

CONTACT DETAILS

Name of Company	CES – Environmental and Social Advisory Services
Designation	Cape Town Branch / Mozambique Country Manager
Profession	Environmental Consultant /Social and Resettlement Specialist
Years with firm	Nine (9) Years
E-mail	m.hardy@cesnet.co.za
Office number	+27 (0)21 045 0900
Nationality	South African
Professional Body	IAIAsa
Key areas of expertise	<ul style="list-style-type: none">• Environmental and Social Impact Assessments• Social Impact Assessments• Resettlement Action Plans• Environmental and Social Due Diligence• Environmental and Social Risk Management

PROFILE

Mr Marc Hardy

Marc holds a M. Phil (Environmental Management) from the Stellenbosch University's of School of Public Management and Planning after completing his undergraduate degrees in development studies and sociology/human geography. He also holds an Institute of Environmental Management and Assessment (IEMA) certification in ISO 14001 Auditing. His professional interests include ESIA reporting for linear, energy and large infrastructure projects, strategic environmental reporting, ESDD's for development financing institutions, social impact assessment and resettlement planning, environmental performance and compliance monitoring. At CES, Marc has been responsible for the management of projects and specialist teams and support staff, the preparation and monitoring of project budgets in excess of \$500 000, as well as being responsible for the management of the CES Maputo, Mozambique office. He is currently managing the ESIA processes for large infrastructure, renewable energy, commercial agriculture and mining developments throughout Africa (mostly to World Bank and International Finance Corporation Performance Standards). Marc has gained extensive social baseline study experience through the various projects involved in to date that have resettlement implications, alternatively, those that potentially impact on large numbers of people. He has also gained notable experience in the mining, agro-industry, forestry, biofuel and palm oil sectors in East and West Africa - in the ESIA, Resettlement Planning, ESDD, as well as the compliance and performance monitoring disciplines. During the course of his professional career Marc has worked in Angola, Cameroon, Democratic Republic of Congo, Ghana, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mozambique, Namibia, Nigeria, Sierra Leone, Swaziland, Tanzania, Uganda, Zambia and South Africa. He recently completed an Environmental and Social Risk Management (ESRM) training programme that was presented by the IFC.

**EMPLOYMENT
EXPERIENCE**

Principal Environmental Consultant and Mozambique Country Manager - EOH Coastal and Environmental Services (Cape Town)

2009 -Current

- Large ESIA, RAP and SIA study leader
- Socio-Economic Baseline Studies
- Extensive exposure and experience to date in Environmental and Social Due Diligence assessments and compliance/performance monitoring
- Strategic Environmental Assessments
- Country-manager for the CES Maputo office

Senior Environmental Consultant - Royal Haskoning DHV (Johannesburg)

2008 -2009

- ESIA studies
- Strategic Environmental Assessments
- Extensive linear and thermal energy project experience

Senior Environmental Officer - Gauteng Provincial Department of Agriculture, Conservation and Environment (GDACE - Johannesburg)

2006 -2007

- Appointed to various panels tasked with developing Spatial Development Frameworks, Urban Edge Policy and Environmental Management Frameworks Responsibilities/Achievements
- Review and management of all EIA applications for the Ekurhuleni region and associated intra-government consultation and representation forums related thereto;

2003-2005

Environmental Consultant / Research Assistant - Various research organisations and consultancies (Cape Town, Western Cape).

June - November 2004

Temporary Lecturer - Department of Environmental and Geographical Science, UCT.

1999-2002

Full time studies at UCT.

1992-1998:

Commercial Diver/Diving Supervisor - Marine and alluvial diamond recovery operations in South Africa, Namibia and Angola.

**ACADEMIC
QUALIFICATIONS**

1990 - 1991:

Learner Official Mining - mining engineering training programme (St. Helena Gold Mine - Welkom, Free State).

- 2001 - B.Soc.Sci. Development Studies (University of Cape Town)
- 2002 - B.Soc.Sci. (Hons) Environmental and Geographical Science (UCT)
- 2009 - M.Phil Environmental Management (Stellenbosch University)

COURSES

- Institute of Environmental Management and Assessment (IEMA) Certificate course in ISO 14001 Auditing, June 2007.
- Certificate course in Project Management, U.C.T. Graduate School of Business, May 2009.
- Coastal setback line determination, Department of Port & Coastal Engineering, Stellenbosch University, September 2010.
- Achieving better resettlement outcomes in development projects, Rhodes University, July 2013 (NQF 6).
- International Finance Corporation Environmental and Social Risk Management (ESRM) course, January- October 2018.

**CONSULTING
EXPERIENCE**

Subsequent to completing his full time studies Marc was involved in research projects through various organisations on behalf the Department of Marine and Coastal Management (MCM) pertaining to various fisheries along the South African coast as research team member for the following:

- On-board monitoring of rock lobster fishing vessels in the Hangklip concession area, False Bay as part of the MCM fishery monitoring program, Cape Town (Research Assistant);
- Compilation of a fishery permit holder database and implementation of a community-based catch monitoring system for the Cape South Coast oyster picking fishery for the MCM (Research Assistant);
- The identification and development of potential additional livelihood options, key intervention strategies, as well as the implementation of a community-based catch monitoring system for the west coast Olifants River subsistence fisher community for the Environmental Evaluation Unit – U.C.T. (Research Assistant).

In the environmental management and assessment field Marc has been project manager or team member for the following projects and processes -

Regulatory:

- Appointed to various panels tasked with developing Spatial Development Frameworks, Urban Edge Policy and Environmental Management Frameworks for local/provincial government while employed by GDACE;
- Team member of a unit tasked with the development of GDACE Departmental EIA review and Basic Assessment Report (BAR) format and reporting requirement guidelines in line with 2006 NEMA EIA Regulations.

- Review and management of all EIA applications for the Ekurhuleni region and associated intra-government consultation and representation forums related thereto;
- Joint reviewer for the Gautrain Rapid Rail Project variation alignment applications, as well as numerous linear, service supply and large infrastructure project applications while employed by GDACE, and represented the Department of the Gautrain Environmental Monitoring Committee.

Strategic environmental management processes:

- The Ekurhuleni Metropolitan Municipality Environmental Management Framework (EMF), Gauteng Province;
- The Dinokeng EMF, Gauteng Province;
- The Tlokwe (Potchefstroom) EMF, North West Province;
- Strategic assessment and environmental risk analysis for 12 potential wind farm projects Western and Northern Cape provinces;
- Environmental risk assessment for a proposed Pretoria Portland Cement manufacturing plant in Tete, Tete Province, Mozambique;
- Rapid Assessment Study for a proposed resettlement project for the Anadarko Petroleum Corporation, Palma District, Cabo Delgado Province, Mozambique;
- Environmental risk assessment for the proposed Kenmare Nataka titanium mineral sands mining expansion project, Nampula Province, Mozambique;
- Environmental risk assessment for the proposed Kenmare Pilivilli and Congolone mining expansion projects, Nampula Province, Mozambique;
- Environmental risk assessment of possible route alternatives for hydrocarbon pipelines from Saldanha Bay to Ankerlig Power Station in Atlantis on behalf of the Central Energy Fund (iGas), Western Cape Province;
- Environmental risk assessment for a proposed kaolin mine near Garies, Northern Cape Province;
- Environmental risk assessment for Frontier Rare Earths' proposed graphite project, Cabo Delgado Province, Mozambique.

Environmental auditing, due diligence and compliance monitoring:

- New Vaal Colliery EMPr compliance audit, Vereeniging, Gauteng Province;
- Gauteng Freeway Improvement Project (GFIP) Construction EMP compliance audits, Johannesburg, Gauteng Province;
- Cerebos Salt due diligence audit, Coega IDZ, Eastern Cape Province;
- Komati Power Station return to service project Construction EMP compliance audits, Mpumalanga Province;
- Camden Power Station return to service project Construction EMP compliance audits, Mpumalanga Province;
- Grootvlei Power Station return to service project Construction EMP compliance audits, Mpumalanga Province;
- Environmental due diligence assessment for Zone 5 of the Coega Industrial Development Zone, Eastern Cape Province;

- Port Alfred Waste Water Treatment works expansion project, Environmental Control Officer (ECO) and Construction EMP compliance audits, Eastern Cape Province;
- Egazini Memorial Precinct Project, ECO and Construction EMP compliance audits, Grahamstown, Eastern Cape Province;
- Environmental and Social Due Diligence (ESDD) audit of a proposed photovoltaic solar electricity generation facility (against IFC PS and EHS guidelines) on behalf of the Standard Bank Group, De Aar, Northern Cape Province;
- Green Resources Forestry Company ESDD against International Finance Corporation (IFC) Performance Standards (PS), Jinja and Lira, Uganda;
- ESDD of the ESIA and Draft Resettlement Action Plan (against IFC PS/EHS guidelines) for the Copperbelt Energy Company's proposed Kabompo Gorge Hydroelectric scheme on behalf of the Standard Bank Group, North-Western Province, Zambia;
- IFC PS deviation assessment for Kenmare mineral sands, Moma, Nampula Province, Mozambique;
- Construction EMP compliance audits for the Kenmare Namalope mineral sands expansion project, Moma, Mozambique;
- Construction and Operational phase compliance monitoring of the Solar Capital Ilanga Lethemba 1 photovoltaic facility, De Aar, Northern Cape Province;
- Construction and Operational phase compliance monitoring of the Solar Capital Ilanga Lethemba 3 photovoltaic facility, De Aar, Northern Cape Province;
- Kenmare titanium mineral sands mining project, Project Lender's Completion Test compliance audit, Moma, Nampula Province, Mozambique;
- Usutu Forestry plantation and pulp mill due diligence audit on behalf of Deutsche Investitions und Entwicklungsgesellschaft bank (DEG), Bhunya, Swaziland;
- Copperbelt Energy Corporation corporate Environmental and Social Management System IFC PS compliance review, Solwezi, North-Western Province, Zambia;
- Independent Environmental and Social Monitor (IESM) for the operation of the Kenya-Uganda (Mombasa to Kampala) railway line, on behalf of Rift Valley Railways Kenya Ltd. (RVRK) and Rift Valley Railways Uganda Ltd. (RVRU) as the IESM for the operation of the Kenya-Uganda railways line system of a total track length of approximately 2,350 km. The project involves an investment by various international investors including the IFC, the AfDB, the FMO, DEG, KfW, PROPARCO and the Equity Bank of Kenya;
- IFC PS Gap Analysis for the proposed Ossiomo Petrochemical Ammonia-Urea Project on behalf of SWEDFUND, Ologbo, Edo State, Nigeria;
- IFC PS Gap Analysis, First Quantum Minerals, Kalumbila Copper Project, North Western Province, Zambia;
- Performance audit on the implementation of Busoga Forestry Company's implementation of the Kachung Community Development Plan on behalf of the Swedish Energy Agency, Lira, Uganda;

CERTIFICATION

- ESDD for Chikweti Forest of Niassa (Global Solidarity Forest Fund) operations on behalf of a potential investor, Lichinga, Niassa Province, Mozambique;
- Phase 1 Environmental Assessment on a South African based agro-chemical (pesticides and fungicides) manufacturer, importer and distributing entity on behalf of Winfield Land 'O Lakes, Texas, U.S.A.;
- ESDD for the proposed Graphit Kropfmühl graphite mining project situated in Ancuabe (Cabo Delgado Province), Mozambique on behalf of DEG;
- ESDD for the proposed Kabanga Nickel mine in, Kagera District, Tanzania, on behalf of the Independent Group;
- ESDD for the proposed purchase of the AngloGold Ashanti Obuasi gold mining project, Ghana, on behalf of Australian based Equatorial Resources;
- ESDD on Agricane's sugarcane and associated agricultural operations on behalf of the CDC, Nchalo, Malawi;
- ESDD on a confidential Sugar Refinery in Bangladesh. The scope of this E&S due diligence assessment included sugar production facilities on behalf of a consortium of DFIs, Dhaka, Bangladesh;
- ESDD on Depthwize Limited, a shallow water and swamp barge oil and gas drilling contractor operating in the Delta region on behalf of the Africa Finance Corporation, Delta State, Nigeria.

Power generation, transmission and renewable energy applications:

- Upgrade of the ashwater return process at Eskom's Arnot Power Station, Mpumalanga Province (Basic Assessment);
- 3MW alien invasive wood fired electrical energy project, Grahamstown, Eastern Cape Province, (Basic Assessment);
- EA Energy 13 MW solar photovoltaic electricity generation project, Coega IDZ, Eastern Cape Province, (Basic Assessment);
- Eskom Multi Products Fuel Transport infrastructure (rail and pipeline) from Milnerton refinery to Ankerlig Power Station, Western Cape Province (EIA);
- Transnet New Multi Products Pipeline (NMPP), Jameson Park to Langlaagte route alignment, Gauteng and Mpumalanga Provinces (EIA);
- Matla Power Station to Jupiter B-Sebenza 400kV overhead powerlines and Substations, Mpumalanga and Gauteng Provinces (Full EIA);
- Johannesburg East electricity supply strengthening project: 400/132KV overhead powerlines and Substations, Gauteng Province (EIA);
- Witkloof-Thuli 132kV overhead power line, Mpumalanga Province (EIA);
- Vryburg 400kV/132kV Substation and loop in lines North-West Province (EIA);
- Boulders-Malelane 132kV overhead power line, Mpumalanga Province (EIA);
- Tarlton-Magaliesburg 132kV overhead power line, North-West Province (EIA);
- Watershed-Sephaku 132kV overhead power line, North-West Province (EIA);
- Cookhouse wind energy project, Eastern Cape Province (EIA);
- Grahamstown wind energy project, Eastern Cape Province (EIA);

- Riebeeck East wind energy project, Eastern Cape Province (Scoping to date);
- Beaufort West wind energy project, Western Cape Province (Scoping);
- Poortjie Wes wind energy project, Western Cape Province (Scoping);
- Carolina wind energy project, Mpumalanga Province (EIA);
- Nanagha Hills wind energy project, Eastern Cape Province (Scoping);
- Brakkefontein wind energy project, Western Cape Province (Scoping);
- Vrede wind energy project, Eastern Cape Province (Scoping);
- Richards Bay wind energy project, Kwa-Zulu Natal Province (EIA);
- St Lucia wind energy project, Eastern Cape Province (EIA);
- Hluhluwe wind energy project, Kwa-Zulu Natal Province (EIA);
- Peddie wind energy project, Eastern Cape Province (EIA);
- Richards Bay wind energy project, Kwa-Zulu Natal Province (EIA);
- Mossel Bay wind energy project, Western Cape Province (EIA);
- Grassridge-Coega IDZ wind energy project, Eastern Cape Province (EIA);
- Rietkloof and Brandvallei wind energy projects, Northern and Western Cape Province (EIA);
- Coega IDZ wind energy project, additional turbines and substations (Basic Assessment);
- JCM Greenquest 60MW solar photovoltaic electricity generation project, Mbalmayo, Cameroon.

General:

- Numerous meteorological monitoring masts for wind energy projects nationally (Basic Assessments);
- Coega IDZ (St Georges Interchange) filling stations, Eastern Cape Province (Scoping);
- Hopewell Private Game Reserve lodge expansion, Alexandria, Eastern Cape (Basic Assessment);
- Greys Gift lodge development, Makana, Eastern Cape (Basic Assessment);
- Egazini Memorial Precinct Project, Grahamstown, Eastern Cape Province (Basic Assessment);
- Pinedale eco-estate residential development, Bathurst area, Eastern Cape Province (full EIA);
- EMP revision for the N2 highway bridge upgrades between Umtata and Butterworth, Eastern Cape Province (EMP);
- Ecological Fatal Flaw Assessment for the proposed Diaz Road Arterial from the Port Elizabeth CBD to Rocklands, Eastern Cape Province.

Waste management, large and bulk service infrastructure:

- Ingagane Power Station domestic waste landfill closure, Newcastle, KZN Province (Basic Assessment and landfill closure permit);
- Regional Hazardous Waste Disposal Facility for the Coega IDZ, Port Elizabeth, Eastern Cape Province (Full EIA and Permit Application Report - PAR).

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes me, my

- Rooiwal Waste Water treatment Works (WWTW) infrastructure and sludge treatment works upgrades, Pretoria Gauteng Province (Basic Assessment and waste permit application);
- Fishwater Flats Wastewater Treatment Works Upgrade, Port Elizabeth, Eastern Cape Province (Full EIA);
- Gansbaai Waste Water treatment Works (WWTW) EMP development, Western Cape Province (EMP);
- Numerous potable water bulk supply pipeline applications for Rand Water, Gauteng Province (Basic Assessments);
- Environmental Management Plans (EMPs) for storm water management system upgrades, Port Elizabeth, Eastern Cape Province;
- Regional Hazardous Waste Disposal Facility for the Coega IDZ, Port Elizabeth, Eastern Cape Province (Addendum EIA).

Commercial agriculture, plantations and biofuels:

- Addax Bioenergy sugarcane to ethanol biofuel project, Makeni, Sierra Leone (Full Environmental, Social and Health Impact Assessment (ESHIA) to IFC and Roundtable on Sustainable Biofuels (RSB));
- Equatorial Palm Oil expansion projects, Butaw and Palm Bay, Grand Bassa and Sinoe Counties, Liberia (ESHIA to AfDB and RSPO standards)
- Nedoil Lokomasama palm oil project, Port Loko District, Sierra Leone (Environmental Scoping and Risk Assessment);
- Green Resources Niassa forestry project, Lichinga, Niassa Province, Mozambique (ESIA);
- Green Resources Lurio forestry project, Nampula Province, Mozambique (ESIA);
- EcoFarm Mozambique (Ltd) organic sugarcane growing project, Chemba District, Sofala Province, Mozambique (ESIA);
- Balmed Holdings cocoa and coffee outgrowers scheme Kenema, Sierra Leone (Social and Environmental Assessment as aligned with the Africa Agriculture and Trade Investment Fund (AATIF) environmental and social reporting requirements);
- Zambeef Holdings (Stakeholder Engagement and Biodiversity Management Plans for Zambeef's Zambian operations, notably, five major agricultural production estates situated throughout the country), Zambia;
- Envalor sugarcane to ethanol biofuel project, Sena, Sofala Province, Mozambique (ESIA);
- Crookes Brothers Grains and Macadamia project in Gúrùe, Zambezia Province, Mozambique, Environmental and Social Management System (ESMS) implementation for the estate operations;
- Ugandan Ministry of Agriculture Animal Industry and Fisheries - Buvuma Island vegetable oil development project, Lake Victoria, Uganda (ESHIA).

Mining and Resources:

- Xstrata Ferrochrome bag filter plant upgrades, North-West Province, South Africa (Basic Assessment);

qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my

- GS Cimentos cement factory in the Mozal IDZ and associated limestone mine, Maputo and Salamanga, Mozambique (ESIA to Mozambican reporting standards).
- Kenmare Namalope mineral sands expansion project, Moma, Nampula Province, Mozambique (Addendum EIA);
- Kenmare Nataka expansion project, Nataka, Nampula Province, Mozambique (ESHIA to IFC PS);
- First Quantum Minerals, Kalumbila Copper Project, North Western Province, Zambia (ESHIA to IFC PS);
- World Titanium Resources Toliara mineral sands project, Ranobe and Toliara, Madagascar (ESHIA to IFC PS);
- Suni Resources Balama and Montepuez graphite mining projects, Cabo Delgado Province, Mozambique (ESHIA to IFC PS);
- Syrah Resources graphite mining project, Balama, Cabo Delgado Province, Mozambique (ESHIA to IFC PS);
- Zirco mineral sands mine, Groenrivier, Northern Cape, South Africa (ESHIA);
- Kenmare Pilivilli and Congolone mineral sands expansion projects, Nampula Province, Mozambique (Scoping);
- Baobab Resources iron ore mining project, Tete, Mozambique (ESHIA);
- Graphex Limitada Nicanda Hill mining project, Cabo Delgado Province, Mozambique (ESHIA to IFC PS);
- Triton Minerals Ancuabe graphite mining project, Cabo Delgado Province, Mozambique (Full ESHIA and RAP to IFC PS);
- Petroleum Geo-Services (PGS) offshore 3D seismic survey in the Zambezi Basin, Mozambique (ESIA to Mozambican reporting standards);
- Alphamin Bisie Mining SA tin mining project, Bisie, North Kivu Province, DRC (ESHIA to IFC PS).

Resettlement Action Plans and Socio-Economic Baseline Studies:

- Resettlement Action Plan, (RAP) Implementation Audit for the Malawi Electricity Infrastructure Development Project on behalf of the Millennium Challenge Account (Malawi). The project involves acquisition of easement rights on land over which the overhead lines traverse (700km) in addition to requiring permanent land acquisition for substations. CES conducted audits on the six RAPs generated for the project assessing the performance of the implementation agent.
- Kenmare Moma Mining Pilivili Expansion Project (RAP), Nampula Province, Mozambique;
- Equatorial Palm Oil expansion projects, Butaw and Palm Bay, Grand Bassa and Sinoe Counties, Liberia (RAPs);
- Syrah Resources graphite mining project, Balama, Cabo Delgado Province, Mozambique (RAP);
- Suni Resources graphite mining project, Montepuez, Cabo Delgado Province, Mozambique (RAP);
- Triton Minerals Ancuabe graphite mining project, Cabo Delgado Province, Mozambique (RAP);

disqualification or dismissal, if engaged.

- Graphex Limitada graphite mining project, Ancuabe, Cabo Delgado Province, Mozambique (RAP);
- Baobab Resources iron ore mining project, Tete, Mozambique (RAP);
- Green Resources Lurio forestry project, Nampula Province, Mozambique (RAP);
- World Titanium Resources Toliara mineral sands project, Ranobe, Madagascar (RAP review / Technical Assistance);
- Crookes Brothers Grains and Macadamia project in Gúrùe, Zambezia Province, Mozambique (RAP);
- Kenmare Mining Pilivilli mining expansion projects, Moma, Nampula Province, Mozambique (RAP);
- Socio-Economic Baseline Study (SEBS) on behalf of the Lesotho Highlands Development Agency (LHDA) for the proposed Polihali Dam - Phase 3 of the Lesotho Highlands Water Scheme - constituting a survey of 11 000 households in the catchment and downstream areas of the proposed dam including the development of the Social Baseline and Income and Expenditure Reports, Mokhotlong, Lesotho;
- MPC SPRL & Alphamin Resources Corporation Bisie tin mining project, Bisie, North Kivu Province, Democratic Republic of Congo (SEBS);
- Biological Resources Baseline Study of the proposed Polihali Dam catchment area on behalf of the LHDA, Mokhotlong, Lesotho;
- Eleqtra Envalor sugarcane to ethanol biofuel project, Sena, Sofala Province, Mozambique (SEBS).

During the course of his professional career Marc has worked in Angola, Cameroon, Democratic Republic of Congo, Ghana, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mozambique, Namibia, Nigeria, Sierra Leone, Swaziland, Tanzania, Uganda, Zambia and South Africa. Marc has been actively involved in lecturing and presenting environmental management training content over the last few years as a course presenter for the CES hosted annual EIA training courses, as well as the presenting of undergraduate and postgraduate environmental management course modules at Rhodes University.



Marc Richard Hardy

Date: 25 January 2019