the potential for development.

### SKILLS BASE AND CORE COMPETENCIES

- GIS Mapping
- EIA Report Writing
- Conducting of public involvement processes
- Administrative tasks
- Analysis and manipulation of geographical information and technical experience with the use of ArcGIS

### EDUCATION AND PROFESSIONAL STATUS

#### Degrees:

- B.Sc. (Hons) Environmental Management (2014), North-West University, Potchefstroom
- B.A Psychology, Geography and Environmental Studies (2013), North-West University, Potchefstroom

#### Courses:

- Environmental Legal Compliance and Auditing (2017), Janice Tooley at the Protea Hotel OR Thambo, Johannesburg

**EMPLOYMENT**

| <b>Date</b>                    | <b>Company</b>                   | <b>Roles and Responsibilities</b>  |
|--------------------------------|----------------------------------|--|
| <b>February 2015 – current</b> | Savannah Environmental (Pty) Ltd | Environmental Assessment Practitioner and GIS Consultant<br><i>Tasks include: Compilation of Environmental Scoping Reports, Plan of Study, Environmental Impact Assessment Reports, Basic Assessments and Environmental management programmes; Environmental Screening Reports; Specialist management; project proposals and tenders; Client liaison and Marketing; Process EIA Applications, GIS Mapping and data analysis and manipulation</i> |

**PROJECT EXPERIENCE****Renewable Power Generation Projects: Solar Energy Facilities****Screening Studies**

| <b>Project Name &amp; Location</b>  | <b>Client Name</b> | <b>Role</b>                   |
|---|--------------------|-------------------------------|
| <i>Pre-feasibility Desktop Screening and Fatal Flaw Scan for a Solar PV Project near Lichtenburg, North West Province</i> | ABO Wind AG        | <i>EAP and GIS Consultant</i> |
| <i>Pre-feasibility Desktop Screening and Fatal Flaw Scan for a Solar PV Project neat Aggeneys, Northern Cape Province</i> | ABO Wind AG        | <i>EAP and GIS Consultant</i> |

**Environmental Impact Assessments and Environmental Management Programmes**

| <b>Project Name &amp; Location</b>   | <b>Client Name</b>                     | <b>Role</b>                   |
|--|--|-------------------------------|
| <i>Buffels PV 1 &amp; Buffels PV 2 Solar Energy Facilities near Orkney, North West</i>                                 | <i>Kabi Solar</i>                      | <i>EAP and GIS Consultant</i> |
| <i>Woodhouse Solar 1 &amp; Woodhouse Solar 2 PV Facilities near Vryburg, North West</i>                                | <i>Genesis Eco-Energy Developments</i> | <i>EAP and GIS Consultant</i> |
| <i>Orkney Solar Farm, North West</i>   | <i>Genesis Eco-Energy Developments</i> | <i>EAP and GIS Consultant</i> |
| <i>Tewa Isitha Solar 1 &amp; Tewa Isitha Solar 2 PV facilities near Upington, Northern Cape</i>                        | <i>AfriCoast Energy</i>                | <i>EAP and GIS Consultant</i> |
| <i>Lichtenburg 1, Lichtenburg 2 and Lichtenburg 3 PV Facilities, near Lichtenburg, North West Province (EIA Phase)</i> | ABO Wind AG                            | <i>EAP and GIS Consultant</i> |

**Basic Assessments**

| <b>Project Name &amp; Location</b>                       | <b>Client Name</b> | <b>Role</b>                   |
|--|--------------------|-------------------------------|
| <i>Harmony Gold 3x PV Facilities, Welkom, Free State</i> | BBEntropie         | <i>EAP and GIS Consultant</i> |

## **Renewable power generation projects: Wind Energy Facilities**

### **Screening Studies**

| <b>Project Name &amp; Location</b>   | <b>Client Name</b>       | <b>Role</b>                   |
|--|--------------------------|-------------------------------|
| <i>Juno Wind Farm Screening Assessment Report near Lamberts Bay, Western Cape Province</i>   | <i>AMDA Developments</i> | <i>EAP and GIS Consultant</i> |
| <i>Lamberts Bay Wind Farm Screening Assessment Report near Lamberts Bay, Western Cape Province</i>   | <i>Windy World</i>       | <i>EAP and GIS Consultant</i> |
| <i>Pre-feasibility Desktop Screening and Fatal Flaw Scan for the Kudusberg and Rondekop Wind Energy Facilities, Northern Cape and Western Cape Provinces</i> | <i>ABO Wind AG</i>       | <i>EAP and GIS Consultant</i> |
| <i>Pre-feasibility Desktop Screening and Fatal Flaw Scan for Wind Projects near Touws River, Western Cape Province</i>                                       | <i>ABO Wind AG</i>       | <i>EAP and GIS Consultant</i> |

### **Environmental Impact Assessments and Environmental Management Programmes**

| <b>Project Name &amp; Location</b>                | <b>Client Name</b>                     | <b>Role</b>                   |
|---|--|-------------------------------|
| <i>Boulders Wind Farm, Western Cape Province</i>  | <i>Vredenburg Windfarm</i>             | <i>EAP and GIS Consultant</i> |
| <i>Namas Wind Farm, Northern Cape Province</i>    | <i>Genesis Namas Wind (Pty) Ltd</i>    | <i>EAP and GIS Consultant</i> |
| <i>Zonnequa Wind Farm, Northern Cape Province</i> | <i>Genesis Zonnequa Wind (Pty) Ltd</i> | <i>EAP and GIS Consultant</i> |

### **Grid Infrastructure Projects**

#### **Basic Assessments**

| <b>Project Name &amp; Location</b>   | <b>Client Name</b>                     | <b>Role</b>                   |
|--|--|-------------------------------|
| <i>132/11kV Olifantshoek Substation and Power Line, Northern Cape</i>                    | <i>Eskom</i>                           | <i>EAP and GIS Consultant</i> |
| <i>Grid connection infrastructure for the Namas Wind Farm, Northern Cape Province</i>    | <i>Genesis Namas Wind (Pty) Ltd</i>    | <i>EAP and GIS Consultant</i> |
| <i>Grid connection infrastructure for the Zonnequa Wind Farm, Northern Cape Province</i> | <i>Genesis Zonnequa Wind (Pty) Ltd</i> | <i>EAP and GIS Consultant</i> |

### **Gas Projects**

#### **Environmental Impact Assessments and Environmental Management Programmes**

| <b>Project Name &amp; Location</b>   | <b>Client Name</b> | <b>Role</b>                                |
|--|--------------------|--|
| <i>Richards Bay Combined Cycle Power Plant (CCPP) power plant, KwaZulu-Natal (Scoping Phase)</i> | <i>Eskom</i>       | <i>EAP (assistance) and GIS Consultant</i> |

#### **Basic Assessments**

| <b>Project Name &amp; Location</b>                                  | <b>Client Name</b> | <b>Role</b>   |
|---|--------------------|---|
| <i>Neopak Combined Heat and Power (CHP) Plant, Rosslyn, Gauteng</i> | <i>Neopak</i>      | <i>EAP, Public Participation and GIS Consultant</i> |

### **Screening Studies**

| <b>Project Name &amp; Location</b>  | <b>Client Name</b> | <b>Role</b>                   |
|---|--------------------|-------------------------------|
| <i>Richards Bay Combined Cycle Power Plant (CCPP) power plant, near Richards Bay, KwaZulu-Natal</i> | <i>Eskom</i>       | <i>EAP and GIS Consultant</i> |



## **Infrastructure Development Projects (bridges, pipelines, roads, etc)**

### **Basic Assessments**

| <b>Project Name &amp; Location</b>                             | <b>Client Name</b> | <b>Role</b>                                  |
|--|--------------------|--|
| Water Treatment Plant at the Neopak Facility, Rosslyn, Gauteng | Neopak             | EAP, Public Participation and GIS Consultant |

## **Housing and Urban Projects**

### **Environmental Impact Assessments and Environmental Management Programmes**

| <b>Project Name &amp; Location</b>                    | <b>Client Name</b>   | <b>Role</b>            |
|---|--|------------------------|
| Metals Industrial Cluster near Kuruman, Northern Cape | Northern Cape Department of Economic Development and Tourism | EAP and GIS Consultant |

## **Environmental Management Tools**

### **Environmental Management Programmes**

| <b>Project Name &amp; Location</b>   | <b>Client Name</b>           | <b>Role</b>            |
|--|------------------------------|------------------------|
| Environmental Management Programme (EMPr) for the Nxuba Wind Farm, Eastern Cape  | ACED                         | EAP                    |
| Operation Environmental Management Programme (EMPr) for Phase 1 of the Amakhala Emoyeni Wind Energy Facility, Eastern Cape     | Cennergi                     | EAP                    |
| Operation Environmental Management Programme (EMPr) for the Tsitsikamma Community Wind Energy Facility, Eastern Cape Province  | Cennergi                     | EAP                    |
| Environmental Management Programme (EMPr) for the Skuitdrift 1 Solar PV Energy Facility near Augrabies, Northern Cape Province | Building Energy South Africa | EAP and GIS Consultant |
| Environmental Management Programme (EMPr) for the Skuitdrift 2 Solar PV Energy Facility near Augrabies, Northern Cape Province | Building Energy South Africa | EAP and GIS Consultant |

## **Environmental and Social Management System (ESMS)**

| <b>Project Name &amp; Location</b>  | <b>Client Name</b>           | <b>Role</b>    |
|---|------------------------------|----------------|
| Preparation of Policies and Plans for the Roggeveld Wind Farm, Western Cape Province    | Building Energy South Africa | EAP assistance |
| Preparation of Policies and Plans for the Kruisvallei Hydro Scheme, Free State Province | Building Energy South Africa | EAP assistance |

## CURRICULUM VITAE OF NICOLENE VENTER

- Profession :** Public Participation and Social Consultant
- Specialisation:** Public participation process; stakeholder engagement; facilitation (workshops, focus group and public meetings; public open days; steering committees); monitoring and evaluation of public participation and stakeholder engagement processes
- Work Experience:** 21 years' experience as a Public Participation Practitioner and Stakeholder Consultant

### VOCATIONAL EXPERIENCE

Over the past 21 years Nicolene established herself as an experienced and well recognised public participation practitioner, facilitator and strategic reviewer of public participation processes. She has experience in managing public participation projects and awareness creation programmes. Her experience includes designing and managing countrywide public participation and awareness creation projects, managing multi-project schedules, budgets and achieving project goals. She has successfully undertaken several public participation processes for EIA, BA and WULA projects. The EIA and BA process include linear projects such as the NMPP, Eskom Transmission and Distribution power lines as well as site specific developments such as renewable energy projects i.e. solar, photo voltaic and wind farms. She also successfully managed stakeholder engagement projects which were required to be in line with the Equator Principles.

### SKILLS BASE AND CORE COMPETENCIES

- Project Management
- Public Participation, Stakeholder Engagement and Awareness Creation
- Public Speaking and Presentation Skills
- Facilitation (workshops, focus group meetings, public meetings, public open days, working groups and committees)
- Social Assessments (Stakeholder Analysis / Stakeholder Mapping)
- Monitoring and Evaluation of Public Participation and Stakeholder Engagement Processes
- Community Liaison
- IFC Performance Standards
- Equator Principles
- Minute taking, issues mapping, report writing and quality control

### EDUCATION AND PROFESSIONAL STATUS

**Degrees:**

- Higher Secretarial Certificate, Pretoria Technicon (1970)

**Short Courses:**

- Techniques for Effective Public Participation, International Association for Public Participation, IAP2 (2008)
- Foundations of Public Participation (Planning and Communication for Effective Public Participation, IAP2 (2009)
- Certificate in Public Relations, Public Relation Institute of South Africa, Damelin Management School (1989)

**Professional Society Affiliations:**

- Board Member of International Association for Public Participation (IAP2): Southern Africa

**EMPLOYMENT**

| Date                                  | Company  | Roles and Responsibilities  |
|---------------------------------------|--|---|
| <p><b>November 2018 – current</b></p> | <p>Savannah Environmental (Pty) Ltd</p>                                    | <p>Public Participation and Social Consultant</p> <p><u>Tasks include:</u></p> <p><i>Tasks include: Drafting of a Public Participation Plan with key deliverable dates and methodology to be followed, Background Information Document, Letters to Stakeholders and Interested and/or Affected Parties (I&amp;APs) inclusive of key project deliverables and responses to questions / concerns raised; Stakeholder identification; facilitating stakeholder workshops, focus group and public meetings; conduct one-on-one consultation with Community Leaders, Tribal Chiefs, affected landowners, etc.</i></p> <p><i>Managing interaction between Stakeholders and Team Members, liaising with National, Provincial and Local Authorities, managing community consultation and communications in project affected areas, attend to the level of technical information communicated to and consultation with all level of stakeholders involved.</i></p> |
| <p><b>2016 – October 2018</b></p>     | <p>Imaginative Africa (Pty) Ltd<br/>(company owned by Nicolene Venter)</p> | <p>Independent Consultant</p> <p>Consulting to various Environmental Assessment Practitioners for Public Participation and Stakeholder Engagements:</p> <p><u>Tasks include:</u></p> <p><i>Tasks include: Drafting of a Public Participation Plan with key deliverable dates and methodology to be followed, Background Information Document, Letters to Stakeholders and Interested and/or Affected Parties (I&amp;APs) inclusive of key project deliverables and responses to questions / concerns raised; Stakeholder identification; facilitating stakeholder workshops, focus group and public meetings; conduct one-on-one consultation with Community Leaders, Tribal Chiefs, affected landowners, etc.</i></p> <p><i>Managing interaction between Stakeholders and Team Members, liaising with National, Provincial and Local Authorities, managing community consultation and communications in project</i></p>                                  |

|                    |  |  |
|--------------------|--|--|
|                    |  | <p>affected areas, attend to the level of technical information communicated to and consultation with all level of stakeholders involved</p> <p><u>Clients:</u><br/>SiVEST Environmental, Savannah Environmental, Baagi Environmental; Royal Haskoning DHV (previously SSI)</p>  |
| <b>2013 - 2016</b> | <p>Zitholele Consulting</p> <p>Contact person: Dr Mathys Vosloo<br/>Contact number: 011 207 2060</p> | <p>Senior Public Participation Practitioner and Project Manager</p> <p><u>Tasks included:</u><br/>Project managed public participation process for EIA/BA/WULA/EAL projects. Manages two Public Participation Administrators. Public Participation tasks as outlined as above and including financial management of public participation processes.</p>  |
| <b>2011 - 2013</b> | <p>Imaginative Africa (Pty) Ltd<br/>(company owned by Nicolene Venter)</p>                           | <p>Independent Consultant<br/>Consulting to various Environmental Assessment Practitioners for Public Participation and Stakeholder Engagements</p> <p><u>Tasks included:</u><br/>Drafting of a Public Participation Plan with key deliverable dates and methodology to be followed, Background Information Document, Letters to Stakeholders and Interested and/or Affected Parties (I&amp;APs) inclusive of key project deliverables and responses to questions / concerns raised; Stakeholder identification; facilitating stakeholder workshops, focus group and public meetings; conduct one-on-one consultation with Community Leaders, Tribal Chiefs, affected landowners, etc.</p> <p>Managing interaction between Stakeholders and Team Members, liaising with National, Provincial and Local Authorities, managing community consultation and communications in project affected areas, attend to the level of technical information communicated to and consultation with all level of stakeholders involved</p> <p><u>Clients:</u><br/>Bohlweki Environmental, Bembani Sustainability (Pty) Ltd; Naledzi Environmental</p> |
| <b>2007 – 2011</b> | <p>SiVEST SA (Pty) Ltd</p> <p>Contact person: Andrea Gibb<br/>Contact number: 011 798 0600</p>       | <p>Unit Manager: Public Participation Practitioner</p> <p><u>Tasks included:</u><br/>Project managed public participation process for EIA/BA projects. Manages two Junior Public Participation Practitioners. Public Participation</p>   |

|                    |  |   |
|--------------------|--|---|
|                    |  | tasks as outlined as above and including financial management of public participation processes.  |
| <b>2005 – 2006</b> | Imaginative Africa (Pty) Ltd<br>(company owned by Nicolene Venter) | <p>Independent Consultant<br/>Public Participation and Stakeholder Engagement Practitioner</p> <p><u>Tasks included:</u><br/>Drafting of a Public Participation Plan with key deliverable dates and methodology to be followed, Background Information Document, Letters to Stakeholders and Interested and/or Affected Parties (I&amp;APs) inclusive of key project deliverables and responses to questions / concerns raised; Stakeholder identification; facilitating stakeholder workshops, focus group and public meetings; conduct one-on-one consultation with Community Leaders, Tribal Chiefs, affected landowners, etc.</p> <p>Managing interaction between Stakeholders and Team Members, liaising with National, Provincial and Local Authorities, managing community consultation and communications in project affected areas, attend to the level of technical information communicated to and consultation with all level of stakeholders involved.</p> <p><u>Clients:</u><br/>Manyaka-Greyling-Meiring (previously Greyling Liaison and currently Golder Associates)</p> |
| <b>1997 - 2004</b> | Imaginative Africa (Pty) Ltd<br>(company owned by Nicolene Venter) | <p>Independent Consultant: Public Participation Practitioner.</p> <p><u>Tasks included:</u><br/>Drafting of a Public Participation Plan with key deliverable dates and methodology to be followed, Background Information Document, Letters to Stakeholders and Interested and/or Affected Parties (I&amp;APs) inclusive of key project deliverables and responses to questions / concerns raised; Stakeholder identification; facilitating stakeholder workshops, focus group and public meetings; conduct one-on-one consultation with Community Leaders, affected landowners, etc.</p> <p>Managing interaction between Stakeholders and Team Members, liaising with National, Provincial Local Authorities, managing community consultation and communications in project affected areas, attend to the level of technical</p>   |

|  |  |  |
|--|--|--|
|  |  | <p>information communicated to and consultation with all level of stakeholders involved.</p> <p><u>Clients:</u><br/> Greyling Liaison (currently Golder Associates);<br/> Bembani Sustainability (Pty) Ltd; Lidwala Environmental; Naledzi Environmental</p> |
|--|--|--|

## PROJECT EXPERIENCE

### RENEWABLE POWER GENERATION PROJECTS: PHOTOVOLTAIC SOLAR ENERGY FACILITIES

#### **Environmental Impact Assessments and Environmental Management Programmes**

| <b>Project Name &amp; Location</b>  | <b>Client Name</b>   | <b>Role</b>  |
|---|--|--|
| Lichtenburg PVs (3 PVs) & Power Lines (grid connection), Lichtenburg, North West Province               | Atlantic Energy Partners<br>EAP: Savannah Environmental              | Project Manage the Public Participation Process<br>Facilitate all meetings               |
| Allepad PVs 4 PVs) & Power Lines (grid connection), Upington, Northern Cape Province                    | IL Energy<br>EAP: Savannah Environmental                             | Consultation with Government Officials, Key Stakeholders, Landowners & Community Leaders |
| Hyperion Solar PV Developments (4 PVs) and Associated Infrastructures, Kathu, Northern Cape Province    | Building Energy<br>EAP: Savannah Environmental                       |  |
| Aggeneys Solar PV Developments (2 PVs) and Associated Infrastructures, Aggeneys, Northern Cape Province | Atlantic Energy Partners and ABO Wind<br>EAP: Savannah Environmental |  |

| <b>Project Name &amp; Location</b>  | <b>Client Name</b>   | <b>Role</b>   |
|---|--|---|
| <p>Tlitseng PV, including Substations &amp; Power Lines, Lichtenburg, North West Province</p> <p>Sendawo PVs, including Substations &amp; Power Lines, Vryburg, North West Province</p> <p>Helena Solar 1, 2 and 3 PVs, Copperton, Northern Cape Province</p>   | <p>BioTherm Energy<br/>EAP: SiVEST</p>   | <p>Public Participation, Landowner and Community Consultation</p>   |
| <p>Farm Spes Bona 23552 Solar PV Plants, Bloemfontein, Free State Province</p> <p>De Aar Solar Energy Facility, De Aar, Northern Cape Province</p> <p>Drongfontein Solar Energy Facility, Kimberley, Northern Cape Province</p> <p>Kaalspruit Solar Energy Facility, Loeriesfontein, Northern Cape Province</p> <p>Platsjambok East PV, Prieska, Northern Cape Province</p> | <p>Surya Power<br/>EAP: SiVEST</p> <p>South Africa Mainstream Renewable Power Developments<br/>EAP: SiVEST</p> | <p>Public Participation, Landowner and Community Consultation</p> <p>Public Participation, Landowner and Community Consultation</p> |
| Renosterburg PV, De Aar, Northern Cape Province   | Renosterberg Wind Energy Company<br>EAP: SiVEST  | Public Participation, Landowner and Community Consultation  |

|  |   |  |
|--|---|--|
| 19MW Solar Power Plant on Farm 198 (Slypklip), Danielskuil, Northern Cape Province | Solar Reserve South Africa<br>EAP: SiVEST | Public Participation,<br>Landowner and Community<br>Consultation |
|--|---|--|

**Basic Assessments and Environmental Management Programmes – Located within the Renewable Energy Development Zones (REDZ)**

| Project Name & Location   | Client Name                                       | Role  |
|---|---|---|
| Moeding Solar PV Solar Energy Facility, Vryburg, North West Province    | Kabi Solar<br>EAP: Savannah Environmental         | Project Manage the Public Participation Process<br>Facilitate all meetings Consultation with Government Officials, Key Stakeholders, Landowners & Community Leaders |
| Sirius Solar PV Solar Energy Facility, Upington, Northern Cape Province | SOLA Future Energy<br>EAP: Savannah Environmental |   |

**RENEWABLE POWER GENERATION PROJECTS: WIND ENERGY FACILITIES**

**Environmental Impact Assessments and Environmental Management Programmes**

| Project Name & Location   | Client Name   | Role                 |
|---|---|----------------------|
| Aletta Wind Farm, Copperton, Northern Cape Province               | BioTherm Energy<br>EAP: SiVEST                                      | Public Participation |
| Eureka Wind Farm, Copperton, Northern Cape Province               |   |                      |
| Loeriesfontein Wind Farm, Loeriesfontein, Northern Cape Province  | South Africa Mainstream Renewable Power Developments<br>EAP: SiVEST | Public Participation |
| Droogfontein Wind Farm, Loeriesfontein, Northern Cape Province    |   |                      |
| Four Leeuwberg Wind Farms, Loeriesfontein, Northern Cape Province |   |                      |
| Noupoort Wind Farm, Noupoort, Northern Cape Province              |   |                      |
| Mierdam PV & Wind Farm, Prieska, Northern Cape Province           |   |                      |
| Platsjambok West Wind Farm & PV, Prieska, Northern Cape Province  |   |                      |
|   |   |                      |

**Basic Assessments and Environmental Management Programmes – Located within the Renewable Energy Development Zones (REDZ)**

| Project Name & Location                               | Client Name                                | Role  |
|---|--|---|
| Nama Wind Energy Facility, Northern Cape Province     | Genesis ECO<br>EAP: Savannah Environmental | Project Manage the Public Participation Process<br>Facilitate all meetings Consultation with Government Officials, Key Stakeholders, Landowners & Community Leaders |
| Zonnequa Wind Energy Facility, Northern Cape Province |  |   |

**Environmental Authorisation Amendments**

| Project Name & Location | Client Name | Role |
|-------------------------|-------------|------|
|-------------------------|-------------|------|

|  |   |                      |
|--|---|----------------------|
| Beaufort West 280MW Wind Farm into two 140MW Trakas and Beaufort West Wind Farms, Western Cape | South Africa Mainstream Renewable Power Developments<br>EAP: SiVEST | Public Participation |
|--|---|----------------------|

### **RENEWABLE POWER GENERATION PROJECTS: CONCENTRATED SOLAR FACILITIES (CSP)**

#### **Environmental Impact Assessments and Environmental Management Programmes**

| <b>Project Name &amp; Location</b>  | <b>Client Name</b>                            | <b>Role</b>          |
|---|---|----------------------|
| Upington Concentrating Solar Plant and associated Infrastructures, Northern Cape Province | Eskom Holdings<br>EAP: Bohlweki Environmental | Public Participation |

### **GRID INFRASTRUCTURE PROJECTS**

#### **Environmental Impact Assessments and Environmental Management Programmes**

| <b>Project Name &amp; Location</b>   | <b>Client Name</b>                          | <b>Role</b>  |
|--|---|--|
| Pluto-Mahikeng Main Transmission Substation and 400kV Power Line (Carletonville to Mahikeng), Gauteng and North West Provinces | Eskom Holdings<br>EAP: Baagi Environmental  |  |
| Thyspunt Transmission Lines Integration Project, Eastern Cape Province   | Eskom Holdings<br>EAP: SiVEST               | Public Participation, Landowner and Community Consultation |
| Westrand Strengthening Project, Gauteng Province   |   |  |
| Mookodi Integration Project, North-West Province   |   | Public Participation,                                      |
| Transnet Coallink, Mpumalanga and KwaZulu-Natal Provinces  |   |  |
| Delarey-Kopela-Phahameng Distribution power line and newly proposed Substations, North-West Province                           |   | Public Participation, Landowner and Community Consultation |
| Invubu-Theta 400kV Eskom Transmission Power Line, KwaZulu-Natal Province   | Eskom Holding<br>EAP: Bembani Environmental |  |

### **Facilitation**

| <b>Project Name &amp; Location</b>   | <b>Client Name</b>                            | <b>Meeting Type</b>                    |
|--|---|--|
| Bloemfontein Strengthening Project, Free State Province                          | Eskom Holdings<br>EAP: Baagi Environmental    | Public Meetings                        |
| Moidraai-Smitkloof 132kV Power Line and Substation, Northern Cape Province       | Eskom Holdings<br>EAP: SSI                    | Focus Group Meetings                   |
| Aggeneis-Oranjemond 400kV Eskom Transmission Power Line, Northern Cape Province  | Eskom Holdings<br>EAP: Savannah Environmental | Focus Group Meetings & Public Meetings |
| Ariadne-Eros 400kV/132kV Multi-Circuit Transmission Power Line (Public Meetings) | Eskom Holdings<br>EAP: ACER Africa            | Public Meetings                        |
| Majuba-Venus 765kV Transmission Power Lines, Mpumlanaga Province                 |   | Public Meetings                        |

### **Basic Assessments and Environmental Management Programmes**

| <b>Project Name &amp; Location</b> | <b>Client Name</b> | <b>Role</b> |
|------------------------------------|--------------------|-------------|
|------------------------------------|--------------------|-------------|



|   |                                  |  |
|---|----------------------------------|--|
| Melkhout-Kudu-Grassridge 132kV Power Line Project (project not submitted to DEA), Eastern Cape Province | Eskom Holdings<br>EAP: SiVEST    | Public Participation, Landowner and Community Consultation |
| Tweespruit-Welroux-Driedorp-Wepener 132Kv Power Line, Free State Province                               |                                  | Public Participation, Landowner and Community Consultation |
| Kuruman 132Kv Power Line Upgrade, Northern Cape Province  | Eskom Holdings<br>EAP: Zitholele | Public Participation, Landowner and Community Consultation |
| Vaalbank 132Kv Power Line, Free State Province  |                                  | Public Participation, Landowner and Community Consultation |
| Pongola-Candover-Golela 132kV Power Line (Impact Phase), KwaZulu-Natal Province                         |                                  | Public Participation, Landowner and Community Consultation |
| Ndumo-Geziza 132kV Power Line, KwaZulu-Natal Province   |                                  | Public Participation, Landowner and Community Consultation |
|   |                                  | Public Participation, Landowner and Community Consultation |

#### Screening Studies

| Project Name & Location  | Client Name                                    | Role              |
|--|--|-------------------|
| Potential Power Line Alternatives from Humansdorp to Port Elizabeth, Eastern Cape Province | Nelson Mandela Bay Municipality<br>EAP: SiVEST | Social Assessment |

### CONVENTIONAL POWER GENERATION PROJECTS (COAL, GAS AND ASSOCIATED INFRASTRUCTURE)

#### Stakeholder Engagement

| Project Name & Location   | Client Name                        | Role                 |
|---|------------------------------------|----------------------|
| Determination, Review and Implementation of the Reserve in the Olifants/Letaba System | Department of Water and Sanitation | Secretarial Services |
| Orange River Bulk Water Supply System   | Golder Associates                  |                      |
| Levuvu-Letaba Resources Quality Objectives  |                                    |                      |

#### Facilitation

| Project Name & Location                        | Client Name   | Meeting Type                         |
|--|---|--------------------------------------|
| Thabametsi IPP Power Station, Limpopo Province | Thabametsi Power Company<br>EAP: Savannah Environmental | Focus Group Meeting & Public Meeting |

#### Environmental Impact Assessments and Environmental Management Programmes

| Project Name & Location  | Client Name   | Role   |
|--|---|--|
| Richards Bay Combined Cycle Power Plant, Richards Bay, Kwa-Zulu Natal Province (Impact Phase)  | Eskom Holdings<br>EAP: Savannah Environmental       | Public Participation                                       |
| Medupi Flue Gas Desulphurisation Project (up to completion of Scoping Phase), Limpopo Province | Eskom Holdings SOC Ltd<br>EAP: Zitholele Consulting | Public Participation, Landowner and Community Consultation |
| Kendal 30-year Ash Disposal Facility, Mpumalanga Province                                      |   |  |
| Kusile 60-year Ash Disposal Facility, Mpumalanga Province                                      |   |  |

|   |  |  |
|---|--|--|
| Camden Power Station Ash Disposal Facility, Mpumalanga Province                     |  |  |
| Tutuka Fabric Filter Retrofit and Dust Handling Plant Projects, Mpumalanga Province | Eskom Holdings SOC Ltd<br>EAP: Lidwala Environmental | Public Participation, Landowner and Community Consultation |
| Eskom's Majuba and Tutuka Ash Dump Expansion, Mpumalanga Province                   |  | Public Participation, Landowner and Community Consultation |
| Hendrina Ash Dam Expansion, Mpumalanga Province                                     |  | Public Participation, Landowner and Community Consultation |

### **INFRASTRUCTURE DEVELOPMENT PROJECTS (BRIDGES, PIPELINES, RAILWAY LINES, ROADS, WATER RESOURCES, STORAGE FACILITIES, ETC)**

#### **Facilitation**

| <b>Project Name &amp; Location</b>   | <b>Client Name</b>   | <b>Meeting Type</b>  |
|--|--|----------------------|
| Determination, Review and Implementation of the Reserve in the Olifants/Letaba System  | Department of Water and Sanitation<br>Golder Associates            | Secretarial Services |
| Orange River Bulk Water Supply System  | Department of Water and Sanitation<br>Golder Associates            | Secretarial Services |
| Levuvu-Letaba Resources Quality Objectives   | Department of Water and Sanitation<br>Golder Associates            | Secretarial Services |
| SmancorCR Chemical Plant (Public Meeting), Gauteng Province                            | Samancor Chrome (Pty) Ltd<br>EAP: Environmental Science Associates | Public Meeting       |
| SANRAL N4 Toll Highway Project (2 <sup>nd</sup> Phase), Gauteng & North West Provinces | Department of Transport<br>EAP:                                    | Public Meetings      |

#### **Environmental Impact Assessments and Environmental Management Programmes**

| <b>Project Name &amp; Location</b>   | <b>Client Name</b>                      | <b>Role</b>          |
|--|---|----------------------|
| Transnet's New Multi-Products Pipeline traversing Kwa-Zulu Natal, Free State and Gauteng Provinces | Transnet<br>EAP: Bohlweki Environmental | Public Participation |

#### **Basic Assessments**

| <b>Project Name &amp; Location</b>   | <b>Client Name</b>                             | <b>Role</b>          |
|--|--|----------------------|
| Realignment of the Bulshoek Dam Weir near Klawer and the Doring River Weir near Clanwilliam, Western Cape Province | Dept of Water and Sanitation<br>EAP: Zitholele | Public Participation |

### **MINING SECTOR**

#### **Environmental Impact Assessment and Environmental Management Programme**

| <b>Project Name &amp; Location</b>                               | <b>Client Name</b>                                  | <b>Role</b>          |
|--|---|----------------------|
| Zero Waste Recovery Plant at highveld Steel, Mpumalanga Province | Anglo African Metals<br>EAP: Savannah Environmental | Public Participation |
| Koffiefontein Slimes Dam, Free State Province                    | Petra Diamond Mines<br>EAP: Zitholele               | Public Participation |

|   |  |  |
|---|--|--|
| <i>Baobab Project: Ethenol Plant, Chimbanje, Middle Sabie, Zimbabwe</i>           | <i>Applicant: Green Fuel<br/>EAP: SiVEST</i>           | <i>Public Participation &amp; Community Consultation</i> |
| <i>BHP Billiton Energy Coal SA's Middelburg Water Treatment Plant, Mpumalanga</i> | <i>BHP Billiton Group<br/>EAP: Jones &amp; Wagener</i> | <i>Public Participation</i>                              |

