

STARK ENERGY LIMITED EXECUTED PROJECT SCOPES

Assignment # 1

Assignment name: Plant Assessment, HAZOP study and Layers of Protection Analysis (LOPA) for Tema Oil Refinery's Residual Fluid Catalytic Cracking Unit (RFCCU)

Country: Ghana

Start date: July 2026

Completion date: September 2026

Name of Client: Tema Oil Refinery (TOR) Ghana

Narrative description of Assignment: Plant Assessment, HAZOP study and LOPA study for the Residual Fluid Catalytic Cracking Unit (RFCCU), covering process hazards, operability issues, safeguards and risk reduction actions.

Description of actual services provided by your staff within the assignment:

- Conducted pre-study plant assessment and review of available RFCCU engineering and process-safety documentation, including P&IDs, Management of Change (MOC) information, Cause & Effect documentation, operating information and incident history made available for the study.
- Defined and confirmed HAZOP nodes using plant grid/drawing references and process boundaries.
- Facilitated a multidisciplinary, node-by-node HAZOP workshop covering normal, start-up, shutdown and abnormal operating conditions.
- Identified credible process deviations, initiating causes and potential consequences and evaluated the adequacy of existing safeguards.
- Conducted Layers of Protection Analysis (LOPA) for selected scenarios to assess independent protection layers and the need for additional risk reduction measures.
- Developed practical recommendations, study actions and action-tracking records for identified gaps and risk reduction measures.
- Documented the HAZOP study and LOPA study outputs for TOR's review and follow-up.

Assignment # 2

Assignment name: Plant Assessment and Revalidation of Tema Oil Refinery's 2008 CDU HazOp Studies and Layers of Protection Analysis (LOPA)

Country: Ghana

Start date: October 2025

Completion date: October 2025

Name of Client: Tema Oil Refinery (TOR) Ghana

Narrative description of Assignment: CDU Assessment, HazOp study and LOPA

Description of actual services provided by your staff within the assignment:

- Plant Assessment
- Identifying potential process deviations and their consequences.
- Evaluating the adequacy of existing safeguards.
- Recommending practical and sustainable risk reduction measures aligned with the best international practices and regulatory requirements.
- Layers of Protection Analysis

Assignment # 3

Assignment name: FPSO Special Survey 7 (SS7) & Diverless UWILD

Country: Ghana

Start date: 2023

Completion date: 2023

Name of Client: Tullow Ghana Limited – Jubilee FPSO

Narrative description of Assignment: Special Survey, LIMPET Sea Chest Isolations & Remotely Operated Vehicle (ROV) Inspection on Tullow’s Jubilee FPSO, Ghana.

Description of actual services provided by your staff within the assignment:

- Installation of the LIMPET Sea Chest Isolations to enable maintenance work to be carried out safely on the client-specified Sea Chests.
- General Visual and Close Visual Inspections of the Hull and Its appendages using an ROV.
- Inspection and Angle Measurements of Mooring Chains.
- Isolation of underwater penetrations (Draft Gauge Sea Water Inlet) for maintenance work to be carried out.
- Isolation of underwater discharge lines (Boiler Blowdown) for maintenance work to be carried out.
- Impressed Current Cathodic Protection (ICCP) Surveys.
- Diverless UWILD

Assignment # 4

Assignment name: Underwater Inspection in Lieu of Dry-Docking (UWILD)

Country: Ghana

Start date: February 2026

Completion date: March 2026

Name of Client: Tullow Ghana Limited – Jubilee FPSO

Narrative description of Assignment: Diverless inspection and integrity programme for hull and appendages using a remotely operated vehicle (ROV).

Description of actual services provided by your staff within the assignment:

- General Visual Inspection (GVI) and Close Visual Inspection (CVI) of the Jubilee FPSO (MV.21) hull and its appendages using an ROV.
- General Visual Inspection (GVI) and Close Visual Inspection (CVI) of the TEN FPSO (MV.25) hull and its appendages using an ROV.

Assignment # 5

Assignment name: Underwater Inspection in Lieu of Dry-Docking (UWILD)

Country: Ghana

Start date: February 2026

Completion date: March 2026

Name of Client: MODEC – TEN FPSO

Narrative description of Assignment: Diverless inspection and integrity programme for hull and appendages using a remotely operated vehicle (ROV).

Description of actual services provided by your staff within the assignment:

- General Visual Inspection (GVI) and Close Visual Inspection (CVI) of the Jubilee FPSO (MV.21) hull and its appendages using an ROV.
- General Visual Inspection (GVI) and Close Visual Inspection (CVI) of the TEN FPSO (MV.25) hull and its appendages using an ROV.

Assignment # 6

Assignment name: Underwater Inspection in Lieu of Dry-Docking (UWILD)

Country: Ghana

Start date: February 2026

Completion date: March 2026

Name of Client: Tullow Ghana Limited (CALM Buoy)

Narrative description of Assignment: Diverless inspection and integrity programme for CALM Buoy Mooring Chains using a remotely operated vehicle (ROV).

Description of actual services provided by your staff within the assignment:

- General Visual Inspection (GVI) and Close Visual Inspection (CVI) of the Mooring Chains.
- Chain measurements of mooring chains.

Assignment # 7

Assignment name: Provision of Hull and Marine General and Specialist Composite Repair Services

Country: Ghana

Start date: 2026

Completion date: Ongoing

Name of Client: Tullow Ghana Limited

Narrative description of Assignment: Sandwich Plate System (SPS) overlay reinstatement of the upper deck iwo Cargo Oil Tank (COT) 1P, 1C and 1S - SPS Engineering, Design and Installation.

Description of actual services provided by your staff within the assignment:

- Vessel Survey, Engineering Design and Class Submission for Sandwich Plate System (SPS) installation on Tullow's Jubilee FPSO

Assignment # 8

Assignment name: Technical Advisory Services for Crude Oil Refinery Establishment

Country: Ghana

Start date: 2022

Completion date: 2024

Name of Client: National Petroleum Authority

Narrative description of Assignment: Government Consultants & Site Representative – Ing. Dr. Papa Benin and Ing. Easmon Asamoah on behalf of the National Petroleum Authority as Government consultants and site representatives for establishment of the Sentuo Oil Refinery according to approved codes & construction standards to meet operational and regulatory requirements.

Description of actual services provided by your staff within the assignment:

- Provided expert consultancy on behalf of the National Petroleum Authority (NPA) to ensure adherence to construction standards during the development of the Sentuo Oil Refinery.
- Monitored construction activities closely to ensure full compliance with the terms and conditions outlined in the Construction Permit.
- Oversaw adherence to approved engineering codes, standards, and specifications for materials and equipment, ensuring the development of a safe, robust, and sustainable refinery infrastructure.
- Worked collaboratively with the project team to ensure the mechanical completion and commissioning of the refinery, guaranteeing the successful and smooth start-up of the facility.
- Conducted HSEQ audits and ensured compliance with regulatory and PSM standards.

Assignment # 9

Assignment name: Technical Advisory Services

Country: Ghana

Start date: 2019

Completion date: Ongoing

Name of Client: O&G Ada Oil Refinery

Narrative description of Assignment: Technical Services Consultants & Owner's Engineer to O&G Engineering Ltd for 300,000 BPSD Oil Refinery at Ada.

Description of actual services provided by our staff within the assignment:

- Prepared documentation for successful acquisition of the Petroleum license for 300,000 BPSD Ada Oil Refinery.
- Conducted feasibility studies.
- Estimate of Refinery EPC cost.
- Undertook the FEED in conjunction with our foreign partners.
- Prepared all the engineering drawings.
- Prepared and submitted documentation for acquisition of construction permit.
- Interfaced with the Regulator, National Petroleum Authority (NPA), EPA & GPHA for issuance of permit.
- Conducted HSEQ audits and ensured compliance with regulatory and PSM standards

Assignment # 10

Assignment name: Technical Advisory Services

Country: Ghana

Start date: 2021

Completion date: Ongoing

Name of Client: Takoradi Oil Terminal (Ibistek)

Narrative description of Assignment: Technical Services Consultants & Owner's Engineer for construction of IBISTEK-PSB's 50,000MT AGO, 30,000MT PMS & 10,000MT LPG Tank Farm and Automated Loading Gantry Oil Terminal at Takoradi

Description of actual services provided by staff within the assignment:

- Managed the entire tendering process and evaluation of submitted bids.
- Prepared and issued a Request for Proposal (RFP) for the Engineering, Procurement, Construction, and Installation (EPCI) of the Tank farm.
- Oversaw the Geo-technical survey on the proposed site.
- Oversaw the Front-End Engineering Design and Detailed Engineering.
- Estimation of EPC cost.
- Evaluated the technical and commercial proposals of EPCI contractors.
- Submission of appropriate documentation for building permit acquisition.
- Submission of appropriate documentation to NPA for the construction of 50,000MT AGO, 30,000MT PMS & 10,000MT LPG Tank Farm and automated loading Gantry.
- Putting in procedures and supervision of construction of the Tank Farm and Loading Gantry
- Interface with the Regulator, National Petroleum Authority (NPA), EPA and other Regulatory agencies.
- Preparation of documentation for acquisition of Building and EPA Permits
- Stakeholder management
- Conducted HSEQ audits and ensured compliance with regulatory and PSM standards.

Assignment # 11

Assignment name: Technical Advisory Services

Country: Ghana

Start date: 2016

Completion date: Ongoing

Name of Client: Akwaaba Oil Refinery

Narrative description of Assignment: Technical Services Consultants & Owner's Engineer for Construction, Test run & Operations of 6,000 BPSD Akwaaba Oil Refinery.

Description of actual services provided by your staff within the assignment:

- Prepared the appropriate documentation for NPA that led to the issuance of Refinery Permit to Operate certificate.
- Supervised the construction activities.
- Audit their operations and continuously optimize them.
- Identify risks and hazards and provide engineering solutions.
- Prepared Standard Operating Procedures.
- Implementation of Management of Change (MoC).
- Preparation of yearly and quarterly environmental reports for EPA.
- Prepared Process Flow Diagrams (PFD) and Piping and Instrumentation Diagrams (P&ID) for the Oil Refinery and continuously updating them.
- Interface with the Regulators, NPA, EPA & GPHA
- Conducted HSEQ audits and ensured compliance with regulatory and PSM standards.

Assignment # 12

Assignment name: Technical Advisory Services

Country: Ghana

Start date: 2018

Completion date: Ongoing

Name of Client: Rikpat Lube Manufacturing Limited

Narrative description of Assignment: Technical Services Consultants & Owner's Engineer for Construction, Test run & Operations of RIKPAT's 20 Ton/Hr Oil Blending Facility.

Description of actual services provided by your staff within the assignment:

- Prepared the appropriate documentation for NPA that led to the acquisition of a license for construction.
- Supervision of construction of the Lude Oil blending facility
- Provision of HSE services.
- Development of Standard Operating Procedures
- Valuation of Lube blending facility assets.
- Prepared Process Flow Diagrams (PFD) and Piping and Instrumentation Diagrams (P&ID) for the Blending facility and continuously updated them.
- Putting in procedures and supervising the construction of the lube oil blending facility.
- Interface with the Regulator, National Petroleum Authority (NPA), EPA & GPHA
- Provision of documentation for acquisition of Permit to Operate Certificate
- HAZOP and HAZID Studies
- Conducted HSEQ audits and ensured compliance with regulatory and PSM standards.

Assignment # 13

Assignment name: Installation & Commissioning

Country: Ghana

Start date: 2021

Completion date: 2022

Name of Client: Quantum LPG Terminal

Narrative description of Assignment: Installation and Commissioning of Tank Gauging and Gas Detection Systems at Quantum LPG Terminal, Tema

Description of actual services provided by your staff within the assignment:

- Mounting of sets of tank instruments for 3 No. LPG tanks.
- Loop checking to confirm existing wiring on all terminations.
- Termination of instruments in the field and MCC room (RTU).
- Final loop checks and instruments power up.
- Functional checks and handing over.
- Submission of installation report.

Assignment # 14

Assignment name: Installation & Commissioning

Country: Ghana

Start date: 2023

Completion date: 2024

Name of Client: Quantum Newgas Cylinder Bottling Plant

Narrative description of Assignment: Provision of Electrical, Instrumentation, Fire and Gas Systems and SCADA Installation & Commissioning works at the Newgas Cylinder Bottling Plant, a subsidiary of the Quantum Group – Tema.

Description of actual services provided by your staff within the assignment:

- Installation of Low Voltage (LV) switchboard with Automatic Transfer Switch (ATS).
- Connection of power cables and control cables from LV Switchboard to field equipment.
- Installation of pressure gauges, flow switch and emergency shutdown valves.
- Installation of instrument junction box and support.
- Installation of field Fire and Gas (F&G) devices including Flame detectors, Gas detectors, Heat detectors smoke detectors, manual call point, beam and sounder.
- Installation of Fire and Gas panel.
- Connection of electric cables from F&G terminal server to field F&G devices including termination.
- System wiring between F&G terminal server and F&G panel.
- Installation of SCADA & KC SCADA panel.
- Wiring and connection of cables between SCADA & KC SCADA panel.
- System wiring between Remote Terminal Unit (RTU) terminal server and RTU.
- Connection of cables between RTU and F&G panel.
- Calibration of field instruments.
- Test and inspection as per Electrical continuity check, loop check and others

Assignment # 15

Assignment name: Technical Advisory Services

Country: Ghana

Start date: 2023

Completion date: Ongoing

Name of Client: A & B Success Africa Waste Lube Oil Recycling Plant

Narrative description of Assignment: Operational Audits Provision of P&IDs for A&B Success Africa Waste Lube Oil Recycling Plant

Description of actual services provided by your staff within the assignment:

- Prepared Piping and Instrumentation Diagrams (P&ID) for the Waste Lube Oil Recycling Plant and continuously updating them.
- Audit their operations.

Assignment # 16	
Assignment name: Technical Advisory Services	
Country: Ghana	Start date: 2023 Completion date: Ongoing
Name of Client: Sahara LPG Group	
Narrative description of Assignment: Technical Services Consultancy - Sahara Group's 6,000mt LPG Storage Facility.	
Description of actual services provided by your staff within the assignment: • Technical Services Consultants to Sahara Group's 6,000 MT LPG Storage Facility and Associated Loading Gantry Project. • Review of Conceptual Design, Basic Engineering Design, Front End Engineering Design and Detailed Engineering Design. • Technical Advisory Services for site implementation of Detailed Engineering Design • Conducted HSEQ audits and ensured compliance with regulatory and PSM standards.	

Assignment # 17	
Assignment name: Technical Advisory Services	
Country: Ghana	Start date: 2016 Completion date: 2019
Name of Client: Greenwich Industries Limited Waste Lube Oil Recycling Plant	
Narrative description of Assignment: Construction and operation of Greenwich Industries Limited Waste Lube Oil Recycling Plant, Ghana.	
Description of actual services provided by your staff within the assignment: • Provision of Consultancy for HSE, PFDs, P&IDs, and SOP development and ensured implementation. • Provision of all the required documentation to NPA that led to the issuance of Plant Permit to operate certificate.	

Assignment # 18	
Assignment name: Technical Advisory Services	
Country: Ghana	Start date: 2020 Completion date: Ongoing
Name of Client: Petra Global	
Narrative description of Assignment: MW Solar Power Plant construction in Ghana	
Description of actual services provided by your staff within the assignment: • Provision of all technical, administrative, and operational support to ensure that the renewable project is developed. • Provision of technical and operational support before, during, and after the construction of the project. • Interface with Bui Power for acquisition of Bui Power land • Conducted HSEQ audits and ensured compliance with regulatory and PSM standards.	

Assignment # 19	
Assignment name: Technical Advisory Services	
Country: Ghana	Start date: 2024 Completion date: 2024
Name of Client: Metka	
Narrative description of Assignment: Metka's Combined Cycle Power Plant, Ghana	
Description of actual services provided by your staff within the assignment: Stark Energy Limited undertook HAZID Constructability Risk Assessment for the 3.5 Km Natural Gas Pipeline Construction from the VRA Natural Gas Substation to Metka's Power Plant in Tema.	

Assignment # 20	
Assignment name: Technical Advisory Services	
Country: Ghana	Start date: 2025 Completion date: Ongoing
Name of Client: Akwaaba Oil Refinery	
Narrative description of Assignment: Technical Service Consultancy – Expansion of Refinery to include Lube Oil processing Plant	
Description of actual services provided by your staff within the assignment: - Conceptual design and FEED - Produced entire documentation for acquisition of construction permit - Stark Energy Limited undertook HAZOP for construction of Lube Oil Blending Plant - Conducted HSEQ audits and ensured compliance with regulatory and PSM standards.	

Assignment # 21	
Assignment name: Technical Advisory Services	
Country: Ghana	Start date: 2024 Completion date: 2024
Name of Client: Tema Oil Refinery, National Petroleum Authority, Puma/Blue Ocean, Sahara Energy, TotalEnergies, GOIL, Sentuo Oil Refinery, Woodfields, Shell/Vivo	
Narrative description of Assignment: Training on Aviation JIG EI standards	
Description of actual services provided by your staff within the assignment: Provision of all technical and operational training in Aviation JIG/EI standards.	

Assignment # 22

Assignment name: Servicing and Overhauling of LPGC compressors on TEN FPSO

Country: Ghana

Start date: 2025

Completion date: Ongoing

Name of Client: MODEC Ghana

Narrative description of Assignment: Servicing and overhauling of LPGC compressors

Description of actual services provided by your staff within the assignment:

- Working with OEM, Hoerbiger to service and overhaul LPGC compressors on TEN FPSO

Assignment # 23

Assignment name: Training on Crude Oil Products Technology

Country: Ghana

Start date: 23rd September 2025

Completion date: 24th September 2025

Name of Client: Chamber of Bulk Oil Distributors (CBOD), TFC, Quantum, Matrix, TTF, ZEN Petroleum, NewGas, SAGE Distribution Trading.

Narrative description of Assignment: Training of Bulk Oil Distributors on Crude Oil Products Technology, partnered with Canadian Petroleum Training Institute (CPTI)

Description of actual services provided by your staff within the assignment:

- Leadership and Decision-Making in Terminal Operations.
- Environmental, Social, and Governance (ESG) in Terminal Operations.
- Refinery Economics and Product Trading: Implications for Terminal Supply.
- Refined Products Value Chain: From Refinery Distribution.
- Regulatory Landscape: High-Level Overview of Compliance and Industry Standards.
- Process Safety and Petroleum Loss Control in Terminal Environments.
- Tank Gauging (Manual & Automatic) and Meter Calibration Best Practices.
- Overfill Protection Systems and Emission Control Technologies.
- Terminal Automation, Internet of Things, and Data Analytics for Efficiency.
- Sustainability and Innovation: Energy-Efficient and Low-Emission Terminal Practices.

Assignment # 24	
Assignment name: General maintenance of the Atlas Copco screw compressor	
Country: Ghana	Start date: June 2026 Completion date: June 2026
Name of Client: KALTIRE MINING TIRE GHANA, Ghana	
Narrative description of Assignment: Servicing of the Atlas Copco screw compressor for Kal Tire, covering pre-service inspection, oil and filter/separator/thermostat replacement, and functional verification of operating pressure, discharge temperature, oil pressure and system integrity.	
Description of actual services provided by your staff within the assignment: • Conducted a pre-service inspection of the Atlas Copco screw compressor • Carried out a comprehensive inspection to identify signs of wear, leaks, loose connections or other abnormalities. • Reassembled the compressor following completion of servicing tasks. • Performed functional tests to verify operating pressure. • Verified overall system integrity following reassembly and testing.	