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### **CURRICULUM VITAE OF JO-ANNE THOMAS**

Profession: Environmental Management and Compliance Consultant; Environmental Assessment

Practitioner

Specialisation: Environmental Management; Strategic environmental advice; Environmental compliance

advice & monitoring; Environmental Impact Assessments; Policy, strategy & guideline

formulation; Project Management; General Ecology

Work experience: Twenty five (25) 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
- Environmental Due Diligence and Assurance
- 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 EAP with the Environmental Assessment Practitioners Association of South Africa (EAPASA) (2019/726)
- Registered with the South African Council for Natural Scientific Professions as a Professional Natural Scientist: Environmental Scientist (400024/00)
- Registered with the International Associated for Impact Assessment South Africa (IAIAsa): 5601
- Member of the South African Wind Energy Association (SAWEA)

### **EMPLOYMENT**

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

### **PROJECT EXPERIENCE**

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

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

### Environmental Impact Assessments and Environmental Management Programmes

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

| Project Name & Location  | Client Name                   | Role                      |
|--|-------------------------------|---------------------------|
| Kgabalatsane SEF North-East for Brits, North West                | Built Environment African     | Project Manager & EAP     |
|  | Energy Services               |                           |
| Kleinbegin PV SEF West of Groblershoop, Northern                 | MedEnergy Global              | Project Manager & EAP     |
| Cape   |                               |                           |
| 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,               | SolaireDirect Southern Africa | Project Manager & EAP     |
| Free State   |                               |                           |
| 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              | FRV Energy South Africa       | Project Manager & EAP     |
| West   | <u> </u>                      | ,                         |
| 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     |
| Northern Cape  |                               |                           |
| Vrede & Rondavel PV, Free State                                  | Mainstream Renewable          | Project Manager & EAP     |
|  | Energy Developments           |                           |
| 3 x PV facilities for Sibanye Stillwater Mines, North            | Sibanye Stillwater            | Project Manager & EAP     |
| West Province  |                               |                           |
| Pixley PV Facilities (x4), Northern Cape                         | Mulilo                        | Project Manager & EAP     |
| Middelvlei PV Facility, Gauteng Province                         | Middelvlei Solar              | Project Manager & EAP     |
| Buffelspoort PV Facility, North West Province                    | Buffelspoort Solar            | Project Manager & EAP     |
| Kwana PV Facility, Northern Cape                                 | Great Karoo Renewable         | Project Manager & EAP     |
|  | Energy (Pty) Ltd              |                           |
| Nku PV Facility, Northern Cape                                   | Great Karoo Renewable         | Project Manager & EAP     |
|  | Energy (Pty) Ltd              |                           |
| Moriri PV Facility, Northern Cape                                | Great Karoo Renewable         | Project Manager & EAP     |
|  | Energy (Pty) Ltd              |                           |
| Additional footprint for the Sannaspos PV Facility,              | Engie Solar                   | Project Manager & EAP     |
| Free State Province  |                               |                           |
| Additional footprint for the Grootspruit PV Facility,            | Engie Solar                   | Project Manager & EAP     |
| Free State Province  | F C. I.                       | Doda 111                  |
| Additional footprint for Graspan PV Facility, Northern           | Engie Solar                   | Project Manager & EAP     |
| Cape  2 v DV Facilities for Six and do Mine. North are Licenses. | Circum des Distinues          | Droin of Man state 2, EAD |
| 2 x PV Facilities for Siyanda Mine, Northam, Limpopo             | Siyanda Platinum              | Project Manager & EAP     |
| Zondereinde PV Facility, Limpopo Province                        | Northam Platinum              | Project Manager & EAP     |
| Ummbila Emoyeni PV Facility, Mpumalanga                          | Windlab                       | Project Manager & EAP     |
| Province   | Mutaba Salair                 | Project Manager 2 FAD     |
| 4 x Mutsho PV facilities, Limpopo Province                       | Mutsho Solar                  | Project Manager & EAP     |
| 9 x Crossroads Energy PV Facilities, Northern Cape               | Crossroads Energy             | Project Manager & EAP     |

| Project Name & Location              | Client Name          | Role                  |
|--------------------------------------|----------------------|-----------------------|
| Limestone PV1 and PV2, Northern Cape | AGV Renewable Energy | Project Manager & EAP |

# **Basic Assessments**

| Project Name & Location                              | Client Name                   | Role                  |
|--|-------------------------------|-----------------------|
| Aberdeen PV SEF, Eastern Cape                        | BioTherm Energy               | Project Manager & EAP |
| Christiana PV 1 SEF on Hartebeestpan Farm, North-    | Solar Reserve South Africa    | Project Manager & EAP |
| West   |                               |                       |
| Heuningspruit PV1 & PV 2 facilities near Koppies,    | Sun Mechanics                 | Project Manager & EAP |
| Free State   |                               |                       |
| 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, | Airports Company South Africa | Project Manager & EAP |
| National   | (ACSA)                        |                       |
| 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     | SolaireDirect Southern Africa | Project Manager & EAP |
| State  |                               |                       |
| Solar Park Expansion within the Rooiwal Power        | AFRKO Energy                  | Project Manager & EAP |
| Station, Gauteng                                     |                               |                       |
| Steynsrus SEF, Free State                            | SunCorp                       | Project Manager & EAP |
| Sirius Solar PV Project Three and Sirius Solar PV    | SOLA Future Energy            | Project Manager & EAP |
| Project Four (BA in terms of REDZ regulations),      |                               |                       |
| Northern Cape  |                               |                       |
| Northam PV, Limpopo Province                         | Northam Platinum              | Project Manager & EAP |
| Kolkies PV Suite (x 6 projects) and Sadawa PV Suite  | Mainstream Renewable          | Project Manager & EAP |
| (x 4 projects), Western Cape                         | Energy Developments           |                       |
| Sun Garden PV, Eastern Cape Province                 | Sun Garden (Pty) Ltd          | Project Manager & EAP |
| Solaris Fields PV, Eastern Cape                      | Solaris Fields (Pty) Ltd      | Project Manager & EAP |
| Red Sands PV1, PV2 and PV3, Northern Cape            | AGV Renewable Energy          | Project Manager & EAP |

# **Screening Studies**

| Project Name & Location                            | Client Name       | Role                  |
|--|-------------------|-----------------------|
| Allemans Fontein SEF near Noupoort, 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 Noupoort, Northern Cape     | Fusion Energy     | Project Manager & EAP |
| Damfontein SEF near Noupoort, Northern Cape        | Fusion Energy     | Project Manager & EAP |
| Everest SEF near Welkom, Free State                | FRV & iNca Energy | Project Manager & EAP |
| Gillmer SEF near Noupoort, 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, | Momentous Energy  | Project Manager & EAP |
| Gauteng  |                   |                       |
| Loskop SEF near Groblersdal, Limpopo               | S&P Power Unit    | Project Manager & EAP |

| Project Name & Location                          | Client Name                | Role                  |
|--|----------------------------|-----------------------|
| Marble SEF near Marble Hall, Limpopo             | S&P Power Unit             | Project Manager & EAP |
| Morgenson PV1 SEF South-West of Windsorton,      | Solar Reserve South Africa | Project Manager & EAP |
| Northern Cape                                    |                            |                       |
| 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 |
| UpingtonAirport 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,    | Momentous Energy           | Project Manager & EAP |
| Gauteng  |                            |                       |

# Environmental Compliance, Auditing and ECO

| Project Name & Location                               | Client Name            | Role            |
|---|------------------------|-----------------|
| ECO and bi-monthly auditing for the construction of   | Enel Green Power       | Project Manager |
| the Adams Solar PV Project Two South of Hotazel,      |                        |                 |
| Northern Cape   |                        |                 |
| ECO for the construction of the Kathu PV Facility,    | REISA                  | Project Manager |
| Northern Cape   |                        |                 |
| ECO and bi-monthly auditing for the construction of   | Enel Green Power       | Project Manager |
| the Pulida PV Facility, Free State                    |                        |                 |
| ECO for the construction of the RustMo1 SEF, North    | Momentous Energy       | Project Manager |
| West  |                        |                 |
| ECO for the construction of the Sishen SEF, Northern  | Windfall 59 Properties | Project Manager |
| Cape  |                        |                 |
| ECO for the construction of the Upington Airport PV   | Sublanary Trading      | Project Manager |
| Facility, Northern Cape                               |                        |                 |
| Quarterly compliance monitoring of compliance         | REISA                  | Project Manager |
| with all environmental licenses for the operation     |                        |                 |
| activities at the Kathu PV facility, Northern Cape    |                        |                 |
| ECO for the construction of the Konkoonsies II PV SEF | BioTherm Energy        | Project Manager |
| and associated infrastructure, Northern Cape          |                        |                 |
| ECO for the construction of the Aggeneys PV SEF       | BioTherm Energy        | Project Manager |
| and associated infrastructure, Northern Cape          |                        |                 |

# 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    | MedEnergy       | Environmental Advisor |
| Cape  |                 |                       |
| Konkoonises II SEF near Pofadder, Northern Cape     | BioTherm Energy | Environmental Advisor |
| Konkoonsies Solar Farm, Northern Cape               | BioTherm Energy | Environmental Advisor |

| Project Name & Location                              | Client Name              | Role                  |
|--|--------------------------|-----------------------|
| Lephalale SEF, Limpopo                               | Exxaro                   | Environmental Advisor |
| Pixley ka Seme PV Park, South-East of De Aar,        | African Clean Energy     | Environmental Advisor |
| Northern Cape  | Developments (ACED)      |                       |
| RustMo1 PV Plant near Buffelspoort, North West       | Momentous Energy         | Environmental Advisor |
| Scuitdrift 1 SEF & Scuitdrift 2 SEF, Limpopo         | Building Energy          | Environmental Advisor |
| Sirius PV Plants, Northern Cape                      | Aurora Power Solutions   | Environmental Advisor |
| Upington Airport PV Power Project, Northern Cape     | Sublunary Trading        | Environmental Advisor |
| Upington SEF, Northern Cape                          | Abengoa Solar            | Environmental Advisor |
| Ofir-ZX PV SEF near Keimoes, Northern Cape           | Networx \$28 Energy      | Environmental Advisor |
| Environmental Permitting for the Steynsrus PV1 & PV2 | Cronimet Power Solutions | Environmental Advisor |
| SEF's, Northern Cape                                 |                          |                       |
| Environmental Permitting for the Heuningspruit PV    | Cronimet Power Solutions | Environmental Advisor |
| SEF, Northern Cape                                   |                          |                       |

# **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 | Aurora Power Solutions | Environmental Advisor |
| Cape   |                        |                       |
| Mogalakwena PV Facility, Limpopo Province            | Pele Green Energy      | Environmental Advisor |

# Environmental Permitting, \$53, Water Use Licence (WUL), Waste Management Licence (WML) & Other Applications

| Project Name & Location                              | Client Name              | Role                  |
|--|--------------------------|-----------------------|
| Biodiversity Permit & WULA for the Aggeneys SEF      | BioTherm Energy          | Project Manager & EAP |
| near Aggeneys, Northern Cape                         |                          |                       |
| Biodiversity Permit for the Konkoonises II SEF near  | BioTherm Energy          | Project Manager & EAP |
| Pofadder, Northern Cape                              |                          |                       |
| Biodiversity Permitting for the Lephalale SEF,       | Exxaro Resources         | Project Manager & EAP |
| Limpopo  |                          |                       |
| Environmental Permitting for the Kleinbegin PV SEF   | MedEnergy                | Project Manager & EAP |
| West of Groblershoop, Northern Cape                  |                          |                       |
| Environmental Permitting for the Upington SEF,       | Abengoa Solar            | Project Manager & EAP |
| Northern Cape  |                          |                       |
| Environmental Permitting for the Kathu PV Facility,  | Building Energy          | Project Manager & EAP |
| Northern Cape  |                          |                       |
| Environmental Permitting for the Konkoonsies Solar   | BioTherm Energy          | Project Manager & EAP |
| Farm, Northern Cape                                  |                          |                       |
| Environmental Permitting for the Lephalale SEF,      | Exxaro Resources         | Project Manager & EAP |
| Limpopo  |                          |                       |
| Environmental Permitting for the Scuitdrift 1 SEF &  | Building Energy          | Project Manager & EAP |
| Scuitdrift 2 SEF, Limpopo                            |                          |                       |
| Environmental Permitting for the Sirius PV Plant,    | Aurora Power Solutions   | Project Manager & EAP |
| Northern Cape  |                          |                       |
| Environmental Permitting for the Steynsrus PV1 & PV2 | Cronimet Power Solutions | Project Manager & EAP |
| SEF's, Northern Cape                                 |                          |                       |
| Environmental Permitting for the Heuningspruit PV    | Cronimet Power Solutions | Project Manager & EAP |
| SEF, Northern Cape                                   |                          |                       |
| Permits for the Kleinbegin and UAP PV Plants,        | MedEnergy Global         | Project Manager & EAP |
| Northern Cape  |                          |                       |

| Project Name & Location                                 | Client Name             | Role                  |
|---|-------------------------|-----------------------|
| S53 Application for Arriesfontein Solar Park Phase 1 –  | Solar Reserve / SunCorp | Project Manager & EAP |
| 3 near Danielskuil, Northern Cape                       |                         |                       |
| S53 Application for Hertzogville PV1 & PV 2 SEFs, Free  | Solar Reserve / SunCorp | Project Manager & EAP |
| State   |                         |                       |
| S53 Application for the Bloemfontein Airport PV         | Sublunary Trading       | Project Manager & EAP |
| Facility, Free State                                    |                         |                       |
| \$53 Application for the Kimberley Airport PV Facility, | Sublunary Trading       | Project Manager & EAP |
| Northern Cape   |                         |                       |
| S53 Application for the Project Blue SEF, Northern      | WWK Developments        | Project Manager & EAP |
| Cape  |                         |                       |
| S53 Application for the Upington Airport PV Facility,   | Sublunary Trading       | Project Manager & EAP |
| Free State  |                         |                       |
| WULA for the Kalahari SEF Phase II in Kathu, Northern   | Engie                   | Project Manager & EAP |
| Cape  |                         |                       |

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

# Environmental Impact Assessments and Environmental Management Programmes

| Project Name & Location                                 | Client Name      | Role                  |
|---|------------------|-----------------------|
| llanga CSP 2, 3, 4, 5, 7 & 9 Facilities near Upington,  | Emvelo Holdings  | Project Manager & EAP |
| Northern Cape   |                  |                       |
| Ilanga CSP near Upington, Northern Cape                 | llangethu Energy | Project Manager & EAP |
| Ilanga Tower 1 Facility near Upington, Northern         | Emvelo Holdings  | Project Manager & EAP |
| Cape  |                  |                       |
| Karoshoek CPVPD 1-4 facilities on site 2 as part of     | FG Emvelo        | Project Manager & EAP |
| the larger Karoshoek Solar Valley Development East      |                  |                       |
| of Upington, Northern Cape                              |                  |                       |
| Karoshoek CSP facilities on sites 1.4; 4 & 5 as part of | FG Emvelo        | Project Manager & EAP |
| the larger Karoshoek Solar Valley Development East      |                  |                       |
| of Upington, Northern Cape                              |                  |                       |
| Karoshoek Linear Fresnel 1 Facility on site 1.1 as part | FG Emvelo        | Project Manager & EAP |
| of the larger Karoshoek Solar Valley Development        |                  |                       |
| East of Upington, Northern Cape                         |                  |                       |

# Environmental Compliance, Auditing and ECO

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

# **Screening Studies**

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

### Compliance Advice and ESAP reporting

| Project Name & Location                          | Client Name      | Role                  |
|--|------------------|-----------------------|
| llanga CSP Facility near Upington, Northern Cape | llangethu Energy | Environmental Advisor |
| llangalethu 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, \$53, Water Use Licence (WUL), Waste Management Licence (WML) & Other Applications

| Project Name & Location                              | Client Name      | Role                  |
|--|------------------|-----------------------|
| Environmental Permitting for the Ilanga CSP Facility | llangethu Energy | Project Manager & EAP |
| near Upington, Northern Cape                         |                  |                       |
| Environmental Permitting for the Kathu CSP, Northern | GDF Suez         | Project Manager & EAP |
| Cape   |                  |                       |
| 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                   |
| 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       | iNca Energy                | Project Manager & EAP |
| Cape   |                            |                       |
| 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  | BioTherm Energy            | Project Manager & EAP |
| area, Western Cape                                 |                            |                       |
| Moorreesburg WEF, Western Cape                     | iNca Energy                | Project Manager & EAP |
| Oyster Bay WEF, Eastern Cape                       | Renewable Energy Resources | Project Manager & EAP |
|  | Southern Africa            |                       |
| 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 | Project Manager & EAP |
|  | Southern Africa            |                       |
| 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 |
| Ummbila WEF, Mpumalanga                            | Windlab                    | Project Manager & EAP |
| Merino WEF, Northern Cape                          | Great Karoo Renewable      | Project Manager & EAP |
|  | Energy (Pty) Ltd           |                       |

| Project Name & Location                           | Client Name              | Role                  |
|---|--------------------------|-----------------------|
| Amakhala Emoyeni Wind Monitoring Masts, Eastern   | Windlab Developments     | Project Manager & EAP |
| Cape  |                          |                       |
| Beaufort West Wind Monitoring Masts, Western Cape | Umoya Energy             | Project Manager & EAP |
| Hopefield Community Wind Farm near Hopefield,     | Umoya Energy             | Project Manager & EAP |
| Western Cape                                      |                          |                       |
| 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    | Umoya Energy             | Project Manager & EAP |
| Cape  |                          |                       |
| Overberg Area Wind Monitoring Masts, Western      | BioTherm Energy          | Project Manager & EAP |
| Cape  |                          |                       |
| Oyster Bay Wind Monitoring Masts, Eastern Cape    | Renewable Energy Systems | Project Manager & EAP |
|   | Southern Africa (RES)    |                       |
| Wind Garden WEF, Eastern Cape                     | Wind Garden (Pty) Ltd    | Project Manager & EAP |
| Fronteer WEF. Eastern Cape                        | Fronteer (Pty) Ltd       | Project Manager & EAP |
| Aeoulus WEF, Eastern Cape                         | Aeoulus (Pty) Ltd        | Project Manager & EAP |
| Hamlett WEF, Eastern Cape                         | Hamlett (Pty) Ltd        | Project Manager & EAP |
| Redding WEF, Eastern Cape                         | Redding (Pty) Ltd        | Project Manager & EAP |
| Ripponn WEF, Eastern Cape                         | Ripponn (Pty) Ltd        | Project Manager & EAP |

# **Screening Studies**

| Project Name & Location                            | Client Name                   | Role                  |
|--|-------------------------------|-----------------------|
| Albertinia WEF, Western Cape                       | BioTherm Energy               | Project Manager & EAP |
| Koingnaas WEF, Northern Cape                       | Just Pal Tree Power           | Project Manager & EAP |
| Napier Region WEF Developments, Western Cape       | BioTherm Energy               | Project Manager & EAP |
| Tsitsikamma WEF, Eastern Cape                      | Exxarro Resources             | Project Manager & EAP |
| Various WEFs within an identified area in the      | BioTherm Energy               | Project Manager & EAP |
| Overberg area, Western Cape                        |                               |                       |
| Various WEFs within an identified area on the West | Investec Bank Limited         | Project Manager & EAP |
| Coast, Western Cape                                |                               |                       |
| Various WEFs within an identified area on the West | Eskom Holdings Limited        | Project Manager & EAP |
| Coast, Western Cape                                |                               |                       |
| Various WEFs within the Western Cape               | Western Cape Department of    | Project Manager & EAP |
|  | Environmental Affairs and     |                       |
|  | Development Planning          |                       |
| Velddrift WEF, Western Cape                        | VentuSA Energy                | Project Manager & EAP |
| Wind 1000 Project                                  | Thabo Consulting on behalf of | Project Manager & EAP |
|  | Eskom Holdings                |                       |
| Wittekleibosch, Snylip & Doriskraal WEFs, Eastern  | Exxarro Resources             | Project Manager & EAP |
| Cape   |                               |                       |

# Environmental Compliance, Auditing and ECO

| Project Name & Location                              | Client Name       | Role            |
|--|-------------------|-----------------|
| ECO for the construction of the West Coast One       | Aurora Wind Power | Project Manager |
| WEF, Western Cape                                    |                   | /               |
| ECO for the construction of the Gouda WEF,           | Blue Falcon       | Project Manager |
| Western Cape   |                   |                 |
| EO for the Dassiesklip Wind Energy Facility, Western | Group 5           | Project Manager |
| Cape   |                   |                 |
| Quarterly compliance monitoring of compliance        | Blue Falcon       | Project Manager |
| with all environmental licenses for the operation    |                   |                 |

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

# **Compliance Advice**

| Project Name & Location                      | Client Name          | Role                  |
|--|----------------------|-----------------------|
| Amakhala Phase 1 WEF, Eastern Cape           | Cennergi             | Environmental Advisor |
| Dassiesfontein WEF within the Overberg area, | BioTherm Energy      | Environmental Advisor |
| Western Cape                                 |                      |                       |
| Excelsior Wind Farm, Western Cape            | BioTherm Energy      | Environmental Advisor |
| Great Karoo Wind Farm, Northern Cape         | African Clean Energy | Environmental Advisor |
|  | Developments (ACED)  |                       |
| Hopefield Community WEF, Western Cape        | African Clean Energy | Environmental Advisor |
|  | Developments (ACED)  |                       |
| 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, | IL&FS Energy Development | Environmental Advisor |
| Western Cape                                     | Company                  |                       |

# 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  | Cennergi          | Project Manager & EAP |
| the Tsitikamma Community WEF & the Diep River       |                   |                       |
| Substation, Eastern Cape                            |                   |                       |
| Biodiversity Permitting for the West Coast One WEF, | Aurora Wind Power | Project Manager & EAP |
| Western Cape  |                   |                       |
| Environmental Permitting for the Excelsior WEF,     | BioTherm Energy   | Project Manager & EAP |
| Western Cape  |                   |                       |
| Plant Permits & WULA for the Tsitsikamma            | Cennergi          | Project Manager & EAP |
| Community WEF, Eastern Cape                         |                   |                       |
| S24G and WULA for the Rectification for the         | Hossam Soror      | Project Manager & EAP |
| commencement of unlawful activities on Ruimsig AH   |                   |                       |
| in Honeydew, Gauteng                                |                   |                       |

| Project Name & Location                            | Client Name           | Role                  |
|--|-----------------------|-----------------------|
| S24G Application for the Rheboksfontein WEF,       | Ormonde - Theo Basson | Project Manager & EAP |
| Western Cape                                       |                       |                       |
| S53 Application & WULA for Suurplaat and Gemini    | Engie                 | Project Manager & EAP |
| WEFs, Northern Cape                                |                       |                       |
| S53 Application for the Hopefield Community Wind   | Umoya Energy          | Project Manager & EAP |
| Farm near Hopefield, Western Cape                  |                       |                       |
| S53 Application for the Project Blue WEF, Northern | WWK Developments      | Project Manager & EAP |
| Cape   |                       |                       |
| S53 for the Oyster Bay WEF, Eastern Cape           | RES                   | Project Manager & EAP |
| WULA for the Great Karoo Wind Farm, Northern       | African Clean Energy  | Project Manager & EAP |
| Cape   | Developments (ACED)   |                       |

# **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      | Axia              | Project Manager & EAP |
| Lephalale, Limpopo                                 |                   |                       |
| Transalloys Coal-fired Power Station, Mpumalanga   | Transalloys       | Project Manager & EAP |
| Tshivasho IPP Coal-fired Power Station (with WML), | Cennergi          | Project Manager & EAP |
| near Lephalale, Limpopo                            |                   |                       |
| Umbani Coal-fired Power Station, near Kriel,       | ISS Global Mining | Project Manager & EAP |
| Mpumalanga   |                   |                       |
| Waterberg IPP Coal-Fired Power Station near        | Exxaro Resources  | Project Manager & EAP |
| Lephalale, Limpopo                                 |                   |                       |

### **Basic Assessments**

| Project Name & Location                           | Client Name    | Role                  |
|---|----------------|-----------------------|
| Coal Stockyard on Medupi Ash Dump Site, Limpopo   | Eskom Holdings | Project Manager & EAP |
| Biomass Co-Firing Demonstration Facility at Arnot | Eskom Holdings | Project Manager & EAP |
| Power Station East of Middleburg, Mpumlanaga      |                |                       |

# **Screening Studies**

| Project Name & Location                        | Client Name                | Role                  |
|--|----------------------------|-----------------------|
| Baseload Power Station near Lephalale, 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 | Axia        | Environmental Advisor |
| Lephalale, Limpopo                            |             |                       |

# Environmental Permitting, \$53, Water Use Licence (WUL), Waste Management Licence (WML) & Other Applications

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

### **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       | Eskom Holdings SoC Limited | Project Manager & EAP |
| transmission power line between Ankerlig and the       |                            |                       |
| Omega Substation, Western Cape                         |                            |                       |
| Gourikwa OCGT to CCGT Conversion project &             | Eskom Holdings SoC Limited | Project Manager & EAP |
| 400kV transmission power line between Gourikwa &       |                            |                       |
| Proteus Substation, Western Cape                       |                            |                       |
| Richards Bay Gas to Power Combined Cycle Power         | Eskom Holdings SoC Limited | Project Manager & EAP |
| Station, KwaZulu-Natal                                 |                            |                       |
| Richards Bay Gas to Power Plant, KwaZulu-Natal         | Richards Bay Gas Power 2   | Project Manager & EAP |
| Decommissioning & Recommissioning of 3 Gas             | Eskom Holdings             | Project Manager & EAP |
| 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   |                            |                       |
| 320MW gas-to-power station in Richards Bay,            | Phinda Power Projects      | Project Manager & EAP |
| KwaZulu-Natal  |                            |                       |
| 3000MW Richards Bay Gas to Power Plant, KwaZulu-       | Phakwe Richards Bay Gas    | Project Manager & EAP |
| Natal  | Power 3                    |                       |

### **Screening Studies**

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

# **GRID INFRASTRUCTURE PROJECTS**

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

| Project Name & Location                           | Client Name        | Role                  |
|---|--------------------|-----------------------|
| Aggeneis-Oranjemond Transmission Line &           | Eskom Transmission | Project Manager & EAP |
| Substation Upgrade, Northern Cape                 |                    |                       |
| Ankerlig-Omega Transmission Power Lines, Western  | Eskom Transmission | Project Manager & EAP |
| Cape  |                    |                       |
| Karoshoek Grid Integration project as part of the | FG Emvelo          | Project Manager & EAP |
| Karoshoek Solar Valley Development East of        |                    |                       |
| Upington, Northern Cape                           |                    |                       |
| Koeberg-Omega Transmission Power Lines,, Western  | Eskom Transmission | Project Manager & EAP |
| Cape  |                    |                       |

| Project Name & Location                            | Client Name        | Role                  |
|--|--------------------|-----------------------|
| Koeberg-Stikland Transmission Power Lines, Western | Eskom Transmission | Project Manager & EAP |
| Cape   |                    |                       |
| 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      | Eskom Transmission | Project Manager & EAP |
| Power Station site, Western Cape                   |                    |                       |
| Tshwane Strengthening Project, Phase 1, Gauteng    | Eskom Transmission | Project Manager & EAP |
| Main Transmission Substation (MTS) associated with | Wind Relic         | Project Manager & EAP |
| the Choje Wind Farm cluster, Eastern Cape          |                    |                       |
| Main Transmission Substation and grid connection   | Windlab            | Project Manager & EAP |
| infrastructure associated with the Ummbila         |                    |                       |
| renewable energy cluster                           |                    |                       |

# **Basic Assessments**

| Project Name & Location                            | Client Name          | Role                  |
|--|----------------------|-----------------------|
| Dassenberg-Koeberg Power Line Deviation from the   | Eskom Holdings       | Project Manager & EAP |
| Koeberg to the Ankerlig Power Station, Western     |                      |                       |
| Cape   |                      |                       |
| Golden Valley II WEF Power Line & Substation near  | BioTherm Energy      | Project Manager & EAP |
| Cookhouse, Eastern Cape                            |                      |                       |
| Golden Valley WEF Power Line near Cookhouse,       | BioTherm Energy      | Project Manager & EAP |
| Eastern Cape                                       |                      |                       |
| Karoshoek Grid Integration project as part of the  | FG Emvelo            | Project Manager & EAP |
| Karoshoek Solar Valley Development East of         |                      |                       |
| Upington, Northern Cape                            |                      |                       |
| Konkoonsies II PV SEF Power Line to the Paulputs   | BioTherm Energy      | Project Manager & EAP |
| Substation near Pofadder, Northern Cape            |                      |                       |
| Perdekraal West WEF Powerline to the Eskom Kappa   | BioTherm Energy      | Project Manager & EAP |
| Substation, Westnern Cape                          |                      |                       |
| Rheboksfontein WEF Powerline to the Aurora         | Moyeng Energy        | Project Manager & EAP |
| Substation, Western Cape                           |                      |                       |
| Soetwater Switching Station near Sutherland,       | African Clean Energy | Project Manager & EAP |
| Northern Cape                                      | Developments (ACED)  |                       |
| Solis Power I Power Line & Switchyard Station near | Brightsource         | Project Manager & EAP |
| Upington, Northern Cape                            |                      |                       |
| Stormwater Canal System for the llanga CSP near    | Karoshoek Solar One  | Project Manager & EAP |
| Upington, Northern Cape                            |                      |                       |
| Tsitsikamma Community WEF Powerline to the Diep    | Eskom Holdings       | Project Manager & EAP |
| River Substation, Eastern Cape                     |                      |                       |
| Two 132kV Chickadee Lines to the new Zonnebloem    | Eskom Holdings       | Project Manager & EAP |
| Switching Station, Mpumalanga                      |                      |                       |
| Electrical Grid Infrastructure for the Kolkies and | Mainstream Renewable | Project Manager & EAP |
| Sadawa PV clusters, Western Cape                   | Energy Developments  | 4                     |
| Sadawa Collector substation, Western Cape          | Mainstream Renewable | Project Manager & EAP |
|  | Energy Developments  | //                    |
| Electrical Grid Infrastructure for the Vrede and   | Mainstream Renewable | Project Manager & EAP |
| Rondavel PV facilities, Free State                 | Energy Developments  |                       |

# **Environmental Compliance, Auditing and ECO**

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

# Environmental Permitting, \$53, Water Use Licence (WUL), Waste Management Licence (WML) & Other Applications

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

### **MINING SECTOR PROJECTS**

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

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

### **Basic Assessments**

| Project Name & Location                           | Client Name | Role                  |
|---|-------------|-----------------------|
| Rare Earth Separation Plant in Vredendal, Western | Rareco      | Project Manager & EAP |
| Cape  |             |                       |
| Decommissioning and Demolition of Kilns 5 & 6 at  | PPC         | Project Manager & EAP |
| the Slurry Plant, Kwa-Zulu Natal                  |             | /                     |

# **Environmental Compliance, Auditing and ECO**

| Project Name & Location                          | Client Name                | Role            |
|--|----------------------------|-----------------|
| ECO for the construction of the Duhva Mine Water | Eskom Holdings SoC Limited | Project Manager |
| Recovery Project, Mpumalanga                     |                            |                 |

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

# Environmental Permitting, \$53, Water Use Licence (WUL), Waste Management Licence (WML) & Other Applications

| Project Name & Location                                 | Client Name               | Role                  |
|---|---------------------------|-----------------------|
| Waste Licence Application for the Rare Earth            | Rareco                    | Project Manager & EAP |
| Separation Plant in Vredendal, Western Cape             |                           |                       |
| WULA for the Expansion of the Landfill site at Exxaro's | Exxaro Resources          | Project Manager & EAP |
| Namakwa Sands Mineral Separation Plant, Western         |                           |                       |
| Cape  |                           |                       |
| 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 | Eskom Holdings       | Project Manager & EAP |
| South Africa and Botswana                          |                      |                       |
| Chemical Storage Tanks, Metallurgical Plant        | Goldfields           | Project Manager & EAP |
| Upgrade & Backfill Plant upgrade at South Deep     |                      |                       |
| Gold Mine, near Westornaria, Gauteng               |                      |                       |
| Expansion of the existing Welgedacht Water Care    | ERWAT                | Project Manager & EAP |
| Works, Gauteng                                     |                      |                       |
| Golden Valley WEF Access Road near Cookhouse,      | BioTherm Energy      | Project Manager & EAP |
| Eastern Cape                                       |                      |                       |
| Great Fish River Wind Farm Access Roads and        | African Clean Energy | Project Manager & EAP |
| Watercourse Crossings near Cookhouse, Eastern      | Developments (ACED)  |                       |
| Cape   |                      |                       |
| llanga CSP Facility Watercourse Crossings near     | Karoshoek Solar one  | Project Manager & EAP |
| Upington, Northern Cape                            |                      |                       |

| Project Name & Location                              | Client Name          | Role                  |
|--|----------------------|-----------------------|
| Modification of the existing Hartebeestfontein Water | ERWAT                | Project Manager & EAP |
| Care Works, Gautng                                   |                      |                       |
| N10 Road Realignment for the Ilanga CSP Facility,    | SANRAL               | Project Manager & EAP |
| East of Upington, Northern Cape                      |                      |                       |
| Nxuba (Bedford) Wind Farm Watercourse Crossings      | African Clean Energy | Project Manager & EAP |
| near Cookhouse, Eastern Cape                         | Developments (ACED)  |                       |
| Pollution Control Dams at the Medupi Power Station   | Eskom                | Project Manager & EAP |
| Ash Dump & Coal Stockyard, Limpopo                   |                      |                       |
| Clayville Central Steam Plant, Gauteng               | Bellmall Energy      | 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, | Networx \$28 Energy           | Project Manager & EAP |
| near Keimoes, Northern Cape                             |                               |                       |
| Qoboshane bridge & access roads, Eastern Cape           | Emalahleni Local Municipality | Project Manager & EAP |
| Relocation of the Assay Laboratory near                 | Sibanye Gold                  | Project Manager & EAP |
| Carletonville, Gauteng                                  |                               |                       |
| Richards Bay Harbour Staging Area, KwaZulu-Natal        | Eskom Holdings                | Project Manager & EAP |
| S-Kol Watercourse Crossing for the Solar PV Facility,   | Networx \$28 Energy           | Project Manager & EAP |
| East of Keimoes, Northern Cape                          |                               |                       |
| Sonnenberg Watercourse Crossing for the Solar PV        | Networx \$28 Energy           | Project Manager & EAP |
| Facility, West Keimoes, Northern Cape                   |                               |                       |
| Kruisvallei Hydroelectric Power Generation Scheme,      | Building Energy               | Project Manager & EAP |
| Free State  |                               |                       |
| Masetjaba Water Reservoir, Pump Station and Bulk        | Naidu Consulting Engineers    | Project Manager & EAP |
| Supply Pipeline near Nigel, Gauteng                     |                               |                       |
| Access Road for the Dwarsug Wind Farm, Northern         | South Africa Mainsteam        | Project Manager & EAP |
| Cape Province   | Renewable Power               |                       |
| Qoboshane borrow pits (EMPr only), Eastern Cape         | Emalahleni Local Municipality | Project Manager & EAP |
| Tsitsikamma Community WEF Watercourse Crossings,        | Cennergi                      | Project Manager & EAP |
| Eastern Cape  |                               |                       |
| Msenge Emoyeni Wind Farm Watercourse Crossings          | Windlab                       | Project Manager & EAP |
| and Roads, Eastern Cape                                 |                               |                       |
| Access road to Wolf WEF, Eastern Cape                   | Red Rocket                    | Project Manager & EAP |
| Access road to Witberg WEF, Western Cape                | Red Rocket                    | Project Manager & EAP |

# **Screening Studies**

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

# Environmental Compliance, Auditing and ECO

| Project Name & Location                             | Client Name             | Role            |
|---|-------------------------|-----------------|
| ECO and bi-monthly auditing for the construction of | Department of Water and | Project Manager |
| the Olifants River Water Resources Development      | Sanitation              | Auditor         |
| Project (ORWRDP) Phase 2A: De Hoop Dam, R555        |                         |                 |
| realignment and housing infrastructure              |                         |                 |

| Project Name & Location                               | Client Name                    | Role            |
|---|--------------------------------|-----------------|
| ECO for the Rehabilitation of the Blaaupan & Storm    | Airports Company of South      | Project Manager |
| Water Channel, Gauteng                                | Africa (ACSA)                  |                 |
| Due Diligence reporting for the Better Fuel Pyrolysis | Better Fuels                   | Project Manager |
| Facility, Gauteng                                     |                                |                 |
| ECO for the Construction of the Water Pipeline from   | Transnet                       | Project Manager |
| Kendal Power Station to Kendal Pump Station,          |                                |                 |
| Mpumalanga  |                                |                 |
| ECO for the Replacement of Low-Level Bridge,          | South African National         | Project Manager |
| Demolition and Removal of Artificial Pong, and        | Biodiversity Institute (SANBI) |                 |
| Reinforcement the Banks of the Crocodile River at     |                                |                 |
| the Construction at Walter Sisulu National Botanical  |                                |                 |
| Gardens, Gauteng Province                             |                                |                 |
| External Compliance Audit of the Air Emission         | PetroSA                        | Project Manager |
| Licence (AEL) for a depot in Bloemfontein, Free       |                                |                 |
| State Province and in Tzaneen, Mpumalanga             |                                |                 |
| Province  |                                |                 |

# Environmental Permitting, \$53, Water Use Licence (WUL), Waste Management Licence (WML) & Other Applications

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

# HOUSING AND URBAN PROJECTS

# **Basic Assessments**

| Project Name & Location                             | Client Name      | Role                  |
|---|------------------|-----------------------|
| Postmasburg Housing Development, Northern Cape      | Transnet         | Project Manager & EAP |
| Expansion of Wildekranz Tourism facilities, Western | Wildekranz Trust | Project Manager & EAP |
| Cape  |                  |                       |

# **Compliance Advice and reporting**

| Project Name & Location                           | Client Name               | Role                  |
|---|---------------------------|-----------------------|
| Kampi ya Thude at the Olifants West Game Reserve, | Nick Elliot               | Environmental Advisor |
| Limpopo   |                           | /                     |
| External Compliance Audit of WUL for the          | Johannesburg Country Club | Project Manager       |
| Johannesburg Country Club, Gauteng                |                           |                       |

# Environmental Compliance, Auditing and ECO

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

# **ENVIRONMENTAL MANAGEMENT TOOLS**

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

# PROJECTS OUTSIDE OF SOUTH AFRICA

| Project Name & Location                         | Client Name | Role                  |
|---|-------------|-----------------------|
| Advisory Services for the Zizabona Transmission | PHD Capital | Advisor               |
| Project, Zambia, Zimbabwe, Botswana & Namibia   |             |                       |
| EIA for the Semonkong WEF, Lesotho              | MOSCET      | Project Manager & EAP |

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



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### **CURRICULUM VITAE OF MICHAEL MORREIRA**

Comprehensive CV

**Profession:** ESG and Sustainability Consultant

**Specialisation:** ESG, Sustainability, and Environmental consulting, advisory and management services.

Work Experience: Savannah Environmental - June 2021 to present - providing environmental consulting,

advisory and management services. 7 years of experience managing steel trading and engineering businesses. 11 years of hands-on experience in natural areas management,

nature conservation management, and local and international eco-tourism

management.

### **VOCATIONAL EXPERIENCE**

Michael Morreira is presently employed as an ESG and Sustainability consultant at Savannah Environmental, Michael also conducts environmental assessment, consulting, report writing and permitting work at Savannah. Michael has several years of practical business management experience; he also has several years of experience fulfilling various positions on large game reserves in Kwa-Zulu Natal, the Eastern Cape, and Mpumalanga.

Over the years Michael has filled senior management roles and has developed a thorough understanding of good business practice. He has developed unique experience having managed trading and engineering businesses, providing materials to a number of clients involved in large scale engineering and fabrication projects, and large scale industrial maintenance and development projects. He has worked as a game ranger and has managed some of South Africa's most famous private game reserves. Michael is has advanced Field Guide and Lead Trails Guide qualifications with more than 7 years of logged professional guiding experience in Big 5 areas.

Michael's work experience is complemented by his educational qualifications. He has completed an Internationally recognised MBA with a Specialisation in Sustainable Development and International Business. Michael's MBA Thesis revolved around the business benefits, barriers, and level of adoption of Sustainability Imperatives into South African small and medium sized enterprises – he awarded a distinction pass for his Thesis and was consequently awarded his MBA in September, 2020.

Over the years Michael has worked and studied with the ambition of making a positive impact – Michael has completed Environmental SDG Indicators training. Since 2020 he has conducted Impact Analysis and research concerning large businesses impacts relative to the United Nations Sustainable Development Goals.

#### **SKILLS BASE AND CORE COMPETENCIES**

- Research and Analysis
- Nature Conservation Management
- Business Management
- Advanced Nature Guiding
- Measuring environmental SDG indicators
- Environmental and Social Impact Assessments
- Report Writing
- ESG and Sustainability Due Diligence and Assurance Assessments
- Environmental Permitting
- Project Environmental Management System (EMS) development aligned with ISO14001:2015 standards

### **EDUCATION AND PROFESSIONAL STATUS**

#### Degrees:

- MBA with a specialisation in International Business and Sustainability (83%). Maastricht School of Management, 2020.
- B-Tech Game Ranch Management. Nelson Mandela Metropolitan University, 2009.
- National Diploma Game Ranch Management (Cum Laude, Best initial degree in the NMMU Faculty of Science).
   Nelson Mandela Metropolitan University, 2006.

#### **Short Courses:**

- United Nations SDG Indicators Training 2021 present
- IAIA Professional Development Program Fundamentals of Impact Assessment, 2021.
- CPD Certified Climate Disclosure Training Program. CDSP Introduction to climate-related disclosures, 2021.
- IFC World Bank Group Sustainability Training and E-Learning Program (STEP), 2021.
- MBA Essentials 15 week short course (90%), University of Stellenbosch Business School, 2018.
- Environmental Impact Assessment Certificate, WESSA, 2012.
- Level 2 Nature Site Guide Dangerous Animal Areas, THETA, 2009.
- Lead Trails Guide Dangerous Animal Areas, THETA, 2009.
- Advance 4x4 Off-road Driving Certificate, Land Rover Off-road Driving Academy, 2009.
- Conservation Certificate, East Cape Game Management Association, 2005.
- Spring Valley School of Professional Hunting Professional Hunters Certificate, 2004

# **EMPLOYMENT**

| Date                              | Company                                    | Roles and Responsibilities   |
|-----------------------------------|--|--|
| June 2021 - current:              | Savannah Environmental (Pty) Ltd           | ESG and Sustainability Consultant developing ESG and Sustainability reports. Integrated environmental consulting, advisory, permitting and management services as offered by Savannah Environmental.   |
| July 2015 – Feb 2020              | MS Steel and Pipe Suppliers t/a Steelscope | Between July 2015 and Feb 2019 Michael served as the branch general manager at MS Steel & Pipe Suppliers t/a Steelscope in Germiston, Gauteng, and between Feb 2019 and Feb 2020 he served as the sales manager. His duties included business general management, growth and development, administration, marketing, sales, customer relationship management, stock controls, debtors controls, overheads management, systems and procedures management, risk management, financial awareness, and staff management  |
| March 2013 – July 2015            | BSi Steel Ltd                              | Between March 2013 and March 2014 Michael served as the assistant branch manager at BSi Steel Kya Sands, Gauteng. His duties included the management and supervision of large scale steel fabrication and production projects, warehouse management, stock controls, key account management, sales, new business development and customer relationship management. Between March 2014 and July 2015 following the closure of the Kya Sands branch his role changed to that of a sales executive and trader at the Westrand branch and at the BSi head office in Klipriver Gauteng – his duties included the management and supervision of large scale steel fabrication and production projects, key account management, sales, new business development and customer relationship management. |
| February 2008 –<br>September 2012 | Mala Mala Private Game Reserve             | Between 2008 and 2010 Michael was employed as a ranger at Mala Mala Game Reserve – his duties involved full time hospitality management, nature conservation duties and advanced nature guiding to international clients. Between 2010 and 2012, he was employed as the Rattray's Camp general manager. His duties included the general management, administration, marketing, stock controls and maintenance of all of the camps facilities. During this time he also served as a field guide, host and liaison to high-end international   |

| Date                            | Company                   | Roles and Responsibilities  |
|---------------------------------|---------------------------|---|
|                                 |                           | guests. During this time, Michael fulfilled various nature conservation duties including: large scale burning regimes, wildlife monitoring and care, ecosystem monitoring and rehabilitation projects, road network and camp maintenance duties. He also worked closely with neighbouring reserves and communities to uphold and encourage high quality relationships.  |
| January 2006 – January<br>2008  | Kragga Kamma Game Reserve | Michael served as the Park Manager at Kragga Kamma Game Park in Port Elizabeth. His duties included the management of construction & maintenance projects for the parks camps, fences, roads, dams and buildings. He was also responsible for wildlife monitoring, wildlife capture, care and translocation (including chemical game capture operations, this included large predators), habitat restoration projects, alien vegetation removal, guiding tourists and hosting functions.  |
| January 2005 – January<br>2006  | Nambiti Conservancy       | Michael served as an assistant manager and game ranger at the Nambiti Conservancy in Ladysmith, KwaZulu Natal. His duties included the introduction and hosting of potential new investors to the game reserve, the oversight of lodge building contractors, the construction and maintenance of road networks, dams and fence lines, the tracking, monitoring and researching of wildlife, the reintroduction and captive care of wildlife including endangered species, the carrying out of vegetation condition and carrying capacity assessments, the removal of exotic vegetation, the development of habitat restoration projects, the management of large scale burning regimes, the guiding and hosting of local and international tourists. He also worked closely with neighbouring communities to uphold and encourage high quality relationships. |
| December 1999 –<br>January 2005 | Various                   | Michael's early career saw him fulfil various pratical entry level positions – trainee automotive mechanic; fence and wall construction; warehousing and dispatch clerk; steel and fencing materials trading. Mountain operations – Sunday River Ski Resort, United States of America. Part time work including anti-poaching, game management, farm management, and outdoor entertainment management at the PPC Grassridge Cattle and Game Ranch, and the Drakensberg Gardens Golf and Leisure Resort.   |

### PROJECT EXPERIENCE

Michael has environmental permitting, EIA and report writing experience, he has also written chapters for ESG and Sustainability reports, and assisted with Due Diligence processes. A record of his project experience is below.

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

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

| Project Name & Location                              | Client Name     | Role                          |
|--|-----------------|-------------------------------|
| EMPr for Claire 1 and 2, Gauteng                     | Bellmall Energy | Junior EAP / Principal Author |
|  |                 |                               |
| EIA Process for the Middelvlei Solar, 120MW Solar PV | Sigma Solar     | Junior EAP / Principal Author |
| Project, Gauteng Province                            |                 |                               |
| EIA for 700MW (7x 100MW) Mutsho Solar PV, near       | CRI-Eagle       | Assist with Public            |
| Musina, Limpopo                                      |                 | Participation – site notices  |
|  |                 | and process notices           |

#### **Basic Assessments**

| Project Name & Location                  | Client Name          | Role                          |
|--|----------------------|-------------------------------|
| BAR for Quantum 1 Solar Energy Facility  | Mainstream Renewable | Junior EAP / Principal Author |
|  | Energy Projects      |                               |
| BARs for Letsoai PV cluster, NC Province | BioTherm Energy      | Junior EAP / Principal Author |

# **Compliance Advice and ESAP reporting**

| Project Name & Location                         | Client Name     | Role                          |
|---|-----------------|-------------------------------|
| ESAP for Claire 1 and 2                         | Bellmall Energy | Junior EAP / Principal Author |
| ESMS BTE / Mulilo BTE Prieska PV, Northern Cape | BioTherm Energy | Junior EAP / Principal Author |

### **Due Diligence Reporting**

| Project Name & Location                        | Client Name        | Role                          |
|--|--------------------|-------------------------------|
| Environmental and Social Due Diligence for the | PGE EDF Consortium | Junior EAP / Principal Author |
| Anglo Solar project, Mogalakwena Solar Project |                    |                               |

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

| Project Name & Location                             | Client Name     | Role                          |
|---|-----------------|-------------------------------|
| Sendawo Solar Part 1 Amendment – North West         | BioTherm        | Junior EAP / Principal Author |
| Province  |                 |                               |
| Adams Solar EMPr Amendment – Northern Cape          | Sola            | Junior EAP / Principal Author |
| Province  |                 |                               |
| Solaris Fields Sun Garden Section 53 – Eastern Cape | Wind Relic      | Junior EAP / Principal Author |
| GPEMF Registration for Claire 03 PV Facility in     | Bellmall Energy | Junior EAP /Principal Author  |
| Clayville, Gauteng                                  |                 |                               |
| EA Amendment for Alldays PV Facility - Capacity     | BioTherm Energy | Junior EAP /Principal Author  |
| Increase  |                 |                               |

| EA amendment for Sendawo PV1, PV2 and PV3 PV          | BioTherm Energy               | Junior EAP /Principal Author |
|---|-------------------------------|------------------------------|
| facilities – capacity increase                        |                               |                              |
| Loeriesfontein PV & power line EA amendments EA       | BioTherm Energy               | Junior EAP /Principal Author |
| extensions beyond 10 years                            |                               |                              |
| Aries II Part 1 amendment EA extension beyond 10      | BioTherm Energy               | Junior EAP /Principal Author |
| years   |                               |                              |
| Kenhardt sunrise power line and Facility Part 1       | BioTherm Energy               | Junior EAP /Principal Author |
| amendments EA extensions beyond 10 years              |                               |                              |
| KT PV2 Part 1 amendment - validity extension          | Kotulo Tsatsi Energy          | Junior EAP /Principal Author |
|   |                               |                              |
| Machadadorp PV Facility Part 1 amendment EA           | Solar to Benefit Africa       | Junior EAP /Principal Author |
| extension beyond 10 years                             |                               |                              |
| Kronos PV1, PV2 and PV3 - amendment of                | juwi Renewable Energies (Pty) | Junior EAP /Principal Author |
| environmental authorisations (x3): validity extension | Ltd                           |                              |

# RENEWABLE POWER GENERATION PROJECTS: WIND ENERGY FACILITIES

# Environmental Permitting, \$53, Water Use Licence (WUL), Waste Management Licence (WML) & Other Applications

| Project Name & Location                             | Client Name                  | Role                          |
|---|------------------------------|-------------------------------|
| Wind Garden and Fronteer Section 53 Application –   | Wind Relic                   | Junior EAP / Principal Author |
| Eastern Cape  |                              |                               |
| Redding and Aeoulus Section 53 Application –        | Wind Relic                   | Junior EAP / Principal Author |
| Eastern Cape  |                              |                               |
| Hamlett and Rippon Section 53 Application – Eastern | Wind Relic                   | Junior EAP / Principal Author |
| Cape  |                              |                               |
| Klawer Wind Farm Part 1 EA Amendment – Western      | Red Rocket Energy            | Junior EAP / Principal Author |
| Cape  |                              |                               |
| Roggeveld Part 1 Amendment – Northern Cape          | Roggeveld Wind Energy        | Junior EAP / Principal Author |
| Section 53 applications for Mercury Cluster         | Mulilo Renewable             | Junior EAP / Principal Author |
|   | Developments                 |                               |
| Perdekraal West Kappa Line - Part 1 Amendment       | BioTherm Energy              | Junior EAP / Principal Author |
| (Validity Extension beyond 10 years including       |                              |                               |
| specialist studies and motivation report)           |                              |                               |
| HARTEBEEST WEF - AMENDMENT OF ENVIRONMENTAL         | Junior EAP /Principal Author | Junior EAP / Principal Author |
| AUTHORISATION: VALIDITY EXTENSION                   |                              |                               |

# **CONVENTIONAL POWER GENERATION PROJECTS (COAL)**

# **Due Diligence Reporting**

| Project Name & Location                      | Client Name | Role                         |
|--|-------------|------------------------------|
| Richards Bay Coal Terminal ESG Due Diligence | RBCT        | Junior EAP, Researcher,      |
| Assessment                                   |             | Project Assistant, Author of |
|  |             | report chapters              |

# **GRID INFRASTRUCTURE PROJECTS**

# **Environmental Compliance, Auditing and ECO**

| Project Name & Location                      | Client Name    | Role                       |
|--|----------------|----------------------------|
| Review of the Pongola & Elandskop EMS system | Eskom, Hyosung | Junior EAP/ EAP/ Principal |
|  |                | Author                     |

# **Compliance Advice and ESAP reporting**

| Project Name & Location                  | Client Name    | Role                       |
|--|----------------|----------------------------|
| Hex BESS EMS development and EMPr review | Eskom, Hyosung | Junior EAP/ EAP/ Principal |
|  |                | Author                     |

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

| Project Name & Location                       | Client Name          | Role                          |
|---|----------------------|-------------------------------|
| Roggeveld power line Part 1 amendment: change | Roggeveld Wind Power | Junior EAP / Principal Author |
| of holder                                     |                      |                               |

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

### **Basic Assessments**

| Project Name & Location                        | Client Name                    | Role                       |
|--|--------------------------------|----------------------------|
| Basic Assessment for the expansion of Highveld | Anglo African Metals (Pty) Ltd | Assist with Public         |
| Waste Recovery Facility, Mpumalanga            |                                | Participation site notices |
|  |                                | and process notices.       |
| Hopefield Watercourse Crossing                 | Umoya Energy                   | Junior EAP, Project        |
|  |                                | Manager, Principle Author  |

# **Compliance Advice and ESAP reporting**

| Project Name & Location                           | Client Name              | Role                          |
|---|--------------------------|-------------------------------|
| Environmental Management Services for the Lesotho | CGGL (on behalf of LHDA) | Junior EAP assist with Review |
| Highlands Development Project (up-front Method    |                          | of EMPr                       |
| Statements & EMPr update)                         |                          |                               |



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### **CURRICULUM VITAE OF CORNELIUS A. HOLTZHAUSEN**

Comprehensive CV

**Profession:** Public Participation and Social Impact Consultant

Specialisation: Public Participation and Social Impact Assessment

Work Experience: Ten (10) Months in Social Impact Assessment

### **VOCATIONAL EXPERIENCE**

Cornelius Holtzhausen is registered with the International Association for Public Participation (IAP2SA145), South Africa and holds an MSocSci in Cultural Anthropology as well as a postgraduate degree in Social Impact Assessment and Public Participation. He has produced a growing list of social impact reports for a wide range of projects. He is responsible for the public participation aspect of the study.

# SKILLS BASE AND CORE COMPETENCIES

- Report and Technical Writing
- Editing
- Analysis and Evaluation
- Communication
- Team Leadership & Development
- Client Relations

### **EDUCATION AND PROFESSIONAL STATUS**

### Degrees:

- Post Graduate Degree in Social Impact Assessment and Public Participation, University of Johannesburg
- Master of Social Sciences in Cultural Anthropology, University of Pretoria
- Bachelor of Social Sciences Honours in Cultural Anthropology University of Pretoria
- BA General Degree, University of Pretoria

### **Professional Society Affiliations:**

International Association of Public Participation South Africa ()

### **EMPLOYMENT**

| Date                   | Company                          | Roles and Responsibilities                      |
|------------------------|----------------------------------|---|
| April 2023 - Current:  | Savannah Environmental (Pty) Ltd | <u>Tasks include</u> :                          |
|                        |                                  | Social Impact Assessments                       |
|                        |                                  | Public Participation                            |
| June 2022 – March 2022 | Afzelia Environmental (Pty) Ltd  | Xxx   |
|                        |                                  | <u>Tasks included:</u>                          |
|                        |                                  | Freelance Consulting, Social Impact Assessments |
|                        |                                  |   |

# PROJECT EXPERIENCE

Project experience includes the Social Impact assessments for access roads, water conveyance systems, dam wall repairs and other water-related projects.

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

### **Due Diligence Reporting**

| Project Name & Location        | Client Name               | Role                   |
|--------------------------------|---------------------------|------------------------|
| Kosi Bay Bridge                | Kwa-Zulu Natal Department | Desktop Social Impact  |
|                                | of Transport              | Assessment and         |
|                                |                           | Stakeholder Engagement |
| Proposed Upgrade to Road D1867 | Kwa-Zulu Natal Department | Desktop Social Impact  |
|                                | of Transport              | Assessment             |

# Environmental Permitting, \$53, Water Use Licence (WUL), Waste Management Licence (WML) & Other Applications

| Project Name & Location                         | Client Name  | Role                  |
|---|--------------|-----------------------|
| Ludeke Dam repairs Project                      | Umgeni Water | Desktop Social Impact |
|   |              | Assessment            |
| The Proposed Nagle-Durban Heights and Inanda-   | Umgeni Water | Desktop Social Impact |
| Wiggins conveyance System Refurbishment Project |              | Assessment            |