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ENVIRONMENTAL AND SOCIAL ADVISORY SERVICES

# COMPANY PROFILE

Offering Environmental & Social Advisory  
Services across Emerging Economies

## GENERAL OVERVIEW

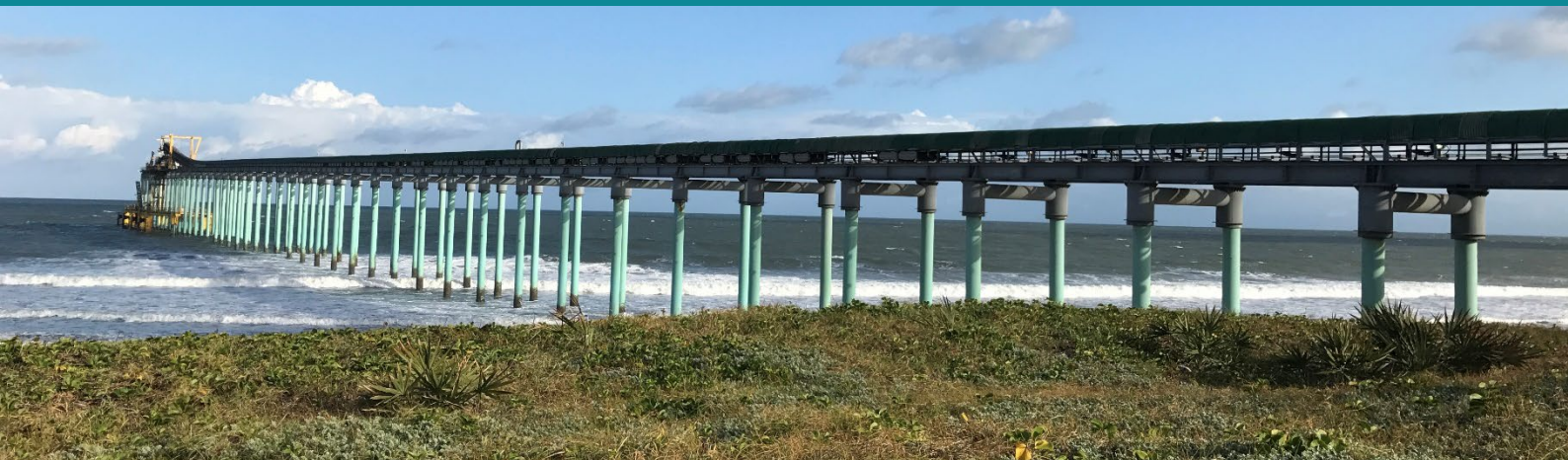
CES has its head office in Grahamstown, where it was founded in 1990, to service a then fledgling market in the fields of Environmental Management and Impact Assessment. CES now has offices in South Africa (Cape Town, Port Elizabeth, East London and Pretoria), as well as a wholly owned subsidiary in Maputo, Mozambique (Coastal & Environmental Services lda., registered as an Environmental Practitioner with the Mozambican authorities).

The Company has grown apace with the increased market demand for environmental and social advisory services in Southern Africa and further afield. Our principal area of expertise lies in assessing the risks and impacts of the development process on the natural, social, and economic environments through, among other instruments, the environmental impact assessment (EIA) process. We believe that by offering these services we contribute meaningfully towards sustainable development.

We adopt a scientific approach to our studies, underpinned by an informed and holistic view of the environment and a pragmatic approach to sustainable development. This results in deliverables that are robust, defensible and credible. This is important for both the project and EIA processes, and as a result the outputs of our studies demonstrate objectivity, sincerity, and professionalism. We believe that a balance between development and environmental protection can be achieved through skillful and careful planning. Our exemplary track record across over 20 African countries and other emerging economies is evidence of the value we bring to the environmental and social advisory offerings we provide. This is due to our deep understanding of the environmental and social challenges associated with establishing and operating facilities and infrastructure in emerging markets.

CES has well-developed working relationships with a number of other individual specialists and specialist consulting companies who provide us with expertise in disciplines such as air quality impact assessments, noise impact assessments, paleontological assessments, radiation hazard assessments and groundwater studies. We have developed long-term relationships with our subconsultants, so they understand our requirements and are willing to go the extra mile for us. Our network of environmental and social professionals across the continent has enhanced our ability to successfully execute projects outside of South Africa.

Our staff is typically comprised of over 30 consultants and approximately 8 support staff. All professional staff members are well qualified, and as many as 90% have advanced postgraduate qualifications, including PhD, MSc, and MA degrees in the biological, social, and environmental sciences.



**CES offers the following advisory services:**

- ✓ Environmental, Social & Health Impact Assessments (ESHIA) compliant with Equator Principles and IFC Performance Standards
- ✓ Environmental and Social Management Programmes
- ✓ Environmental, Social & Governance (ESG) due diligence and compliance auditing and monitoring
- ✓ Environmental Control Officer (ECO) and Environmental Site Officer (ESO) services
- ✓ Environmental & Social Risk Assessments and Feasibility Studies
- ✓ Environmental and Social (E&S) Management System development
- ✓ Strategic Environmental Assessments
- ✓ State of Environment and Sustainability Reporting
- ✓ Socio-economic Baseline Surveys and Social Impact Assessments
- ✓ Resettlement Action Plans, resettlement planning and land holding and asset inventory surveys
- ✓ Scoping-level Health Impact Assessments
- ✓ Climate Change Adaptation & Mitigation Assessments and Greenhouse Gas Inventories
- ✓ Environmental & Social Monitoring Program development and execution
- ✓ Biodiversity baseline assessments, critical habitat identification and Biodiversity Management Plan Development
- ✓ Long-term bird & bat monitoring for wind energy projects
- ✓ Integrated Coastal Zone Management and coastal dune ecology
- ✓ Environmental & social training and skills development
- ✓ Integrated Waste Management
- ✓ Development of rehabilitation and mine closure plans
- ✓ Aquatic and wetland Impact Assessments
- ✓ Estuarine Assessments and Management Plans
- ✓ Heritage and Archaeological Impact Assessments
- ✓ Water and Dust Monitoring

**CES specializes in the following sectors:**

- ✓ Mining and extractive industries
- ✓ Agri-industrial sector (biofuel, forestry, palm oil, commercial crops etc.)
- ✓ Ports and harbours
- ✓ Renewable energy (wind, solar, and hydroelectric)
- ✓ Infrastructure and linear infrastructure
- ✓ Industrial Facilities
- ✓ Aquaculture
- ✓ Industrial facilities

We have a demonstrated ability to manage large and complex environmental and social studies, including complex Environmental and Social Due Diligences, Strategic Environmental Assessments, Coastal Management Programmes, Socio-economic Baseline Assessments, Environmental Social & Health Impact Assessments and Resettlement Action Plans. This experience was gained in the 1990's when we completed several integrated environmental and social impact assessments at a time when regulatory requirements in most African countries did not exist, and IFC Performance Standards had not been developed. Our assessments resulted in environmental approval and supported our client's bankable feasibility assessments and funding stages. Our reports have been rigorously reviewed by parties such as the World Bank, MIGA, the European Investment Bank (EIB), the International Finance Corporation (IFC), the Deutsche Investitions- und Entwicklungsgesellschaft (DEG) Bank, the African Development Bank (AfDB), and the Dutch Development Bank (FMO) as well as various other Development Finance Institutions (DFI).



## RECENT MAJOR PROJECT EXPERIENCE

We benchmark our studies against the Equator Principles and the IFC Performance Standards, but we are also very familiar with the specific standards of many DFIs such as the European Investment Bank and African Development Bank. In addition, we have experience with a few specialized sustainability standards such as the Roundtable for Sustainable Biomaterials (RSB), the Roundtable for Sustainable Palm Oil (RSPO) and the Forest Stewardship Council (FSC). We are therefore familiar with the requirements of the safeguard policies and performance standards of most major DFIs and private sector banks.

A selection of some of our larger flagship projects are described below.

For further detail, see our series of brochures covering specific fields of expertise.



### Mining and Extractive Industry:

- ✓ **Zirco Resources** – Northern Cape Province South Africa (since 2012): CES completed the ESHIA for a heavy mineral mine in the Northern Cape Province of South Africa. A large number of the specialist assessments (waste and wastewater assessment, traffic and transport assessment, soil and agricultural assessment, rehabilitation report, socio-economic assessment and visual impact assessment) were conducted internally by CES specialists. The project obtained a positive Environmental Authorization in February 2016, and a Mining Right. CES continues to provide E&S advisory services to Zirco Resources, inclusive of additional EIAs and ad hoc E&S services.

Kenmare Moma – CES has been offering E&S advisory services to Kenmare year on year since completing their initial environmental assessment in 1997, and the successful completion of the ESIA for their original heavy mineral sands mine at Namalope on the northern coast of Mozambique in Nampula Province. CES coordinated the entire process, prepared all of the documentation and conducted a large number of the specialist studies.

In 2010, CES prepared an Addendum ESIA in support of the Phase II expansion which was approved by MICOA (now MITADER - MTA). CES was also responsible for the Environmental and Social Pre-Feasibility assessments and the Scoping studies for the Phase III expansion involving three separate deposits. All three scoping studies were accepted by MICOA and in 2017 CES was appointed to conduct the ESHIA for the priority Phase III expansion site at Pilivilli, and subsequently for the Nataka expansion project. For these latter three ESHIA's CES also prepared the Resettlement Action Plans. All these ESHIA reports were reviewed extensively by international lender groups and the Lenders Independent Engineers in the United Kingdom and found to be of a high standard.

In addition to the above, CES has also provided a variety of other E&S advisory services to Kenmare Resources. These include assisting with the initial development of the Environmental & Social Management System for the Namalope mines, conducting numerous gap analyses against the IFC Performance Standards, developing and assisting with the implementation of action plans to achieve compliance with the IFC Performance Standards (2006 and 2012), review of the air and water quality monitoring programmes and regular independent E&S audits of construction and operational activities.



- ✓ **El Burullus Heavy Minerals Mine** – Egypt (2009): Comprehensive ESIA for a proposed heavy mineral mine situated on the western side of the Nile Delta in northern Egypt. This study was done to World Bank standards and the project was approved and has been implemented.
- ✓ **Syrah Resources Limited** - The Balama Graphite Mine Project is in Cabo Delgado Province, Mozambique. CES conducted a full ESHIA which included a large number of specialist studies. The ESHIA was completed in 2014 and an Environmental License was issued in early 2015. CES also finalised a RAP process to facilitate the resettlement of 250 affected farm owners. Construction on the project was initiated in mid-2015 and is now operational.
- ✓ **Triton Minerals** – The Ancuabe Graphite Mine Project is also located in Cabo Delgado Province, Mozambique. CES conducted a full ESHIA which was completed in 2017 and the Environmental License issued in 2018. CES also finalised a RAP process to enable Triton to resettle households affected by the mine’s footprint. A preconstruction monitoring programme was set up and implemented by CES and relevant sub-consultants. The program included surface and ground water quality monitoring, air quality monitoring, vegetation and fauna monitoring and weather monitoring.
- ✓ **Trident Copper / Nickel Project** – CES was contracted by Kalumbila Minerals Ltd, a subsidiary of First Quantum Minerals to undertake an Environmental Impact Assessment and prepare an Environmental Impact Statement (EIS) for two large copper mines located in North-Western Province Zambia in accordance with Zambian Legislation and international standards. The projects involved the construction of two large -scale copper mines and associated infrastructure. In addition to a large pit (the development of the Sentinel project included the construction of a 40 Mtpa copper sulphide concentrator and is now one of the largest copper mines in Africa. CES also assessed the impacts of two large river diversions, the construction of two large dams (2,400ha in extent), a 10,000 ha Tailings Storage Facility, large waste rock dumps, internal roads, and a sawmill. CES completed the following specialist studies as part of these assessments: Surface and Groundwater Assessment, Environmental Water Requirements Assessment (Musangezhi and Chisola Rivers), Botanical Assessment, Land and Resource Use Assessment, Waste Assessment, and Environmental and Social Risk Assessment for the River Diversions and Tailings Storage Facility. These projects were approved by the Zambian Environmental Management Authority (ZEMA) and have been operational for over a decade.



## Biofuels and Agri-industry

- ✓ **Addax Sugarcane to Ethanol Biofuel Project** – Sierra Leone (2012): ESHIA for a large plantation of sugarcane, ethanol processing factory and cogeneration plant, including a Social and Environmental Management Plan, and Resettlement Action Plan. A full-scale baseline monitoring programme was also prepared. The study was completed to IFC, WB and AfDB standards and all reports and supporting documentation were reviewed by international lenders.

“In an independent study commissioned by the European Commission to assess the value of biofuel EIAs and compliance with the European Union renewable energy directive (EU-RED) the assessment stated that one EIA, the ESHIA study for the Addax Bioenergy project in Bombali district of Sierra Leone (Coastal & Environmental Services 2009) stands out in comparison with the other EIAs. While the average EIA described three features with quantified impacts, the Sierra Leone report described 14 features in that way.”

- ✓ **RSB Guidelines for environmental and social impact assessment** - “In an independent study commissioned by the European Commission to assess the value of biofuel EIAs and compliance with the European Union renewable energy directive (EU-RED) the assessment stated that one EIA, the ESHIA study for the Addax Bioenergy project in Bombali district of Sierra Leone (Coastal & Environmental Services 2009) stands out in comparison with the other EIAs. While the average EIA described three features with quantified impacts, the Sierra Leone report described 14 features in that way.”The ESIA guidelines that CES developed for the RSB are based on international best practice but have also been tailored to comply with the RSB Principles and Criteria for Sustainable Biofuels. These guidelines are therefore specifically for the biofuels sector and indicate, through a screening approach, when it is appropriate to undertake a full ESIA, a Rapid Assessment or just an Environmental Management Plan.
- ✓ **Zambeef Products Plc Biodiversity and Social Technical Assistance** - As part of a technical agreement with the German Development Bank (DEG) and Zambeef, CES developed a Biodiversity Action Plan (BAP) for one of Zambeef’s farms which is situated within the Lower Zambezi Game Management Area, Zambia. One of the key issues that emerged was the lack of a comprehensive biodiversity baseline for the proposed wildlife corridor, and the CES team was subsequently tasked with preparing the baseline. Based on the findings of this study and an assessment of the needs of local communities it was proposed that the land be managed as a conservation area rather than a corridor. CES also assisted the company to prepare five individual Stakeholder Engagement Plans (SEPs) to facilitate management of communication between the company and their stakeholders, including the communities surrounding their five farming operations.

✓ **Green Resources Niassa and Lurio Plantation Project** - In 2014 CES completed the ESHIA for the establishment of 30,000 ha of new forest plantations in Niassa Province (Lichinga) for Green Resources. In 2015 CES were responsible for upgrading Green Resources ESHIA for the establishment of a 126,000ha new hardwood forest plantation to lenders standards. These studies were completed to comply with Mozambican standards, as well as international standards (IFC; African Development Bank; European Investment Bank; Forest Stewardship Council Policy and Standards; Climate, Community and Biodiversity Alliance Standards; and the Clean Development Mechanism Project Standards and activities).

In 2015 CES completed the first phase of a Simplified Environmental Assessment Report for two of Green Resources business opportunities associated with the plantations. The first was a Micro Density Fibre Board Facility located 10 km southwest of Lichinga and the second a Woodchip plant at the Nacala Port.

In 2016 CES was appointed by Norfund and Finnfund to undertake independent E&S performance monitoring audits on their behalf at Green Resources operations in Tanzania, Uganda and Mozambique. The primary objective of the audits was to confirm that the E&S risks associated with these operations, which included forestry plantations and beneficiation facilities, were being managed in compliance with a range of international standards. This work is ongoing.

In 2019 CES was employed by Green Resources to develop several tools to assist with the company's internal E&S Monitoring Programme. This included the development of questionnaire forms using "ODK Collect" that allowed for in field interviews to be conducted. Additionally, CES was involved in training GR staff in the installation and operation of tablet software (OruxMaps) and database management.

**Olam Cocoa Plantation ESIA** – CES completed an ESIA for a large cocoa plantation in Tanzania. CES were requested to appraise options of out-grower versus formal plantation. The site earmarked for the plantation was particularly sensitive and the ESIA identified and highlighted these sensitivities in line with the IFC performance standards.







## Renewable energy

- ✓ Wind and Solar Energy EIAs - CES have been involved in EIAs in the renewables sector since the late 2000's when renewables first started in South Africa. We have completed over 70 EIAs or Basic Assessment applications related to wind and solar energy projects, and these projects have ranged in size from 2 Mw to 700 Mw. All but a handful of these projects have received positive Environmental Authorisations, and thus far over 15 have, as part of the Department of Energy's renewable energy programme received preferred bidder status. A number of projects are in operation or under construction. CES has completed seven EIAs for powerlines and solar projects in Cameroon, Zambia, Malawi and Mozambique. Our client portfolio includes EDF, Atlantic Energy, Red Cap, Mainstream, Biotherm (now BTE), Sturdee Energy and Plan 8. CES has also provided ECO services for many of these projects, as well as further post-EIA services to facilitate financial close.
- ✓ Solar PV Environmental and Social Impact Assessment (ESIA) in Cameroon - CES was responsible for the preparation of an ESIA for the development of a 70MW solar PV installation near Yaoundé in Cameroon. Specialist studies included flora and faunal surveys, hydrological, social and natural resource use assessments. The project was carried out to IFC, FMO and AfDB standards.
- ✓ Kafue Gorge Lower Hydropower Station - Zambia: Due Diligence study of previous environmental and social impact assessments for a proposed 600–900 MW peaking hydropower station in the Kafue Gorge, including preparation of a detailed Terms of Reference for an Environmental, Social and Health Impact Assessment, determination of social and environmental impacts, and environmental flow requirements, in the lower Kafue River. Study done to IFC, World Bank and AfDB standards and all reports reviewed by IFC and WB.
- ✓ HydroSA (Pty) Ltd : Environmental Impact Assessment to South African national standards for a 40 MW run-of-river HPP on the Orange River. The project uses the elevation difference over the 56m-high Augrabies Falls as the driving head. The project is sensitive because, although the underground power chamber is outside the boundary of the Augrabies Falls National Park, it will be necessary to run the feed water across park land via a culvert, from a low diversion weir across the river inside the park boundary.

“CES has considerable expertise in EIA, due diligences, and construction compliance monitoring in the renewables sector, especially in wind and solar projects in South Africa and Africa.”







## Ports and harbours



- ✓ Ngqura Port EIA (1999/2000): The development of a new deep-water port was critical to the success of the Coega Industrial Development Zone, outside Port Elizabeth. CES was awarded the contract to lead the EIA for this development and was responsible for overall management of the project. The proximity of the proposed port to two small islands increased the complexity of the assessment which incorporated a large number of specialist studies covering both marine and terrestrial habitats. After successful completion of the EIA, CES was also involved in the planning of land use within the port which had to take into consideration various terrestrial ecological requirements.
- ✓ Strategic environmental assessments (SEAs) for the ports of East London and Port Elizabeth and the scoping phase of the SEA for the Mossel Bay Port (2008): The primary objective of each of these studies was to identify opportunities and constraints associated with implementation of respective Port Master Plans that could be related to the environmental and socio-economic contexts of each of the ports. The scoping phase of the studies involved extensive stakeholder engagement and identification of gaps in the baseline information. These gaps were subsequently addressed and used to inform the recommendations emerging from the SEAs.
- ✓ Transnet compliance audits - Transnet implemented an Integrated Management System (IMS) based on ISO14001, 2014 requirements. These standards require Transnet to establish, implement and maintain procedures to identify and have access to the applicable compliance obligations to which Transnet subscribes. A legal compliance audit was conducted for Transnet to: Determine whether their compliance obligations are being met per site; and to make recommendations to ensure compliance (where there is any non-compliance). This environmental legal compliance audit was completed for 11 Business Units located throughout South Africa.



## Climate change

- ✓ Transnet National Ports Authority Climate Change Risk Assessment - This project involved a detailed assessment of direct and indirect climate change-related risks and appropriate mitigation and adaptation strategies for all seven commercial ports in South Africa. The approach involved a review of the latest climate change prediction models for the relevant geographical areas in order to understand the likely context-specific manifestations of climate change. An “event tree” risk methodology was then applied to this information in order to understand the likely implications for the individual ports including the potential for damage to infrastructure, disruption to port operations and energy consumption.
- ✓ Web-based climate change response monitoring and evaluation system for South Africa - CES worked together with other business units in the EOH Group to develop this system for the Department of Environmental Affairs.
- ✓ Buffalo City Metropolitan Municipality Climate Change Strategy - The strategy identified the main climate change risks and adaptation and mitigation opportunities. Responses and action plans were developed for high priority risks and opportunities.



## Infrastructure and Industrial facilities

- ✓ Kalagadi Manganese (Pty) Ltd - EIA to South African national standards for a manganese smelter in the Coega Industrial Development Zone, Port Elizabeth, South Africa, to produce 310,000 tonnes per annum of high-carbon ferro-manganese alloy for the export market. The assessment included a specialist study to analyse the large volumes of slag produced by the smelting process, to determine its suitability for use in, for instance, road building or the manufacture of cement.
- ✓ Eskom Transmission Infrastructure - CES has been supporting Eskom with the development of their distribution network through the impact assessment process. CES have worked with Eskom in 5 of the 9 provinces with specialists visiting sites from the Gqeberha in Eastern Cape to Kleinsee in the Northern Cape and has completed numerous EIA and basic Assessment applications for Eskom.
- ✓ EIA of the Knysna TR2 Upgrade for the Western Cape Provincial Department of Transport (2007): The assessment investigated the impacts of the upgrade of the section of N2 highway, known as the TR2, that runs alongside the Knysna Lagoon. The upgrade involved extending the carriageway into the lagoon, which is an extremely sensitive environment. The EIA was completed and approved in 2008, and all upgrades were successfully constructed.
- ✓ EIA for the Knysna Toll Highway for SANRAL and the Knysna Municipality. This challenging project involved undertaking a full and comprehensive Environmental Impact Assessment and managing an extensive and complex public participation programme, involving liaison with close to 1000 interested and affected parties. The development of an extensive issues and response trial, the preparation and release of a draft scoping report and the facilitation of its review were key components. The incorporation of IAP concerns, and a clear definition of the scope for the full EIA identified the key challenges, which were orientated around the selection of alternative routes for the proposed bypass. The management and coordination of all specialist investigations (including aquatic, terrestrial ecology, noise, erosion, traffic, economic, social, and heritage assessments), the review and quality assurance of these studies and the preparation of an environmental impact

report were key responsibilities. Considerable problems were identified with the two alternative routes and a high-level assessment of a third northern route was also undertaken at a late stage.

- ✓ CES was commissioned by the eSwatini Electrical Company (EEC) in March 2020 to undertake a full ESIA and RAP for their proposed 87km 132kV transmission line from Nhlngano to Lavumisa and 4 substations in the southern Shizelweni region. The powerline impacts on private and state-owned lands, and communal lands with around 200 households/persons being affected. The ESIA and RAP were undertaken in compliance with the World Bank's Environmental and Social Standards (ESS) and the specialist studies included Ecological, avifaunal, aquatic and wetlands, socio-economic and heritage.
- ✓ CES were commissioned to complete a full EIA for the marine intake and outfall pipeline intended to service the Coega IDZ. The EIA required investigation into marine heritage and ecology as well as thermal plume modelling to understand the magnitude of the impacts that might be associated with the project being implemented in the Greater Addo Marine Conservation Area. The EIA was successfully completed and a positive Environmental Authorization issued.
- ✓ A full EIA was conducted for the Qolora Aquaculture Zone, a community-based aquaculture facility aimed at accommodating a number of production operators and the production of different marine organisms. The aquaculture zone also included hatcheries, processing facilities and all related infrastructure. This project required an application for a Water Use License due to the treatment of marine and domestic wastewater. Both the EIA and Water Use License were approved.
- ✓ Road upgrade EIA's and Basic Assessments, and Mining Rights Application for SANRAL. CES has completed close to 20 studies for SANRAL on various route sectors across the country to obtain Environmental Authorizations, Water Use Licenses and Mining Rights for Borrow Pits in support of upgrading the country's National Roads. Activities include road widening, road re-alignments, road & rehabilitation, bridges and river crossings along the various road sections.
- ✓ Environmental Control Officers (ECO) services have also been provided to SANRAL by CES. This includes the on-site deployment of ECOs during the construction phase, who undertake monthly environmental audits for the duration of the construction phase. On behalf of SANRAL, team CES ensure that all contractors comply with the Environmental Authorisations and EMPRs. We also provide botanical search and rescue services to SANRAL if specified in the Environmental Authorization.





Ndlambe Local Municipality Water Supply Scheme - CES conducted a number of EIAs for various elements of the Ndlambe Bulk Water Scheme for Amatola Water. This included a groundwater abstraction and supply scheme for Port Alfred, and reticulation of groundwater from an existing water treatment works at Cannon Rocks to Alexandria. The appointment also included obtaining all other necessary approvals, including water use licenses in terms of the National Water Act and Coastal Waters Discharge Permits in terms of the Integrated Coastal Management Act. After the projects received their Environmental Authorizations CES commenced with Environmental Control Officer (ECO) responsibilities for the augmentation of the Water Treatment Works (WTW) at the Glen Melville dam near Grahamstown as part of the water supply scheme project.

Lusikisiki Regional Water Supply Scheme - CES conducted an EIA for the augmentation of the existing potable water supply to the Lusikisiki area, which included the construction of Zalu Dam on the Xura River, upgrading

of the abstraction infrastructure, upgrading of the potable water treatment works, replacement of various water supply pipelines and reservoirs, expansion of the existing distribution network, and establishment of small groundwater schemes. Environmental Authorizations were issued for all components of the project.

Sandile Dam to Cannon Rocks potable water supply pipeline - CES conducted the EIA for the construction of a potable water supply pipeline from the Burns Hill Reservoir (supplied by the Sandile Dam water treatment works) to Cannon Rocks, approximately 180 km away. The scope of work included all appropriate Water Use Authorizations as well as Authorizations for Borrow Pits from the Department of Mineral Resources.

Debe Water Supply Scheme Upgrade - CES conducted an EIA for the upgrade of numerous elements of the existing Debe water supply scheme. This appointment included all Water Use Authorizations and approvals from the Heritage Resources Agency.

### Coastal zone advisory services

The St Francis Bay Property Owners Non-Profit Company, on behalf of the Kouga Local Municipality, developed a scheme to protect coastal infrastructure along the St Francis Bay frontage. The scheme would use suitable material from the Kromme Estuary to re-create a sandy beach and develop stub groyne structures to keep the material in place. CES completed the EIA process and worked with specialists on coastal and dune ecology as well as estuarine ecology to determine the potential impacts of the scheme. The project received its Environmental Authorization and is being implemented.

Western Cape Coastline State of the Coast Reporting - The project involved three phases: (1) Conducting stakeholder engagement and developing a list of indicators for assessing the state of the Western Cape coast. (2) Writing a State of the Coast Report in terms of the Integrated Coastal Management Act. (3) Developing an online platform for the display of indicator information and writing a Monitoring and Evaluation Framework. The project was completed in 2017 for the Western Cape Department of Environmental Affairs and Development Planning.

- ✓ Integrated Coastal Zone Management Plan for Buffalo City - In 2002 CES prepared one of the first Integrated Coastal Zone Management Plans (CZMP) in South Africa, based on the requirements of the then Coastal Management White Paper for the Buffalo City Municipality coastline in the Eastern Cape. It established an appropriate framework for improved management of the coastline and included recommendations to promote the sustainable development and management of the marine and coastal environment and natural resources.

- ✓ ADM District Coastal Management Plan (2014): We developed an Integrated Coastal Management Programme (CMP) for the coastal region from the Great Fish River to the Mbashe River. This CMP covered the entire coastline of the Amathole District Municipality (ADM), excluding Buffalo City Metro Municipality (BCMM), for which a CMP had already been prepared. The CMP was aligned with the requirements of the National Environmental Management: Integrated Coastal Management Act (24 of 2008) (ICM Act). It focused more closely on the coastlines of the Great Kei and Ngqushwa local municipalities (LM), but also integrated the findings of the CMPs that were being developed concurrently for Mbashe and Mnguma LMs.
- ✓ DEA Oceans & Coasts - Integrated Coastal Management Training: CES developed and presented four weeklong training courses on elements of integrated coastal management and implementation of the Integrated Coastal Management Act to Provincial and National public servants in all four coastal provinces.
- ✓ Review of the Coastal Management Plan for the West Coast District Municipality - CES were appointed to update the CMP for the Coast District Municipality, and the five coastal Local Municipalities, Coastal Management Programmes. This included a review of the current CMPs, a series of stakeholder workshops and public participation, determination of the status quo as well as ensuring that the 2nd generation CMP aligned with the National Coastal Management Programme.

“CES has been involved in coastal management since 1990. We have prepared seminal reports on Integrated Coastal Zone Management and were involved in studies supporting the establishment of the Integrated Coastal Management Act.”







## Social and resettlement advisory services

### Lesotho Highlands Water Development Authority (LHDA) Socio- economic baseline survey - Maseru and Mokhotlong, Lesotho

- As part of Phase II of the Lesotho Highlands Water Project and the construction of the new Polihali Dam in Mokhotlong, CES completed a 20-month Socio-Economic Baseline Study (SEBS) in the rural highlands in eastern Lesotho. The study included two extensive survey studies (a comprehensive census survey of 11,500 households within the expansive study area as well as a longitudinal income and expenditure survey of all households within 12 sample villages – each household in each village was surveyed once a month for a full year). In addition to the surveys, the study collected and collated secondary data, and ran approximately 45 focus group discussions utilising a range of participatory rural appraisal techniques across the entire study area. The two surveys produced a very significant amount of data (including spatial data and photographs), which were captured in two large Access databases. The comprehensive database contained 11,172 survey instances, 395,088 records, captured in 44 related tables. The monthly database contained 4,290 survey instances, 156,088 records, captured in 30 related tables. Database management included continued database cleaning and management, as well as running queries for data analysis in the databases and conducting database training for project officials.



- ✓ Bisie Tin Mining Project for Mining Processing Congo (MPC) SPRL & Alphamin Resources Corporation - CES was contracted to conduct a Socio-Economic Baseline Study (SEBS) for the Bisie Tin Mining Project. The project involved extensive household surveys in extremely remote conditions. Around 1,000 households were interviewed in 8 traditional villages.
- ✓ Lúrio Green Resources SA Pty Ltd. for a large scale plantation project in Mozambique - This study included developing a Global Resettlement Framework, pilot RAP, training, various Social Management and Monitoring Plans, a Cultural Resource Management Plan, a grievance mechanism and a Stakeholder Engagement Plan, all to IFC Standards.
- ✓ Triton Ancuabe RAP - CES developed a Resettlement Action Plan (RAP) in accordance with Mozambican regulations and IFC Performance Standard 5. Land was evaluated in the proposed mine footprint area of 9,000ha by undertaking a household-level census and farmland survey. CES ensured the active participation of community members to allow the enumerators to gain a better understanding of the area by pairing each enumerator with a community representative. District, provincial and national government technicians provided overall supervision.



- ✓ CES was also appointed to update an existing Resettlement Action Plan (RAP) for Capitol Resources Tete iron ore, steel and vanadium project (Mozambique) to International Finance Corporation (IFC) and African Development Bank's (AfDB) Involuntary Resettlement Policies.
- ✓ CES conducted a Socio-Economic Baseline Survey and prepared a Resettlement Action Plan (RAP) for Kenmare Resources Pilivilil mining expansion project in northern Mozambique. Team CES completed a socio-economic census and asset inventory of 3600 households in the Pilivilil mining concession, as well as along a proposed haul road, pipeline and powerline servitude. The surveying of the 3500ha concession area was undertaken within three months. The certificates of conformity were received in July 2019 and October 2019 for the mine and servitude project respectively. CES has continued to provide RAP services to Kenmare, and as at November 2023 were in the process of completing two additional RAPs for Kenmare's Phase II expansion.
- ✓ CES completed Mid-Term and Completion Audits for the Malawi Electricity Infrastructure Development Project on behalf of the Millennium Challenge Account (MCA-Malawi). The project involved the acquisition of easement rights on land over which the overhead lines traverse (700km), in addition to requiring permanent land acquisition for substations. CES conducted mid-term and completion audits on the six Resettlement Action Plans generated for the project assessing the performance of the implementation agent. A total of 8500 Project Affected People files were audited. In addition, the study approach also entailed the survey of 407 PAP's Project Affected People throughout the project area, in order to inform the audit findings.
- ✓ CES completed a comprehensive quantitative and qualitative survey (Focus Group meetings and Key Informant interviews) for the Lesotho Highlands Development Authority (LHDA), the implementing Authority of the LHWP within Lesotho to Measure the socio-economic status of the HHs within the LHWP local catchments and to measure the socio-economic status of the eight (8) Mole catchment affected villages that formed part of the Stage 3 Resettlement process. This entailed the development of bespoke survey instruments. The Socio-economic, Health and Nutritional Assessment survey instruments/questionnaires were mostly quantitative, designed for easy data capturing into Microsoft Access and additional statistical packages (such as the SPSS and R software platforms). For the Health portion of the survey questionnaire, a self-reported health assessment was used to collect clinical information from the cohort regarding the presence or absence of acute or chronic disease, determinants or risk factors for disease development and healthcare utilisation and/or access. A total of 4,200 households were surveyed across the various catchments.





## Due Diligence and compliance auditing

- ✓ Confidential Client, Bangladesh - CES was appointed to assess the environmental and social risks associated with an existing sugar refinery and construction of a new refinery in Bangladesh. These operations are owned by one of the biggest conglomerates in the country. The applicable standards included the IFC Performance Standards (2012) and the relevant sector-specific guidelines. In addition to general E&S compliance and risks, the focus was on health & safety, management of contractors and labour-related risks. CES was also appointed as the Lenders' E&S Advisor to assist with monitoring of compliance with E&S obligations.
- ✓ Confidential Client, Uganda - CES was appointed to undertake the E&S due diligence for a new solar PV facility and associated power evacuation line in Uganda. Following completion of this phase of the work, CES was appointed by the Lenders as their E&S Advisor for the construction and operational phases of the project.
- ✓ Rift Valley Railways, Kenya and Uganda - CES was appointed as the Independent Environmental and Social Monitor (IESM) for the rehabilitation of the existing railway network in Kenya and Uganda. After the initial contracting period appointment (June 2012 to June 2014), CES was reappointed to monitor compliance with all relevant guidelines and standards for an additional 2 years. The project involved a number of international investors and lenders including the IFC, the AfDB, the FMO, DEG, KfW and Proparco.
- ✓ Copperbelt Energy Corporation Environmental & Social Verification - CES was been appointed as the Lenders' Independent Reviewer by a consortium of international Development Finance Institutions. The scope of the assignment was to review, over a period of at least 6 years, compliance of the CEC with the E&S requirements of the loan agreement on a twice yearly basis. This included, amongst other things, compliance at a corporate level and at project level at installations in Zambia and Nigeria, against the IFC Performance Standards. Assets included hydropower dams and extensive electrical distribution networks.
- ✓ Farmsecure Agri-industries, South Africa - CES was appointed by Deutsche Investitions und Entwicklungsgesellschaft mbH (DEG) to conduct an environmental and social scoping review of Farmsecure, a service provider to the South African agricultural sector. The overall objective of the review was to provide DEG with an overview of Farmsecure's environmental and social performance at management level, at operational sites and on farms within the Farmsecure Group of companies. Farmsecure's activities included providing technical and financial support and marketing services to grain, oilseed and livestock farmers, fruit farmers and packers, as well as manufacture and distribution of a range of fertilisers.
- ✓ DC Group, Norfund and DFC - CES conducted a detailed ESDD to assess AgDevCo's overall approach to E&S risk management both at corporate level and for 10 investments in their investment portfolio. It included assessing AgDevCo's overall approach and Environmental and Social (E&S) Management System, and their capacity in Environmental, Social, Health and Safety management. Site visits to five operations were undertaken, and the scope considered aspects such as the ESMS, social considerations and resettlement, Gender, climate change and animal welfare.
- ✓ CES was appointed to assess the environmental and social risks associated with a large-scale sugar cane and cattle farming operation in Malawi. Key issues considered were occupational health & safety, water security, hazardous chemical management and land acquisition.



## E&S Monitoring and Management

- ✓ Corporate Environmental & Social Management System (ESMS) Development for Ethiochicken - CES was contracted by the largest commercial producer of day-old chicks in Ethiopia to assist them with the development of an IFC-compliant corporate ESMS to assist them with management of risks across their operational sites. The CES team developed all core system documentation as well as numerous management plans for individual operations.
- ✓ Corporate ESMS for JCM Power (Toronto, Canada) - CES was contracted to develop a corporate ESMS that would assist JCM Power to enhance the management of E&S risks associated with their portfolio of clean energy projects in Africa, Latin-America and South Asia.
- ✓ Corporate ESMS for Econet Wireless - Econet is one of the leading mobile phone operators in Zimbabwe, experiencing significant growth of its services and infrastructure. CES was contracted to develop an IFC-compliant corporate ESMS that would assist the company to enhance the management of E&S risks associated with their operations.
- ✓ Environmental Control Officers (ECO) services to Enel - CES provided on site deployment of ECOs for the Nojoli Wind Farm outside Cookhouse, Eastern Cape the Gibson Bay Wind Farm outside Humansdorp, the Paleisheuvel Solar Plant, Piketberg, Western Cape and the Tom Burke Solar Plant, Western Cape. These services included the permanent deployment of ECOs to all sites and for the duration of the construction phase. On behalf of the owners team CES ensured that all contractors complied with the Environmental Authorization and EMP.

“CES has completed numerous due diligence studies, especially in the agricultural and renewable energy sectors across Africa”



## Training and teaching

- ✓ BancABC E&S Capacity Building - CES was appointed by the Common Fund for Commodities (CFC) and the Africa Agriculture Trade and Investment Fund (AATIF) to assist BancABC with the development and implementation of an Environmental and Social Management System (ESMS). The objective was to enhance the organisation’s ability to manage E&S risks associated with their investment portfolio. In addition to developing system documentation, the scope of the assignment also included running train-the-trainer sessions on the ESMS for the newly appointed E&S Champions within the bank. In 2017, CES was awarded a follow-up contract to extend ESMS-related capacity building within the organization. This included numerous workshop-style training sessions in various countries in which the bank operates as well as E&S training audits.



- ✓ NACOMA “Tools of Coastal Zone Management” Training Course – Tools of Sustainable Coastal Zone Management (2009): This World Bank-funded course was developed by CES to train more than 50 government and municipal officials from all over Namibia on the suite of environmental management tools that are applicable to the management of coastal zones and associated natural resources. The course incorporated theoretical sessions with reinforcement through field-based case studies.
- ✓ Integrated Coastal Management Act Training Course - CES was contracted by the South African Department of Environmental Affairs to develop a series of two-day training courses to 175 delegates from different provinces around South Africa. The primary purpose of the course was to enhance the understanding of the implications and application of the Integrated Coastal Management Act in the public and private sector. The course content provided a good balance between the theoretical aspects of ICMA and the related practical aspects.

