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| **Ref** (maximum 15) | **Project title** | **Implementation Support for the Floating Liquefied Natural Gas Project** |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100 % | 19 National Experts | UTM FLNG | African Export-Import (AFREXIM) Bank | 07/2022 – Ongoing |  |
| **Detailed description of the project** | **Type of services provided** |
| UTM FLNG Limited is a company that specializes in the development and operation of floating liquefied natural gas (FLNG) facilities. The company's flagship project is the development of an FLNG vessel, which is a type of LNG production facility that is built on a ship and can be moved from location to location.UTM FLNG Limited is headquartered in Hong Kong and is a subsidiary of UTM Holdings Limited, a company that is engaged in the exploration, production, and trading of oil and gas. The company has a strong focus on technology and innovation, and its FLNG vessel is designed to be highly efficient and cost-effective, while also meeting stringent safety and environmental standards.The UTM FLNG vessel is designed to produce up to 1.2 million tons of LNG per year and will be used to process natural gas from offshore fields. The vessel is equipped with advanced technology for processing and liquefying natural gas, as well as for storing and transporting LNG to customers around the world.It was estimated by the Nigerian National Petroleum Corporation (NNPC) that Nigeria has around 202 trillion cubic feet (TCF) of proven gas reserves plus about 600 TCF of unproven gas reserves. Furthermore, it was estimated by Wood Mackenzie that offshore Nigeria has more than 84 tcf of commercial and technical gas reserves. These reserve estimations place Nigeria among the top 10 offshore countries on a global scale. However, the lack of gas fiscal terms and overall gas and power infrastructure has resulted in vastly under-utilized gas reserves. Given this and other commercial considerations, UTM FLNG in partnership with Nigerian National Petroleum Company (NNPC) and other stakeholders conceived the idea of monetizing the trapped Natural Gas in offshore Locations in Nigeria via the development of a Floating Liquefied Natural Gas (FLNG) Facility at the shallow water Yoho and Awawa fields located in OML 104 in Offshore, Akwa Ibom State, Nigeria. Floating LNG is a novel technology that allows a vessel with liquefaction capability to tap directly into remote offshore fields and load it directly onto an LNG carrier, avoiding the need of building expensive underwater pipeline infrastructure. The FLNG accomplishes the gas treatment and liquefaction from the natural gases produced in offshore gas fields, and the storage/offloading of product LNG to LNG carriers for ocean transportation.The objective of the project is to monetize the natural gas reserves trapped in offshore locations in Nigeria by developing a Floating Liquefied Natural Gas (FLNG) facility at the shallow water Yoho and Awawa fields located in OML 104, in partnership with Nigerian National Petroleum Company (NNPC) and other stakeholders. The project aims to produce 1.2 million metric tonnes per annum (mmtpa) of LNG from the available 1.1 trillion cubic feet (TCF) of associated gas, with LNG storage capacity of 200,000m3 and tanker size ranging from 138,000m3 to 181,000m3. The project is estimated to provide more than 5,000 personnel employments and will help in the commercialization of flare gas to reduce its negative impact.Richflood was engaged by UTM FLNG to conduct a comprehensive Environmental and Social Impact Assessment (ESIA) as per the International Finance Corporation (IFC) performance standards. This includes assessing the potential impacts of the project on the environment and communities, identifying measures to mitigate any negative impacts, and developing a comprehensive plan to manage and monitor the impacts throughout the project's life cycle. Richflood is also responsible for ensuring compliance with all relevant laws and regulations, as well as stakeholder engagement and consultation. In addition, the primary goal is to ensure that the project is developed in a socially and environmentally responsible manner, while also supporting sustainable development. | * Scoping Studies: Conducting an assessment to identify key environmental and social issues that need to be considered during the Environmental and Social Impact Assessment (ESIA) process.
* Baseline Surveys: Collecting information about the current environmental and social conditions of the project area to establish a baseline for evaluating potential impacts.
* Impact Assessment: Analyzing the possible environmental and social impacts of the proposed project and identifying suitable measures to minimize negative effects.
* Stakeholder Engagement: Engaging with stakeholders to obtain their opinions and concerns regarding the project and integrating them into the ESIA report.
* ESIA Report Preparation: Creating comprehensive reports that document the results of the assessment and provide recommendations for mitigating and managing environmental and social impacts.
* Regulatory Compliance: Ensuring that the project complies with all applicable environmental and social regulations and guidelines.
* Monitoring and Evaluation: Developing monitoring and evaluation plans to monitor the implementation of mitigation measures and assess the effectiveness of the ESIA process.
* Climate Data Analysis and Modelling: Conducting analysis of historical climate data, modelling future climate scenarios, and assessing risks related to climate change to inform project design and engineering decisions, and develop adaptive management plans for long-term sustainability of offshore projects.
* Carbon Footprint Management: Developing strategies for reducing the carbon footprint of the project, integrating emissions costs into business decisions, and enhancing portfolio resilience.
* Greenhouse Gas Management: Developing a greenhouse gas inventory, identifying emissions reduction opportunities, and setting emissions reduction targets for the FLNG facility.
* Biodiversity Impact Mitigation: Identifying potential impacts of the FLNG facility on local marine biodiversity, and developing mitigation plans to minimize noise pollution and prevent oil spills.
* Stakeholder Engagement: Engaging with local communities and other stakeholders to ensure that the FLNG facility is designed and implemented in a way that takes into account their needs and concerns, and informing them of the potential climate-related risks and benefits of the project.
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| **Ref** (maximum 15) | **Project title** | **Technical Support for the Operation of 10,000 Metric Tons Cashew Nut Processing Plant**  |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Republic of Guinea |  | 100% | 10National Experts | Diaoune Agro-Industrie  | USDFC | 02/2022 – 03/2023 | - |
| **Detailed description of the project** | **Type of services provided** |
| Diaoune Agro-Industrie is a subsidiary of Diaoune et Frères Sarl, established in Côte d'Ivoire in 2004. Diaoune et Frères Sarl has been a major player in the Cashew nut business, initially engaging in the cultivation and export of raw cashew nuts to the processing plant in Asian countries, particularly Vietnam and India. With the vast experience in the cashew nut agro-business industry spanning more than fourteen (14) years, the management of Diaoune Agro-Industrie is deploying this rich knowledge and experience to bring more added value to the cashew industry in the Republic of Guinea and has already constructed and operated a 10,000 metric tons per annum cashew processing plant in the city of Kankan in upper Guinea. Diaoune Agro-Industrie Sarl is a registered agro-processing company in Guinea and has its headquarters in Conakry. The company engages in various activities in the cashew nut value chain, which includes sourcing and processing raw cashew as well as export of cashew kernel. Currently, Diaoune Agro-Industrie operates the largest cashew nut processing plant in Guinea, which was established in 2019.Furthermore, as part of the company’s vision to increase value addition through the cashew agro-industry as one of Guinea’s emerging sectors and boost export, Diaoune Agro-Industrie is planning to establish another cashew nut processing Plant in Boké, which largest cashew production basin in Guinea. The cashew nut processing Plant will operate at 10,000 metric tons capacity per annum which is similar to the existing Plant in Kankan and has engaged Richflood to conduct the Environmental and Social Impact Assessment (ESIA) and Environmental, Social, Health and Safety (ESHS) services for the project.The purpose of the ESIA conducted by Richflood is to identify and evaluate the significance of potential impacts on identified receptors and resources; to develop and describe mitigation measures that will be taken to avoid or minimize any potential adverse effects and enhance potential benefits, and to report the significance of the residual impacts that remain the following mitigation. The screening and scoping phases allow for determining what Environmental and Social (E&S) standards apply to the Project, and what potential impacts related to the Project are likely to result in significant effects.The impact assessment phase consists of an analysis of potential sources of impacts arising from the Project, together with an analysis of the sensitivity of the receiving natural and human environment. This draws from data captured through:* baseline studies (to determine the sensitivity of the receiving environment); and
* Interact with the Project team, to develop a Project description, analyze how the Project may generate sources of E&S impacts, and (where relevant) analyze feasible alternatives to the Project.

This ESIA adheres to the International Finance Corporation's (IFC) Performance Standards (PS), Good International Industry Practices (GIIP), and other relevant standards, such as the World Bank Group Environmental, Health, and Safety General and sector-specific Environmental, Health, and Safety (EHS) Guidelines. Also, Gender Assessment, Child Labour Assessment were conducted as part of the Environmental and Social Impact Assessment (ESIA) for the Diaoune Agro-Industrie Sarl (“DAI or the Company”) proposed Cashew nuts processing factory in Boke, Guinea Republic  | * Provide an overview of the project and its objectives, as well as the legislative and regulatory context that applies to the project, including national and international requirements and guidelines.
* Conduct scoping studies to identify key environmental and social issues that should be considered in the Environmental and Social Impact Assessment (ESIA) process.
* Conduct baseline surveys to gather information about the existing environmental and social conditions of the project area.
* Conduct an Environmental and Social Impact Assessment (ESIA) to evaluate the potential environmental and social impacts of the proposed project and identify mitigation measures.
* Develop a comprehensive Environmental and Social Management Plan (ESMP) that includes recommendations for mitigation and management of environmental and social impacts.
* Engage with stakeholders, including local communities, to gather their views and concerns about the project and incorporate them into the ESIA and ESMP reports.
* Develop a stakeholder engagement plan that outlines the process for engaging with stakeholders and ensuring their meaningful participation throughout the project lifecycle.
* Conduct a gender analysis to identify gender-specific impacts of the project and develop a gender action plan to ensure that the project benefits women and men equally.
* Conduct a child labor risk assessment to identify potential risks associated with child labor in the cashew-nut supply chain and develop measures to mitigate those risks.
* Conduct a human rights impact assessment to identify potential human rights impacts of the project and develop measures to prevent or mitigate those impacts.
* Conduct a biodiversity assessment to identify potential impacts of the project on local biodiversity and develop measures to mitigate those impacts.
* Conduct a carbon footprint analysis to identify opportunities to reduce greenhouse gas emissions associated with the project.
* Develop a monitoring and evaluation plan to track the implementation of mitigation measures and assess the effectiveness of the ESIA process and ESMP.
* Conduct capacity-building activities for local stakeholders, including training on environmental and social management practices.
* Develop a grievance mechanism to enable affected stakeholders to raise concerns and complaints related to the project and ensure that they are addressed in a timely and transparent manner.
* Develop a communications plan to ensure that stakeholders are informed about the project and its potential impacts, and that their feedback is incorporated into project decision-making.
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| **Ref** (maximum 15) | **Project title** | **Implementation Support for BUA Cement Production Plants** |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 50 %  | 2 Int‘l Experts19 National Experts | BUA Cement Plc | IFC – International Finance Corporation  | 01/2022– 09/2022 | SRK Consulting |
| **Detailed description of the project** | **Type of services provided** |
| BUA Cement Plc is a publicly traded cement manufacturing company headquartered in Lagos, Nigeria. The company was founded in 1988 as Obu Cement Company Limited, and in 2020, it merged with Cement Company of Northern Nigeria (CCNN) to form BUA Cement Plc. BUA Cement is one of the largest cement producers in Nigeria and has a strong presence in the Nigerian market, as well as exporting to neighboring countries in West Africa. The company's production capacity is currently over 8 million metric tons per year and is expected to increase to 20 million metric tons by 2022 with the completion of new production facilities.BUA Cement operates three cement plants in Nigeria, located in Sokoto, Edo, and Adamawa states. The company is committed to sustainable practices and has implemented various initiatives to reduce its carbon footprint, such as using alternative fuels and implementing energy-efficient technologies in its production processesBUA Cement’s construction of the 6,000TPD Kalambaina line is in line with the strategic midterm expansion programme of the company. The project was borne out of the fact that the Nigerian market is still greatly underserved and with the projected growth in major infrastructure projects and spending over the next few years, and thus the need to meet current and projected demand. The lifespan of the project is projected at 50 years.Additionally, to meet the power requirement of the non-kiln operation and support the Cement Plant with an uninterrupted power supply, the project includes the installation and operation of a 48MW Gas Fired power plant. The Power Plant is situated on a 100,000m2 acquired land which is about 500m from the Cement facility area. It operates on five Wärtsilä 34DF dual-fuel engines, running primarily on liquefied natural gas (LNG), with the capability to switch to low-pour fuel oil (LPFO) if necessary. The Power Plant ensures continuous production resulting in a reduction of production losses due to power break downsOther components of the project include Limestone and Coal Crushing Unit, Limestone and Coal Mixing bed, Raw mill burning unit, Clinker mixing and storage unit, Packing Plant, Central Control Room (CCR), Laboratory, Waste water treatment plant, Technical building, Power plant, Regasifying Plant.In compliance with the regulations set forth by the International Finance Corporation (IFC) and the Federal Ministry of Environment, BUA Cement Plc has engaged the services of Richflood to conduct an Environmental and Social Impact Assessment (ESIA) for its Cement Production Lines 3 & 4. This assessment will evaluate the potential environmental and social impacts of the project, identify measures to mitigate any negative effects, and develop a comprehensive plan to manage and monitor impacts throughout the project's life cycle.In 2022, Richflood, in a joint venture with SRK Consulting Limited, a South African-based company, conducted the ESIA. Furthermore, to ensure the implementation of monitoring programs and compliance obligations of BUA Cement during all operations, a retainer agreement was executed with Richflood for permitting requirements and a series of environmental studies, including Environmental Audit, periodic Environmental Compliance Monitoring, Environmental Protection and Rehabilitation Program, and Training programs. These studies are conducted periodically to measure the performance of BUA Cement Plc, Sokoto, against the EMS, ensure compliance with statutory limits, as well as meet the objectives and targets of the EAR/EMP. | * Conducting environmental impact assessments (EIAs) to evaluate the potential effects of the cement production project: This involves conducting a comprehensive evaluation of the potential environmental impacts of the cement production project, including impacts on air quality, water quality, soil quality, and wildlife habitats.
* Assessing potential environmental impacts of the project: This includes analyzing the potential environmental impacts of the project on the environment and identifying potential risks and impacts that need to be addressed.
* Developing an environmental management plan for the project: This involves creating a comprehensive plan to manage the environmental impacts of the project. This plan includes strategies for minimizing the impacts and monitoring the effectiveness of environmental management plans.
* Identifying and assessing potential environmental risks associated with the cement production project: This involves evaluating the environmental risks associated with the cement production project, such as pollution of air, water, and soil, and developing strategies to minimize or prevent these risks.
* Developing and implementing monitoring programs to track the environmental impacts of the project: This involves creating a system to monitor the environmental impacts of the cement production project over time, evaluate the effectiveness of environmental management plans, and identify areas for improvement.
* Guiding regulatory compliance and environmental permits required for the project: This involves providing advice on regulatory compliance and ensuring that the project obtains all necessary environmental permits required by law.
* Conducting audits of the cement production project's environmental performance: This involves conducting periodic audits of the cement production project's environmental performance to ensure that environmental management practices are being followed and that the project is in compliance with environmental regulations.
* Providing training to personnel on environmental management and sustainability: This involves providing training to the staff on best practices for environmental management and sustainability, such as reducing waste, conserving energy, and minimizing the use of hazardous materials.
* Assessing the social and cultural impacts of the cement production project on local communities: This involves assessment of the social and cultural impacts of the project on local communities, such as impacts on traditional land use, access to water resources, or cultural heritage sites.
* Developing community engagement plans to promote transparency and stakeholder participation in the project: This involves developing a plan to engage with local communities and stakeholders to promote transparency and participation in the cement production project and to address community concerns and grievances.
* Conducting stakeholder consultations to identify and address community concerns about the project: This involves conducting stakeholder consultations to identify and address community concerns about the environmental impacts of the project and working with communities to develop strategies to mitigate these impacts.
* Assessing and managing the health and safety risks associated with the cement production project, including conducting risk assessments and implementing measures to minimize risks to workers and nearby communities.
* Providing technical expertise and guidance on sustainable resource management practices, such as waste management and energy efficiency, to minimize the environmental impact of the project.
* Conducting lifecycle assessments to evaluate the environmental impact of the entire cement production process, from raw materials extraction to the disposal of waste products.
* Identifying and implementing measures to reduce greenhouse gas emissions and other harmful air pollutants associated with the cement production project.
* Working with local and national government agencies to ensure that the project is in compliance with relevant environmental regulations and policies.
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| **Ref** (maximum 15) | **Project title** | **Technical support for Iron Ore Mining and Processing**  |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100% | 1 Int‘l Expert31National Experts | African Natural Resources & Mines Ltd. (ANRML) | IFC | 05/2018 – 01/2020 | - |
| **Detailed description of the project** | **Type of services provided** |
| African Natural Resources & Mines Ltd. (ANRML) is a subsidiary of African Industries Group (AIG); a Nigeria Manufacturing Company with a primary focus on Solid Minerals/Mining, Steel Production, Power generation, Chemicals and Glass manufacturing. AIG intends to be Nigeria’s foremost High-Quality Steel Manufacturing Company, the latest in steel-making, creating the industrial backbone for a stronger Nigeria. Thus, the Company aims to be a Leading Global Steel Firm in using Iron Ore to make High-Quality Cost Efficient Steel. AIG have a Strong Manufacturing Presence (Largest Steel Business in Nigeria) as one of the largest industrial groups in West Africa with a rich 40-year history; with operations also in West Africa, Middle-East, Asia and Europe; i.e. it has offices in UAE, Ghana, Romania, China and India. In view of this, AIG through ANRML embarked on Iron Ore Mining and Processing ProjectThe goal of the project is for African Natural Resources & Mines Ltd. (ANRML) to find iron ore deposits within the exploration area of Gujeni in Kagarko Local Government Area of Kaduna State. This is part of ANRML's larger goal of being Nigeria's foremost high-quality steel manufacturing company, using iron ore to make cost-efficient steel and becoming a leading global steel firm. The project involves the provision of steel-beam for infrastructural development in Nigeria, which will add value to the country's solid mineral reserves and increase production capacity to meet local demand. It will provide direct and indirect employment opportunities, increase derivation funds, contribute to economic diversification, improve socio-economic and urbanization of the project area, and promote direct foreign investment. The project will also lead to the development of secondary industries and promote business development for African Industries Group. Capacity building for employees and locals, sourcing raw materials locally, and increment in the income of the host communities are other expected benefits. Additionally, the project will positively impact revenue generation, availability of local building materials, and attract private and government investments in industries and infrastructural development.Richflood provided technical support by conducting environmental and social impact assessments in accordance with applicable laws and regulations, identifying potential impacts of the project on the environment and local communities, recommending measures to mitigate negative impacts and enhance positive ones, and preparing the necessary reports and documentation to obtain ESIA certification. In addition, Richflood has been working closely with African Natural Resources & Mines Ltd. (ANRML) and other stakeholders during the project implementation to ensure that the project meets the required standards and guidelines for environmental and social sustainability through periodic compliance monitoring. Richflood also helps to protect the environment and ensure the sustainability of the mining operation for years to come. | * Conduct a comprehensive Environmental and Social Impact Assessment (ESIA) of ANRML's mining and processing activities and identify potential environmental and social impacts.
* Develop an Environmental and Social Management Plan (ESMP) based on the findings of the ESIA, which outlines ANRML's approach to managing and mitigating environmental and social impacts throughout the mining and processing project.
* Conduct a Stakeholder Engagement Plan (SEP) that outlines ANRML's approach to engaging with local communities, NGOs, government agencies, and other relevant stakeholders throughout the mining and processing project.
* Develop a Biodiversity Management Plan (BMP) that outlines ANRML's approach to conserving and managing biodiversity in the mining and processing area.
* Conduct a Water Management Plan (WMP) that outlines ANRML's approach to managing water resources in the mining and processing area, including the management of water quality and quantity.
* Conduct a Social Impact Assessment (SIA) to assess the potential social impacts of ANRML's mining and processing activities, including impacts on local communities, cultural heritage, and human rights.
* Develop a Grievance Mechanism to address any concerns or complaints raised by stakeholders throughout the mining and processing project.
* Provide Technical Assistance to ANRML to ensure that the mining and processing project aligns with international standards and best practices in environmental and social management.
* Capacity building and training for ANRML's staff to ensure that they have the skills and knowledge to effectively implement the ESMP and manage environmental and social risks associated with the mining and processing project.
* Provide monitoring and reporting services to ensure that ANRML remains compliant with the environmental and social commitments outlined in the ESMP and other relevant regulatory requirements.
* Conduct Environmental Compliance Monitoring to record compliance with legal requirements and environmental regulatory legislation in carrying out mining and processing activities.
* Conduct Air Quality Management to monitor and manage the quality of air in and around the mining and processing area.
* Conduct Noise Management to monitor and manage the noise levels generated by the mining and processing activities and its potential impact on nearby communities.
* Conduct Land Use Planning to ensure that the mining and processing activities do not adversely affect land use patterns in the area and to identify potential land use conflicts.
* Conduct Closure Planning to ensure that ANRML has a plan in place to rehabilitate the mining and processing site and manage any potential long-term environmental impacts after the project ends.
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| **Ref** (maximum 15) | **Project title** | **Implementation Support for ESIA, RAP and Compliance Monitoring** |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100% | 25National Experts | Sweat Works Limited (SWL) | Client funded | 06/2018 – 06/2020 | - |
| **Detailed description of the project** | **Type of services provided** |
| Sweat Works Limited is a competitive quarry company that operates at a local quarry located at the state border between Abuja and Kaduna in Nigeria. The company has a mission to provide high-quality stone materials for construction projects in the region. To achieve its mission, Sweat Works Limited has invested in state-of-the-art equipment and technology that is on par with its international counterparts. This investment has enabled the company to efficiently and effectively extract stone materials from the quarry, ensuring that they are of the highest quality and meet the needs of their customers.Sweat Works Limited's quarry is known for its rich rock deposits, which allows the company to offer a wide range of stone materials to its customers. With a focus on quality, safety, and sustainability, the company is committed to meeting the needs of its customers while minimizing its impact on the environment.Sweat Works Ltd. (SWL) holds a mining license for a granite quarry located in Kaduna State, Nigeria. SWL plans to operate the quarry, and as per the environmental management statutory requirements in Nigeria, they have engaged Richflood to conduct an Environmental and Social Impact Assessment (ESIA) of the proposed project. The ESIA study is in line with the National Environmental Policy, EIA Act CAP E12 LFN 2004, and the Federal Ministry of Environment (FMEnv) Sectoral Guidelines for the Mining Sector. Additionally, the Equator Principles (EPs) and International Finance Corporation (IFC) benchmark were consulted where applicable to determine, assess and manage environmental and social risks in the project. The scope of the study includes collecting extensive baseline environmental data, identifying key stakeholders and their concerns, assessing the potential impacts of the proposed project, recommending practical and cost-effective measures to mitigate negative impacts and enhance positive impacts, and developing an actionable Environmental Management Plan.The project aims to establish a granite quarry in the Poyikpma community of Kaduna State, Nigeria, to provide high-quality stones for construction projects in the region. The project intends to comply with the statutory requirements for environmental management by conducting an Environmental and Social Impact Assessment (ESIA) and developing measures to mitigate negative impacts and enhance positive impacts. The project will also adhere to Equator Principles (EPs) and International Finance Corporation (IFC) benchmarks for environmental and social risk management. The project's focus is on minimizing the environmental impact of quarry operations and adopting sustainable mining practices. Additionally, the project seeks to engage with stakeholders and address their concerns while developing an actionable Environmental Management Plan to guide the implementation of environmental and social management activities throughout the project's lifecycle. | * establish the baseline ecological conditions of the proposed project area;
* establish the environmental sensitivities prevalent in the proposed project area;
* identify, quantify, and assess the likely negative and positive environmental impacts of the project as presently designed;
* identify, evaluate, and predict the impact of the proposed granite exploration project on the ecological and socio-economic settings with adequate interfacing and project interaction;
* identify existing and expected environmental regulations that will affect the operations and advise on standards, concepts and targets;
* identify any environmental issues and concerns that may, in the future, affect the successful operation of the project;
* develop control strategies to mitigate and ameliorate significant impacts that the projects would have on the totality of measurable environmental characteristics;
* develop an effective Environmental and Social Management Plan (ESMP) to last the lifespan of the project including compliance, monitoring, auditing and contingency planning.
* provide guidance in the planning and execution of involuntary resettlement
* identification of project impacts and affected populations;
* documentation of legal framework for land acquisition and compensation;
* develop compensation framework;
* description of resettlement assistance and restoration of livelihood activities;
* assistance in the development of a detailed budget;
* develop an implementation schedule;
* description of organizational responsibilities;
* develop and execute a framework for public consultation, participation, and development planning;
* description of provisions for redress of grievances and establishment of grievance mechanism; and
* develop a framework for monitoring, evaluation, and reporting.
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| **Ref** (maximum 15) | **Project title** | **Technical support for Cassava cultivation** **and** **Starch Processing Plant** |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100% | 10National Experts | H & W Starch Derivatives Limited | African Development Bank (AfDB) | 04/2020– 03/2021 | - |
| **Detailed description of the project** | **Type of services provided** |
| H & W Starch Derivatives Limited is a company that specializes in the production of starch-based products such as glucose syrup, maltodextrin, and modified starches. The company is based in Nigeria and has been in operation since 2012. H & W Starch Derivatives Limited sources its raw materials from local farmers and has established partnerships with agricultural cooperatives to ensure a consistent supply of high-quality raw materials. The company's products are used in a wide range of industries, including food and beverage, pharmaceuticals, and paper manufacturing. H & W Starch Derivatives Limited is committed to sustainable practices and is dedicated to ensuring that its operations have a positive impact on the environment and the communities in which it operates.H & W Starch Derivatives Limited plans Cassava cultivation, and Starch Processing Plant. The project was hinged on the significance of the Cassava (an important food crop), strategically valued for its role in food security, poverty alleviation and as a source of raw materials for agro-allied industries in Nigeria with huge potential for the export market. Nigeria being a major source with Africa being the largest centre of production, the project was aimed at serving as a source of national economic growth/diversification as well as eliminating the high demand-supply gap of the food crop in the country. In addition, Kwara State is one of the major states in Nigeria that are heavily endowed with high-yield of Cassava farm-produce. Thus, the need to maximize the land potential for producing Cassava through proper cassava plantation on a large scale, and the processing of the produce to starch for agro-allied industries.The main components of the proposed project include the Cassava cultivation, and Starch Processing Plant situated on 10,100 hectares of land out of which about 6,180 hectares were used for the Cultivation of Cassava and 72.578 hectares were used for the processing plant. The processing plant has an input capacity of 400 tons of tubers per day and a daily Starch output capacity of 100 tons. The project was financed by African Development Bank (AfDB).Richflood provided technical assistance by ensuring the implementation of Environmental and Social Standards (ESSs) for the project. The project aims to maximize the potential of land for cassava production, increase employment and wealth creation through agro-processing and value addition, enhance Nigeria's food security and economy by diversifying the manufacturing base, reduce waste and increase utilization of cassava products to alleviate poverty, and address the high demand-supply gap for cassava starch in Nigeria by increasing local production and reducing imports. | * Conducting an Environmental and Social Impact Assessment (ESIA) of the cassava cultivation and starch processing plant to determine potential environmental and social impacts.
* Conducting a Social Impact Assessment (SIA) to assess potential social impacts of the project on local communities, cultural heritage, and human rights.
* Creating a Stakeholder Engagement Plan (SEP) to engage with local communities, NGOs, government agencies, and other stakeholders throughout the project.
* Establishing a Grievance Mechanism to address concerns or complaints raised by stakeholders throughout the project.
* Providing Technical Assistance to ensure that the project adheres to international standards and best practices in environmental and social management.
* Capacity building and training for the company's staff to effectively implement the ESMP and manage environmental and social risks associated with the project.
* Providing monitoring and reporting services to ensure compliance with environmental regulations and legal requirements, as well as the company's environmental and social commitments outlined in the ESMP.
* Recording compliance with legal requirements and environmental regulatory legislation during Environmental Compliance Monitoring.
* Developing an Environmental and Social Management Plan (ESMP) based on the findings of the ESIA to manage environmental and social risks associated with the project.
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| **Ref** (maximum 15) | **Project title** | **Technical support for Combined Cycle Power Plant (CCPP) Project** |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100% | 15National Experts | Waltersmith Petroman Oil Limited  | Client funded | 03/2016-06/2019 | - |
| **Detailed description of the project** | **Type of services provided** |
| Waltersmith Ugamma Power Company Ltd is a Nigerian-based company that specializes in the development, construction, and operation of power generation projects. The company was established in 2018 as a joint venture between Waltersmith Petroman Oil Limited and the Nigerian National Petroleum Corporation (NNPC). Waltersmith Ugamma Power Company Ltd is focused on developing and operating small-scale power generation plants that use natural gas as fuel.Waltersmith Petroman Oil Limited (Waltersmith) plans to, through her major subsidiary, Waltersmith Ugamma Power Company Limited, firstly develop a Combined Cycle Power Plant (CCPP) to generate a total of 300MW, in Ugamma, Ochia Autonomous Community in Awara District of Ohaji/Egbema Local Government Area in Imo State. The power generated is intended to be transmitted, along a 32km distance, to an existing Grid Substation in Owerri Municipal Local Government Area, for purposes of Evacuation and distribution. Thus, a supplementary project of construction of a 32km 132kV Transmission Line. The project aims at generating electricity, in addition to the National Grid supply. About 8 km of the proposed Transmission Line will run on a new Right of Way (RoW) while the remaining 24 km shall run parallel to the Ahoada-Owerri 132kV Transmission Line. The Ugamma Gas-powered Independent Power Plant (IPP) Project is initiated by the available fuel source: the Gas supply of ANOH Project and Waltersmith Ibigwe Flow Station Facility, existing 15-20km and 100m respectively to the proposed power plant location. About 37.5 mmscf/day of gas would be required by the plant during operation. Richflood was engaged to provide technical assistance in assessing and managing the potential environmental and social impacts of the Ugamma Gas-powered Independent Power Plant (IPP) Project. This would involve conducting a comprehensive Environmental and Social Impact Assessment (ESIA) to identify potential impacts, mitigation measures, and management plans to minimize or prevent adverse effects on the environment and surrounding communities. The consultant would also need to ensure compliance with relevant regulatory and international standards, including those related to emissions, waste management, and community engagement. Additionally, they would provide ongoing monitoring and evaluation of the project's environmental and social performance to ensure that any potential impacts are adequately managed and that sustainable development principles are followed.The Waltersmith project objectives are to develop and operate a Combined Cycle Power Plant (CCPP) in Ugamma, Imo State, Nigeria, with a total capacity of 300MW, and to transmit the generated electricity to an existing Grid Substation in Owerri Municipal Local Government Area for evacuation and distribution. The project also involves the construction of a 32km 132kV Transmission Line. The primary aim of the project is to provide reliable and affordable electricity to communities and industries in Nigeria and to contribute to the country's national power grid supply. Additionally, the project seeks to promote sustainable development and reduce the carbon footprint of its operations by utilizing natural gas as fuel and complying with international standards for emissions and waste management. | * Scoping and baseline studies to determine the potential environmental and social impacts of the project.
* Preparation of an Environmental Impact Assessment (EIA) report following applicable regulatory frameworks.
* Identification of mitigation measures to minimize or avoid negative environmental and social impacts.
* Preparation of a Resettlement Action Plan (RAP) to address any potential displacement of people as a result of the project.
* Stakeholder engagement and consultation to ensure that community concerns and expectations are incorporated into the project design and implementation.
* Monitoring and evaluation of the project during construction and operation to ensure compliance with environmental and social management plans and applicable regulations.
* Capacity building and training for project personnel, regulators, and affected communities on environmental and social management practices.
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| **Ref** (maximum 15) | **Project title** | **Training of Nuclear Power Programme Advocacy Assistants**  |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100% | 12National Experts | Nigeria Atomic Energy Commission (NAEC) | Client funded | 12/2019-12/2019 | - |
| **Detailed description of the project** | **Type of services provided** |
| NAEC stands for Nigeria Atomic Energy Commission. It is the body responsible for developing and implementing Nigeria's nuclear energy program. The commission was established in 1976 and operates under the supervision of the Federal Ministry of Science and Technology. NAEC's mandate includes promoting the peaceful use of nuclear technology, conducting research and development activities, establishing nuclear safety standards and regulations, and collaborating with national and international organizations on nuclear energy issues. The commission has various departments and units, including the Nuclear Technology Centre, Nuclear Safety and Radiation Protection Department, Nuclear Medicine and Radiation Control Department, and Nuclear Security Department.The importance of nuclear power as a viable alternative solution to meet the increasing energy demands of countries globally cannot be overemphasized. However, human resources must be adequately equipped with knowledge of nuclear energy applications and safety features. To this end, education and training are critical in creating awareness and interest among the local community, highlighting the economic benefits of Nuclear Power Programmes, and developing qualified plant personnel to ensure the safe and reliable operation of Nuclear Power Plants. As such, a training and advocacy programme has been developed to train Advocacy Assistants who will be responsible for effectively communicating the benefits and importance of the envisioned Nuclear Power Programme within the cultural and linguistic context of the Geregu People. The programme is designed to be inclusive, targeting a wide range of groups and meeting their specific education and training needs. The NPP Advocacy Assistants will play a pivotal role in promoting the safe and sustainable use of nuclear energy in the Geregu community.The advocacy program aims to create awareness of NAEC's Nuclear Power Plant projects through town hall meetings, jingles, and radio shows in English and the local dialect. The program also aims to identify and train Advocacy Assistants who will conduct effective roadshows within the community and promote the economic benefits of the technology to gain acceptance.Richflood was engaged to render technical assistance by developing and implementing a training and advocacy program aimed at creating awareness and interest in the benefits and safety of Nuclear Power Programmes among the Geregu People in Nigeria. Richflood will identify and engage Advocacy Assistants, providing them with the necessary education and training to serve as advocates for the NPP project. The consultant will also organize Town Hall Meetings, jingles, and radio shows in English and the local dialect to effectively communicate the benefits of the Nuclear Power Plant projects to the community. The consultant's ultimate objective is to promote the safe and sustainable use of nuclear energy while ensuring that safety remains a top priority. | * Conducting a needs assessment to determine the knowledge and skills gaps among the target audience and identify specific training and advocacy needs for the NPP project.
* Designing and developing curriculum and training materials tailored to the specific needs and goals of the commission or organization, including online and in-person training modules.
* Providing subject matter expertise in nuclear energy and safety regulations to support the development of accurate and effective training materials.
* Facilitating stakeholder engagement and participation through focus group discussions, community meetings, and other interactive methods to gain valuable input and feedback for training and advocacy programs.
* Monitoring and evaluating the impact and effectiveness of the training and advocacy programs through various methods, such as surveys, interviews, and performance assessments.
* Providing ongoing support and consultation to ensure the successful implementation and sustainability of NPP projects, including technical support and guidance on safety regulations, community engagement, and communication strategies.
* Conducting research and analysis to support the development of advocacy strategies and materials, such as policy briefs, white papers, and social media campaigns, to build support for the NPP project.
* Providing capacity building and training for Advocacy Assistants and other personnel involved in the NPP project to enhance their knowledge and skills in advocacy and communication.
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| **Ref** (maximum 15) | **Project title** | **Implementation Support for the Coal Mining Project** |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100% | 10National Experts | Dangote Industries Limited (DIL) | Client funded | 2021-2022 | - |
| **Detailed description of the project** | **Type of services provided** |
| Dangote Industries Limited (DIL) intends to commence coal mining activities in two areas in Benue State and partly in Kogi State. The coal extracted will be used as fuel for kiln firing in the operation of DIL's cement plants. The estimated annual production capacity for the Owukpa mine is 0.45 million tons, while that of the Okpokwu mine is 1 million tons per annum, and the mines are expected to be active for 29 years.Following the Environmental Impact Assessment (EIA) Act, CAP E12, LFN 2004, and other statutory requirements, DIL engaged Richflood to conduct a series of studies to assess the potential environmental and social impacts of the mining activities and recommend control techniques to manage them. Five reports were produced after the studies, which include the Environmental Protection and Rehabilitation Programme (EPRP) Report, Fuel Storage Plan (FSP) Report, Climate Change Mitigation & Adaptation Plan (CCMAP) Report, Traffic Management Plan (TMP) Report, and Preliminary Water Use Plan (PWUP) Report.Richflood ensures DIL's mining activities are carried out in compliance with all relevant regulations and best practices to ensure that potential environmental and social impacts are adequately managed and mitigated. | Environmental Protection and Rehabilitation Programme (EPRP) :* Develop an efficient action plan for conducting mining operations
* Provide strategy for environmentally sound conditions suitable for future economic use
* Develop plans to rehabilitate/reclaim the mining area
* Provide an efficient closure plan to mined areas
* Facilitate compliance with relevant legislations, regulations, and approvals

Fuel Storage Plan (FSP):* Provide a framework for DCML to ensure effective containment of bulk chemicals and fuel
* Manage stored fuel and chemicals to minimize their release to soil or water bodies
* Assess potential risks of chemicals or fuels before their use on-site
* Implement appropriate risk and/or impact mitigation measures

Climate Change Mitigation & Adaptation Plan (CCMAP) :* Identify and minimize major greenhouse gas emission sources from mining operations
* Document proactive climate change mitigation and adaptation measures for each greenhouse gas source
* Identify proposed GHG monitoring locations, equipment, and frequency for the mine's GHG monitoring program
* Develop a management strategy to reduce the potential for concerns relating to greenhouse gases emissions

Traffic Management Plan (TMP):* Develop a management strategy to minimize the potential for traffic conflict resulting from product transport and minimize potential air pollution and noise impacts associated with product transport
* Promote employee and community road safety awareness
* Comply with traffic management policies and regulatory frameworks
* Comply with occupational health and safety standards
* Develop a management strategy to establish, maintain and ensure compliance with a Truck Driver Code of Conduct and to avoid incidents and accidents

Preliminary Water Use Plan (PWUP) Report:* Identify and evaluate the water sources required for the mining operations
* Develop a plan for the efficient use and management of water resources
* Facilitate compliance with water resource regulations and management plans
* Identify and implement appropriate measures to mitigate the potential impacts of mining operations on water resources.
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| **Ref** (maximum 15) | **Project title** | **Technical support for the development of Environmental and Social Management Framework for the Cassava to Glucose Plant** |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100% | 4National Experts | OY Crystal Food Processing Company Limited | Client funded | 12/2021-12/2021 | - |
| **Detailed description of the project** | **Type of services provided** |
| OY Crystal Food Processing Company Limited is a Nigerian Agro Business focused on the cassava value chain to become one of the Top 5 cassava processors in the country by 2028. The company's primary product of interest is glucose syrup, and it plans to establish a processing plant with a production capacity of 70,000 tons annually.To support this production, OY Crystal plans to cultivate approximately 70,000 acres of land for cassava production. The company is currently in discussions with over 20 communities willing to provide land on a long-term lease. Each farm will be managed by a dedicated farm manager who will reside in the community and employ local workers. The farm manager will interface with the resident community stakeholders to ensure the security and implementation of OY Crystal's Corporate Social Responsibility Plans. In addition, cassava inputs will be sourced from local farmers to serve as a buffer for the primary production.The expected annual production output is 70,000 metric tons of glucose syrup for both local and export consumption, along with other by-products such as fructose, dextrose, and maltose. OY Crystal is committed to contributing to the growth and development of the Nigerian economy through the cassava value chain, while also providing high-quality products to both local and international markets.Richflood was contracted by OY Crystals to provide technical and managerial expertise for the development and operations of the Cassava to Glucose Plant. The primary objective of the engagement was to identify key environmental and social impacts and risks related to the project, as well as to develop strategies for mitigating them.To achieve this goal, Richflood developed a comprehensive Environmental and Social Management Framework (ESMF) that integrated the most important environmental and social considerations into all stages of project preparation, implementation, monitoring, and operation. This framework provides a step-by-step approach for managing environmental and social risks and impacts throughout the project lifecycle.OY Crystal, along with its implementing partners and contractors, will follow this ESMF to ensure that all environmental and social risks and impacts are fully assessed and that management measures are in place before the implementation of relevant project activities. By implementing the ESMF, OY Crystal is demonstrating its commitment to promoting sustainable development practices and ensuring that its operations are conducted in an environmentally and socially responsible manner. | * Ensure that environmental and social considerations are integrated into project planning.
* Conduct a comprehensive review of the existing policies, regulations, and institutional arrangements to address and mitigate the environmental and social impacts of the project.
* Develop a framework to identify, assess, and evaluate potential environmental and social impacts of project activities.
* Define the methodology for implementing social and environmental safeguards required for the subprojects.
* Identify and develop the main risk mitigation measures to be implemented throughout the project lifecycle.
* Establish clear roles and responsibilities of stakeholders, including defining a monitoring and surveillance framework for the implementation of the ESMF.
* Develop and implement an environmental and social management plan to mitigate identified impacts, including developing effective mitigation measures, monitoring, and reporting mechanisms.
* Conduct stakeholder consultations and participation throughout the ESMF development and implementation process to ensure transparency, accountability, and inclusiveness.
* Ensure compliance with relevant environmental and social standards, regulations, and international best practices.
* Develop capacity building programs for project stakeholders to ensure that they are knowledgeable about and capable of implementing the ESMF effectively.
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| **Ref** (maximum 15) | **Project title** | **Technical support for Granite Quarry Operations** |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100% | 8National Experts | CGC Nigeria Limited | Client funded | 2017-2023 | - |
| **Detailed description of the project** | **Type of services provided** |
| CGC Nigeria Limited, with its headquarters in Kaduna, is a subsidiary of CGCOC GROUP CO. LTD. The company started its business in Nigeria in the 1980s and has been, actively involved in civil engineering works such as roads, bridges, and drilling. Over the years, the company has expanded its business portfolio to cover, exploration and mining engineering, crude oil trading, agriculture, real estate, hydropower plant and power transmission construction etc.CGC Nigeria Limited is a firm, known for (road) construction, civil engineering, and building infrastructural development in Nigeria and its environs. In a bid to provide its construction services, the company needs granite aggregates (from quarry activities) to supplement the ever-increasing need for construction material. Thus, CGC Nig. Ltd. as a construction company is involved in Granite-Quarry Operations, to produce required granite chippings. As a pre-requisite to expanding its construction activities (commercial productivity) and increasing the supply of granite aggregates required for construction purposes, the Company acquired several quarry leases across Nigeria.Therefore, under the Nigerian Minerals and Mining Act, 2007, and section 91, of the Nigeria Mining and Mineral Regulation 2011, among other obligations to comply with, the Ministry of Mines and Steel Development (MMSD), Richflood was engaged by CGC to carry out Environmental Audit which entails assessing the organization’s compliance with its policies, procedures and regulatory requirements with the ultimate aim of facilitating management control of environmental practices (including environmental protection and prevention of pollution) in balance with business and socio-economic needs. | * Establish the extent to which the activities within the CGC mining site comply with the existing environmental laws and standards;
* Identify hazards and evaluate the risks arising from the CGC mining activities;
* Examine procedures for emergency response preparedness and training in areas of health and safety;
* examine the effectiveness of operational systems and safety controls as well as quality assurance within the CGC mine site;
* assess the exposure of the workforce to pollution or physical disabilities as well as the availability, quality and usage of personal protective equipment and occupational health information;
* examine the environmental conditions of the CGC mine site and determine the need, if any, for clean-up and remediation measures;
* assess CGC Environmental Management System with respect to the CGC mine operation to ascertain whether it is an asset or a liability for the Company’s performance;
* make cost-effective recommendations for identified areas of concern in the operational activities of the CGC mine Facility;
* aid CGC to regulate its environmental practices and increase its responsiveness to stakeholders (shareholders, employees, host communities, public, etc.); and
* aid CGC in achieving optimal resource utilization and improved process performance for the operation of the mine site.
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| **Ref** (maximum 15) | **Project title** | **Technical support for the Development and Operation of Gold Refinery**  |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100% | 14National Experts | Kian Smith Trade and Co Limited | Client funded | 06/2018-09/2019 | - |
| **Detailed description of the project** | **Type of services provided** |
| Kian Smith Trade and Co Limited (KSTCL) is a Nigerian company that specializes in minerals, commodities and marine services. They prioritize high-quality minerals and excellent service, as well as building and maintaining strong relationships with partners. Kian Smith provides realistic solutions, consistent results, and timely deliveries to ensure business sustainability. They take full responsibility for successful sales and operations as trading partners, consultants, and brokers. Kian Smith collaborates with local entrepreneurs and communities to ensure growth, involvement of local content, sustainable development, and social responsibility in mining development projects. They prioritize safety and environmental protection in all earth mineral resourcing, ensuring that sites under their management have exploration licenses registered with the National Environmental Standards and Regulations Enforcement Agency (NESREA).KSTCL employed the services of Richflood (accredited by the FMEnv) to conduct the ESIA study to determine the potential associated impacts and risk of the proposed gold refining project to the environment from the project activities, with aid from similar projects across the globe, and to proffer mitigation measures to the negative impact and enhance the positive impacts on the biophysical and social environment under the regulation of the Federal Ministry of Environment (FMEnv) in conformity to national and international best practices.Kian Smith Trade & Co. Ltd proposed Aqua Regia Process as the gold refining method to be adopted in the proposed project. The gold bar or gold powdered which is already between 60% and 93% pure will be transported into the refining facility and the Gold Processing will follow to obtain 99.999% purity of gold.The overall beneficial impact of the proposed project includes: * The benefits of value addition to Gold in Nigeria and neighbouring African Countries.
* The multiplier effect of direct and indirect fiscal investment would boost the local and regional economies.
* Industrialization: the proposed project supports the industrialisation drive initiative of the Government.
* Promotion of global Environmental Justice direction.
* Cooperation: The proposal supports an industry that integrates states, communities and existing artisanal miners where possible into the mining ecosystem.
* Provision of direct and indirect employment opportunities for Nigerians during the various phases of construction and operation of the facility;
* Increased revenue to local and state governments as well as other government-mandated development agencies/commissions. This will aid in poverty alleviation and general socio-economic development within stakeholder states, local government areas; and the community.
 | * *Environmental impact assessments*: Conduct environmental impact assessments to identify the potential environmental impacts of the refinery's operations, and develop mitigation measures to minimize those impacts.
* *Environmental risk assessment:* Conduct a risk assessment to identify the environmental risks associated with the refinery's operations, and develop risk management strategies to mitigate those risks.
* *Waste management and disposal:* Develop and implement a waste management and disposal plan to ensure that the refinery's waste is managed and disposed of safely and in compliance with environmental regulations.
* W*ater resource management and conservation:* Provide services to help the refinery conserve water resources, manage its water use and discharge, and ensure that its water management practices are sustainable and environmentally responsible.
* *Air quality management: P*rovide services to help the refinery manage its air emissions, reduce its greenhouse gas emissions, and ensure compliance with air quality regulations.
* *Permitting and regulatory compliance assistance*: Assist with environmental permitting and regulatory compliance, ensuring that the refinery complies with all relevant regulations.
* *Health and safety assessments and training:* Provide health and safety assessments and training to refinery employees to ensure a safe and healthy workplace, as well as compliance with health and safety regulations.
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| **Ref** (maximum 15) | **Project title** | **Technical support for Battery Manufacturing Project** |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100% | 16National Experts | Neway Power Technology Company Limited | Client funded | 06/2021-05/2022 | - |
| **Detailed description of the project** | **Type of services provided** |
| Neway Power Technology Company Limited is a privately owned company registered in Nigeria under the Corporate Affairs Commission with RC No. 1575928, on the 3rd of June 2019; whose commercial interest is in the manufacturing and sales of Lead-acid batteries. The company adheres to the business principle of “technology for development and quality for existence”. Thus, the setting up of the battery manufacturing Plant is geared towards contributing to the nation’s industrialization and infrastructural development, through the provision of certified automobile batteries and indeed increasing the economic gains and social amenities of the project area. Neway Power strives to provide its customers with high- quality products and sales service considering its years of experience in battery manufacturing, production and management, with great technical strength and a mature quality management system.Neway Power Technology Company Limited, having a strong interest in the manufacturing sector of the economy, through a full chain of battery production development, has committed to continually contribute to the Nation’s industrialization by embarking on Battery Manufacturing, specifically, Automobile battery, Motorcycle battery, Sun Cell Storage Battery, UPS Battery, Telecom battery etc. Neway Power Technology Company Limited contracted Richflood to conduct the Environmental Impact Assessment (EIA) of the proposed Battery Manufacturing project. The EIA study was undertaken in line with statutory requirements for environmental management in Nigeria, which include the National Policy on Environment, the EIA Act CAP E12 LFN 2004, the Federal Ministry of Environment (FMEnv) Sectoral Guidelines for Manufacturing and Infrastructural development Projects, amongst other State, National and International Guideline/Regulations, Standards and Regulatory Frameworks. The EIA study for the proposed Battery Manufacturing Project at Ukwa West Local Government Area, Abia State was carried out by Richflood and comprised of a team of multidisciplinary experts with diversified experience on local and international assignments.Neway Batteries would be designed specially to suit Nigeria’s hot and humid weather, bumpy road and vast second-hand automotive usage. Such features include long operating life and the ability to stay cool in warm settings. Additionally, the vent cap will be designed to prevent overheating even with continual use. Also, the design will include a tough casing and a strong internal separator to prevent leaks for long-term performance. The battery manufacturing facility operation intends to adopt the most advanced equipment and technology, involving the continuous development of a strong management team in these fields. The project adopts the technologies of the extended grid and continuous casting and rolling grid for producing battery plate, automatic assembly and battery inner formation, and produces the PE battery shell and the maintenance-free lead batteries. | * Fulfil the laws stipulated and required by the Federal, State and Local Governments;
* Establish and document the baseline environmental, social and health components of the proposed project area;
* Establish the environmental sensitivities prevalent in the proposed project area;
* Identify, quantify and assess the likely negative and positive environmental impacts of the project as presently designed;
* Identify existing and expected environmental regulations that will affect the operations and advise on standards, concepts and targets;
* Provide all necessary answers to stakeholders, assessors, host community, regulators, financiers, pressure groups and other interested parties;
* Identify any environmental and social issues and concerns that may, in the future, affect the successful operation of the project;
* Develop control strategies to mitigate and ameliorate significant impacts that the projects would have on the totality of measurable environmental characteristics;
* Develop an effective Environmental Management Plan (EMP) to last the lifespan of the project including compliance, monitoring, auditing and contingency planning.
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| **Ref** (maximum 15) | **Project title** | **Technical support for ESIA, CDA and EPRP for the Mining and Processing of Gold, Cassiterite, Talc, Lead, and Silver** |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100% | 25National Experts | North-South Extractive Company Limited | Client funded | 07/2021-02/2023 | - |
| **Detailed description of the project** | **Type of services provided** |
| North-South Extractive Company Limited is a subsidiary company of Paragon Holdings Limited. Paragon Holdings Limited is a group of companies involved in oil and gas exploration, refining and marketing of petroleum products, procurement of equipment and oil field supplies, project consultancy, marine transportation, solid minerals exploration and production, insurance brokerage, real estate and property development. The proposed project (Mining and Processing of Gold, Cassiterite, Talc, Lead, and Silver) is a joint venture agreement between North-South Extractive Company Limited and the Nigerian Mining Corporation (NMC) for the joint exploration, development, processing and other business activities as shall be mutually agreed by both parties. The proposed project site is covered under an Exploration Licence 550-EL with four (4) Mining Leases (ML-019325, ML-019326, ML-019327 and ML-019328) which cover 797 Cadastral Units and is (159.4km2) located in Koro community in Pategi Local Government Area of Kwara; and Odogbe and Iye communities in Yagba-East Local Government Area of Kogi State.Hence, North-South Extractive Company appointed Richflood as the Environmental Consultant to conduct Environmental Impact Assessment (EIA) for the Proposed project in line with the statutory requirement for environmental management in Nigeria.The proposed project is hinged on the significance of mining, which is strategically valued for its role in economic diversification and poverty alleviation. The mineral deposits at the project location are arguably the most highly-desired and useful metals in the world. The set of minerals (Cassiterite, Gold, Lead, Silver and Talc) are the metals of choice for the industrial, medical and technology industries, just to name a few. While the activities of North-South Extractive Company Limited’s project will lead to the creation of jobs and economic opportunities, especially for the people of the host communities, it will also lead to a high investment in social infrastructure outside of their immediate sphere of operations. Some of the benefits of the proposed project include:* Help in the diversification of the economy from the oil and gas sector;
* Boost economic activities through direct and indirect employment and local suppliers of goods and services within Isanlu and Pategi in Kogi and Kwara states respectively;
* Offer job opportunities in various categories to several Nigerian professionals, skilled and semi-skilled craftsmen;
* Enable the development of key regional infrastructure (such as water and power) for the host communities;
* Improve medical facilities by adding to the current facilities and improve the overall wellbeing amongst employees and their dependents with targeted health awareness programs, particularly for key issues;
* Provide the States (Kogi and Kwara) as well as the Federal Government of Nigeria with royalty payments and taxes;
* Improve the financial standing and reputation of Nigeria as a good investment destination thus encouraging additional Foreign Direct Investment;
* Helps to maintain an investment in mineral exploration as exploration in the region would continue and it would be hoped that further economic mineral discoveries would be made and developed; and
* Provide economic benefits to North-South Extractive Company Limited and its shareholders.
 | * Satisfy Federal, State and Local Governments as well as stakeholders, that proactive environmental actions shall be incorporated in the North-South Extractive Company Limited project design as well as construction and operational phases of the project;
* Establish the baseline environmental and social conditions of the proposed project area;
* Establish the environmental sensitivities prevalent in the proposed project area;
* Identify, quantify, and assess the likely negative and positive environmental impacts of the project as presently designed;
* Develop control strategies to mitigate and ameliorate significant negative impacts that the projects would have on the totality of measurable environmental characteristics;
* Identify existing and expected environmental regulations that will affect the operations and advise on standards, concepts and targets;
* Identify, evaluate, and predict the impact of the proposed project on the ecological and socio-economic settings with adequate interfacing and project interaction;
* Identify any environmental issues and concerns that may, in the future, affect the successful operation of the project;
* Develop an effective Environmental Management Plan (EMP) to last the lifespan of the project including compliance, monitoring, auditing and contingency planning.
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| **Ref** (maximum 15) | **Project title** | **Development of Framework for Water Allocation Plan for Lake Chad Catchment Area** |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100% | 18National Experts | Nigeria Integrated Water Resources Management Commission, Abuja | Client funded | 07/2019-11/2020 | - |
| **Detailed description of the project** | **Type of services provided** |
| During the past decades, the Lake Chad Basin had suffered and still suffering from drought and desertification, leading to a loss of biodiversity and a decline in all rural production, which caused widespread poverty, malnutrition and migration. In recent times, water shortage has become more serious mainly in the northern part of the country because of the increasing need for irrigation, water supply, energy generation etc. as a result of population growth and economic development. Therefore, adequate development and management of water resources have become a critical necessity to meet these needs and prevent environmental damage. As water scarcity has increased globally, water allocation plans and agreements have taken on an increasing significance in resolving international, regional and local conflicts over access to water. With water now a limiting factor to food production and economic growth, a vital input to power generation, and with the rapid decline in the health of aquatic ecosystems, how water is allocated has taken on increasing significance.Although, currently, there are no agreed limits to the total abstraction from the lake, aquifers or river basins within the 8 hydrological basins in Nigeria. The net result is that allocation and total abstraction of water resources have been on the increase with significant impacts; for instance, the river flows in the upper catchment areas have diminished or ceased periodically in most cases, lakes; river levels have fallen, aquifer flows and quality has been impacted etc. Without any limits in place, allocation of the resources has continued to increase in response to the increasing demand for water use. Therefore, the framework is aimed at establishing a reasonable and practical framework for water allocation and water abstraction within the Chad Basin Hydrological Catchment Area 8 (HA 8), which has to be agreed upon and adopted by stakeholders and which aims to safeguard the natural ecosystem from over abstraction/depletion while supporting demands on the water resources. Also, it is aimed at establishing guiding tools to serve as a water allocation planning mechanism for sharing in the catchment.Richflood was commissioned to establish a reasonable and practical framework for water allocation and abstraction within the Lake Chad basin, which has to be agreed upon and adopted by stakeholders and aims to safeguard the natural ecosystems from over-abstraction/depletion while supporting multiple demands on the water resources.The outcome of this research is expected to provide a framework to address the following:1. Improved Conservation and Preservation of Water

i. Availability of water resources (both surface and groundwater)ii. Preservation of water (Area of protected wetlands and rivers)1. Improved Use of Water and Sanitation

i. Irrigation water requirement (Amount of water needed for varied purposes)ii. Control of water loss (Percentage of water lost through various water systems)iii. Recycling of water1. Increased Employment

i. Employment resulting from water and sanitation construction maintenance1. Improved Quality of Water and Sanitation

i. Pollution of water and soil (Level of chemicals, minerals, metals, and pesticides in soil, surface and groundwater)1. Greater Equity in the Allocation of Water and Sanitation
 | * Provide effective and efficient planning and management of the water resources of the Lake Chad basin (catchment area) and by extension the nation’s hydrological catchment areas.
* Restore the quality of livelihood about the present water condition within the catchment area (communities).
* Improve and increase the water balance structure within the region and improvement the environmental condition (sanitation) and develop an environmental (sanitation) standard.
* Maximize the amount of water that can be allocated for use.
* Maintain the water quantity needed by existing users and the environment
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| **Ref** (maximum 15) | **Project title** | **Implementation Support for the Sugarcane Farm and Milling Factory**  |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100% | 10National Experts | Sunti Golden Sugar Estate (SGSE) | Client funded | 02/2020-10/2021 | - |
| **Detailed description of the project** | **Type of services provided** |
| Sunti Golden Sugar Estate (SGSE), a subsidiary of Flour Mills of Nigeria PLC established a large-scale sugarcane farm at the site of the defunct Sunti Sugar Company which it acquired from the Federal Government of Nigeria in December 2011. The purpose of the sugarcane farm is to produce high-quality sugarcane which will then be milled on site and the raw sugar transported to Lagos for refining at the newly built refinery located in Apapa. The initial phase of the sugarcane farm project covered 4,000ha for which an EIA was conducted and has since been approved by the FMEnv. Having completed the development of the first phase of the project, SGSE is desirous of expanding its operations to cover the remaining 11,000ha of its estate as well as establishing a sugarcane milling factory and a power plant. Under this second phase, an additional 11,000ha is expected to be brought under pivot irrigated sugarcane cultivation, cane milling, power generation, residential development and other associated uses. The major farm operations that will be undertaken at the Sunti Farm are not much different from the operations that characterize large-scale mechanized farming processes. These operations are therefore the key processes of the proposed project and it is within their defined scope that any impact on the environment can be identified and evaluated. For the avoidance of doubt, the Sunti Farm project will consist of broad categories of operations and processes like land preparation, crop cultivation, irrigation, reaping and harvesting, loading and transportation, sugarcane processing, power generation, complimentary amenities and infrastructure like roads, culverts, drainage channels and bridges.In line with regulatory requirements, SGSE is conducting environmental monitoring to provide an independent scientific assessment of the environmental impacts of its operations in its locations. Consequently, Richflood was commissioned to undertake this exercise to meet regulatory guidelines and standards. This is also in response to corporate principles and policies that govern its operations for environmental compliance monitoring and also proposes mitigation measures, which will be incorporated into the project design and environmental management system.  | * Generate monthly data on Effluent quality from the discharge point
* Generate monthly data on Surface water/sediment samples from any available surface water bodies.
* Generate weekly data on air quality and Noise level from designated areas.
* Generate data on soil from designated areas.
* Demonstrate compliance and/ or non-compliance with regulations.
* Assist in meeting the requirements of the Environmental Management Plan and Sunti Golden Sugar Estate Limited standards.
* Ensure workers/public security, safety and health.
* Advise on measures to improve discharge and emission characteristics where they do not meet regulatory standards.
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| **Ref** (maximum 15) | **Project title** | **Technical support for Coal Mine Project**  |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100% | 15National Experts | Koyla Energy Limited (KEL) | Client funded | 01/2018-12/2019 | - |
| **Detailed description of the project** | **Type of services provided** |
| Koyla Energy Limited (KEL) embarked on the search for Coal Deposits within the Okaba Coal Block area in the Ankpa Local Government Area of Kogi State. It was successfully discovered in the course of carrying out the geological reconnaissance map that the area is a mineralized zone with exploration and mining potential for processing the readily mineable deposits of Coal within the area. However, to engage in Solid Minerals Exploration as well as Processing and Beneficiation of Metallic Ores following the provisions of the Nigerian Minerals and Mining Act, 2007, and its Regulation, 2011, among other obligations to comply with, Koyla Energy Limited acquired a Mining Lease (No.: 8123-ML) covering 240 Cadastral Units, i.e. 48km2 to carry out Mining Operations/Processing of Coal within the mineralized zone of Okaba.Koyla Energy Limited (KEL) is a subsidiary of African Industries Group (AIG); a Nigeria Manufacturing Company with a primary focus on Solid Minerals/Mining, Steel Production, Power generation, Chemicals and Glass manufacturing. The Company aims to address the power needs of Nigeria by tapping the huge coal reserves in the country in an environmentally friendly way benefitting the local communities. Thus, KEL is established inclusively for the development, operation, maintaining of coal mines and coal-fired power plants. Koyla Energy Limited has a strong technical team comprising qualified professionals, and COMEG (Council of Nigerian Mining Engineers and Geoscientists) members and has robust financial competence to carry out exploration and coal mining as well as coal power plants. The Company also has strong technical partners having experience and expertise in coal mining over more than three (3) decades in the state of the art of technology; with a large fleet of technologically advanced in-house heavy equipment and machinery. **Project Objective:**Koyla Energy Limited is developing the Coal Mine Project at Okaba for primarily two reasons: (1) for the required fuel-stock of a proposed 300MW Coal-Powered Plant in Ajaokuta, Kogi State (located 150km away); and (2) for the raw materials required for an Iron-Ore Processing Project at Gujeni, Kaduna State (located 395km).  | * identify existing environmental regulations affecting the proposed project and decide on the appropriate operational/functional environmental standards and targets for the project;
* establish the present existing baseline (bio-physical, socio-economic and health) conditions of the project environment and therefore provide a basis for measuring future changes and impacts;
* identify potential environmental and socio-economic impacts and hazards that may result from any of the proposed project activities;
* assure effective consultations with the host and adjoining communities of the proposed project and ensure their concerns are properly addressed and their views integrated into the project decision-making processes;
* recommend cost-effective and practical preventive, reduction and control strategies for the significant potential or associated adverse impacts of proposed projects.
* develop a cost-effective Environmental and Social Management Plan (ESMP) for ensuring that impact mitigation strategies are implemented;
* provide all necessary data, information and objective evidence required for developing an Environmental Impact Statement (EIS) for the proposed project; and
* Provide a tool for managing and addressing third-party claims about the proposed project activities.
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| **Ref** (maximum 15) | **Project title** | **Technical support for Jetty/Terminal Facility Construction** |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100% | 16National Experts | Quatromen Integrated Company Limited  | Client funded | 06/2021-06/2022 | - |
| **Detailed description of the project** | **Type of services provided** |
| Quatromen Integrated Company Limited is a privately owned company registered in Nigeria under the Corporate Affairs Commission with RC No. 1639985, on 9th December 2019. The company has its head office located at Suite 9, fifth floor, Edo House, Plot 75 Ralph Shodeinde Street, CBD Abuja, Nigeria. The Company provides one of the most comprehensive ports and cargo handling services, shipping services and logistics support in the industry in Nigeria. The company has taken the lead in designing customized, cost-optimized supply chain solutions and ensuring that they are fully implemented. Quatromen is also involved in end-to-end logistics service thereby ensuring a smooth transition of goods from start to finish and every stop in between. The company places high value on maintaining and enhancing quality in every facet of its operations.Quatromen Integrated Company Limited proposed Jetty/Terminal facility construction in Warri to reduce the burden of activities in the existing Jetties, promote economic business activities, accelerate export and import, boost manufacturing, agricultural production, food security in Nigeria and offer job opportunities in various categories to some Nigerian professionals’ skilled and semi-skilled craftsmen.Quatromen contracted Richflood to conduct the Environmental Impact Assessment (EIA) of the proposed Jetty/Terminal Construction project. The EIA study was undertaken in line with statutory requirements for environmental management in Nigeria, which include the National Policy on Environment, the EIA Act CAP E12 LFN 2004, the Federal Ministry of Environment (FMEnv) Sectoral Guidelines for Maritime Projects operations, amongst other State, National and International Guideline/Regulations, Standards and Regulatory Frameworks. | * Project screening and site visit;
* Preparation of Terms of Reference (ToR) in accordance with regulatory guidelines;
* Review of national and international environmental regulations guiding the project;
* Consultations with regulators and other relevant stakeholders concerned with the proposed project;
* Extensive and comprehensive literature review specific to the project site to obtain background information on the environmental characteristics of the area;
* Field data gathering exercise and survey of the area to establish environmental baseline information specific to the study area;
* Impact identification, prediction, interpretation and evaluation from project activities;
* Determine and evaluate the potential positive and significant negative impacts of the Jetty Construction activities;
* Proffer appropriate mitigation measures for the negative impacts;
* Provide a mechanism for public disclosure of project information.
* Integrate the opinions and views of all stakeholders particularly host communities into the project to ensure that the Construction project is both environmentally and socially sustainable;
* Develop an appropriate Environmental Management Plan (EMP); and
* Ensure compliance with relevant statutory requirements and Company good practices.
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| **Ref** (maximum 15) | **Project title** | **Implementation Support for Ikorodu Power Generation Limited (IPGL)** |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100 % | 13 National Experts | Ikorodu Power Generation Limited (IPGL) | Client funded | 08/2019-02/2021 |  |
| **Detailed description of the project** | **Type of services provided** |
| Ikorodu Power Generation Limited (IPGL), is a subsidiary of SkippersSeil Limited. SkippersSeil Limited is an integrated energy firm with a focus on electrical innovation, design, manufacturing and engineering. SkippersSeil Limited has been serving the power sector in India and across the globe since 1986. SkippersSeil Limited commenced its operations with the manufacturing of substation equipment and subsequently integrated into EPC (Engineering Processing and Construction) for EHV transmission lines and substations for utilities, institutions and industries up to 400 kV. Skipper also undertakes automation projects and a balance of plant projects in power-generating stations. Recently, SkippersSeil Limited diversified into power generation with a project entailing the setup of a hydro-power plant. Several thermal power plants are in advanced stages as well.SkipperSeil Limited is a subsidiary of SkipperSeil Group, which is internationally renowned in the power and infrastructure sectors. SkipperSeil Group has created a niche in serving clients in power transmission, distribution and generation across sectors and nationalities. SkipperSeil Group along with its parent group offers consultancy, EPC services, manufacture and supply products in electrical and power generation sectors to over 50 countries around the globe. These include regions of the Middle East, South-East Asia, Europe, Africa and America. SkipperSeil Group has its global footprints through its subsidiaries in India, Nigeria, Ghana and the Middle East. This is where Skipper-make products are manufactured and/or projects of sub-stations, transmission lines and power generation plants are undertaken.Following the need to meet the increasing electricity demand, Ikorodu Power Generation Limited (IPGL) is taking steps to improve the quality and reliability of electricity supply while ensuring the sustainability of the power provision industry. By bridging the gap between the available electricity supply, and the demand required for industry, commercial businesses and homes, the project will support domestic economic development, improve lifestyles, provide revenue for the government and create employment opportunities in Lagos State.The Project will result in various positive and negative interactions between planned activities and the environment. In line therefore with the statutory requirement for environmental management in Lagos State and Nigeria, Ikorodu Power Generation Limited (IPGL) has engaged Richflood to conduct an Environmental Impact Assessment (EIA) for the project. The EIA study was undertaken in line with statutory requirements for environmental management in Nigeria, which include the National Policy on Environment, the EIA Act CAP E12 LFN 2004, the Lagos State Environmental Management and Protection Law 2017, Part VI Section 199 subsection 6, the Federal Ministry of Environment (FMEnv) Sectoral Guidelines for Manufacturing and Infrastructural development Projects, amongst other State, National and International Guideline/Regulations, Standards and Regulatory Framework. | * Conducting an Environmental Impact Assessment (EIA) study in line with statutory requirements for environmental management in Nigeria.
* Assessing the potential positive and negative impacts of the project on the environment.
* Identifying measures to minimize, mitigate or manage the negative impacts of the project on the environment.
* Providing recommendations to the client on how to proceed with the project in an environmentally sustainable manner.
* Liaising with regulatory bodies and stakeholders to ensure compliance with environmental regulations and obtain necessary permits and approvals.
* Monitoring the project during the construction and operation phases to ensure compliance with environmental management plans and regulations.
* Providing regular reports to the client and relevant authorities on the project's environmental performance.
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| **Ref** (maximum 15) | **Project title** | **Technical support for Granite Quarry operation** |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100% | 8National Experts | Sinotrust Mining Engineering Company Ltd.  | Client funded | 01/2021-04/2021 | - |
| **Detailed description of the project** | **Type of services provided** |
| Sinotrust Mining Engineering Company Ltd. is a reputable company, known for high-standard quarry operations in Nigeria. In a bid to provide and meet up the demand for construction materials, the company has engaged in the production of needed granite aggregates (from a quarry facility) to supplement the ever-increasing need for construction materials. Thus, Sinotrust Mining Engineering Company Ltd. is involved in a Granite-Quarry operation, to produce required granite chippings. As a pre-requisite to expanding its granite quarry production activities (commercial productivity) and increasing the supply of granite aggregates required for construction and other developmental purposes, the Company has acquired several Quarry Sites in different Nigerian States.In accordance with the Nigerian Minerals and Mining Act, 2007, and Section 91, of the Nigeria Mining and Mineral Regulation 2011, among other obligations as complied with, the Ministry of Mines and Steel Development (MMSD), Richflood was engaged by Sinotrust to carry out Environmental Audit which entails assessing the organization’s compliance with its policies, procedures and regulatory requirements with the ultimate aim of facilitating management control of environmental practices (including environmental protection and prevention of pollution) in balance with business and socio-economic needs. Also, Richflood carried out Environmental Protection and Rehabilitation Program (EPRP) to ensure sustainable management of the environment throughout the mine lifespan and aid a more efficient and effective final closure (and rehabilitation). The Plan further defines the environmental protection and rehabilitation goals and stipulates the method to be adopted, with the required resources that will be needed to accomplish the Plan.In addition, to incorporate future Quarry operation changes and ensure that the quarry operations are continuously re-assessed and improved to ensure air quality, noise, water, soil and waste management is optimally managed throughout the life of the Quarry Plant, Richflood facilitated the permitting procedures for Sinotrust in accordance with the National Environment Standards and Regulations Enforcement Agency (NESREA) requirements. | * Assessing performance against a set of requirements or targets, related to specific issues;
* Evaluating compliance with environmental legislation and corporate policies;
* Measuring performance against the requirements of an environmental management system standards; and
* Exploring the potential economic, social and environmental benefits that an improved performance can achieve.
* Generation of adequate environmental information assessment of facilities for the potential environmental risks that are likely to be caused by the operations of the facilities;
* Achieving maximum resource optimization and improved process performance;
* Encouraging organizations to self-regulate their environmental practices, and to increase their responsibility to stakeholders and society;
* Ensuring compliance with regulatory requirements;
* Developing strategies to minimise human exposure to risks from environmental, health and safety problems.
* Ensure quarry operation is carried out in a controlled manner, using scheduled timeframe to prevent or mitigate accidental spillover;
* Define environmentally sustainable operation control systems;
* Design protection measures for environmental components of the site;
* Provide guidelines for progressive rehabilitation of the site during and after operations;
* Provide an efficient action plan for conducting mining operations.
* Provide environmentally sound conditions suitable for future economic use.
* Ensure quarry operation does not compromise the quality and quantity of surface water or groundwater for existing users and water-dependent ecosystems;
* Ensure residual risks and liabilities are identified and controlled;
* Assure that mine closure processes are cost-effective and efficient;
* Develop strategies to rehabilitate/reclaim the mining areas and ensure the full cost of decommissioning and rehabilitation; and
* Develop an environmental monitoring program focused towards the achievement of closure outcomes.
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| **Ref** (maximum 15) | **Project title** | **Technical support for Polyester Fibre Manufacturing Plant Project** |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100% | 16National Experts | Starich Recycling Technology Co., Limited (SRTCL) | Client funded | 08/2018-03/2020 | - |
| **Detailed description of the project** | **Type of services provided** |
| Starich Recycling Technology Co., Limited (SRTCL) is a privately owned company registered in Nigeria under the Corporate Affairs Commission with RC No. 1515416, on the 3rd of August, 2018; whose commercial interest is in the manufacturing of polyester fibres from recycled PET bottles; thus the setting up of a PET Recycling Plant which is set towards contributing to the nation’s industrialization and urban/infrastructural development, by the provision of raw materials for companies that are into the manufacturing/production of PET bottles/fabrics and indeed increase the economic gains and social amenities of the project area/location. The cooperate office address of SRTCL is 11km from Imo River bridge, Port Harcourt – Aba Express Way beside International Conventional Centre, Ukwa West L.G.A., Abia State.Recycling is one of the most important actions currently available to reduce these impacts and represents one of the most dynamic areas in the plastics industry today. Recycling provides opportunities to reduce oil usage, carbon dioxide emissions and the quantities of waste requiring disposal. Thus, considering recycling as against other waste-reduction strategies, like reduction in material use through down-gauging or product reuse, the use of alternative biodegradable materials and energy recovery as fuel will enhance sustainability. Therefore, SRTCL is in the recycling industry to contribute their quota in saving the earth and also to compete in the highly competitive recycling industry throughout the Recycling market across the Globe.SRTCL contracted Richflood to conduct an Environmental Impact Assessment (EIA) for the proposed Polyester Fibre Manufacturing Plant Project. The purpose of the EIA is to identify, predict, evaluate, and mitigate the potential environmental impacts of the project, both positive and negative, and to develop an Environmental Management Plan to guide the project's planning, construction, operation, and decommissioning. The EIA followed the National EIA Procedure developed by FMEnv following the EIA Act, which outlines the steps to be taken from project conception to commissioning to ensure that the project is implemented with maximum consideration for the environment. By conducting an EIA, SRTCL aims to shape the project to suit the local environment, reduce adverse impacts, and present predictions and options to decision-makers.The project objectives include producing high-quality polyester fibres for commercial use, generating employment opportunities, contributing to the economy, and meeting the demand for polyester fibres in the market. | * Satisfy Federal, State and Local Governments as well as stakeholders, that proactive environmental actions shall be incorporated in the project design, installation, construction and operation phases of the project;
* Provide all necessary answers to stakeholders, assessors, host community, regulators, financiers, pressure groups and other interested parties;
* Give a detailed description of the proposed Project and relevant Project alternatives;
* Ensure all environmental components (baseline) from the project site are established and documented;
* Identify all environmental aspects of the proposed project that may interact positively or negatively with the environment;
* Make appropriate recommendations to prevent, reduce or control identified potential and associated impacts;
* Develop Environmental and Social Management Plan (ESMP) and procedures for effective and proactive environmental management of the environment throughout the project life cycle; and
* Include a proposed institutional structure to govern the implementation of the ESMP and monitoring programme for the project.
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| **Ref** (maximum 15) | **Project title** | **Technical support for Mining Operations** |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100% | 10National Experts | CCECC  | Client funded | 2017-2023 | - |
| **Detailed description of the project** | **Type of services provided** |
| CCECC stands for China Civil Engineering Construction Corporation, which is a state-owned construction and engineering company based in China. The company was founded in 1979 and has since then been involved in various construction projects both in China and abroad.CCECC has been operating in Nigeria for over 30 years and has been involved in various infrastructure development projects in the country. The company has played a significant role in the construction and renovation of railway lines, roads, bridges, airports, and other key infrastructure projects in Nigeria.CCECC is one of the leading construction companies in Nigeria and has contributed significantly to the development of the country's infrastructure. The company has also provided employment opportunities for thousands of Nigerians and has implemented various corporate social responsibility programs in the communities where it operates.CCECC Nigeria Limited recognize the potential negative impact of its activities on the environment and has put environmental concerns as a major focus of its activities by complying with extant environmental laws and regulations. For instance, in line with statutory requirements for environmental management in Nigeria, which include the National Policy on Environment, the EIA Act CAP E12 LFN 2004, the Federal Ministry of Environment (FMEnv) Sectoral Guidelines for Manufacturing and Infrastructural development Projects, amongst other State, National and International Guideline/Regulations, Standards and Regulatory Frameworks, CCECC Nigeria Limited has commissioned Richflood to conduct Environmental Audit for its granite quarry operations in different states in Nigeria in compliance with Section 8 (k) of the National Environmental Standards and Regulations Enforcement Agency (NESREA) Regulation S. I No 29, that requires existing industries to undertake environmental audit and submit reports of such every three (3) years, and in general to the demand of National Environmental Standards and Regulations Enforcement Agency (NESREA) through the NESREA Act No 25 of 2007 amended in 2019 which requires that all businesses, industries and organizations in Nigeria comply with environmental laws that protect the environment and public health through several extant national sectorial environmental regulations in the NESREA act.In essence, therefore, Richflood conducted the Environmental Audit for CCCECC facilities and it is designed to protect the environment with specific objectives, which include:* Evaluate compliance of CCECC with environmental legislation and corporate policies
* Measure the performance of CCECC against the requirements of an environmental management system standard
* Explore the potential economic, social and environmental benefits that an improved performance of the operations of CCECC can achieve.
 | * Generation of adequate environmental information on CCECC for the potential environmental risks that are likely to be caused by its operations in the immediate environs.
* Achieving resources optimization and improved process performance of CCECC.
* Encouraging CCECC to self-regulate its environmental practices and to increase its responsibilities to stakeholders and society.
* Ensuring compliance by CCECC not only with laws, regulations and standards but also with its policies and the requirements of its approved NESREA Environmental Management Plan.
* Enabling environmental problems and risks associated with the operations of CCECC is to be anticipated.
* Minimizing human exposure to risks from environmental health and safety problems associated with the operations of CCECC.
* Identifying types of pollutants and waste generation, storage, transportation, treatment and disposal as well as the general practice, in CCECC’s facility
* Identifying requirements, regulations and limitations as applicable in the form of Permits and Licenses granted by CCECC
* Identifying Federal and State databases relevant to CCECC such as any nearby abandoned, inactive or uncontrolled hazardous waste sites; Industrial landfills; Municipal landfills; Solid waste sites and drinking water sources
* Investigating the presence of sensitive sites within or in the neighbourhood of CCECC that are capable of impacting the data collected such as the above-ground storage tanks**;** air sources mobile and stationary**;** presence of asbestos**;** boiler usage**;** contaminated sites**;** drinking water quality cross-connections**;** discharges to groundwater**;** sewage and septic system discharges etc.
* Inspection/observation of activities as well as assessment of general housekeeping practices within the facility.
* Environmental assessment within the facility including measurement and data collection/sampling of air quality, noise levels, microclimate parameters etc.
* Environmental auditing of the quarry activities using audit protocol and checklist.
* Verification of compliance/non-compliance of the facility with relevant environmental regulations, standards and guidelines.
* Recording of audit findings and evaluation.
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| **Ref** (maximum 15) | **Project title** | **Technical support for Urban Shelter Infrastructure Limited (USIL)**  |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100% | 19National Experts | Urban Shelter Infrastructure Limited (USIL)  | Client funded | 12/2020-12/2022 | - |
| **Detailed description of the project** | **Type of services provided** |
| Urban Shelter Infrastructure Limited (USIL) is a Nigerian-based company that specializes in real estate development, construction, and infrastructure projects. The company was founded in 1991 and has since established itself as one of the leading real estate development firms in Nigeria. USIL has a wide range of experience in the development of residential, commercial, and industrial properties. The company's portfolio includes the development of affordable housing units, luxury apartments, office buildings, shopping centres, and industrial warehouses.USIL is committed to providing high-quality infrastructure projects that meet the needs of the communities it serves. The company's projects are designed to be environmentally sustainable, socially responsible, and economically viable. USIL has a team of highly skilled professionals with expertise in various areas of real estate development, construction, and project management. The company has also formed partnerships with leading local and international firms to ensure the success of its projects.In partnership with Bwari Area Council, USIL proposed the Construction of the Dei-Dei Ultra-Modern Market, in the Dei-Dei community in Bwari Area Council of FCT, Abuja. Also, in partnership with Gwagwalada Area Council, USIL proposed the construction of the Datsu Salihu Ultra-Modern Market, in the Zuba community in Gwagwalada Area Council of FCT, Abuja. These multipurpose market projects are aimed at providing a market environment that will enhance vibrant economic activities for the growth and development of Abuja and the nation at large. Urban Shelter Infrastructure Limited (USIL) has proposed the construction of an Ultra-Modern Markets project, which will have both positive and negative interactions with the environment. In compliance with the statutory requirements for environmental management in Nigeria, USIL has engaged Richflood to conduct an Environmental Impact Assessment (EIA) study. The study will adhere to the relevant national and international guidelines, regulations, and standards such as the National Environmental Policy, EIA Act CAP E12 LFN 2004, Abuja Environmental Protection Board (AEPB) guidelines, and the Federal Ministry of Environment (FMEnv) Sectoral Guidelines. The scope of the study will cover gathering baseline environmental data, identifying stakeholders and their concerns, assessing potential impacts of the project, recommending practical measures to mitigate negative impacts and enhance positive ones, and developing an effective Environmental Management Plan.Naturally, every developmental project is conceived to offer key benefits to its main host communities and by extension, the project’s area of influence. On completion of the project, the benefits shall include amongst others:* Provide an integrated one-stop-shop for trade services, trade finance and advisory services to the business community;
* Provide a range of iconic business facilities to support the effective provision of key trade services offered;
* Increase intra-African trade, catalyse value addition and contribute towards positive economic transformation
* Serve as a source of income to the government through royalties and tax generation;
* Increase revenue/derivations to the Area Councils, FCT authorities as well as other mandated agencies/commissions;
* Increase socio-economic development and well-being of its population and promote the economic growth of the area;
* Provide direct and indirect employment opportunities.
 | * Description of the proposed activities;
* Description of the potentially affected environment of the proposed project including specific information necessary to identify and assess the environmental and social effects of the proposed activities;
* Description of practical activities, as appropriate;
* Assessment of the likely potential environmental impacts of the proposed activities and the alternatives, including direct or indirect, cumulative, short and long-term effects;
* Identification and description of measures available to mitigate adverse environmental impacts of the proposed activities and an assessment of these measures;
* Indication of gaps in knowledge and uncertainty;
* Indication of whether the environment of any other state or Local Government Area(s) or areas outside Nigeria are likely to be affected by the proposed activity or its alternatives
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| **Ref** (maximum 15) | **Project title** | **Technical support for Manganese Mining and Processing**  |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100% | 15National Experts | Sino Minmetals Company Limited  | Client funded | 01/2021-04/2022 | - |
| **Detailed description of the project** | **Type of services provided** |
| Sino Minmetals Company Limited is a mining Company, known for its small-scale mining operations of Manganese, utilizing processing the massive deposit of the mineral ore found and acquired in the mineralized zone of the project location. The processed (end-product) manganese-aggregates are packaged for commercial-exportation. The Company was registered (incorporated as a ‘Limited’ Company, under the Nigeria Companies and Allied Matters Act, 1990) on the 1st of August, 2014, with the Corporate Affairs Commission (CAC), with RC.1207782 as the registration number. Sino Minmetals Company Limited is an indigenous mining company with a primary focus on Solid Minerals/Mine development; with competent management and a technical crew that comprises local expertise, specializing in mining and exploration techniques. In addition to the in-house team, the company engages the technical services independent consultants in different capacities in the development of the mining prospect. The company also strives to achieve the most efficient use of its energy resources, high safety standards and environmentally acceptable production in compliance with all national and international laws and regulations. This is not limited, however, to regulatory compliance but is a total commitment to environmental protection including the rapid response to any contingencies that may arise as a result of its operations.In compliance with mining obligations and environmental guidelines of regulatory bodies, like the Federal Ministry of Environment (FMEnv) and Federal Ministry of Mines and Steel Development (MMSD) statutory provisions and following the Environmental Impact Assessment (EIA) Act CAP E12 LFN 2004 that are in operation in Nigeria, SMCL contracted Richflood to conduct Environmental Impact Assessment (EIA) of the proposed mine site [(20817SSML) for manganese mining and processing operations] at Daranna in Bagudo Local Government Area of Kebbi State, North-west, Nigeria, to satisfy the environmental- compliance requirements, amongst other purposes. The EIA study was conducted in line with the statutory required obligations of every mineral title holder as stipulated by the Federal Ministry of Mines and Steel Development (MMSD), in pursuance to the provisions of the Minerals and Mining Act (2007) and its Regulations (2011), compliance to the EIA Act CAP E12 LFN 2004, the Federal Ministry of Environment (FMEnv) 1995 Sectoral Guidelines for Mining projects, to ensure sustainable management of the environment throughout the mine lifespan; and aid a more efficient and effective final closure (and rehabilitation) and provide opportunities to improve environmental management strategies throughout the mining cycle.The project aims to establish a sustainable and profitable small-scale manganese mining operation in Daranna, Bagudo Local Government Area of Kebbi State, Nigeria. The objectives include meeting all statutory and regulatory requirements for mining and environmental compliance, conducting an Environmental Impact Assessment (EIA) study, engaging competent management and technical crew, packaging the processed manganese-aggregates for commercial exportation, minimizing negative environmental impacts, contributing to the economic development of the local community, ensuring efficient use of energy resources, and improving environmental management strategies throughout the mining cycle. Additionally, the project aims to aid in the final closure and rehabilitation of the mining site. | * identify existing environmental legal frameworks, laws, and guidelines regulating the proposed project and decide on the appropriate operational/functional environmental standards and targets for the project;
* establish the current/present existing baseline (bio-physical, socio-economic and health) conditions of the project environment and therefore provide the basis for measuring future changes and impacts;
* identify potential environmental and socio-economic impacts and hazards that may result from any of the proposed project activities;
* assure effective consultations with the host and adjoining communities of the proposed project and ensure their concerns are properly addressed and their views integrated into the project decision-making processes;
* recommend cost-effective and practical preventive, reduction and control strategies for the significant potential or associated adverse impacts of proposed projects.
* develop a cost-effective Environmental Management Plan (EMP) for ensuring that impact mitigation strategies are implemented;
* provide all necessary data, information and objective evidence required for developing an Environmental Impact Statement (EIS) for the proposed project; and
* provide a tool for managing and addressing third-party claims in relation to the proposed project activities.
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| **Ref** (maximum 15) | **Project title** | **Technical support for the Construction and Operation of a Petrol Retail Station** |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100% | 12National Experts | NNPC Retail Limited | Client funded | 05/2021-11/2021 | - |
| **Detailed description of the project** | **Type of services provided** |
| NNPC Retail Limited is a fully owned subsidiary of the Nigerian National Petroleum Corporation (NNPC) that operates in the Downstream Sector of the Nigerian Oil and Gas Industry. It is the nation’s leading petroleum products retailing company, working assiduously to ensure a safe and seamless supply of unadulterated petroleum products to Nigerians through our over 500 service outlets spread across the country. As a customer-centric company, NNPC Retail Limited ensures the safe and accurate dispensing of its products and service deliveries. Its products and services include: Premium Motor Spirit (Petrol), Automotive Gas Oil (Diesel), Dual-Purpose Kerosene, Aviation Turbine Kerosene, Liquefied Petroleum Gas (cooking gas) and Fuel Oil.NNPC Retail Limited proposed the construction and operation of a Petrol Retail Station at the University of Nigeria Enugu Campus, behind the School Bus Stop in Enugu South Local Government Area of Enugu State. The rapidly growing population in the proposed project site/ area has resulted in more vehicles plying along the route and consequently the demand for more fuel outlets. Therefore, the project Proponent realized this as an opportunity to establish a fuel service station in this area, hence, the project aims at operating a Petrol Retail Station (comprising of PMS – 5 tanks, AGO – 1 tank and DPK - 1 tank) of 45,000 litres eachRichflood conducted the Environmental Impact Assessment (EIA) for the proposed construction and operation of a Petrol Retail Station. The EIA study was undertaken in line with statutory requirements for environmental management in Nigeria, which include the EIA Act CAP E12 LFN 2004, Department of Petroleum Resources (DPR) now Nigerian Midstream and Downstream Petroleum Regulatory Authority (NMDPRA), amongst other States, National and International Guideline Regulations, Standards and Administrative Frameworks.The most significant benefit of the proposed petrol station project is to stimulate the economic and social development of the country by meeting the high demand for petroleum products in the country and also to meet the proponent’s economic desires. The objective of the proposed NNPC Retail Petrol Station is to provide safe and adequate storage facilities for efficient distribution and supply/sale of petroleum products. Additionally, it aims to generate employment opportunities, contribute towards wealth creation, provide revenue for the government through the payment of taxes, improve the standard of living of Nigerians, and enhance the socio-economic development of Nigeria. | * Establish environmental baseline conditions, evaluate impacts and recommend mitigation measures concerning the facility activities/operation in the area.
* Identify the environmental (and social) impact associated with the proposed field development project and the characterized environment.
* Evaluate the magnitude and significance of the proposed impacts and the effects, and assess control options.
* Identify existing and expected environmental regulations that will be affected by the development and advice on standards and targets.
* Identify any environmental issues and concerns which may, in the future, affect the proposed project development.
* Ensure proper consultation with communities bordering the proposed project site, in line with regulatory requirements.
* Develop a comprehensive Environmental Management Plan (EMP) that served as an environmental guide during the various stages of the project execution.
* Implement control techniques to eliminate or lessen the severity of the effects and to manage the impacts.
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| **Ref** (maximum 15) | **Project title** | **Technical support for the Mining and Processing of Gold (Au), Copper (Cu), Silver (Ag) and Lead (Pb)** |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100% | 17National Experts | Ohil Global Mining Company Limited  | Client funded | 06/2017-07/2019 | - |
| **Detailed description of the project** | **Type of services provided** |
| The mining sector in Nigeria has faced various challenges over the years, including inadequate infrastructure, poor funding, and security concerns. However, the government of Nigeria has taken steps to address these issues and attract more investment to the sector, which has led to the emergence of companies like Ohil Global Mining Company Limited. Ohil Global Mining Company Limited is a mining company based in Nigeria. It is involved in the exploration and mining of solid minerals such as barite, lead, zinc, and copper. The company has several mining sites located in different parts of Nigeria, including Benue State, Nasarawa State, Plateau State, Taraba State, Zamfara State etc. Its operations are focused on developing Nigeria's solid mineral resources and contributing to the growth of the country's mining sector.Ohil Global Mining Company Limited has a reputation for adhering to best practices in the mining industry, including ensuring environmental sustainability and compliance with relevant laws and regulations. The company is also committed to the development of the local communities in which it operates, through the provision of employment opportunities and the implementation of social responsibility programs.Ohil Global Mining Company Limited (OGMCL) is involved in the mining and processing of Gold (Au), Copper (Cu), Silver (Ag) and Lead (Pb); The project is located within the exploration area of 1858EL, covering a total of 529 Cadastral Units (CUs), an equivalent of 105.8km2, which contains three (3) mining leases of 17467ML (184CUs), 17471ML (184CUs) and 17470ML (161CUs) for the exploration and mining of Au, Cu, Ag and Pb within the mineralized zone of Bagega, Sunke, Mai Galma and Tungarkudeku Communities in Anka Local Government Area of Zamfara State. Richflood was tasked with the assessment or evaluation of the potential impacts that will be made on the environment (land, water and air) by the proposed projects, and proffering the best alternative options and effective/implementable mitigation measures to cushion the identified project impacts, resulting from proposed aspects/activities of the project. This is, to provide an Environmental Management Plan to guide the project's planning, construction, operation and decommissioning. The environmental management activities at each phase of the project was be guided by environmental standards, including those posed by legislation and those established by self-regulating industrial codes of practice, industry standards and company policy. The project aims to add value to Nigeria's solid mineral reserve, increase production capacity, and enhance the country's overall export earnings. It also aims to provide direct and indirect employment opportunities, increase derivation funds to local and state governments, and aid in poverty alleviation and socio-economic development. The project aims to improve the socio-economic and urbanization of the project area and host community and ensure gainful employment of Nigerians. Additionally, it aims to increase the possibility of setting up secondary industries that will utilize the refined minerals and encourage urban development in the project area, as well as promote direct foreign investment. | * identify existing environmental regulations affecting the proposed project and decide on the appropriate operational/functional environmental standards and targets for the project;
* establish the present existing baseline (bio-physical, socio-economic and health) conditions of the project environment and therefore provide a basis for measuring future changes and impacts;
* identify potential environmental and socio-economic impacts and hazards that may result from any of the proposed project activities;
* assure effective consultations with the host and adjoining communities of the proposed project and ensure their concerns are properly addressed and their views integrated into the project decision-making processes;
* recommend cost-effective and practical preventive, reduction and control strategies for the significant potential or associated adverse impacts of proposed projects.
* develop a cost-effective Environmental Management Plan (EMP) for ensuring that impact mitigation strategies are implemented;
* provide all necessary data, information and objective evidence required for developing an Environmental Impact Statement (EIS) for the proposed project; and
* provide a tool for managing and addressing third-party claims in relation to the proposed project activities.
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| **Ref** (maximum 15) | **Project title** | **Technical support for Homaset Limited** |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100% | 20National Experts | Homaset Limited | Client funded | 06/2022-10/2022 | - |
| **Detailed description of the project** | **Type of services provided** |
| Homaset Limited is a Nigerian-based company. The company acquired a Quarry Lease (36206 QLS), which was granted on January 17th, 2022. The total land area of the Quarry Lease is 1.2 km2 covering 6 Cadastral Units (CU). The project area is located at Tugbechi farm settlement in Waru Community, Abuja Municipal Area Council (AMAC), FCT, Abuja. Similarly, the company acquired Quarry Lease (36824 QLS), which was granted on March 3rd, 2022. The total land area of the Quarry Lease is 0.8Km2 covering 4 Cadastral Units (CU). The project area is located at Tunga Samu community in Zuba, Gwagwalada Area Council, FCT, Abuja.In line therefore with the statutory requirements for environmental management in Nigeria, Homaset Ltd. appointed Richflood to provide technical assistance in conducting Environmental Impact Assessment (EIA) for the proposed projects. The EIA study was undertaken by Richflood in line with statutory requirements for environmental management in Nigeria, which include EIA Act CAP E12 LFN 2004, Abuja Environmental Protection Board (AEPB) guidelines, National Environmental Policy, Federal Ministry of Environment (FMEnv) Sectoral Guidelines among other National and International Guideline/Regulations, Standards and Regulatory Frameworks.The scope of the study includes gathering extensive baseline environmental data, identifying key stakeholders and stakeholder issues, assessing the potential impacts of the proposed project; proffering practical and cost-effective measures to mitigate identified negative impacts and enhance positive impacts, and developing of workable Environmental Management Plan. The proposed project will involve the extraction of rocks. The project includes the planning, designing, and construction of infrastructure to extract, transport, and process the materials. The scope of the project also includes site restoration, environmental management, and community engagement. The goal is to efficiently and safely extract the materials while minimizing the impact on the surrounding environment and ensuring compliance with regulatory requirements.The project will contribute to the development of the mining sector of the economy. The project will also provide many business and employment opportunities through the direct and indirect involvement of contractors, consultants, suppliers, and other professionals at various phases of the project. The project will alert minds on potential yet-unmanned alternative economic money-spinners that can be replicated in other states of Nigeria, as is the case in several other economies of the world today. | * Project screening, reconnaissance survey and inception visit;
* Preparation of Terms of Reference (ToR) in accordance with regulatory guidelines;
* Review of national and international environmental regulations guiding the project;
* Consultations with regulators and other relevant stakeholders concerned with the proposed project;
* Extensive and comprehensive literature review specific to the project site to obtain background information on the environmental characteristics of the area;
* Field data gathering exercise and survey of the area to establish environmental baseline information specific to the study area;
* Impact identification, prediction, interpretation and evaluation from project activities;
* Development of effective mitigation/ ameliorative measures and monitoring programmes for significant impacts;
* Development of a comprehensive Environmental Management Plan covering the project life cycle; and
* EIA reporting follows the Abuja Environmental Protection Board (AEPB) guidelines and procedures.
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| **Ref** (maximum 15) | **Project title** | **Technical support for BOGI Coal Mine** |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100% | 16National Experts | BOGI Coal Mine | Client funded | 03/2017 – 01/2019 | - |
| **Detailed description of the project** | **Type of services provided** |
| Bogi Coal Mines Limited is a subsidiary company of Skipper Infra JLT (SkipperSeil Group). Skipper is an integrated energy firm with focus on Electrical Innovation, Design, Manufacturing and Engineering. Skipper has been serving the power sector in India and across the globe since 1986 and has its global footprints through its subsidiaries in India, Nigeria (Bogi Coal Mines Limited etc), Ghana and Middle East, where Skipper-make products are manufactured and/or projects of sub-stations, transmission lines and power generation plants are undertaken.The Vision of Skipper is “To be an International Power and Infrastructure enterprise most admired for its People, Performance and Partnerships”. It is against this backdrop that the Bogi Coal Mines project is conceived. In addition to contributing to the diversification of the country’s economy, and support the country’s efforts to enhance people’s access to affordable and reliable electricity supply, the purpose of the proposed Bogi Coal mine in Ibobo Community is to provide a source of fuel to the proposed Banji Power Generation IPP in Makurdi, Benue State.The estimated quantity of coal to be mined per day is 3200 ton/day assuming 312 days of excavation; thus an annual production of 1 Million Tons of Coal deposit. The mined coal will be handled through coal transfer points with the provision of suppression facility. Wind barriers would be provided around the stockpile to prevent fugitive dust due to wind. Bunker ventilation would also be provided in coal bunkers to evacuate dust and hazardous gases from the coal bunkers. The dust collector outlet emission would be restricted to 50mg/Nm3.Richflood, as the environmental consultant, plays a crucial role in carrying out environmental impact assessments (EIA) for the BOGI coal mine. This includes site visits and data gathering from various sources, including government agencies, academic research, and local communities. The analysis and processing of the data gathered inform the comprehensive understanding of the potential impacts of the BOGI coal mine and the development of strategies to mitigate or minimize these impacts, as well as the development of management plans. Overall, Richflood's role as an environmental consultant for the BOGI coal mine is essential in ensuring that the mine operates in an environmentally responsible manner.  | * Environmental Impact Assessment (EIA): Conduct a comprehensive EIA of the mine to assess the potential environmental impacts of mining operations and recommend mitigation measures to reduce these impacts.
* Permitting and Compliance: Assisting with the environmental permitting process required for mining operations and ensuring compliance with environmental regulations.
* Reclamation and Restoration: Develop the environmental protection and rehabilitation plan (EPRP) to restore the mined land to its natural state once mining operations are complete.
* Environmental Management System (EMS) Development: Developing an EMS to manage environmental risks and ensure compliance with regulations.
* Waste Management: Developing waste management plans to minimize the impact of mining operations on the environment.
* Air Quality Management: Developing strategies to manage dust and other air pollutants generated by mining operations.
* Noise Assessment and Management: Assessing the impact of mining operations on noise levels and developing management plans to minimize noise pollution.
* Community Engagement and Consultation: Engaging with local communities to ensure that their concerns are addressed and that they are involved in the decision-making process.
* Emergency Planning and Preparedness: Developing emergency response plans to address potential environmental incidents, such as spills or leaks.
* Training and Education: Providing training and education to mining staff on environmental issues and regulations.
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| **Ref** (maximum 15) | **Project title** | **Technical support for Lead/Zinc Mine Operation**  |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100% | 22National Experts | Multiverse Mining and Exploration Plc | Client funded | 10/2019-08/2021 | - |
| **Detailed description of the project** | **Type of services provided** |
| Multiverse Mining and Exploration Plc is a Nigerian mining company that specializes in the exploration, development, and mining of solid minerals. The company was incorporated in 2002 and is based in Abuja, Nigeria. The company operates several mining sites in Nigeria and is committed to responsible mining practices that prioritize safety, environmental sustainability, and social responsibility. Multiverse Mining and Exploration Plc also collaborate with local communities and stakeholders to ensure that mining operations benefit the local economy and promote the development of the mining industry in Nigeria.Multiverse Mining and Exploration Plc has mining licenses covering various mineral resources including gold, lead, zinc, copper, and iron ore. The company also engages in the exploration and development of other minerals such as tantalite, barite, and gemstones. The company in partnership with Anhui Synee Mining Co. Ltd, a China-based company through a Memorandum of Association, obtained a Mining License (27260 ML) which covers 10 Cadastral Units in an area of 2Km2 at Abuni Community, Awe Local Government Area of Nasarawa State. Richflood provided technical support in the aspect of Post Impact Assessment (PIA) to identify and evaluate existing and associated impacts that emanate or could arise from all operational activities (routine and non-routine) related to the existing Multiverse Mining and Exploration Plc lead/zinc mine operation as well as to propose appropriate mitigation measures for the avoidance of significant reduction of those impacts. This is to ensure that the facility operations and related activities are carried out sustainably. In addition, the PIA helps to ensure that the environmental and social issues, as well as risks associated with the operations of the lead/zinc mine that could lead to liability, are identified, and appropriately mitigated to acceptable levels including monitoring. | * Determine the current environmental characteristics of the study area covering biophysical, social and health components.
* Determine the extent, magnitude and concentration of pollutants as well as wastes emanating from the facility and their management approach.
* Determine and evaluate the impacts of the facility operations on the environment especially on the sensitive receptors present within the facility’s area of influence.
* Develop cost-effective mitigation measures and Environmental Management Plan (EMP) for the facility.
* Provide the basis for co-operation, consultation and compliance with regulatory authorities, stakeholders as well as the public.
* Obtain the necessary permit and approval from the FMEnv.
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| **Ref** (maximum 15) | **Project title** | **Technical support for Gold Mining Operations**  |
| **Name of legal entity** | **Country** | **Overall project value (USD)** | **Proportion carried out by legal entity (%)** | **No of staff provided** | **Name of client** | **Origin of funding** | **Dates (start/end)** | **Name of partners if any** |
| RichfloodInternational | Nigeria |  | 100% | 10National Experts | Gladwyn Investment Company Ltd | Client funded | 04/2021-09/2021 | - |
| **Detailed description of the project** | **Type of services provided** |
| Gladwyn Investment Company Ltd. is a reputable company, known for high-standard geophysical, geochemical, geographical information systems and other mineral-related activities such as Mining Operations in Nigeria. In a bid to provide and meet up the demand for Gold, the company has engaged in mining and processing of needed Gold (from a mining facility) to produce the required Gold as well as to supplement the ever-increasing need for various industries.As a pre-requisite to expand its production activities (commercial productivity) and increase the supply of Gold required, the Company has acquired a Mining Site, with a land area of 0.8km2 which is equivalent to (4) Cadastral Units (CU), in Atakumosa West Local Government Area, Osun State.In accordance therefore with the Nigerian Minerals and Mining Act, 2007, and Section 91, of the Nigeria Mining and Mineral Regulation 2011, among other obligations as complied with, Richflood was engaged by Gladwyn Investment Company Ltd to carry out an Environmental Audit which entails assessing the organization’s compliance with its policies, procedures and regulatory requirements with the ultimate aim of facilitating management control of environmental practices (including environmental protection and prevention of pollution) in balance with business and socio-economic needs. Also, Richflood facilitated the permitting procedures for Gladwyn Investment Company Ltd in accordance with the National Environment Standards and Regulations Enforcement Agency (NESREA) requirements. | * Provide a mechanism to evaluate progress in environmental management;
* Provide a focus for improvement;
* Provide a formal approach to continual improvement of the environmental performance of the facility;
* Provide information on compliance with environmental legislation, therefore highlighting potential areas for improvement and reducing the risk of accusation for negligence;
* Provide independent opinion of the performance of an industrial facility and identify areas requiring attention from either compliance or good management practice perspectives;
* Demonstrate accountability to third parties such as shareholders, etc;
* Assess which particular areas of business impact the environment and to what extent;
* Check the level of compliance with environmental legislation; and
* Develop an Environmental Management System (EMS).
* assess the nature and extent of environmental concerns of (operators’) existing facilities
* provide data for the extent of pollution in the area
* quantify the causes and potential remedies of problems at any facility
* identify those activities which harm the environment
* examine the causes and potential mitigation measures of identified environmental impacts/concerns at the facility
* record compliance with legal requirements/environmental regulatory legislation, in carrying out Environmental Compliance Monitoring
* measure achievements against the corporate environmental policy objectives
* proffer general or specific recommendations after evaluation of the company’s environmental policy, management commitment to environmental culture, record keeping, environmental baseline studies, environmental incidents/claims, environmental cost-benefit analysis, waste management, production process, emission/impact monitoring and mitigation measures.
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