



**PETROLEUM COMMISSION, GHANA**  
Regulating, Managing & Coordinating Upstream Petroleum Activities



# 2024 GHANA UPSTREAM PETROLEUM BUSINESS OUTLOOK REPORT

INTRODUCTION

5

EXPLORATION ACTIVITIES

7

DEVELOPMENT

9

PRODUCTION AND OPERATIONS

11

DECOMMISSIONING

15

HEALTH, SAFETY AND ENVIRONMENT

16

ECONOMIC

18

UPCOMING INTERNATIONAL OIL AND GAS EVENTS

23

RECOMMENDATION FOR BUSINESS

24







## REMARKS FROM THE CEO

Egbert Faibille Jnr.

It is with great pleasure that the Petroleum Commission presents to the industry the 2024 Ghana's Upstream Petroleum Business Outlook Report. The Commission remains optimistic about a gradual surge in operational activities in the industry. The Fifth edition of the Ghana's Upstream Petroleum Business Outlook Report provides a concise overview into 2024 business trends, growth opportunities, potential awards of long lead contracts and procurement to the supplier community.

The industry in 2023 celebrated 10 years of the enactment of the Petroleum (Local Content and Local Participation) Regulations, 2013 (L.I. 2204). The celebrations were held as part of the Commission's flagship annual Local Content Conference and Exhibition. The Conference witnessed the participation of some of the major upstream Petroleum stakeholders both locally and internationally.

The companies offered thought provoking solutions and measures to improve the sector's performance through the implementation of sustainable local contact strategies for retainment of in-country value addition to increase the benefits from resource exploration to the economy.

The Commission's focus in 2024 is to aggressively continue to promote Ghana's hydrocarbons in the wake of the signals for a shift from fossils to renewable energy; and accelerate investment in the upstream Petroleum sector through the acquisition of seismic data in the open acreages, fiscal, policy and regulatory reforms. It is worth noting that the Commission has witnessed a sharp increase in requests to visit our Data Room in order to evaluate the hydrocarbon potential of areas of interest and open acreages.

This is a positive indication that investors are keen in exploring opportunities available in Ghana's oil and gas industry. There is no doubt in my mind that the industry will see a steady increase in operational activities as the national oil company, GNPC, works towards opening up the onshore Voltaian Basin for exploration. With GNPC currently at Stage 3 of its Voltaian Reconnaissance programme,

It is anticipated that the Corporation will open up a new frontier of petroleum exploration in Ghana. We encourage all industry players, especially Indigenous Ghanaian companies, to take advantage of the numerous upcoming opportunities available in the industry.

---

It is my hope that the 2024 Ghana's Petroleum Business Outlook Report will serve as a valuable source of information to spark meaningful dialogue culminating to strategic change in your business operations to promote local participation.



## REMARKS FROM THE DIRECTOR, LOCAL CONTENT

Kwaku Boateng

A decade after the promulgation of the Petroleum (Local Content and Local Participation) 2013 (L.I. 2204), and the subsequent strategies adopted to develop local capacity has seen a boost in participation of local companies. Significantly, the Commission has given a major impetus to the local content drive through various mechanisms including the enforcement of the provisions of the Local Content Regulation L.I. 2204.

Indigenous Ghanaian Companies (IGCs) have kept faith with the government's local content agenda by continuously developing capacities in mid-technical service segments of upstream value chain. For the purposes of enhancing local content development, particularly amidst the current challenging global trends in oil and gas investment and energy transition, the L.I. 2204 was amended by L.I. 2435 to introduced 'Channel Partnership' and 'Strategic Alliance' as options alongside the incorporation of JVCs to further deepen local content in Ghana's upstream petroleum industry. The Commission in 2023 commenced the implementation of the amended Local Content L.I. 2435.

This has provided avenues other than Joint Ventureship for participation by both foreign and indigenous companies in the Oil and Gas industry and also provided formerly inaccessible oil and gas business opportunities to indigenous Ghanaian companies. In 2024, the Commission will conduct industrywide sensitization programme on the opportunities for enhanced in-country investments and IGCs' industry participation in short-term and one-off contracts from Channel Partnerships and Strategic Alliances.

Following the approval of Plan of Development for Pecan field late 2023, it expected that the development of the field will commence this year. In addition, Eni Ghana will undertake appraisal of Eban- Akoma discoveries this year with possible subsequent development, Tullow Ghana Ltd. will continue its E&P programmes on Jubilee & TEN fields and other existing E&P companies are expected to drill their first exploratory wells in the first half of this year as per their work programme for 2024.

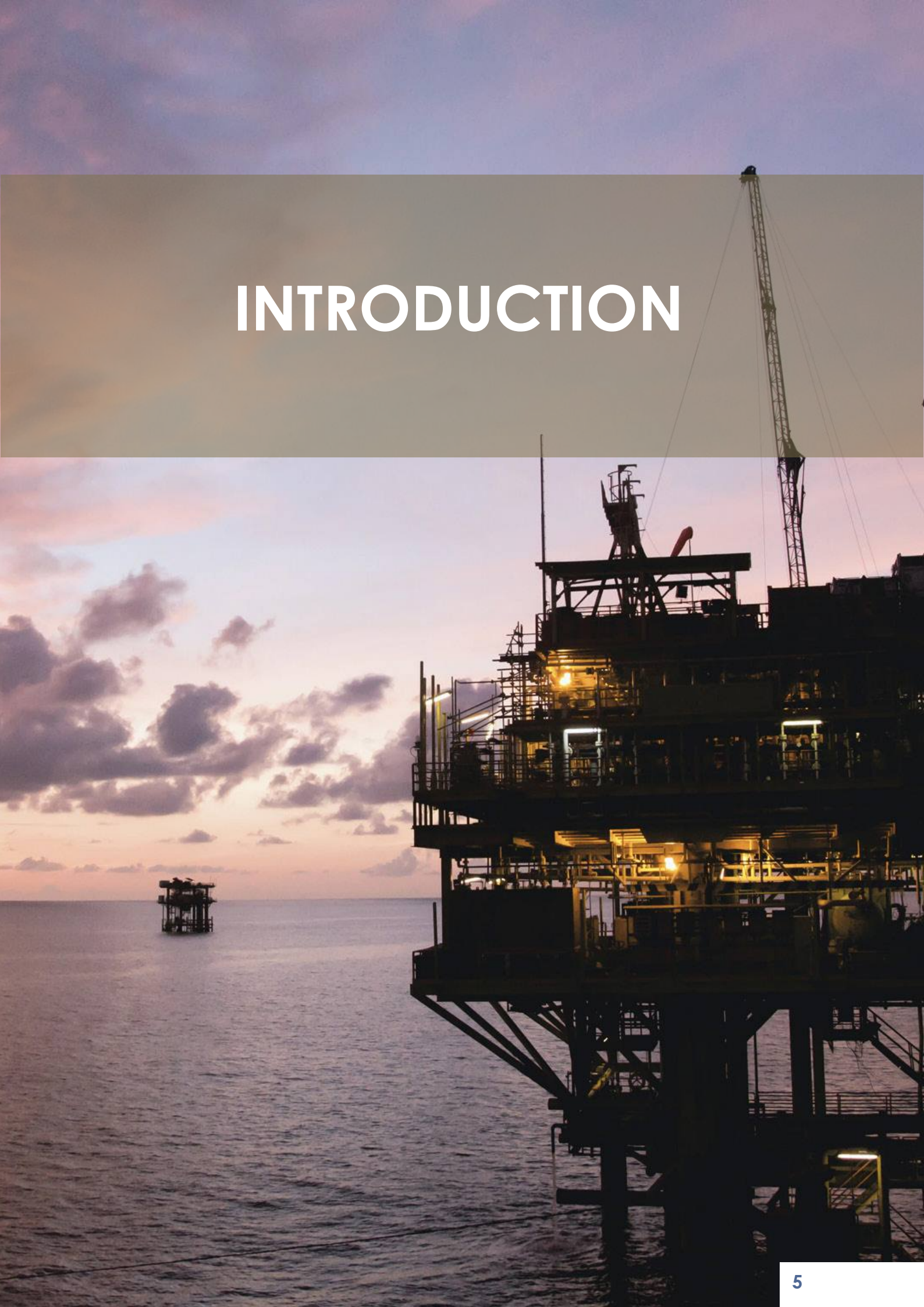
---

To this end, I urge all IGCs to explore the business opportunities line up in 2024 by E&P companies and rededicate themselves to capacity development. The 2024 Petroleum Business Outlook Report offers a first-hand business industry perspective spanning the upstream oil and gas value chain and opportunities that it offers

It is our hope that this report would communicate business views and promote the understanding of current and future business conditions in Ghana's upstream petroleum industry. We will continue to engage with you and assure you that the outcomes of the engagement may translate into policy and regulatory directions that will enhance local participation in the industry.



# INTRODUCTION



The upstream petroleum industry remains one of the major contributors to the sustainable growth and the transformation of the Ghanaian economy. The sector present enormous opportunities to the development of businesses especially the involvement of Indigenous Ghanaian companies, and human capital development in the sector.

As the Commission implements and adopts sustainable strategies to maximise Local Content, it is imperative for the industry players to be abreast with vital information pertaining to the sector, upcoming projects, opportunities, and events planned for the year.

The 2024 Ghana Upstream Petroleum Business Outlook serves as a primary source reference that is structured in a manner that provides readers a step-by-step overview of the business prospects and outlook for the year. The report was drawn from the work programmes of International Oil and Gas (IOCs) and International Service Providers (ISPs) to aid upstream petroleum players in critical decision-making processes pivotal in guiding strategic planning and enabling businesses to make informed decisions about budget allocations, and investment decisions to obtain contracts.

Ghana's oil and gas sector has witnessed a resilient supply chain regardless of the disruptions caused by the global economic downturn. The upstream industry in 2023 saw the discoveries of two exploratory wells, Akoma 1-X and Eban-1x in the Offshore Cape Three Points Block 4 Contract Area. They submitted a double appraisal which was approved and are set to begin drilling of Eban 2A in 2024. Furthermore, the IOCs operating the producing wells seek to maintain their focus on the development and maintenance on the existing fields; Jubilee, TEN and OCTP.

Additionally, it is essential to note the need for IGCs to initiate strategic investment decisions into Environmental, Social and Governmental (ESG) programmes which has become a key criterion for determining contract award. The Commission, through its Upstream Petroleum Business Academy has taken keen interest in ESG reporting and has engaged experts to help build capacity of SMEs in ESG in the course of the year.

Finally, IGCs are encouraged to leverage on the opportunities outlined in this report and put themselves in readiness to obtain contracts to drive our objective of increasing Ghanaian participation, not just in numbers, but more importantly in terms of contract value in the industry.



# 2

## EXPLORATION ACTIVITIES

### CTP BLOCK 4

Upon the success of the drilling of the Akoma and Eban wells, Eni submitted a joint appraisal program for the Akoma and Eban discoveries which has been approved by the Petroleum Commission. Eni requested for an extension of the Eban-Akoma appraisal programme which has been granted. Aprokuma-1X was also successful and an appraisal programme has been submitted to the Commission.

The Aprokuma appraisal programme has also been approved on the condition that Eni commits to drilling a well during its appraisal. The Operator is currently conducting Geotechnical and Geophysical surveys over Eban-Akoma Area in preparation for the drilling of an Appraisal well, Eban 2A.

### BASE ENERGY

Base Energy and GNPC Explorco are currently planning towards the acquisition of new 3D seismic data over the Expanded Shallow Water Tano Block by Q1 2024.

### AMNI

Amni plans to drill its obligatory exploration well, Kusia-1X in Q4 2023 was unsuccessful. However, well planning and drilling related procurement of goods and services are ongoing.

### ECO – ATLANTIC

Eco Atlantic continues well planning and procurement of drilling related goods and services. Eco Atlantic plans to drill its obligatory exploration well, Dawadawa-1X in Q2 2024.

### MEDEA

Medea is planning towards drilling of its obligatory exploration well in Q4 2024. Well planning and drilling related procurement of goods and services are ongoing as of December 2021. It is also in the process of completing farm-in negotiations with Strategic Fuel Fund of South Africa.

### PECAN ENERGIES

Pecan Energies Plan of Development for the Pecan discover has been approved and development activities are currently ongoing. Operator has also submitted to the Minister of Energy a formal request to carry out exploration activities with the approved DPA of the DWT/CTP Contract area.

### GOIL OFFSHORE

Following the exit of ExxonMobil from the Deepwater Cape Three Points Contract Area in May 2021, the Minister of Energy in May 2022 assigned the 80% participating interest previously held by ExxonMobil and operatorship of the block to GOIL

Upstream. In 2024 GOIL Upstream secured a farm-in partner (Planet one) and currently reorganising.

## **GNPC (VOLTAIN BASIN)**

Phase IV (B) (Southern sector) of GNPC's 2D seismic data acquisition programme in the Voltaian Basin commenced in November 2023 and will cover parts of Bono East, Ashanti and Eastern Regions of Ghana. It is expected that a total of One Thousand and Forty (1040) line kilometre of 2D seismic data will be acquired during this phase. The seismic data is being acquired by BGP-BAY Geophysical Services Limited and upon completion will be processed by the same BGP-BAY Geophysical Services Limited.

## **WCTP BLOCK 2 (Springfield)**

Springfield is tied up in legal tussle with Operators of the Sankofa fields over possible extension of the Afina discovery extending into the OCTP contract area. However, Springfield is pursuing the appraisal of Odum and Banda discoveries.

## **OPCO**

OPCO carried out well planning and drilling related procurement of goods and services in 2022 and made preparation towards the drilling of its obligatory exploration well, Mansonia-1X for Q4 2023. However, this was unsuccessful.

## **TULLOW GHANA**

Tullow Ghana's application to carry out exploration within the Jubilee development area has since been approved by the Minister of Energy. Tullow is currently executing what is referred to as an Infrastructure Led Exploration (ILX)

## PECAN ENERGIES

Following the acquisition of Aker Energy by Africa Finance Corporation Equity Investment (AFCEI) in the Deepwater Tano Cape Three Points (DWT/CTP) license area, Pecan Energies was set up to be the Operator of the DWT/CTP license area. Pecan Energies submitted a Plan of Development (PoD) in April 2023 and June 2023 post the optimisation of the field development. The submitted PoD was approved by the Minister of Energy (MoE) in June 2023. The approved PoD had some changes made in relation to the initial PoD.

These changes include modifications and optimisation of the subsea architecture. The field development plans to deploy a modified existing FPSO (Dhirubhai 1). Pecan Energies is currently awaiting the Final Investment Decision (FID) to commence the development as approved. Pecan Energies plans to secure the FID in 2024. This will enable the Operator to commence contracting procedures on long lead items. In addition, the Operator will continue to optimise the detailed engineering for the field development in relation to the subsea and FPSO modifications scopes.

## TULLOW GHANA LIMITED

Tullow Ghana Limited (TGL) plans to drill two (2) wells and complete these wells within the Jubilee field for the year 2024 as part of the approved Greater Jubilee Full Field Development (GJFFD) Plan. The drilling of wells for the Jubilee South East (JSE) commenced in 2022 and the first phase has been completed. Currently, the drilling rig is drilling the J68-P full section well with the top hole of J69-P already drilled. The rig will then move to drill the J69-P full section till the end of 2023 and the early part of 2024. The rig will then switch over to the completion mode to complete the J68-P and J69-P wells.

After the completion of the planned wells for 2024, the plan is to release the rig and demobilise. On the other hand, considerations have been made for options to add wells, farm out or release the rig. The Operator continued the subsea installation in 2023 which led to the first oil from the Jubilee South East (JSE) in Q4 2023. These subsea installations included the installation of the first six slot manifold in Ghana. This manifold was also fabricated in Ghana.

Additionally, the subsea jumpers were installed in 2023 post the fabrication for the JSE project which forms part of the Greater Jubilee Full Field Development Project (GJFFDP). In 2024, the Operator will continue with the fabrication and installation of the subsea jumper for the Jubilee field. In addition, fabrication and installation of the subsea Pipeline End Termination (PLET) tieback will continue in 2024. The turret preservation as a measure to ensure the integrity of the turret activities will continue in 2024.



The TEN enhancement project which commenced in 2022 led to the submission of the draft TEN Amendment Plan of Development (TAPOD) in 2023. The TAPOD contains details of the developmental plans within the TEN enhancement project. These details include the drilling of infill wells, development of discovered resources and gas export from the TEN field.

Post the submission of the draft TAPOD, several engagements had occurred in relation to the content of the PoD as well as Gas Sales Agreement (GSA). The TEN field Operator also submitted a request for the Infrastructure Led Exploration (ILX) which will lead to exploration activities to the existing TEN field area as well as additional area request.

In 2024, TGL does not have plans to drill wells in the TEN field. The Operator is expected to submit the TAPOD to the Minister. In addition, the Operator is working on the ways to enhance production in the Enyenra reservoirs. This led to the formation of the Enyenra Artificial Lift Working Group which includes the Operator and Partners. In 2024, TGL will continue with the engagements with the institutional engagements on the TAPOD, GSA as well as FEED studies for the TAPOD.

Finally, TGL intends to undertake 4D Seismic acquisition and processing on the TEN field.

# 4

## PRODUCTION AND OPERATIONS

### TULLOW GHANA LTD (TGL)

The FPSO Kwame Nkrumah executed the Jubilee Expansion (JEx) Project in 2023. The JEx project, which is aimed at upgrading the gas handling capacity and increasing the seawater treatment, produced water and water injection systems capacity were commissioned. The Gas Injection compressor rewheeling is currently on-going. The outstanding scope is the inert gas cooler capacity expansion which is scheduled for the next planned maintenance shutdown in 2025. The following JEx modifications were commissioned in 2023:

- i. Compressor control upgrade on MP/HP-A panel and MP/HP-B panel.
- ii. Dual Medium Pressure Gas Compressor (MPGC) gas compressor train operation
- iii. 2nd TEG contractor up to 25 MMscf/d
- iv. Multi-Media Filter Bypass
- v. Seawater overboard dump line
- vi. Produced water modifications including de-oiling hydrocyclone vessel.

TGL conducted subsea integrity inspections and repairs in 2023. These activities included the scanning of the flowline. TGL continued studies on the riser annulus flooding and mitigation which involved the proposal to install clamps to prevent complete flooding of the riser annulus.

In 2024, the Jubilee expansion project will continue. The project includes the compressor upgrade of the Gas Injection Compressor (GIC)-A and GI-B panels and the inlet gas cooler replacement. Planned and corrective maintenance activities will continue in 2024 as per the Maintenance and Inspection guidelines.

TGL will continue with the studies into the riser annulus mitigation project to resolve the flooding levels in the risers. In relation to offloading systems, the Operator will continue the procurement process which was commenced in 2023 as well as calm buoy annual inspection and mooring line sensors replacement. In addition, TGL in 2024 will conduct the subsea inspection, maintenance, and repair activities.

The table below presents the well count and the production statistics from the Jubilee Field.

**JUBILEE FIELD**

**WELLS**

Oil Producers	24
Water Injectors	17
Gas Injectors	3

**PRODUCTION SUMMARY PER MONTH (2023)**

Average Oil Production (BBL)	2,514,417.09
Average Gas Production (MMSCF)	6,401.18
Average Gas Export (MMSCF)	2,834.08

**OPERATIONS**

- Fabric maintenance
- SWLP-C caisson debris removal
- Repair on deck boiler feedwater line
- Riser 10 remediation
- Riser 5 remediation
- Dual train operation
- LP Gas Compressor Coolers Replacement
- Dual train operations on MPGCs
- SWI improvements
- HPGC-B, MPGC-B upgrade

**Jubilee Field Update**

The TEN field has suffered flow assurance challenges since the beginning of 2023. The use of gas lift contributed to managing flow assurance challenges for the Enyenra wells. Some of wells within the Enyenra field have low reservoir pressure and thereby making it difficult for the wells to flow to the FPSO. The oil and gas production from FPSO JEAM was generally stable with no major issues. There was a planned maintenance shutdown on the TEN field in 2023. The major activities for the shutdown were jumper installation for Enyenra North, MF separator modification to allow low pressure gas to join the process stream via the low-pressure gas compressors, utility swivel repair and production swivel inspection.

Other scopes for the shutdown were vessel inspections for the MF separator and methanol storage tank. In 2023, TGL conducted checks into the increase in water production from the En21-P well which was due to an opened section of the subsea jumper. This was resolved in 2023. TGL undertook crude oil foamer trials as part of ways to remedy the slugging nature of the risers on the TEN field. A crude oil foamer trial was conducted on selected Enyenra wells to improve their productivity by improving oil lift as well as reduce back pressure on the wells. The oil foamer trial showed an improvement in the production volumes from the selected wells as well as pressure management.

TGL will continue to run the three Low Pressure Gas Compressors (LPGC) on the FPSO JEAM to help reduce flare rates. In addition, TGL will continue with the maintenance and asset integrity activities on the FPSO JEAM in 2024. In 2024, TGL will continue with subsea inspections and repairs as well as SCM replacement.



The table below presents the well count and the production statistics from the TEN Field.

## TEN Field Update

### TEN FIELD

#### WELLS

Oil Producers	9
Water Injectors	6
Gas Injectors	2

#### PRODUCTION SUMMARY PER MONTH (2023)

Average Oil Production (BBL)	524,015.00
Average Gas Production (MMSCF)	3,866.06
Average Gas Export (MMSCF)	76.54

#### OPERATIONS

- Fabric Maintenance
- Field production enhancement
- GTG-B 8K service
- FPSO rotation test and turret bearing greasing

## ENI EXPLORATION AND PRODUCTION (E&P) GHANA LTD.

The FPSO John Agyekum Kufuor (JAK) carried out system maintenance and upgrade activities from 8th to 24th September 2023 which necessitated the shut-in of NAG producer wells and NAG facilities including the Onshore Receiving Facility (ORF). The activities included the calibrations of control valves, function test of Emergency Shutdown Valves (ESDVs) and Blow Down Valves (BDVs), Non-Destructive Test (NDT) inspections of Non-Associated Gas (NAG) Slug Catcher and Mono Ethylene Glycol (MEG) surge drum according to API standard. These activities increased the NAG throughput to 235 mmscf/d from 210 mmscf/d. The FPSO JAK saw a high flare rate in the months of February, June, and October to December. The high flare rates were due to the following:

- i. Unavailability of HP flash gas compressor-B.
- ii. Unavailability of HP flash gas compressor-A after a trip of the Gas injection Compressor (GIC) compressor B on spurious high temperature on air cooler motor.
- iii. Unavailability of GIC A due to issues with internal windings of electrical motor.

The Operator conducted subsea sealant application to temporarily resolve the subsea integrity issue of some Xmas trees on the OCTP field. In 2024, the Operator will continue its activities to increase the capacity of the NAG export facilities from the FPSO to the ORF. Fabric maintenance, facilities maintenance and calibration activities will continue in 2024. In relation to the subsea activities, Eni plans to undertake subsea inspections, maintenance and repairs to resolve the subsea integrity issues in 2024. These subsea inspections, maintenance and repairs also help to ascertain the integrity of the subsea equipment. In addition, the Operator will continue with studies on the mini tree project as a permanent solution to the subsea integrity issues.

### ENI Field Update

#### OCTP

##### WELLS

Oil Producers	10
NAG Producers	5
Water Injectors	2
Gas Injectors	3

##### PRODUCTION SUMMARY PER MONTH (2023)

Average Oil Production (BBL)	869,672.08
Average Gas Production (MMSCF)	4,435.99
Average NAG Production (MMSCF)	5,463.23
Average Gas Export (MMSCF)	5,341.81

##### OPERATIONS

Methanol injection  
Fabric Maintenance  
Clean In Place (CIP) activities  
Instruments Fault Finding and Rectification

# DECOMMISSIONING

## GHANA NATIONAL PETROLEUM CORPORATION (GNPC)

The Ghana National Petroleum Corporation (GNPC) commenced decommissioning of the Saltpond field in October 2022 post the approval of the Decommissioning Plan in 2019. Post the approval of the plan, procurement process commenced while GNPC sought for the regulatory permits and approval for the decommissioning activities. The Decommissioning plan includes the Plug and Abandonment (P&A) plans and strategies for the six (6) wells in the field as well as the cutting and dismantling of the Mr. Louie Production Platform.

GNPC contracted Hans and Co. Oil and Gas Limited as the contractor for the plug and abandonment activities using the Trident 8 Jack-up drilling rig. The wells 10-A1 and 10-A2 were completed on 19th November 2022 and 28th December 2022 respectively. "Killing" of the remaining wells (10-A3, 10-A4, 10-A5, 10-A6) commenced post the P&A of the two wells 10-A1 and 10-A2. The rig then successfully plugged all the wells by the 1st of May 2023 with the environmental cement plug in place for each well.

The rig was subsequently demobilized. The heavy lift barge concurrently and successfully cut off all the upper leg sections of the Mr. Louie Production Platform. The main hull and the lower section of the legs are to be dismantled per a new work scope being assessed. The project has three phases, Phase 2 which is the Execution of Decommissioning Plan has three (3) stages. Stage 1 is well plugging and abandonment, stage 2 is removal and dismantling of Mr. Louie platform topside and waste management while stage 3 is the installation of surveillance and marine lights (site remediation). The project is current at stage 2.



## HEALTH, SAFETY AND ENVIRONMENT

Health, Safety and Environment (HSE) in the upstream petroleum sector has been gradually improving over the years with increased awareness on process safety, operational efficiency, commit more to Personnel-On- Board (POB) to maintain facilities, Regulatory audits, verification and information sharing. The 2023 reportable incidents have recorded a rise of about 5% as at November. This can be attributed to increased drilling operations and are mostly recorded aboard the support vessels conducting the drilling scopes.

There has been a surge in the number of road transport incidents reported in the year 2023. The Commission shall look to engage operators to ensure improvement and safety of all persons engage in oil and gas activities in the upstream sector. The Commission shall continue to conduct site visits and audits to all operational facilities. The reporting regime for O & M contractors, and subcontractors operating in the upstream oil and gas sector is still being implemented and a baseline is being established by the Commission to ensure prudent and safe operations of subcontractors within the industry.

### **DEFERRED MAINTENANCE AND SHUTDOWN MAINTENANCE SCOPES**

As operational activities increase, maintenance, shutdown scopes and class certification surveys deferred as a result of the pandemic and global logistical challenges will see a sharp increase in 2024. This is necessary to ensure that safety and environmentally critical elements as well as critical equipment meet industry and class requirements. The FPSO Kwame Nkrumah maintenance is planned for early 2025, however, there are pre-shutdown scopes in mid-to-late 2024 to help achieve the main objectives of the shutdown (100% completion of critical scopes and other opportunity scopes prior to start-up).

The pre-shutdown scopes include but not limited to: work pack planning for pressure vessels entry, breaking flanges and containment, development of lifting plans and task risk assessments for several shutdown scopes, instrumentation checks and replacement, spool piece and piping fabrication, nitrogen bottles supply for purging activities, hose supply, accommodation vessel hire for POB support, vessel entry and confined space works, gas monitor supply, air bottles, bolts, nuts, spades, rupture discs, PPE supply, waste management, IBC tanks supply, chemicals, etc. needed to ensure an incident-free and efficient shutdown and plant start-up within the specified period. This presents several opportunities for local companies.

## **OPPORTUNITIES FOR HSE CONSULTANCY**

Ongoing drilling operations by Tullow Ghana Ltd as part of the Greater Jubilee Full Field Development Project. Exploration drilling activities by Eco Atlantic Oil and Gas, Medea and OPCO. Other opportunities for companies with adequate capacity to support the industry include:

- i.**Environmental baseline studies and environmental assessment consulting,
- ii.**Onshore and offshore environmental monitoring activities for operators and subcontractors (service providers)
- iii.**Provision of personal protective equipment (PPEs)
- iv.**HSE Training
- v.**Waste management opportunities with ongoing decommissioning of the Saltpond field
- vi.**Fire-fighting systems and equipment
- vii.**Fabric Maintenance on Offshore facilities (mechanical surface preparation, engineering wrap repairs, blasting, painting, thermal insulation materials, coating protection, etc.)
- viii.**Third Party HSE Inspections and Audits (6-monthly LOLER inspections, PSV recertification).

## **OTHER HEALTH, SAFETY AND ENVIRONMENT UPDATES FOR 2023**

- Gazetting of Guidelines to the Petroleum (Exploration and Production) Health Safety and Environment Regulations, 2017 (L.I. 2258) in 2023
- Technical review of L.I. 2258 to identify gaps and implementation challenges.
- Promoting a sound health, environment and safety culture comprising all activity areas and which contributes to achieving that everyone who takes part in petroleum activities takes on responsibility in relation to health, environment and safety, including also systematic development and improvement of health, environment and safety.

**a) Global Upstream Investment in 2023**

Global Upstream capex reached approximately \$603.5bn in 2023, a 5.1% rise from 2022 investments. Investments were primarily concentrated in the Middle East and North Africa (MENA) region which had the largest and fastest-growing capex, driven by their National Oil Companies (NOC). Investments were largely targeted at low-cost and short-cycled barrels. In addition, a greater percentage of capex was committed to sanctioned development assets and with less focus on new exploration ventures.

Sub-Saharan Africa and Russia attracted the least investments. Upstream investments in Sub-Saharan Africa were driven by projects in Namibia, Mauritania, Senegal, Uganda, Congo, Mozambique, Ghana, Angola, and Cote d'Ivoire. Sub-Saharan Africa struggles with high break-even costs, above-the-ground conditions and security while Russia faces adverse impacts of sanctions and domestic regulatory changes.

It is worth noting that some of the largest International Oil Companies slowed or partially divested assets due to the impending Energy Transition, considering the growing market uncertainty.

**b) Global Upstream Investment outlook 2024**

Global 2024 capital expenditure (capex) is projected to be US\$606.6bn, remaining flat over the 2023 capex. Upstream capex in 2024 are expected to be driven largely by investments in newly sanctioned developments, existing developments as well as some new exploration in selected hotspots. The 2024 capex outlook is supported by the following factors:

**i. Market Uncertainty**

The increasing volatile price outlook is weighted towards the downside risk. The expected retreat in oil prices will be driven by the outlook of slowing demand growth among the largest consumers due to weakening macroeconomic conditions and a growing supply from non-OPEC producers.

**ii. Inflation**

Cost inflation is expected to remain elevated over the medium-term bolstering spending, but not anticipated to attain the peak experienced in 2022. Higher costs primarily drive the increase in investment. Companies are expected to target projects with operational efficiency and focus on a reduction in upfront capital spending on greenfield projects which could limit spending growth.

### **iii. Interest rates**

It is anticipated that interest rates will decline in major economies but will remain at levels higher than those before the Covid-19 pandemic. This is likely to constrict financial decisions for investors as the cost of borrowing will be still higher than pre-pandemic levels. Consequentially, it raises the required rate of return for investors directing oil and gas producers towards higher returns, low-risk opportunities and spending more cautiously.

### **iv. Shareholder returns over production expansion.**

Public companies (the majors) will continue to prioritize shareholder returns over production growth limiting capex growth. Oil and gas companies will continue to steer through this new dynamic while trying to strengthen their balance sheet taking into consideration their uncertain price outlook ahead.

### **v. Weakening Global oil demand growth**

Oil and gas companies are expected to adjust their capital expenditure in response to a weakening outlook on global oil demand growth caused by the anticipated economic slowdown among key consumers in the near term and ongoing energy transition efforts.

## **c) Ghana Upstream Investment Outlook: Work Programme**

According to the 2024 Work Programme & Budget of the Contractors, investments in Ghana's Upstream Industry are projected to reach \$ 1 billion in 2024, representing a substantial decrease of approximately 40% from the previous year's projected investments of \$1.6 billion. The forecasted investments are largely going to be driven by the following:

### **i. Pecan Field development by Pecan Energies Ghana Limited.**

Africa Finance Corporation's Pecan Energies is expected to reach Final Investment Decision in 2024 and first oil in 2027 with an estimated peak oil production of 110,000 b/d.

### **ii. Jubilee and TEN enhancement projects, which will consist of:**

- Drilling 3 wells in the Jubilee Field
- Completion of 4 wells in the Jubilee Field
- Subsurface Studies

### **iii. ENI's drilling operations will consist of the:**

- Akoma-Eban appraisal programme and the drilling of Eban -2A well
- Approkuma appraisal programme

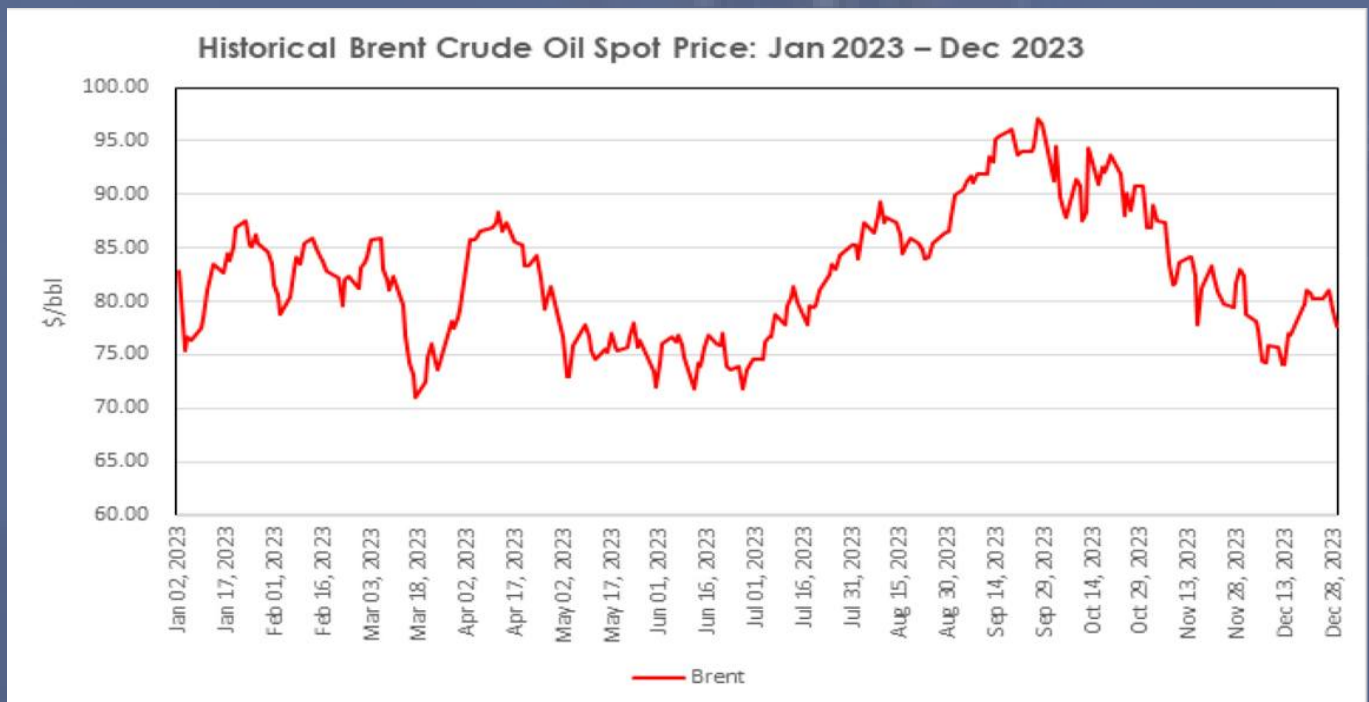
# PRICE OUTLOOK

## d) Oil price analysis in 2023

In 2023, the average price of Brent crude oil was \$83/bbl, a decrease from \$101/bbl in 2022, representing a difference of \$19/bbl. The shift in global trade dynamics, with Russian crude oil finding new destinations outside the EU, and lower-than-expected global crude oil demand, counteracted the effects of OPEC+ supply curbs. During the first half of 2023, crude oil prices experienced fluctuations due to factors such as the EU import ban on Russian crude oil, multiple global central bank interest rate hikes, and concerns about inflation and recession.

Despite these challenges, Brent crude oil prices were notably less volatile compared to 2022. The second half of 2023 saw increased price fluctuations due to geopolitical tensions and concerns about crude oil demand, resulting in Brent crude oil prices ending the year at \$78/bbl, \$4 lower than the beginning of 2023. Crude oil prices rose in early October due to the Israel-Hamas conflict, oil prices levelled at \$91/bbl. As fears of a broader conflict and supply disruptions eased, concerns about crude oil demand led to a decrease in price, settling at \$74/bbl beginning in December.

In mid-December, oil prices increased again as geopolitical tensions rose amid attacks related to the Israel-Hamas conflict on shipping vessels in the Red Sea. The attacks resulted in higher insurance rates and rerouting of ships, pushing the price of Brent up to \$78/bbl for the year ending 2023. The graph below shows the random walk of crude oil price in 2023





## e)Oil price forecast for 2024

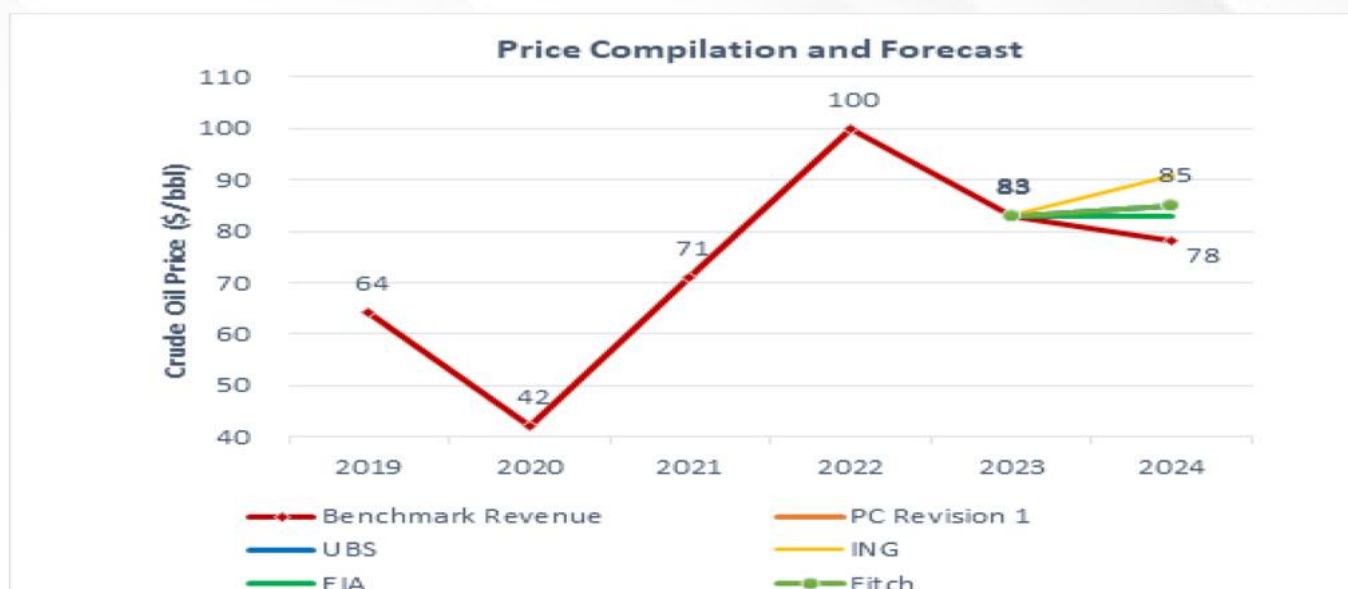
The 2024 price forecast is bearish, to be driven by significant storage space held by OPEC+, record-breaking U.S. oil production and rising production and supply capacity of other non-OPEC countries of Brazil, Guyana, US, Norway and Canada. The U.S. crude production and supply is projected to make up half of the growth in the supply of non-OPEC countries and hence are now known as the swing supplier. The projected glut in the market will contain any price increase. Barring a serious geopolitical escalation, discontinuation or relaxation of the OPEC+ supply cuts and high global demand growth for crude, oil prices will remain depressed through the year 2024.

### Medium-Term Price Forecast (\$/bbl)

Sources	2023 (\$/bbl)	2024 (\$/bbl)
Benchmark Revenue	83	78
PC Revision	83	85
UBS	83	85
EIA	83	83
Fitch	83	85
ING	83	91

The graph below illustrates the actual trend of oil price movement from 2019 to 2023 with a 2024 forecast by various institutions and the Petroleum Commission

Figure 9: Petroleum Commission Price Compilation and Forecast (2019-2024)



The table below lists the factors that are anticipated to drive up prices and those that could cause them to decrease:

### Oil Price Drivers

PRICE SUPPORT FACTORS	PRICE CONTAINMENT FACTORS
<ul style="list-style-type: none"> <li>Rising demand growth among the largest consumers due to strengthening macroeconomic conditions</li> </ul>	<ul style="list-style-type: none"> <li>Slowing demand growth among the largest consumers due to weakening macroeconomic conditions</li> </ul>
<ul style="list-style-type: none"> <li>Additional voluntary cuts by OPEC+ to the already existing 2.2 million bpd starting 1<sup>st</sup> of January until the end of March 2024. OPEC+ establishing a price floor.</li> </ul>	<ul style="list-style-type: none"> <li>Overperformance of U.S. oil production and growing supply from other non-OPEC+ producers, including Norway, Canada, Brazil, and Guyana.</li> </ul>
<ul style="list-style-type: none"> <li>Significant geo-political escalation</li> </ul>	<ul style="list-style-type: none"> <li>Geo-political de-escalation</li> </ul>
<ul style="list-style-type: none"> <li>Continuous prioritisation of shareholder returns over investment in upstream capacity. This diminishes the capacity for companies to boost production and supply.</li> </ul>	

The risks to the oil price forecast are tilted to the downside. The main drivers for this are expected to be the declining demand growth among the largest consumers due to an expected weakening in the macroeconomic fundamentals. On the supply side, projected continual efforts from OPEC+ to establish a price floor to counterbalance the continuously growing supply from non-OPEC nations. The Petroleum Commission estimates an annual average of **US\$85/bbl**.

## 7. UPCOMING INTERNATIONAL OIL AND GAS EVENTS

The table below provides lists of some upcoming International Oil and Gas Event for the year.

### Upcoming International Events

EVENT	DATE	VENUE	ORGANISATION	OBJECTIVE
Subsea Expo	20th - 22nd February 2024	P&J Live, Aberdeen	Global Underwater Hub	To showcase the capabilities, innovations and cutting-edge technologies of the underwater sectors.
Offshore Technology Conference (OTC)	6th - 9th May 2024	NRG Park Houston, USA	AMCHAM/PC	To exchange ideas and opinions to advance scientific and technical knowledge for offshore resources and environmental matters.
Global Energy Show (GES)	11th-13th June 2024	Calgary, Canada	CANCHAM /PC/CESCGHA	To lead the path of meeting energy demand, discussing energy transition, showcasing technology and innovation and discovering the role of all energy sources in the greater energy system.
SPE ATCE 2024 Conference and Exhibition	23rd - 25th September, 2024	New Orleans, Louisiana, USA	Society of Petroleum Engineers (SPE)	Leading Global E&P professionals to deliberate on innovation in energy and technological development.
Africa Oil Week (AOW)	7th-11th October 2024	Cape Town, South Africa	Hyve Group PLC	To develop policy, secure investment and nurture partnership that will promote sustainable development and energy transition.
African Energy Week	4th -8th November 2024	Cape Town, South Africa	African Energy Chamber	To unite African energy stakeholders with global investors to discuss and maximize opportunities within the continent's entire energy industry.
2023 Local Content Conference	TBC	Best Western Atlantic Hotel, Takoradi, Ghana	PC	To create a platform for industry players to discuss through the various presentations and technical sessions.

## 8. RECOMMENDATION FOR BUSINESS

### UPCOMING ACTIVITIES IN EXPLORATION

PROJECTS	ACTIVITIES	SERVICES LIKELY TO BE IN DEMAND
AMNI (Central Tano)	G&G Studies <b>(All year round)</b> Well planning and drilling of Kusia-1X, evaluation of results in 2024	Generic <ul style="list-style-type: none"> <li>• Supply chain services (freight forwarding, transport, etc.)</li> <li>• Vehicle fleet management</li> <li>• Recruiting, HR, training, and health</li> </ul>
MEDEA (East Cape Three Points)	G&G Studies <b>(All year round), procurement of drilling goods and services</b> Yet to make a commitment to drill in 2024	<ul style="list-style-type: none"> <li>• Legal and regulatory services</li> <li>• Financial and risk services</li> <li>• IT/Communication services</li> <li>• Lifting services</li> <li>• Environmental services</li> <li>• Site support services (catering, hospitality, maintenance, waste management, security)</li> </ul>
SPRINGFIELD (West Cape Three Points Block 2)	G&G Studies <b>(All year round)</b> Planning appraisal drilling programs for Banda-1X and Odum-1X in 2024	<ul style="list-style-type: none"> <li>• Site support consumables (food, office supplies, stationery Etc.)</li> </ul>
ECO-ATLANTIC (Deepwater Cape Three Points West)	G&G Studies <b>(All year round), procurement of drilling goods and services</b> Well planning and drilling of Dawadawa-1X, evaluation of results in 2024	
OPCO (Offshore South West Tano)	G&G Studies <b>(All year round), procurement of drilling goods and services</b> Well planning and drilling of Edinam-1X in 2024	
GOIL/GNPC (Deepwater Cape Three Points) GNPC (Voltaian Basin Project)	G&G Studies <b>(All year round)</b> Promotion of Block to potential farm in partners 2D seismic data acquisition <b>(Q1-Q3)</b> Phase 4 of 2D seismic acquisition ongoing in the middle belt part of the Basin in 2024	
ENI (Cape Three Points Block 4)	Appraisal Drilling <b>(Q2)</b> Execution of appraisal plan in Q2 2024 by drilling Eban-2A	

## UPCOMING ACTIVITIES IN DEVELOPMENT

PROJECT	ACTIVITIES	SERVICES LIKELY TO BE IN DEMAND	
		TECHNICAL SERVICES	GENERIC AND SUPPORT SERVICES
<ul style="list-style-type: none"> <li>• Pecan Field Development</li> <li>• Greater Jubilee Full Field – Jubilee South East (JSE)</li> <li>• Tweneboa Enyenra and Ntomme (TEN) – Enyenra Artificial Lift Working Group</li> </ul>	<ul style="list-style-type: none"> <li>• Drilling and Completion</li> <li>• Engineering design studies</li> <li>• Fabrication and installation of subsea system</li> <li>• Fabrication or modification of FPSO modules</li> <li>• Reservoir studies</li> </ul>	<ul style="list-style-type: none"> <li>• Engineering design, Fabrication &amp; Installation of the following: <ul style="list-style-type: none"> <li>○ Manifold</li> <li>○ Xmas Tree</li> <li>○ Mudmats</li> <li>○ Jumper</li> <li>○ Mooring piles</li> </ul> </li> <li>• Commissioning of subsea and topside equipment</li> <li>• Termination of flying leads</li> <li>• Reservoir management</li> <li>• Well drilling and completion services.</li> <li>• Well intervention and workover.</li> <li>• Pipeline installation.</li> <li>• Welding</li> <li>• Calibration</li> <li>• Supply of pipes, valves, and installation</li> <li>• Flow assurance studies.</li> <li>• Engineering design studies</li> </ul>	<ul style="list-style-type: none"> <li>• Legal and regulatory services</li> <li>• Health services</li> <li>• IT/ Communication services</li> <li>• Environmental and Social Planning</li> <li>• Supply Chain Services (freight forwarding, transport, etc.)</li> <li>• Financial and risk services</li> <li>• Construction services &amp; Lifting services.</li> <li>• Environmental services</li> <li>• Site support services (catering, hospitality, waste management, security)</li> <li>• Site support consumables (food, office supplies, stationery etc.)</li> <li>• Office management services</li> <li>• Energy (fuel, electricity) and chemicals</li> <li>• Uniform, personal safety equipment.</li> <li>• Recruiting and training.</li> <li>• Vehicle fleet management</li> <li>• Electronic equipment supply</li> </ul>



## UPCOMING ACTIVITIES IN PRODUCTION AND OPERATIONS

PROJECT	ACTIVITIES	SERVICES LIKELY TO BE IN DEMAND	
		TECHNICAL	GENERIC AND SUPPORT SERVICES
<ul style="list-style-type: none"> <li>• Jubilee</li> <li>• TEN</li> <li>• Sankofa Gye Nyame</li> <li>• Onshore Receiving Facility (ORF)</li> </ul>	<ul style="list-style-type: none"> <li>• Production operations</li> <li>• Maintenance/ repair</li> <li>• Modifications of FPSO or subsea systems</li> <li>• Reservoir management</li> </ul>	<ul style="list-style-type: none"> <li>• Reservoir management</li> <li>• Well intervention and workover.</li> <li>• Inspections and repair of topside infrastructure</li> <li>• Pipeline maintenance and asset integrity services.</li> <li>• Welding</li> <li>• Fabric maintenance</li> <li>• Metering maintenance services and calibration</li> <li>• Non-Destructive Testing (NDT)</li> <li>• Supply of pipes, valves, and installation</li> <li>• Subsea Inspection, Maintenance and Repair (IMR)</li> <li>• Asset integrity management services</li> <li>• Risk Based Inspection (RBI)</li> <li>• Engineering services</li> </ul>	<ul style="list-style-type: none"> <li>• Legal and regulatory services</li> <li>• Health services</li> <li>• IT/ Communication services</li> <li>• Environmental and Social Planning</li> <li>• Supply Chain Services (freight forwarding, transport, etc.)</li> <li>• Financial and risk services</li> <li>• Construction services &amp; Lifting services.</li> <li>• Environmental services</li> <li>• Site support services (catering, hospitality, waste management, security)</li> <li>• Site support consumables (food, office supplies, stationery etc.)</li> <li>• Office management services</li> <li>• Energy (fuel, electricity) and chemicals</li> <li>• Uniform, personal safety equipment.</li> <li>• Recruiting and training.</li> <li>• Vehicle fleet management</li> <li>• Electronic equipment supply</li> </ul>





TEL: +233[0]302953392 - +233[0]302953393



[baed@petrocom.gov.gh](mailto:baed@petrocom.gov.gh)