

CURRICULUM VITAE OF KAREN JODAS

Profession:	Environmental Management and Compliance Consultant; Environmental Assessment Practitioner. Professional Natural Scientist: Environmental Science since 1999.
Specialisation:	Strategic environmental assessment and advice; development of plans and guidelines; environmental compliance advise and monitoring; Environmental Impact Assessment; environmental management; project management and co-ordination of environmental projects; peer review; policy, strategy and guideline formulation; renewable energy projects; water resources management.

VOCATIONAL EXPERIENCE

Provide technical input for projects in the environmental management field, specialising in strategic evaluation, Environmental Impact Assessment studies, environmental management plans, programmes and guidelines, integrated environmental management, environmental compliance monitoring; peer review of EIA reports and processes, strategy and guideline development, and public participation. Key focus on overall Project Management, integration of environmental studies and environmental processes into larger engineering-based projects, strategic assessment, and the identification of environmental management solutions and mitigation/risk minimising measures.

Excellent working knowledge of environmental legislation, strategies, guidelines and policies. Compilation of the reports for environmental studies are in accordance with the all relevant environmental legislation under the National Environmental Management Act. Due consideration of Equator Principles and compliance with IFC performance standards is now a part of all projects.

SKILLS BASE AND CORE COMPETENCIES

Provide technical input for projects in the environmental management field, specialising in strategic evaluation, Environmental Impact Assessment studies, environmental management plans, programmes and guidelines, integrated environmental management, environmental compliance monitoring; peer review of EIA reports and processes, strategy and guideline development, and public participation. Key focus on overall Project Management, integration of environmental studies and environmental processes into larger engineering-based projects, strategic assessment, and the identification of environmental management solutions and mitigation/risk minimising measures.

Excellent working knowledge of environmental legislation, strategies, guidelines and policies. Compilation of the reports for environmental studies are in accordance with the all relevant environmental legislation under the National Environmental Management Act. Due consideration of Equator Principles and compliance with IFC performance standards is now a part of all projects.

SKILLS BASE AND CORE COMPETENCIES

- Twenty years (20) of experience in the environmental management, impact assessment and compliance fields
- Eighteen (18) years of experience in Project Management - Project management of large environmental assessment and management projects
- Strategic and compliance advise for all aspects of environmental assessment and management
- External and peer review of environmental assessment and compliance reporting as well as EIA processes
- Working knowledge of environmental planning policies, regulatory frameworks and legislation

- Input and review of Environmental Management Plans and Programmes, including Invasive Species Monitoring, Control and Eradication Plans
- Identification and assessment of potential environmental impacts and benefits
- Development of practical and achievable mitigation measures and management plans and evaluation of risk to project execution
- Experienced in environmental compliance advise, monitoring and reporting for construction projects
- Compilation and review of the reports in accordance with all relevant environmental legislation
- Public participation/involvement and stakeholder consultation
- Environmental strategy, policy and guidelines development
- Experienced in assessments for both linear developments and nodal developments
- Key experience in the assessment of impacts associated with renewable energy projects
- Wide range of experience for public and private sector projects
- Experienced consultant in projects in Sub-Saharan Africa.

EDUCATION AND PROFESSIONAL STATUS

Degrees:

- B.Sc Earth Sciences, majoring in Geography and Zoology, Rhodes University, Grahamstown, 1993
- B.Sc Honours in Geography (in Environmental Water Management), Rhodes University, Grahamstown, 1994. Major subjects included Water Resources Management, Streams Ecology, Fluvial Geomorphology and Geographic Information Systems.
- M.Sc in Geography (Geomorphology), Rhodes University, Grahamstown, 1996

Short Courses:

- Environmental and Social Risk Management (ESRM), International Finance Corporation, 2018
- Integrated Water Resource Management, the National Water Act, and Water Use Authorisations, CSBSS, 2017
- WindFarmer Wind Farm Design course, Garrad Hassan, 2009
- Environmental Law Course, Aldo Leopold Institute, 2002
- Water Quality Management, Potchefstroom University, 1998

Professional Society Affiliations:

- Registered with the South African Council for Natural Scientific Professions as a Professional Natural Scientist: Environmental Science (400106/99)
- Registered with the International Associated for Impact Assessment South Africa (IAIAsa): 5888

Other Relevant Skills:

- Xtrack Extreme – Advanced Off-Road Driving Course (2003)

EMPLOYMENT

Date	Company	Roles and Responsibilities
2006 - Current:	Savannah Environmental (Pty) Ltd	Director <i>Independent specialist environmental consultant, Environmental Assessment Practitioner (EAP) and advisor</i>
1997 – 2005:	Bohlweki Environmental (Pty) Ltd	Associate <i>Environmental Management Unit: Manager; Principle Environmental Scientist focussing on Environmental Management and Project Management</i>

PROJECT EXPERIENCE

Experience includes projects associated with 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
Aggeneys PV Plant, Northern Cape	Solar Capital	Project Manager & EAP
Blackwood PV SEF, Free State	VentuSA Energy	Project Manager & EAP
Bloemsmond PV 1 & PV 2 SEF's, Northern Cape	Atlantic Energy Partners	Project Manager & EAP
Bosjesmansberg PV SEF, Northern Cape	Networx	Project Manager & EAP
Boundary PV SEF, Northern Cape	VentuSA Energy	Project Manager & EAP
Buffels PV 1 & PV 2 SEF's, North West	Kabi Energy	Project Manager & EAP
De Aar PV SEF, Northern Cape	African Clean Energy Developments (ACED)	Project Manager & EAP
De Aar PV Solar Energy Plant, Northern Cape	Solar Capital	Project Manager & EAP
Gihon & Kison PV SEF's, Limpopo	Networx	Project Manager & EAP
Gunstfontein PV SEF, Northern Cape	Networx / Prana Energy	Project Manager & EAP
Harmony Eland, Nyala & Tshepong PV SEF's, Free State	BEEEntropie Renewable Innovation	Project Manager & EAP
Hibernia SEF, North West	EA Energy	Project Manager & EAP
Iziko PV SEF, Mpumalanga	VentuSA Energy	Project Manager & EAP
Kabi Kimberley PV Facility at DeBeers, Northern Cape	Kabi Solar	Project Manager & EAP
Karoo Renewables PV SEF, Northern Cape	SARGE	Project Manager & EAP
Kheis Phase 1, 2 & 3 PV SEF, Northern Cape	GeStamp Solar	Project Manager & EAP
Klipgat PV SEF, Northern Cape	Terra Solar	Project Manager & EAP
Loeriesfontein/Helios PV SEF, Northern Cape	Solar Capital	Project Manager & EAP
Naauwpoort PV SEF, Northern Cape	Terra Solar	Project Manager & EAP
Orkney PV SEF, North West	Genesis Eco-Energy	Project Manager & EAP
Pofadder SEF, Northern Cape	Mainstream Renewable	Project Manager & EAP
Prieska North PV SEF, Northern Cape	VentuSA Energy	Project Manager & EAP
Prieska PV SEF, Northern Cape	VentuSA Energy	Project Manager & EAP
Ritchie PV SEF, Northern Cape	Solar Capital	Project Manager & EAP
San Solar PV SEF, Northern Cape	VentuSA Energy	Project Manager & EAP
Sirius (Tungston Lodge) PV Solar Plants (x2, Northern Cape)	Aurora Power Solutions	Project Manager & EAP
Sol Invictus x4 PV Developments, Northern Cape	Building Energy	Project Manager & EAP
Solar Plant at Kathu (Wincanton), Northern Cape	REISA	Project Manager & EAP
Solar Plant at Sishen (Wincanton), Northern Cape	VentuSA Energy	Project Manager & EAP
Solar Plant at Sishen (Wincanton), Northern Cape	VentuSA Energy	Project Manager & EAP
SolarReserve Kotulo Tsatsi PV1 SEF, Northern Cape	Kotulo Tsatsi Energy and SolarReserve South Africa	Project Manager & EAP
SolarReserve Kotulo Tsatsi PV2 Facility, Northern Cape province	Kotulo Tsatsi Energy and SolarReserve South Africa	Project Manager & EAP
Stormberg Solar PV SEF, Eastern Cape	Networx / Prana Energy	Project Manager & EAP
Tewa Isitha (Grootdrink/Albany) PV SEF, Northern Cape	Africoast Engineers	Project Manager & EAP

Project Name & Location	Client Name	Role
Tiger Kloof PV SEF near Vryburg, North West	Kabi Energy	Project Manager & EAP
Tiger Solar PV SEF, Northern Cape	Kabi Energy	Project Manager & EAP
Vaalkop and Witkop PV SEF's, North West	Kabi Solar	Project Manager & EAP
Wagnbietjiespan PV SEF, Free State	VentuSA	Project Manager & EAP
Wolmaransstad Municipality PV SEF, North West	BlueWave	Project Manager & EAP
Woodhouse PV 1 & PV 2 SEF's, North West	Genesis Eco-Energy	Project Manager & EAP
Zuurwater PV SEF's (x4), Northern Cape	Solafrica / BlueWave	Project Manager & EAP
Three PV SEF facilities in Lichtenburg, North West	Atlantic Energy Partners	Project Manager & EAP

Basic Assessments

Project Name & Location	Client Name	Role
Amandla Welanga & Dida PV SEF's near Noupoot, Northern Cape	Terra Solar	Project Manager & EAP
Carolusberg PV SEF, Northern Cape	Ilio Energy (SARGE)	Project Manager & EAP
Gosforth Park and Kynoch Rooftop PV SEF's Northern Cape	Building Energy	Project Manager & EAP
Hennenman PV SEF, Free State	BlueWave	Project Manager & EAP
Hibernia PV SEF near Lichtenburg, North West	EA Energy	Project Manager & EAP
Inkulukelo PV SEF, Northern Cape	Terra Solar	Project Manager & EAP
Kabi Kimberley PV SEF, Northern Cape	Kabi Energy	Project Manager & EAP
Kokerboom & Boabab PV Solar Energy Plants, Northern Cape	Brax Energy	Project Manager & EAP
Middelburg PV SEF, Mpumalanga	African Clean Energy Developments (ACED)	Project Manager & EAP
Nigramoep PV Solar Energy Plant, Northern Cape	SARGE	Project Manager & EAP
Noupoot (Kleinfontein and Toitdale) CPV, Northern Cape	Terra Power	Project Manager & EAP
O'Kiep 1 PV Solar Energy Plant, Northern Cape	Ilio Energy (SARGE)	Project Manager & EAP
O'Kiep 2 PV Solar Energy Plant, Northern Cape	BluePort Trade 118 (SARGE)	Project Manager & EAP
O'Kiep 3 PV Solar Energy Plant, Northern Cape	Ilio Energy (SARGE)	Project Manager & EAP
Rodicon PV SEF, Mpumalanga	VentuSA Energy	
Slurry PV SEF, North West	PPC	Project Manager & EAP
Small projects for PV SEF's, North West	BlueWave	Project Manager & EAP
Son Sitrus Rooftop PV Installation, Eastern Cape	Building Energy	Project Manager & EAP
Tollie PV SEF, Northern Cape	Terra Solar	Project Manager & EAP
x2 Southern Farms PV Solar Energy Plants, Northern Cape	Southern Farms	Project Manager & EAP

Screening Studies

Project Name & Location	Client Name	Role
Allemans, Wonderheuwel, Damfontein & Dida PV SEF's, Northern Cape	Terra Solar	Project Manager & EAP
Amandla Welang, Gillmer & Inkululeko PV SEF's, Northern Cape	GeoSolar/ TerraSolar	Project Manager & EAP
Blouputs PV, Onseepkans PV, Hoogelegen PV & Boegoeberg PV projects, Northern Cape	Engineering Development Industrial Projects (EDIP)	Project Manager & EAP
Bobididi PV SEF, Limpopo	Root 60Four Energy	Project Manager & EAP
Boshof-Les Marais / Buitenfontein SEF, Free State	Bluewave Capital	Project Manager & EAP
Bosjesmansberg PV SEF, Northern Cape	Networx	Project Manager & EAP

Project Name & Location	Client Name	Role
Class 2 & Class 3 Road Networks in the vicinity of the proposed Tambo Springs Freight Hub, Gauteng	SMEC South Africa (on behalf of Gauteng Department of Roads & Transport)	Project Manager & EAP
Hibernia SEF, North West	EA Energy	Project Manager & EAP
Lephalale PV SEF, Limpopo	Exxaro	Project Manager & EAP
Prieska PV SEF, Northern Cape	Terra Solar	Project Manager & EAP
Proposed Solar Project near Hotazel, Northern Cape province	ABO Wind	Project Manager & EAP
Proposed Solar Project near Beaufort West, Western Cape	ABO Wind	Project Manager & EAP
Proposed Solar Project near Lichtenburg, North West province	ABO Wind	Project Manager & EAP
PV SEF's (x15) for the projects for the REIPP small scale BID, Nationwide	Building Energy	Project Manager & EAP
Senekal 1 & 2, Pongola & Newcastle PV SEF's, Kwa-Zulu-Natal	Building Energy	Project Manager & EAP
Small scale PV SEF project - 2nd Stage One	Bluewave Capital	Project Manager & EAP
Small scale PV SEF project - 2nd Stage One	Building Energy	Project Manager & EAP
Stella Helpmekaar SEF, North West	Bluewave Capital	Project Manager & EAP
Wolmaransstad Municipality SEF, North West	Bluewave Capital	Project Manager & EAP
Solar Project near Beaufort West, Western Cape	ABO Wind	Project Manager & EAP
Solar Project near Lichtenburg, Western Cape	ABO Wind	Project Manager & EAP
Solar Project near Hotazel, Western Cape	ABO Wind	Project Manager & EAP

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
ECO for the Contraction of the De Aar & Prieska PV Facilities, Northern Cape	GeStamp	Project Manager
ECO for the Construction of the Kathu PV Facility, Northern Cape	REISA / Building Energy	Project Manager

Compliance Advice and ESAP Reporting

Project Name & Location	Client Name	Role
ACWA Power SolarReserve Redstone Solar Plant, Northern Cape	SolarReserve	Environmental Advisor
Bokpoort PV SEF, Northern Cape	Solafrica	Environmental Advisor
Boshof PV SEF, Free State	BlueWave	Environmental Advisor
Hennenman PV SEF, Free State	BlueWave	Environmental Advisor
Kathu II SEF, Northern Cape	Building Energy	Environmental Advisor
Kathu PV SEF, Northern Cape	Building Energy / REISA	Environmental Advisor
Prieska PV SEF, Northern Cape	VentuSA	Environmental Advisor
San Solar SEF, Northern Cape	VentuSA / Acciona	Environmental Advisor
Sishen PV SEF Phase 1, Northern Cape	Aveng / Acciona	Environmental Advisor
Wolmaransstad Municipality Solar PV SEF, North West	BlueWave	Environmental Advisor
ESAP reporting for the operation phase of the Mulilo Solar PV De Aar and Mililo Solar PV Prieska	Mulilo and X-Elio	Environmental Advisor

Due Diligence Reporting

Project Name & Location	Client Name	Role
Kabi Kimberley PV Plant, Northern Cape	Enertis Solar	Environmental Advisor

Project Name & Location	Client Name	Role
Sishen Solar Farm, Northern Cape	Acciona (Windfall 59 Properties)	Environmental Advisor
Vaal River Solar 1 PV plant, North West	Enertis Solar	Environmental Advisor

Environmental Permitting & Water Use License (WUL) Applications

Project Name & Location	Client Name	Role
Permitting for the Kathu PV SEF, Northern Cape	Abengoa Solar	Project Manager & EAP
S53 application for Kabi Kimberley De Beers PV Plant, Northern Cape	Kabi Energy	Project Manager & EAP
S53 application for the Blackwood PV SEF, Free State	VentuSA Energy	Project Manager & EAP
S53 application for the Boundary PV SEF, Northern Cape	VentuSA Energy	Project Manager & EAP
S53 application for Vaalkop & Witkop PV SEF's, North West	Kabi Energy	Project Manager & EAP
S53 applications for various projects (Amandla Welang, Didar, Inkululeko, Kleinfontein, Klip Gat, Naau Poort, Toitdale & Tollie PV SEF's), Northern Cape	Terra Solar	Project Manager & EAP
WUL application for the Woodhouse PV1 & PV2 SEF's, North West	Genesis Eco-Energy	Project Manager & EAP

RENEWABLE POWER GENERATION PROJECTS: CONCENTRATED SOLAR FACILITIES (CSP)

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
De Aar CSP Energy facility, Northern Cape	African Clean Energy Developments (ACED)	Project Manager & EAP
Khi Solar One CSP facility, Northern Cape	Abengoa Solar	Project Manager & EAP
Noupoort CSP facility, Northern Cape	Cresco	Project Manager & EAP
Paulputs CSP facility, Northern Cape	Abengoa Solar	Project Manager & EAP
Pofadder & Upington CSP facilities, Northern Cape	Abengoa Solar	Project Manager & EAP
SolarReserve Kotulo Tsatsi CSP facility, Northern Cape province	SolarReserve	Project Manager & EAP
SolarReserve Kotulo Tsatsi CSP1 facility, Northern Cape	Kotulo Tsatsi Energy and SolarReserve South Africa	Project Manager & EAP
SolarReserve Kotulo Tsatsi CSP2 facility, Northern Cape	Kotulo Tsatsi Energy and SolarReserve South Africa	Project Manager & EAP
SolarReserve Kotulo Tsatsi CSP3 facility, Northern Cape	Kotulo Tsatsi Energy and SolarReserve South Africa	Project Manager & EAP
Upington 2 CSP facility, Northern Cape	Abengoa Solar	Project Manager & EAP
Upington 3 CSP facility, Northern Cape	Abengoa Solar	Project Manager & EAP
Xina Solar One CSP facility, Northern Cape	Abengoa Solar	Project Manager & EAP

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
KaXu Solar One facility, Northern Cape	Abengoa Solar	Project Manager
Khi Solar One facility, Northern Cape	Abengoa Solar	Project Manager
Xina Solar One facility, Northern Cape	Abengoa Solar	Project Manager

Screening Studies

Project Name & Location	Client Name	Role
Site Identification Tool for Proposed CSP Projects, Limpopo	Exxaro	Environmental Advisor

Compliance Advice and ESAP reporting

Project Name & Location	Client Name	Role
Kaxu Solar One CSP facility, Northern Cape	Abengoa Solar	Environmental Advisor
Khi Solar One CSP facility, Northern Cape	Abengoa Solar	Environmental Advisor
SolarReserve Kotulo Tsatsi CSP facility, Northern Cape province	SolarReserve	Environmental Advisor
Xina One CSP facility, Northern Cape	Abengoa Solar	Environmental Advisor

RENEWABLE POWER GENERATION PROJECTS: WIND ENERGY FACILITIES

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
ABs WEF near Indwe, Eastern Cape	Rainmaker Energy	Project Manager & EAP
Amakhala Emoyeni WEF, Eastern Cape	Windlab Developments	Project Manager & EAP
Amatole (2 phases) WEF, Eastern Cape	Genesis ECO-Energy	Project Manager & EAP
Boulders Wind Farm, Western Cape	IPD Power	Project Manager & EAP
Britannia Bay WEF, Western Cape	Terra Power Solutions	Project Manager & EAP
Castle WEF in De Aar, Northern Cape	Juwi Renewable Energies	Project Manager & EAP
Cookhouse WEF, Eastern Cape	African Clean Energy Developments (ACED) & Tertia Waters	Project Manager & EAP
Deep River Wind Energy Facility, Eastern Cape	VentuSA Energy	Project Manager & EAP
Dorper Phase 1 WEF, Eastern Cape	Rainmaker Energy	Project Manager & EAP
Elliot WEF, Eastern Cape	Rainmaker Energy	Project Manager & EAP
Garob WEF, Northern Cape	Juwi Renewable Energies	Project Manager & EAP
Gouda WEF, Western Cape	VentuSA Energy	Project Manager & EAP
Great Karoo WEF, Northern Cape	African Clean Energy Developments (ACED)	Project Manager & EAP
Gunstfontein WEF, Northern Cape	African Clean Energy Developments (ACED)	Project Manager & EAP
Happy Valley WEF, Eastern Cape	REISA	Project Manager & EAP
Hidden Valley WEF, Northern Cape	African Clean Energy Developments (ACED)	Project Manager & EAP
Hopefield WEF, Western Cape	Umoya Energy	Project Manager & EAP
Karoo Renewable Energy Facility, Northern & Western Cape	SARGE	Project Manager & EAP
Karreebosch Wind Farm (Roggeveld Phase 2), Northern Cape & Western Cape	G7 Renewable Energies	Project Manager & EAP
Karusa Wind Farm, Northern Cape	African Clean Energy Development	Project Manager & EAP
Klipheuwel / Dassiesfontein WEF, Western Cape	BioTherm Energy	Project Manager & EAP
Nojoli WEF, Eastern Cape	African Clean Energy Developments	Project Manager & EAP
Nxuba WEF, Eastern Cape	African Clean Energy Developments	Project Manager & EAP
Olifants River WEF, Western Cape	SARGE	Project Manager & EAP

Project Name & Location	Client Name	Role
Oyster Bay WEF, Eastern Cape	RES	Environmental Advisor
Pofadder x3 WEF's, Northern Cape	Mainstream Renewable	Project Manager & EAP
Project Blue WEF, Northern Cape	Windy World	Project Manager & EAP
Rheboksfontein WEF, Western Cape	Moyeng Energy	Project Manager & EAP
Riverbank WEF near Wesley, Eastern Cape	Just Energy	Project Manager & EAP
Sere WEF, Western Cape	Eskom Generation	Project Manager & EAP
Soetwater Wind Farm, Northern Cape	African Clean Energy Development	Project Manager & EAP
Springfontein WEF, Northern Cape	Mainstream Renewable	Project Manager & EAP
Stormberg WEF, Eastern Cape	Networx / Prana Energy	Project Manager & EAP
Suurplaat WEF, Western & Northern Cape	Moyneg Energy	Project Manager & EAP
Uiekraal WEF, Western Cape	Crenergol	Project Manager & EAP
West Coast One WEF, Western Cape	Moyeng Energy	Project Manager & EAP
West Coast WEF, Western Cape	Exxaro	Project Manager & EAP
Zen WEF near Gouda, Western Cape	VentuSA Energy	Project Manager & EAP

Basic Assessments

Project Name & Location	Client Name	Role
Britannia Bay Wind Monitoring Mast, Western Cape	Terra Power Solutions	Project Manager & EAP
Caledon, Worcester & Tulbach Wind Monitoring Masts, Western Cape	SAGIT	Project Manager & EAP
Deep River Wind monitoring Mast, Eastern Cape	VentuSA Energy	Project Manager & EAP
Denhami Wind Farm, Western Cape	Richard Young	Project Manager & EAP
Dorper, Abs & Dobos Wind Monitoring Masts, Eastern Cape	Rainmaker Energy	Project Manager & EAP
Hopefield Wind Monitoring Mast, Western Cape	Umoya Energy	Project Manager & EAP
Klawer Wind Energy Facility, Western Cape	Vendiwell	Project Manager & EAP
Klipheuwel / Dassiesfontein Wind Monitoring Mast, Western Cape	BioTherm Energy	Project Manager & EAP
Riverbank Wind Monitoring Mast, Eastern Cape	Just Energy	Project Manager & EAP
Wind Monitoring Masts near Suurplaat, Western Cape	Investec Bank	Project Manager & EAP
Wind Monitoring Masts on the West Coast & Darling, Western Cape	Investec Bank	Project Manager & EAP

Screening Studies

Project Name & Location	Client Name	Role
Cookhouse WEF, Eastern Cape	African Clean Energy Developments (ACED)	Project Manager & EAP
De Aar WEF, Northern Cape	African Clean Energy Developments (ACED)	Project Manager & EAP
Developments within identified areas in the Overberg, Western Cape	BioTherm Energy	Project Manager & EAP
Hopefield WEF, Western Cape	African Clean Energy Developments (ACED)	Project Manager & EAP
Juno WEF, Western Cape	AMDA Developments	Project Manager & EAP
Lambert's Bat WEF, Western Cape	Vaayu Energy SA	Project Manager & EAP
Prospect Sites for various WEF's	Thabo Consulting (on behalf of Eskom Holdings)	Project Manager & EAP
Struis Baai area WEF, Western Cape	Richards Young	Project Manager & EAP
Suurplaat WEF, Western Cape	Investec Bank	Project Manager & EAP
Theewaterskloof Municipality WEF, Western Cape	Theewaterskloof Municipality	Project Manager & EAP

Project Name & Location	Client Name	Role
WEF's on x2 site on the West Coast, Western Cape	Investec Bank	Project Manager & EAP
Various WEF's in the Western Cape	Department of Environmental Affairs & Development Planning (DEA&DP)	Project Manager & EAP
Van Reenens WEF, Kwa-Zulu Natal & Free State	4GREEN Development Africa	Project Manager & EAP
WEF Development within the Sandveld area, Western Cape	Kovacs Investments (Nick Prium)	Project Manager & EAP

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
ECO for the Construction of the Dorper Phase 1 WEF, Eastern Cape	Rainmaker Energy	Project Manager
ECO for the Construction of the Gouda Wind Farm, Western Cape	Blue Falcon Trading	Project Manager
EO for the Construction of the Dassiesklip WEF, Western Cape	Group Five	Project Manager

Compliance Advice & ESAP Reporting

Project Name & Location	Client Name	Role
Amakhala Emoyeni WEF, Eastern Cape	Windlab Developments	Environmental Advisor
Cookhouse II WEF, Eastern Cape	African Clean Energy Developments	Environmental Advisor
Cookhouse WEF, Eastern Cape	African Clean Energy Developments	Environmental Advisor
Dorper Phase 1 WEF, Eastern Cape	Rainmaker Energy	Environmental Advisor
Garob WEF, Northern Cape	Juwi Renewable Energies	Environmental Advisor
Gouda WEF, Western Cape	Aveng / Acciona	Environmental Advisor
Happy Valley WEF, Eastern Cape	VentuSA Energy / EDPR	Environmental Advisor
Hidden Valley WEF, Northern Cape	African Clean Energy Developments (ACED)	Environmental Advisor
Hopefield WEF, Western Cape	Umoya Energy	Environmental Advisor
Karusa Wind Farm, Northern Cape	African Clean Energy Development	Environmental Advisor
Loperberg WEF, Eastern Cape	Rainmaker Energy	Environmental Advisor
Nobelsfontein WEF, Northern Cape	Coria / SARGE	Environmental Advisor
Nojoli WEF, Eastern Cape	African Clean Energy Developments (ACED)	Environmental Advisor
Nxuba WEF, Eastern Cape	African Clean Energy Developments	Environmental Advisor
Oyster Bay WEF, Eastern Cape	RES	Environmental Advisor
Riverbank Wind WEF, Eastern Cape	InnoWind	Environmental Advisor
Roggeveld Phase 1 WEF, Northern Cape	Building Energy	Environmental Advisor
Soetwater Wind Farm, Northern Cape	African Clean Energy Development	Environmental Advisor
Springfontein WEF, Northern Cape	Mainstream Renewable	Environmental Advisor
Zen WEF, Western Cape	VentuSA Energy	Environmental Advisor

Due Diligence Reporting

Project Name & Location	Client Name	Role
Gouda WEF, Western Cape	Blue Falcon Trading	Environmental Advisor

Project Name & Location	Client Name	Role
Loeriesfontein, Khobab & Noupoort WEF's, Northern Cape	Actis	Environmental Advisor
Roggeveld Wind Farm, Northern Cape	Building Energy	Environmental Advisor

Environmental Permitting & WUL Applications

Project Name & Location	Client Name	Role
Permitting for the Cookhouse WEF, Eastern Cape	African Clean Energy Developments (ACED)	Project Manager & EAP
Permitting for the Karusa Wind Farm, Northern Cape	African Clean Energy Development	Project Manager & EAP
Permitting for the Sere WEF, Western Cape	Eskom	Project Manager & EAP
Permitting for the Soetwater Wind Farm, Northern Cape	African Clean Energy Development	Project Manager & EAP
Permitting Riverbank WEF, Eastern Cape	Electrawinds	Project Manager & EAP
S24G for the Klipheuwel / Dassiesfontein WEF, Western Cape		Project Manager & EAP
S53 application for the Nxuba Wind Farm, Eastern Cape	African Clean Energy Developments (ACED)	Project Manager & EAP
S53 Application for the Zen WEF, Western Cape	VentuSA Energy	Project Manager & EAP
WUL application for the Oyster Bay WEF, Eastern Cape	RES	Project Manager & EAP

CONVENTIONAL POWER GENERATION PROJECTS (COAL)

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
H2 Energy Power Station, Mpumalanga	H2 Energy	Project Manager & EAP

Screening Studies

Project Name & Location	Client Name	Role
Coal fired power station in the Bethal area, Mpumalanga	ISS Global	Project Manager & EAP
Indwe Power Station, Eastern Cape	IPSA	Project Manager & EAP
IPP Base Load Power Station Development in Lephalale, Limpopo	Exxaro	Project Manager & EAP

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
ISO 14001:2015 Audit for the Hendrina Power Station, Mpumalanga	Eskom Holdings	Project Manager

CONVENTIONAL POWER GENERATION PROJECTS (GAS)

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Ankerlig OCGT to CCGT Conversion project & the Transmission Power Line between Ankerlig and the Omega Substation, Western Cape	Eskom Generation	Project Manager & EAP
Gourikwa OCGT to CCGT Conversion project & the Transmission Power Line between Gourikwa and the Proteus Substation, Western Cape	Eskom Generation	Project Manager & EAP

Neopak Combined Heat and Power (CHP) Plant, Rosslyn, Gauteng	Neopak	Project Manager & EAP
Richards Bay Combined Cycle Gas Turbine (CCGT) Power Plant, Kwa-Zulu Natal	Eskom	Project Manager & EAP

Screening Studies

Project Name & Location	Client Name	Role
Environmental Analysis for gas transmission pipelines in the Clayville, Nigel, and Wadeville areas, Gauteng	Eskom Holdings	Project Manager

GRID INFRASTRUCTURE PROJECTS

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Kyalami/Midrand Substation and 3 Transmission Lines, Gauteng	Eskom Transmission	Project Manager & EAP
Steelpoort Integration Project, Limpopo	Eskom Transmission	Project Manager & EAP

Basic Assessments

Project Name & Location	Client Name	Role
Amakhala Emoyeni Power Line & Kopleegte Substation, Eastern Cape	Cennergi	Project Manager & EAP
Bon Espirange Substation & Overhead Power Line for the Roggeveld Wind Farm, Northern Cape	Building Energy (G7 Renewable Energies)	Project Manager & EAP
Castle WEF Powerline, Northern Cape	Juwi Renewable Energies	Project Manager & EAP
Cuprum-Burchell; Burchell-Mooidraai Power Line, Northern Cape	Eskom	Project Manager & EAP
Expansion of the Komsberg Main Transmission Substation, Northern Cape	Enel Green Power	Project Manager & EAP
Garob-Kronos Power Line, Northern Cape	Juwi Renewable Energies	Project Manager & EAP
Golden Valley Dx-Poseidon Power Line Substation & Golden Valley-Kopleegte Power Line, Eastern Cape	BioTherm Energy	Project Manager & EAP
Gunstfontein Switching Station, Power Line & Ancillary Infrastructure, Northern Cape	African Clean Energy Developments (ACED)	Project Manager & EAP
Ilanga Lethemba-Hydra, Northern Cape	Solar Capital	Project Manager & EAP
Iziduli Emoyeni WEF on-site substation, Power Line & Switching station, Access Roads & Watercourse Crossings, Eastern Cape	Windlab	Project Manager & EAP
Khai-Ma WEF Power Line, Northern Cape	Mainstream Renewable	Project Manager & EAP
Korana WEF Power Line, Northern Cape	Mainstream Renewable	Project Manager & EAP
Korana SEF Power Line, Northern Cape	Mainstream Renewable	Project Manager & EAP
Nobelsfontein WEF Power Line & Substation, Northern Cape	Coria / SARGE	Project Manager & EAP
Nojoli WEF Substation & Power Line Grid Connection, Eastern Cape	African Clean Energy Developments (ACED)	Project Manager & EAP
Olifantshoek Substation & Powerline, Northern Cape	Eskom Holdings	Project Manager & EAP
Poortjies WEF Power Line, Northern Cape	Mainstream Renewable	Project Manager & EAP
Power Line & Substation for the Blackwood WEF, Northern Cape	VentuSA Energy	Project Manager & EAP

Power Line & Substation for the Khobab WEF in Loeriesfontein, Northern Cape	Mainstream Renewable	Project Manager & EAP
Power Line Connecting the Sishen SEF to the Ferrum MTS-UMTU Klip Kop Power Line, Northern Cape	Acciona (Windfall 59 Properties)	Project Manager & EAP
Power Line for the Grid Connection of the 2 SEF's near Kath and Dibeng, Northern Cape	VentuSA Energy	Project Manager & EAP
Power Line for the Rhebokfontein WEF, Western Cape	Moyeng Energy	Project Manager & EAP
Power Line from Aggeneys Solar One to Aggeneis MTS Substation, Northern Cape	BlueWave	Project Manager & EAP
Re-alignment of 3 Eskom Power Line Servitudes within the Hopefield WEF, Western Cape	Umoya Energy	Project Manager & EAP
Re-alignment of the Power Line & Watercourse Crossings for the Loeriesfontein 2 WEF, Northern Cape	Mainstream Renewable	Project Manager & EAP
Re-alignment of the Power Line from Loeriesfontein 1 WEF to the Helios Substation, Northern Cape	Mainstream Renewable	Project Manager & EAP
Re-alignment of the Power Line from Loeriesfontein 3 WEF to the Helios Substation, Northern Cape	Mainstream Renewable	Project Manager & EAP
Substation for the Aggeneys PV SEF, Northern Cape	BioTherm Energy	Project Manager & EAP
Substation, Power Line & Watercourse Crossings for the Springfontein WEF, Free State	Mainstream Renewable	Project Manager & EAP
Wesley-Peddie (Riverbank Phase 2) Power Line for the Uncedo Lwethu WEF, Eastern Cape	Just Energy	Project Manager & EAP

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
EO for the construction of the Neptune-Vuyani Transmission Line, Western Cape	Trans-Africa Projects on behalf of Eskom	Project Manager

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

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Afguns Road Realignment Project, Limpopo	Eskom Holdings	Project Manager & EAP
Expansion of the existing Welgedacht Water Care Works, Gauteng	ERWAT	Project Manager & EAP
Industrial Metals Cluster, Northern Cape	Northern Cape Department of Economic Development and Tourism	Project Manager & EAP
Modification of the existing Hartebeestfontein Water Care Works, Gauteng	ERWAT	Project Manager & EAP

Basic Assessments

Project Name & Location	Client Name	Role
New Raw Water Reservoir & Pipeline for the Medupi Power Station, Limpopo	Eskom Holdings	Project Manager & EAP
Msenge Emoyeni WEF Watercourse Crossings, Eastern Cape	Windlab	Project Manager & EAP
Dilokong Transport Facility, Limpopo	South African National Roads Agency Limited (SANRAL)	Project Manager & EAP
Neopak Water Treatment Plant, Gauteng	Neopak	Project Manager & EAP

Project Name & Location	Client Name	Role
Realignment of MR73 Road for the Construction of the Paulputs CSP Facility, Northern Cape	Abengoa Solar	Project Manager & EAP
Biomass Storage Area in Support of the Mkuze Biomass Power Station, KwaZulu-Natal	Building Energy	Project Manager & EAP
Wastewater Dam & Pipeline in Support of the Mkuze Biomass Power Station, Kwa-Zulu Natal	Building Energy	Project Manager & EAP
Watercourse Crossings for the Klawer Wind Energy Facility, Western Cape	Vendiwell	Project Manager & EAP

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
ECO for the Construction of the Tiffindell Ski Resort, Eastern Cape	Tiffindell Ski	ECO
ECO for the Distribution centre & warehouse at Lords View Industrial Estate, Gauteng	Oliver & Partners	Project Manager
ECO for the Upgrade of the Waterval Wastewater Treatment Works, Gauteng	BCP Palace (on behalf of ERWAT)	Project Manager

Compliance Advice and reporting

Project Name & Location	Client Name	Role
Mkuze Biomass Plant, Kwa-Zulu Natal	Building Energy	Environmental Advisor
Tiffindell Ski, Eastern Cape	Tiffindell Ski	Environmental Advisor

Environmental Permitting & WUL Applications

Project Name & Location	Client Name	Role
Permitting, S53 & WULA for the Mkuze Biomass Plant, Kwa-Zulu Natal	Building Energy	Project Manager & EAP
WULA for the Visserhok Waste Tyre Depot, Western Cape	REDISA	Project Manager & EAP
WULA for the Witbank Waste Tyre Depot, Mpumalanga	REDISA	Project Manager & EAP

MINING

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
Compliance Audit for the Palesa Coal Mine WML, Mpumalanga province	HCI Coal	Project Manager
Compliance Audit Waste Use Licene for the Mbali Coal Mine, Mpumalanga province	HCI Coal	Project Manager

ENVIRONMENTAL MANAGEMENT TOOLS

Project Name & Location	Client Name	Role
Review the effectiveness *& efficiency of the environmental impact management (EIA) system in South Africa, and formulate an environmental impact management strategy and action plan	National Department of Environmental Affairs	Environmental Advisor
Drafting a Position Paper: Project Financing and Environmental Risk Management (considering IFC	Standard Bank Group	Environmental Advisor

Performance Standards & Equator Principles)		
EMP for the Phase 1 of the Elitheni Coal Mine Project, Eastern Cape	Elitheni Coal	Environmental Advisor
Gap Analysis of Environmental Management Systems (EMS) with ISO 14001:2004	Venture Diversified Products	Environmental Advisor
Development of Provincial Guidelines for 4x4 routes	Western Cape Department of Environmental Affairs & Development Planning	Environmental Advisor
Permitting Study on the Status of Renewable Energy Projects in South Africa	E.ON	Environmental Advisor
Practical review of EGI SEA	CSIR	Environmental Advisor
Development & Implementation of the Environmental Management Systems (EMS) with ISO 14001:2004 for the UBS Office in Sandton, Gauteng	UBS AG	Environmental Advisor
Resource & Efficiency Plans for the operation phase of the Mulilo Solar PV De Aar and Mililo Solar PV Prieska	Mulilo and X-Elio	Environmental Advisor

TRAINING

Project Name & Location	Client Name	Role
Hendrina Power Station Environmental Law Training	Eskom Holding	Project Manager
Radar Training for NCC Biologists	EchoTracks	Project Manager

CURRICULUM VITAE OF LISA OPPERMAN

Profession :	Environmental Assessment Practitioner and GIS Consultant
Specialisation:	Environmental Impact Assessments, Basic Assessments, Site Screening and Site Selection reporting, compilation of maps through the use of ArcGIS, Social Impact Assessments
Work Experience:	4 years and 10 months of experience in the environmental management and GIS field

VOCATIONAL EXPERIENCE

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

SKILLS BASE AND CORE COMPETENCIES

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

EDUCATION AND PROFESSIONAL STATUS

Degrees:

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

Courses:

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

EMPLOYMENT

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

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

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

Environmental Impact Assessments and Environmental Management Programmes

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

Basic Assessments

Project Name & Location	Client Name	Role
<i>Harmony Gold 3x PV Facilities, Welkom, Free State</i>	<i>BBEntropie</i>	<i>EAP and GIS Consultant</i>
<i>Khunab Solar Development, consisting of Klip Punt PV1, McTaggart PV1, McTaggart PV2, McTaggart PV3 and the Khunab solar Grid</i>	<i>Atlantic Energy Partners and Abengoa</i>	<i>Project management, Social Impact Assessment</i>

Connection near Upington, Northern Cape Province		Specialist and GIS Consultant
Sirius Solar PV3 and PV4, near Upington, Northern Cape Province	Solal	Co-author to Social Impact Assessments

Renewable power generation projects: Wind Energy Facilities

Screening Studies

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

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Boulders Wind Farm, Western Cape Province	Vredenburg Windfarm	EAP and GIS Consultant
Namas Wind Farm, Northern Cape Province	Genesis Namas Wind (Pty) Ltd	EAP and GIS Consultant
Zonnequa Wind Farm, Northern Cape Province	Genesis Zonnequa Wind (Pty) Ltd	EAP and GIS Consultant

Grid Infrastructure Projects

Basic Assessments

Project Name & Location	Client Name	Role
132/11kV Olifantshoek Substation and Power Line, Northern Cape	Eskom	EAP and GIS Consultant
Grid connection infrastructure for the Namas Wind Farm, Northern Cape Province	Genesis Namas Wind (Pty) Ltd	EAP and GIS Consultant
Grid connection infrastructure for the Zonnequa Wind Farm, Northern Cape Province	Genesis Zonnequa Wind (Pty) Ltd	EAP and GIS Consultant
Khunab Solar Grid Connection, near Upington, Northern Cape Province	Atlantic Energy Partners and Abengoa	Project management, Social Impact Assessment Specialist and GIS Consultant

Gas Projects

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Richards Bay Combined Cycle Power Plant (CCPP) power plant, KwaZulu-Natal (Scoping Phase)	Eskom	EAP (assistance) and GIS Consultant

Basic Assessments

Project Name & Location	Client Name	Role
Neopak Combined Heat and Power (CHP) Plant, Rosslyn, Gauteng	Neopak	EAP, Public Participation and GIS Consultant

Screening Studies

Project Name & Location	Client Name	Role
Richards Bay Combined Cycle Power Plant (CCPP) power plant, near Richards Bay, KwaZulu-Natal	Eskom	EAP and GIS Consultant

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

Basic Assessments

Project Name & Location	Client Name	Role
Water Treatment Plant at the Neopak Facility, Rosslyn, Gauteng	Neopak	EAP, Public Participation and GIS Consultant

Housing and Urban Projects

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Metals Industrial Cluster near Kuruman, Northern Cape	Northern Cape Department of Economic Development and Tourism	EAP and GIS Consultant

Environmental Management Tools

Environmental Management Programmes

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

Environmental and Social Management System (ESMS)

Project Name & Location	Client Name	Role
Preparation of Policies and Plans for the Kruisvallei Hydro Scheme, Free State Province	Building Energy South Africa	EAP assistance

CURRICULUM VITAE OF NICOLENE VENTER

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

VOCATIONAL EXPERIENCE

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

SKILLS BASE AND CORE COMPETENCIES

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

EDUCATION AND PROFESSIONAL STATUS

Degrees:

- Higher Secretarial Certificate, Pretoria Technicon (1970)

Short Courses:

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

Professional Society Affiliations:

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

EMPLOYMENT

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

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

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

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

RENEWABLE POWER GENERATION PROJECTS: PHOTOVOLTAIC SOLAR ENERGY FACILITIES

Environmental Impact Assessments and Environmental Management Programmes

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

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

19MW Solar Power Plant on Farm 198 (Slypklip), Danielskuil, Northern Cape Province	Solar Reserve South Africa EAP: SiVEST	Public Participation, Landowner and Community Consultation
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Basic Assessments and Environmental Management Programmes – Located within the Renewable Energy Development Zones (REDZ)

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

RENEWABLE POWER GENERATION PROJECTS: WIND ENERGY FACILITIES

Environmental Impact Assessments and Environmental Management Programmes

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

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

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

Environmental Authorisation Amendments

Project Name & Location	Client Name	Role
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Beaufort West 280MW Wind Farm into two 140MW Trakas and Beaufort West Wind Farms, Western Cape	South Africa Mainstream Renewable Power Developments EAP: SiVEST	Public Participation
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RENEWABLE POWER GENERATION PROJECTS: CONCENTRATED SOLAR FACILITIES (CSP)

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Upington Concentrating Solar Plant and associated Infrastructures, Northern Cape Province	Eskom Holdings EAP: Bohlweki Environmental	Public Participation

GRID INFRASTRUCTURE PROJECTS

Environmental Impact Assessments and Environmental Management Programmes

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

Facilitation

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

Basic Assessments and Environmental Management Programmes

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

Screening Studies

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

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

Stakeholder Engagement

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

Facilitation

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

Environmental Impact Assessments and Environmental Management Programmes

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

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

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

Facilitation

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

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Transnet's New Multi-Products Pipeline traversing Kwa-Zulu Natal, Free State and Gauteng Provinces	Transnet EAP: Bohlweki Environmental	Public Participation

Basic Assessments

Project Name & Location	Client Name	Role
Realignment of the Bulshoek Dam Weir near Klawer and the Doring River Weir near Clanwilliam, Western Cape Province	Dept of Water and Sanitation EAP: Zitholele	Public Participation

MINING SECTOR

Environmental Impact Assessment and Environmental Management Programme

Project Name & Location	Client Name	Role
Zero Waste Recovery Plant at highveld Steel, Mpumalanga Province	Anglo African Metals EAP: Savannah Environmental	Public Participation
Koffiefontein Slimes Dam, Free State Province	Petra Diamond Mines EAP: Zitholele	Public Participation

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



CURRICULUM VITAE OF JANA DE JAGER

Profession :	Environmental Assessment Practitioner
Specialisation:	Environmental Assessments, report writing, and GIS
Work Experience:	2.5 years' experience in Environmental Assessments & GIS

VOCATIONAL EXPERIENCE

Professional execution of consulting services for projects in the environmental management field, specialising in Environmental Impact Assessment studies, water assessments, environmental permitting, public participation, compilation of Environmental Management Plans and Programmes, and integrated environmental management. Responsibilities include report writing, compilation of project specific mapping, project management, review of specialist studies and the identification and assessment of potential negative environmental impacts and benefits. Compilation of the reports for environmental studies is in accordance with all relevant environmental legislation.

Experience in conducting environmental impact assessments for energy developments, industrial manufacturing projects (asphalt plants), waste treatment projects (HCRW), and water use licensing for Mixed-Use Developments.

SKILLS BASE AND CORE COMPETENCIES

- Compilation of environmental impact assessment reports and environmental management programmes in accordance with relevant environmental legislative requirements;
- GIS analysis and mapping as per project specifications

EDUCATION AND PROFESSIONAL STATUS

Degrees:

- B.Sc. (Hons) Environmental Science & Geography (2017), University of Pretoria (UP)
- B.Sc. Environmental Science (2016), University of Pretoria (UP)

Short Courses:

- Beginning Project Management: Project Management Level 1 (2020) – Joseph Phillips (Udemy)
- CBSS Water Governance Training Course (2019) – Carin Bosman, Water use governance Specialist
- Environmental Law Update Workshop (2018) – IMBEWU Sustainability Legal Specialists
- Official DWS Section 21 (c) and (i) Water Use Authorisation Course (2018)- Dr Wietsche Roets, Specialist Scientist: (In Stream Water Use);

Professional Society Affiliations:

- South African Council for Natural Scientific Professionals - Candidate Natural Scientist: Environmental Scientist – Reg No. 120039

Other Relevant Skills:

- Water Use Licensing on EWULAAS
- Compiling project budgets and proposals

EMPLOYMENT

Date	Company	Roles and Responsibilities
01 September 2020 - Current:	Savannah Environmental (Pty) Ltd	<i>Environmental Assessment Practitioner & GIS Consultant</i> <u>Tasks include:</u> <i>Compilation of Environmental Impact Assessment (EIA) reports; Basic Assessment (BA) reports and Environmental Management Programmes; Environmental Screening reports; GIS mapping; Co-ordination of the public participation process; Project management; project proposals and tenders; Client liaison and Marketing; Process EIA Applications.</i>
16 January 2018 – 29 August 2020	AquaEco	<i>Junior Environmental Consultant</i> <u>Tasks included:</u> <i>Drafting Environmental Applications; Basic Assessment & Environmental Impact Assessment Reports, and EMPr for review; assisting in environmental audits. Public participation liaison. Loading Water Use Licence information onto E-WUULAS system</i>

PROJECT EXPERIENCE

Jana has experience in conducting environmental impact assessments for industrial manufacturing projects (asphalt plants), waste treatment projects (HCRW), and water use licensing for Mixed-Use Developments. She has gained the ability to conduct project specific mapping and GIS analysis.

RENEWABLE ENERGY PROJECTS

Basic Assessments

Project Name & Location	Client Name	Role
Establishment of various infrastructure at the Msenge Emoyeni WEF	Amakhala Emoyeni Renewable Energy (Pty) Ltd	Junior EAP GIS
132kV power line for Hyperion Hybrid Facility	Hyperion Solar Hybrid (Pty) Ltd	Junior EAP GIS

OTHER PROJECTS

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Atholl Square Construction Environmental Management Programme	PIC	EMPr Author
Roadspan Asphalt Plant, Belfast, Mpumalanga	Roadspan Surfaces	Junior EAP
Rooiberg Asphalt Plant, Pretoria Gauteng	Rooiberg Asphalt	Junior EAP

Basic Assessments

Project Name & Location	Client Name	Role
Buhle Waste HCRW Treatment Plant	Buhle Waste	Junior EAP

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
TRAC N4 Toll Route Annual Audit	TRAC N4	Assistant Auditor
TRAC N4 Toll Route Annual Water Sampling	TRAC N4	ECO

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

Project Name & Location	Client Name	Role
Midrand Aquaculture Facility GEMF Registration	Private	Junior EAP
Kapama Game Reserve – WULA	Kapama Game Reserve	Junior EAP
Marataba Safari Lodge – WULA	Marataba Safari Lodge	Junior EAP
Lapalala Game Reserve – GA registration	Lapalala Game Reserve	Junior EAP
Ngwenya Lodge – WULA	Ngwenya Lodge	Junior EAP