



Setting up a National Petroleum Regulator: The Petroleum Commission and Management of Ghana's Petroleum Resources

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I EVOLUTION OF THE COMMISSION

The regulation and management of the upstream petroleum sector can be traced back to the 1970s when the Petroleum Department under the Ministry of Fuel and Power had oversight responsibilities for petroleum activities. The Petroleum Department was responsible for promoting exploration activities and the marketing of petroleum in the industry. The Ghana Geological Survey Department, however, stored and managed geological data acquired by international oil companies.

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During the early 1980s, it became necessary for the government to establish legal and regulatory frameworks to govern the petroleum industry. The legal framework established spanned the period of two decades before the commercial discovery of petroleum. The laws that governed the operations of the petroleum industry were the Ghana National Petroleum Corporation Act, 1983 (P.N.D.C.L. 64), the Petroleum Exploration and Production Act, 1984 (P.N.D.C.L. 84) and the Petroleum Income Tax Law, 1987 (PNDC Law 188).

The Ghana National Petroleum Corporation Act, 1983 (PNDC Law 64), established GNPC as a body corporate “*to undertake the exploration, development, production and disposal of petroleum*”. The Petroleum Exploration and Production Act, 1984 (PNDC Law 84), established the legal framework governing the contractual relationship among the State, GNPC and prospective investors in upstream petroleum operations. The Petroleum Income Tax Act establishes a separate income tax regime for oil and gas activities.

The Ghana National Petroleum Corporation, as a statutory body, was established from the Department of Petroleum under the Ministry of Fuel and Power to undertake exploration, manage the resource and serve as an advisory body to the Minister and the Energy Board. The management and storage of geological data were transferred from the Ghana Geological Survey Department to GNPC. Key experts were also transferred from the Department of Petroleum and the Geological Survey Department to GNPC to build the capacity of the newly created institution.

In 2007, after the discovery of oil and gas in commercial quantities, the role of GNPC as a national oil company and a manager of the petroleum resource became very important. The law that established the GNPC as the national oil company assigned it the right to undertake the exploration, development, production and disposal of petroleum. One of the roles the GNPC had been performing was the monitoring and regulation of petroleum activities on behalf of the Ministry of Energy. The discovery of petroleum, however, brought to the fore factual issues related to the Corporation’s role as regulator and player in the upstream and midstream petroleum sectors. There was a call for the separation of the Corporation’s regulatory function from its commercial function.

This call was heightened in 2008 when government organised the first ever oil and gas forum in Accra to solicit views and opinions of industry experts, academia and the general public as to how the new resource should be managed for the benefit of current and future generations.

The broader consensus at that conference was that the role of GNPC as a national oil company holding the government's commercial interests in the petroleum agreements and a manager of the resource should be separated to increase investor confidence in the industry.

Subsequently, the government took a decision to establish a petroleum upstream regulator to be called Ghana Upstream Petroleum Authority (GUPA) by introducing a Bill in Parliament to set up a regulator for the upstream and midstream petroleum activities. GUPA was to have responsibility for the regulation, oversight and monitoring of activities in the petroleum upstream and midstream sectors. The Bill was also to create an enabling environment for increased private sector participation and investment in the petroleum sector and to strengthen the regulatory framework for healthy competition and quality assurance.

However, following the assumption of the new government in 2009, the GUPA Bill was withdrawn from Parliament and an attempt to establish an independent regulator for the sector was abandoned. In 2011, when government introduced the Petroleum Revenue Management Bill to Parliament to ensure effective and transparent management of petroleum revenues, Parliament reminded the government of the constitutional provisions in Article 269 which required that a Commission be established by or under an Act of Parliament for the "regulation and management of the utilization of the country's natural resources" and the coordination of the policies in relation to them. Parliament therefore directed the government to submit a bill to establish a Commission to regulate and manage the exploitation and utilisation of the newly-found petroleum resources. The *Petroleum Commission Act, 2011* (Act 821), was therefore passed by Parliament in July 2011 to establish the Commission "to regulate and manage the utilisation of petroleum resources in the upstream petroleum sector and to coordinate policies in relation to them" (Fig. 1).

2 FUNCTIONS OF THE COMMISSION

The Commission's functions are mainly regulatory, advisory, managerial and technocratic in nature.¹ The Commission has been empowered to ensure compliance with laws, regulations, guidelines and procedures

¹ Section 3 of the Petroleum Commission Act, 2011 (Act 821).

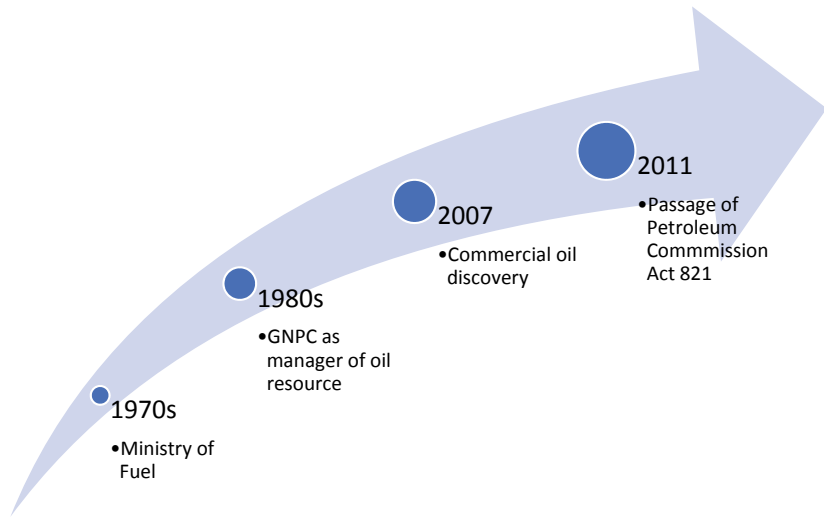


Fig. 1 Evolution of regulatory developments (*Source* Author's construct)

governing petroleum activities such as health, safety and environmental standards, optimum exploitation of resources, optimum utilisation of facilities, local content development, issuance of permits, approvals and consents for specific petroleum activities, and offering of policy advice to the sector Minister.

Its advisory role on matters related to petroleum activities is to ensure that activities such as field development plans, plans for the development of petroleum transportation, processing and treatment facilities, and decommissioning activities are undertaken in a safe, secure, cost-effective and optimum manner for the benefit of citizenry. The Commission also recommends to the sector Minister national policies related to petroleum activities.

By acting as a national petroleum data repository, the Commission receives and stores petroleum data and manages the national petroleum data, assesses and approves appraisal programmes, analyses petroleum economic data, and ensures cost-efficient petroleum activities to achieve optimal levels of resource exploitation.

The Commission is also responsible for promoting local content and local participation in petroleum activities while creating linkages in

the industry to prevent the petroleum sector remaining as an enclave economy and ensuring sustainable economic development.

3 MANAGING AND REGULATING THE UPSTREAM PETROLEUM SECTOR

3.1 *Institutional Strengthening and Funding*

The strength and capacity of an institution are key to the efficient delivery of its functions. After the establishment of the Commission, experts were seconded from key government institutions such as GNPC, Ghana Immigration Service, the Ministry of Energy and the Environmental Protection Agency. The Commission also engaged advisors and consultants in the early stage of its establishment to accelerate its capacity development.

With a vision to become a world-class regulator, the Commission embarked on a wide range of capacity building programmes, both local and international. The first batch of staff who were employed by the Commission started work in the last quarter of 2012 and were taken through rigorous training programmes on the petroleum value chain and development, subsea development, drilling and completion, petroleum economics, supply chain management, data management and good governance.

The World Bank (under Oil and Gas Capacity Building Programme) and the Norwegian Government (under Oil for Development Programme) instituted programmes to improve public management skills and regulatory capacity while enhancing transparency and strengthening technical skills among relevant institutions in Ghana's emerging oil and gas sector. The Department for International Development (DfID) through its funded programmes, Ghana Oil and Gas for Inclusive Growth (GOGIG) and others such as the Korean Government, oil and gas companies such as Tullow and Eni, and sub-contractors such as Baker Hughes, Schlumberger and Halliburton provided support to the Commission at its early stages to increase its capacity and operate efficiently.

During the development of the TEN and the OCTP projects, the Commission ensured that its staff were seconded to the project locally and internationally, in the construction of the FPSOs and the manufacturing of subsea systems.

Obtaining adequate funding for its operations and capacity building programmes undertaken during its infant stage was challenging although the Petroleum Commission Act, 2011 (Act 821), made provision for the funding source of the Commission to include monies from Parliament, budgetary allocations, internally generated funds, donations and grants.

The Commission was capitalised with a loan of GHS2 million from the National Petroleum Authority (NPA) after an unsuccessful attempt to receive initial funding from GNPC. The loan amount was paid to NPA in 2015. In the early stages of its establishment, the Commission obtained a third of its funding from the government's budgetary allocation in 2013, which incidentally was the last. Subsequently, in 2014, the Commission requested to receive funding under the Petroleum Revenue Management Act (PRMA) to obtain stable funding for its operations but was unsuccessful. In the same year, it managed to obtain access to the Hydrocarbon Exploration Levy under the *Customs and Excise (Petroleum Taxes and Petroleum Related Levies) Act, 2005 (Act 685)*, for its promotional activities of Ghana's hydrocarbon basins. This was, however, short-lived due to the Levy's abolition from the petroleum price build-up in 2016.

This left revenues from fees charged for issuing operating permits as the main source of revenue for the Commission. In view of the limited number of companies operating in the sector in the early years of the Commission's establishment, these revenues were inadequate to fund the Commission's operations. Hence, for over two years of its existence, the Commission was operating out of rented apartments as its operational office. After being refused a loan request from several banks, UBA Bank extended a loan of USD\$6.5 million to the Commission to purchase its current Head Office. The building was, however, not in a good state and was unfurnished. The World Bank provided a grant to the Commission through the Ministry of Energy & Petroleum to rehabilitate and refurbish the building before the Commission was able to move in, in 2014.

In this age where technology is a key driver in fulfilling business needs and enabling innovation in the petroleum industry, the Commission, in spite of teething challenges, resolved to establish the National Petroleum Data Centre to store and manage petroleum data pursuant to its mandate under Act 821. The objective was to leverage this infrastructure in promoting data accessibility for both internal and external clients. The Commission, with assistance from the World Bank through the Oil and Gas Capacity Building Project (OGCBP) and technical support from

the Norwegian Government, built a state-of-the-art Data Centre with world-class infrastructure in 2015.

To ensure some financial independence and strengthen the legal basis for the fees the Commission charges for its operations, the Commission, in 2015, developed and saw to the passage of the Petroleum (Fees and Charges) Regulations, 2015 (LI 2221).

To ensure sustainable funding of the Commission's operations, the Ministry of Petroleum in 2016 directed that the Training and Technology Transfer fees provided for in petroleum agreements (PAs), which was previously paid to GNPC, be allocated to the Commission in all new petroleum agreements.

3.2 *Strategy and Performance*

The Commission set out nine (9) key strategic objectives to achieve its mandate and its vision to become a *world-class regulator promoting Ghana as an upstream hub*. These were to regulate the exploration, development and production of petroleum resources, manage the utilisation of petroleum resources, coordinate the policies in relation to upstream petroleum activities, promote investments in the upstream petroleum industry and promote local content and local participation (including establishing sectoral linkages) in petroleum activities, public education, capacity building and ensuring social and environmental protection and community harmony.

3.2.1 *Regulatory Development*

After the discovery of oil and gas in commercial quantities, it became necessary for existing legislation and legal frameworks governing the industry to be strengthened. The *Petroleum (Exploration and Production) Act, 2016* (Act 919), was enacted to repeal PNDC Law 84, to ensure safe, secure, sustainable and efficient petroleum operations, and to achieve optimal long-term resource exploitation and utilisation for the benefit and welfare of Ghanaians. The Act made provisions for several Regulations to be developed to give full effect to the law and priority areas were selected by the Commission, based on urgency and possible negative effect on operations. These included the Petroleum Exploration and Production (Health, Safety and Environment) Regulations, 2017 (L.I.2258), to ensure safe conduct of petroleum activities, particularly with respect to the environment, Petroleum (Exploration

and Production) (Data Management) Regulations, 2017 (L.I.2257), to manage the acquisition, interpretation, marketing and sale of petroleum data, and Petroleum (Exploration and Production) Measurement Regulations, 2016 (L.I. 2246), to ensure accurate fiscal metering and production sharing. The Commission, subsequently working with the Ministry of Energy & Petroleum, ensured the passage of the Petroleum (Exploration and Production) (General) Regulations, 2018 (L.I.2359), to cover all residual regulations (safe Decommissioning and Community Relations and Social Performance) envisaged under Act 919. The General Petroleum Regulations was passed by an Act of Parliament in 2017.

The Petroleum (Fees and Charges) Regulations, 2015 (L.I.2221), was passed to ensure that oil companies obtained relevant permits for specific petroleum activities such as appraisal activities, construction and installation of facilities, production, assignment of shares and mortgage of participating interest in blocks, drilling activities, as well as operations.

In 2013, the Petroleum (Local Content and Local Participation) Regulations, 2013 (L.I.2204), was passed to promote the maximisation of value addition and job creation in the industry. To ensure effective implementation of the Regulations, the Commission developed several guidelines to provide clarity to the Regulations. These included the Joint Venture Guidelines, the Company Registration Guidelines and the Insurance Placement Protocol for offshore insurance in the industry. The Commission has also developed other guidelines such as the Procurement and Bid Evaluation Guidelines, Guidelines for Electronic Filing of Documents, Guidelines for the Reservation of Goods and Services to Indigenous Companies, Importation of Chemical, Research and Development Guidelines and the Financial Services Guidelines, which are yet to be published. After seven years of implementation of the Local Content Regulations, the Commission has commenced processes for the amendment of the Regulations to address challenges faced in its implementation to achieve optimum local content development.

3.2.2 Efficient Utilisation of Petroleum Resources

The government's objective is to develop and produce petroleum to optimise recovery, increase investment and undertake petroleum operations in a cost-efficient and environmentally sustainable manner.

The enactment of relevant legislation and the creation of systems are a sine qua non to ensuring efficient production of petroleum resources. The current production levels have been sustained through reinjection

of water and gas and the use of secondary recovery mechanisms to shore hydrocarbon production. The Commission has instituted several measures including the underlisted to ensure cost-efficiency in the exploitation of petroleum resources.

- **Cost efficiency**—Contractors are required to provide information on cost statements to enable the Commission evaluate and assesses cost performance. These costs are recovered from petroleum revenue once production commences. The Commission monitors to ensure that petroleum revenues are not surcharged with costs which may not necessarily be considered as allowable petroleum costs. In this respect, the Commission has established a cost audit department, as part of its organisational restructuring, to ensure effective budgetary and cost control through quarterly review of expenditure against approved budget and expenditure benchmarking.
- **Energy efficiency**—The complexity and variety of installations and operations make it necessary to make systematic efforts towards energy saving and effective infrastructure utilisation. The Commission ensures the coordination and synergy between installations and their functions.
- **Reservoir performance**—There is the constant monitoring of reservoir performance vis a vis reservoir response, to ascertain any variance in the field development plan and ensure remedial actions are taken to restore optimal and efficient production.
- **Measurement systems**—There is the monitoring of measurement systems to ensure compliance with calibrations and operational requirements of meters and its associated auxiliaries.
- **Environmental sustainability**—There is the regular monitoring of gas emissions due to technical flaring and the usage of gas to fuel the energy requirements of installed facilities.

3.2.3 Policy Coordination

The difficulty in establishing a clear delineation of the petroleum value chain over the years has posed a challenge to the regulation of the sector. Although the upstream and downstream sectors of the industry are properly defined and regulated, the midstream leaves a lot to be desired due to the relative underdevelopment of the sector. The Commission in 2015, as part of its advisory role, developed and sent a policy paper to the Minister for Energy on a clear segmentation of the sector, to ensure proper regulation and provide guidance to investors in the industry. Regardless of the absence of regulation in the midstream, the Commission has worked with

other regulators such as the Energy Commission, NPA, PURC and the Ghana Standards Board, to regulate activities in that segment of the value chain where necessary (Fig. 2).

The dependence of the upstream sector on ancillary or supportive industries for its operations necessitates the need for policies, laws, regulations, guidelines and processes of various sectors to be aligned, to achieve efficiency and to reduce bureaucracy in the industry. Serving as a conduit between upstream companies and other sectors, the Commission facilitates and ensures that applicable laws and regulations are adhered to the



Fig. 2 Policy coordination of the petroleum commission (*Source* Author’s construct)

letter. Its relationship with institutions such as Registrar General's Department, Ghana Maritime Authority, Ghana Immigration Service, Bank of Ghana, Environmental Protection Agency, Ghana Atomic Energy, Ghana Revenue Authority, Ghana Civil Aviation, Ghana Ports and Harbour, National Security and Ghana Investment Promotion Centre, among others, have been strengthened over the years.

The Commission has over the years developed a number of policies for adoption by the sector Ministry. These include: Community Relations and Social Investments, Policy, Localization Policy, Policy on the Establishment of Welding Institute, Unitization Policy and Petroleum Upstream Oil & Gas Technology Transfer Policy.

3.2.4 *Promote Investment in the Industry*

The petroleum industry in Ghana has seen significant milestones since the early explorers in 1903. So far, only a small percentage of the estimated Ghanaian hydrocarbon resources has been produced. After the 3 producing fields (Jubilee, TEN and OCTP) and 25 additional discoveries, the pace of exploration and discovery has significantly decreased. It is important that rigorous campaigns are undertaken to enhance the prospectivity of Ghana's hydrocarbon basins, particularly in the Eastern, Central and inland Voltaian Basins, which have seen very little activity despite high prospectivity.

In 2015, the Commission signed an agreement with a consortium of Ghana Geophysical, ION Geophysical Corporation and Geox of Epsom, UK, to acquire approximately 6,000 km of regional multi-client 2D seismic data offshore Ghana. In March 2019, a mega-survey and multi-client contract was also signed with PGS Ghana Ltd. to create a regional 3D seismic data set to provide a major step change in the understanding of the geology of the Western Basin and help the Commission to better technically understand the regional geology. The dataset is expected to be marketed to enhance the potential and prospectivity of the Basin. This was followed with another multi-client agreement with TG Geo-Partners to acquire 3D seismic data acquisition in the Keta Basin in December 2020.

To ensure the sustainability of oil and gas production, there must be replacement of reserves. The Petroleum Commission, as the resource manager over the years, has been promoting the petroleum potential of the country both internally and abroad, through conferences and exhibitions. The Commission has participated in international conferences such

as the Offshore Technology Conference (OTC), American Association of Petroleum Geologists (AAPG), North Atlantic Petroleum Exposition (NAPE) and Africa Oil Week. Locally, the Commission, for the past years, has seized every opportunity to showcase Ghana's petroleum potential as well as create awareness about Ghana's role at every CWC Conference, Africa Local Content Conferences, SAIPEC, OWA, ONS, Subsea Expro, etc.

The recent launch of the licensing rounds as against the open-door regime was to increase investor confidence in the sector by creating a fair, transparent and proportionate process for awarding blocks. The industry attracted a considerable number of investors after the first licensing round. The transparent process for the award of blocks for exploration and production is intended to attract the requisite investment needed in the industry and enable increased exploration within frontier acreages. The move has seen over 13 oil giants such as BP, Hunt Oil, Shell, among others, visiting the data room and currently awaiting the next bidding round and limited negotiation periods to acquire blocks in the sector. The Commission was instrumental in developing a framework for Ghana's first licensing round.

3.2.5 Local Content and Local Participation

The Commission, subsequent to the promulgation of the Local Content Regulations, adopted a new approach in the implementation of local content. The Commission was fully aware that in order to achieve the objectives set out in the Regulations, it was imperative to give critical attention to the real drivers for local content and local participation. A value chain analysis carried out by the Commission revealed huge deficit in the labour market of key skills and know-how and the lack of capacities and capabilities of local companies to support petroleum activities.

It was therefore necessary for pragmatic and well-structured strategies to be developed to achieve the set objectives. The Commission adopted the following strategies to accelerate local content development and increase in-country spend:

- Establishment of strategic committees to accelerate local content development;
- Corporate reorganisation to provide focus on key areas of local content development;

- Creation of an enabling environment through transparency and access to information to bridge information asymmetry in the industry;
- Development of reporting templates, to simplify local content reporting;
- Establishment of Local Content Fund;
- Undertaking of public education and awareness on local content policies, philosophy and implementation; and
- Acceleration of capacity building in the industry and implementation of government's Accelerated Oil and Gas Capacity Building Project.

4 OTHER ACTIVITIES OF THE PETROLEUM COMMISSION

4.1 *Strategic Committees*

Five (5) different strategic committees were set up immediately after the Local Content Regulations came into effect with the specific task to implement the provisions in the Regulations and optimise local content along the value chain. The level of local participation in the industry could only have been imagined at the commencement of implementation of the Regulations. The pragmatic and well-structured strategies developed by the various strategic committees have catapulted the development of local content in the industry and Ghana's success could be comparable to some matured industries in the Africa region. The Committees were: Strategy Committee, Value Chain Committee, Procurement Committee, Human Resource Committee and Cluster Mapping Committee.

The *Strategy Committee* was set up to develop strategies to maximise local content. The work of the Committee resulted in key strategies in procurement and tendering processes to favour local participation and increased in-country spend. Strategies such as the unbundling of contracts, shortening of contract durations, encouraging "local-local" content, development of contract strategy and evaluation criteria, and ensuring minimum local content levels were achieved in every contract, ensuring every contract has a minimum of 5% local participation, among others, were deployed to boost indigenisation in the industry. The work of the Committee saw to the re-evaluation of projects under the TEN and OCTP to ensure substantial scopes of work were carried out in-country. Major topsides and subsea systems such as module stools, suction piles, sleepers, mud-mats, riser protection frames amounting to over 3,500

tons per project were fabricated in-country, even though these projects commenced prior to the effective date of the Local Content Regulations.

The most profound of the works of the strategic committees was the *Value Chain Committee*. The Committee was to categorise the value chain into goods and services that could be reserved for Ghanaians (*short-term*), goods and services that required additional capacities to meet international standards (*medium term*) and goods and services that could be provided through long-term experience and capacity building (*long-term*). Evident in its work was the streamlining of the registration process in the industry, the reservation of provision of over twenty-five (25) goods and services for Indigenous Ghanaian Companies (IGCs), the increased capacity building of IGCs and increased local investment in the industry. It is invigorating to note that over 400 IGCs are currently registered to provide various goods and services in the industry (Fig. 3).

The work of the Strategy Committee was in sync with the *Procurement Committee* which was also set up to review all procurement and tendering processes to ensure fairness, transparency and broader local participation. The number and value of contracts to indigenous Ghanaian companies have increased tremendously over the years. Over 15,000 contracts and purchase orders amounting to over USD\$2.2 billion have been awarded to indigenous Ghanaian companies between 2014 and the third quarter of 2020. Tullow, for instance, within a year, increased the contract payments to indigenous Ghanaian companies from US\$75.8



Fig. 3 Examples of in-country fabrication of equipment (*Source* Subsea 7 Volta Contractors Limited)

million to US\$409.8 million (an increase of about 441%) between 2018 and 2019. Eni between the same period increased contract payments from USD\$158.7 to about USD\$171 million to indigenous and JV companies with at least 10% indigenous companies' participation.

The *Human Resource Committee* was also set up in the same period to undertake baseline survey of human resource requirement and ensure an adequate and sustainable supply of qualified skills labour to meet the requirements in the Regulations. It was evident in the Committee's work of the huge disparity in the qualifications obtained by Ghanaians in anticipation to work in the sector and the sector requirements. The observation by the Committee was not farfetched as there was a phenomenal increase in the number of Ghanaians pursuing oil and gas courses after the commercial discovery of oil and gas. The Ghana Upstream Sector Internship Programme (GUSIP) was therefore established to assign graduates to IOCs and service companies for a period of 6–12 months to obtain the requisite skills. The Commission instituted a pilot project with an initial 10 interns seconded to the TEN project in 2015 for a period of one year. Some of the interns, after the project, were retained while others were employed by other institutions. The project, however, was disrupted due to low oil prices in 2016 and low activities which rendered most of the upstream companies inactive. The Committee's work also led to the realignment of scholarship programmes offered by the IOCs and service companies to address the skills gap.

In contrast, the *Cluster Mapping Committee* failed to achieve its set objectives. The Committee was to identify geographical concentration of oil and gas activities and develop strategies for creating allied entities. It was expected that the petroleum industry would have created petroleum and related supportive industries that would sustain economic development, especially in the host communities. The work of this committee was unable to establish linkages between the petroleum sector and the rest of the economy by developing allied industries as expected. Initiatives such as revamping of Tema Shipyard, establishment of Greenhouse vegetable farms in the Western Region, poultry farms and development of petrochemicals are yet to see the light of the day.

4.2 *Local Content Fund*

Another major step taken by the Commission in the implementation of local content policy of the government is the establishment of the Local

Content Fund, which was provided for by the Petroleum (Exploration & Production) Act, 2016 (Act 919). This Fund is dedicated to supporting local companies to compete favourably in the market by providing financial resources to indigenous small- and medium-scale enterprises (SMEs) in the oil and gas sector.

This Fund, without doubt, is a remarkable lift for indigenous Ghanaian participation in the industry and the opportunity for expansion of in-country spending. An account for the Local Content Fund has been created and monies have started accruing into the Fund. The modalities and guidelines for accessing the Fund have been developed.

The Commission expects that monies from the Fund will be channelled to capacity development for local service providers to enable them acquire relevant skills and provide concessionary credit for business expansion. With the establishment of the Local Content Fund, it is hoped that the era of funding constraints to support capacity and skills development for local service providers and personnel, and capitalisation of local service providers, will gradually be eased. It is expected that the availability of affordable loans on flexible terms will encourage investment in the sector, reduce investment risk and enhance participation of IGCs in the upstream sector. Local Service Providers will then be able to provide quality services which will contribute towards driving growth, not only in the industry, but the entire economy.

4.3 Corporate Reorganisation

The strategies adopted by the Commission necessitated a reorganisation of its operations to ensure local content was prime in the delivery of its functions. Major reforms instituted were the creation of new departments to give focus to human resource and skills development, development of local capacities, capabilities and competitiveness of domestic businesses, access to finance by Ghanaian companies through the Local Content Fund and domestic financial institutions, and monitoring to ensure compliance by companies.

The single act of restructuring its operations has led to significant gains for the Commission. The Commission, together with the Ghana Revenue Authority (GRA), through its activities, was able to retrieve USD1.1 million in 2018 for the state. An additional USD1 million was obtained from non-compliant companies.

5 CREATE FAVOURABLE INVESTMENT CLIMATE & PRACTICE TRANSPARENCY

The most critical principle in maximising benefits in the extractive sector is transparency. The Commission believes that transparency is key in all business endeavours. The Commission has taken a number of initiatives to demonstrate Ghana's commitment to transparency. Some of the key initiatives include:

5.1 Establishment of a Beneficial Ownership Register

The Commission worked with the Registrar General Department to establish a Beneficial Ownership register of companies in the country. The successful passage of a new Companies Act in 2019 (Act 992) addresses all the Beneficial Ownership disclosure requirements, including developing beneficial ownership templates and thresholds in the oil and gas industry. Ghana has completed and deployed the Beneficial Ownership disclosure Register/software which covers the oil and gas industry as well.

5.2 Establishment of Petroleum Register

The Commission established a Petroleum Register in 2018 that hosts a record of petroleum agreements and contracts ratified by Parliament as well as petroleum permits, certificates, authorisations, approvals and consents by the Petroleum Commission. The Register provides a single platform for access to petroleum agreements, licenses, permits and authorisations issued to upstream companies in the industry. This has broadened the boundaries of transparency and information disclosure in upstream petroleum activities and provided Civil Society Organizations (CSOs) a single platform to monitor upstream activities. The Register has blotted out the perceived opaqueness in that aspect of the petroleum industry. Citizens, Civil Society Organisations, Think Tank Institutions, academia, etc., are now better equipped to demand more accountability from the government.

5.3 Establishment of Electronic Procurement System (E-PORTAL)

The Commission has created an E-Portal to bridge the information asymmetry bias against Ghanaian service companies. The E-Portal, as the

name suggests, is to enhance communication between the Commission on the one hand and stakeholders. The platform will also allow companies to announce their procurement plans, issue tender notifications and receive alerts on specific issues online, thereby reducing the information gap. The E-Portal has created an open and more accessible platform for companies to participate in the tendering process in the industry. The Portal, since its establishment, has streamlined the procurement process, reduced procurement time and transaction cost, enhanced competition and eventually increased efficiency.

5.4 Establishment of Common Qualification System (CQS)

The Commission is in the advanced stage of establishing a Common Qualification System (CQS) in fulfilment of Regulation 37 of L.I 2204. The CQS seeks to address the current challenge in the industry where diverse qualification systems and standards are used by industry players in prequalifying sub-contractors which may lead to unfair treatment in disqualifying indigenous companies. The CQS seeks to create a “single window” system for prequalifying all companies that intend to engage in petroleum activities and create a level playing field for all companies.

5.5 Participation in Extractive Industries Transparency Initiatives (EITI)

A key indicator for good governance is the availability and easy access to information. Ghana is a signatory to the Extractive Industries Transparency Initiatives (EITI) which promotes open and accountable management of oil, gas and mineral resources. The Petroleum Commission is represented at EITI and periodically provides relevant information for its activities.

5.6 Development of Reporting Templates

The L.I. 2204 requires all companies operating in the sector to periodically submit to the Commission for review, a number of reports such as local content performance report, procurement plans and local content plans. The Commission has developed reporting templates for submission of such reports in order to ensure uniform reporting format among companies, simplify the reporting process, enable a standard method

for evaluating local content plans and performance, and minimise the volumes of information the Commission receives.

5.7 *Capacity Building*

The Local Content policy which was adopted by Cabinet in 2011 identified limited capacity as one of the key challenges facing the fledging oil and gas industry. The Commission therefore made capacity building one of its major strategic objectives. The following initiatives were therefore undertaken:

5.7.1 *SMEs Capacity Building*

Specific measures have been put in place to ensure that indigenous Ghanaian Businesses are competitive through capacity building programmes. The Commission, in conjunction with other stakeholders, periodically organises capacity building workshops and seminars for Ghana SMEs with a view to enhancing their competitiveness.

The Government of Ghana and the Jubilee Partners jointly established the Enterprise Development Center (EDC) in Takoradi to develop the capacities of SMEs and increase the international competitiveness of local businesses. Many local companies have undergone various degrees of capacity building at the EDC since its establishment. The EDC, though now defunct after the expiration of its initial five-year funding facility from the Jubilee partners, has its mandate being implemented by the Commission under the newly established Business Advisory and Enterprise Development Department.

5.7.2 *Development of Insurance Protocol*

Having recognised the limited capacity of the domestic insurance industry in underwriting oil and gas risk, the Commission in conjunction with the National Insurance Commission and other stakeholders in the Petroleum Upstream and Insurance industries developed a Protocol on placement of insurance in the upstream petroleum industry. This Protocol has overcome the capacity challenges by obligating all general insurance companies to pool their resources together and underwrite upstream petroleum risk under one entity called GOGIP (Ghana Oil & Gas Insurance Pool). This Protocol has enhanced the growth of the insurance market by providing the mechanism for the oil and service companies to retain a substantial portion of their insurance business in Ghana. This

will reduce the level of capital flights and also avail the local insurance practitioners the opportunity for human capital development in the area of oil and gas insurance underwriting.

5.7.3 *Human Resources Development & Localisation of Oil & Gas Jobs*

The Commission has put in place policies, programmes and initiatives that outline strategies to orient, train and develop personnel by improving skills, knowledge, capabilities and competencies required in the upstream industry. One of the initiatives under the human resource development programme is the Ghana Upstream Sector Internship Programme (GUSIP) mentioned earlier on. GUSIP provides unemployed Ghanaian graduates and technicians with practical experience, vocational skills and professional integration pathways to be able to assimilate into the oil and gas industry. Other programmes to enhance local capacity include: supporting local universities to build capacities to train Ghanaians locally, supporting vocational and technical education development programmes (example welding and fabrication training programmes), improving gender diversity in Ghana oil and gas industry, mentoring and coaching programmes of local and foreign employees, skills transfer from expatriate to locals through development of a succession plan, etc. All these programmes are designed to ultimately develop the oil and gas industry with optimal local content and participation, enhance national development and create jobs.

5.7.4 *Accelerated Oil and Gas Capacity Building Programme (AOGC)*

The Accelerated Oil and Gas Capacity Building Programme (AOGC) is a government initiative that has been instituted to build the capacities of Ghanaians and Ghanaian companies in various technical and vocational areas for a period of 5 years.

The objectives of the AOGC programme are to aggressively invest in education and skills enhancement of Ghanaians to manage the oil and gas sector, facilitate the capacity building of educational and training institutions, and explore standards and certification requirements in the oil and gas industry. The programme is to further ensure the creation of jobs by facilitating the training and certification of technical and vocational graduates with practical experience, provide professional integration pathway to enable them to be assimilated into the oil and gas industry, and empower

local firms to progressively play active roles in the oil and gas value chain through capacity development, financing and partnership support.

The AOGC programme is being implemented under four thematic areas including:

- Technical, Vocational and Apprenticeship Development;
- Capacity Development of Educational Institutions;
- Small and Medium-sized Enterprises (SME) Capacity Building;
- Public Institutional Development and Sector Management.

The Commission, as the implementer of the AOGC programme, has worked with some multinational companies such as Baker Hughes/GE, Haliburton, Subsea 7 and Aker Energy to establish a framework for technical training for a number of Ghanaians.

With support from Baker Hughes, five (5) Ghanaians have been trained as internationally certified specialised welders in the Northern Alberta Institute of Technology, Canada, and have returned to various institutions as welding trainers. The Commission has also secured a grant of USD\$4.3 million from Aker Energy to establish a state-of-the-art Welding Institute in Takoradi that will be accredited internationally to train and certify welders at international standards.

In addition, collaboration between the Petroleum Commission and Saiwest (a service company operating in Ghana) led to the training of twenty (20) unemployed Ghanaians from all over the country as welders at a facility in Takoradi.

Memorandums of Understanding (MoUs) have been signed with two (2) technical training institutions in Scotland, namely Aberdeen Drilling School and Glasgow Caledonian University, to offer technical training to Ghanaians.

5.7.5 Public Education

The discovery of oil amplified public expectation on possible accelerated economic growth and development in the country. The “paradox of plenty” has, however, proved otherwise. The phenomenon is even truer, especially when the institutions, structures, infrastructure and facilities necessary to accelerate such developments are unavailable. The over exuberance created by the media and politicians from the oil find led to irrational expectations which, if not properly managed, could lead to

social tensions or even conflicts. This misconception was a bane for the Commission during the early years of its establishment.

Stakeholder engagements at all levels were necessary to manage expectations of citizens, particularly, in the coastal areas. Rigorous and continuous educational campaigns, community engagements and sensitisation were carried out especially in the Western region during the early years of hydrocarbon production to manage public expectations.

The stiff opposition faced by government towards the passage of the Local Content Regulations by international bodies, diplomatic communities, IOCs, etc., also necessitated extensive public education and stakeholder engagements prior and post the passage of the Regulations. The Commission organised and participated in seminars, workshops, conferences and meetings to provide clarity to the regulations, its philosophy and the implementation strategy to allay the fears of stakeholders. The Commission adopted a collaborative approach with its stakeholders to develop pragmatic steps in achieving the objectives of the Regulations amidst the challenges and ambitious targets set by the Regulations.

5.7.6 Environmental Protection and Minimisation of Gas Flaring

As the country focuses on managing the resources and the resulting revenues efficiently, there is a need to constantly pay attention to protecting the environment to ensure sustainable development at the same time. The Commission works closely with the Environmental Protection Agency (EPA) to ensure that environmental regulations are not only strictly adhered to but also petroleum activities are carried out in a safe manner and the exploration and production technologies being employed in the industry are environmentally safe.

In a similar way, the Commission ensures that Ghana's zero-gas flaring policy which is encapsulated in the Petroleum (Exploration and Production) Act, 2016 (Act 919), is complied with. By working with EPA, the Commission ensures an optimal utilisation and prudent management of the gas resources and prevents routine gas flaring or venting. However, for safety and operational purposes, some minimal amount of gas is allowed to be flared, but it is always within the acceptable range such that the environment is not polluted and this is continuously monitored by both the Petroleum Commission and EPA.

5.7.7 *Social Protection*

As companies explore for oil off the shores of Ghana, the Commission has learnt from the past mistakes in the mining sector and seeks to ensure that local communities impacted by oil extraction are compensated with government investment, social development and the corporate social responsibility activity of licenced or concession firms. To this end, the Petroleum Commission, in partnership with the oil and gas companies, has developed Guidelines on Social Performance *to guide Social Investment Projects by the IOCs and also* provide a framework and benchmarks for the design, implementation, monitoring/evaluation and reporting of Social Performance activities by the oil companies.

Ghana's petroleum resources are found in offshore basins; hence, there is a significant interface between petroleum activities and other usage of marine space. The Commission has taken a policy decision that both fishing and the petroleum sectors play a key role in the economic development of the nation and under no circumstance should one adversely affect the other. The Petroleum Commission works closely with the Ministry of Aquaculture, Fisheries Commission and other stakeholders, to ensure that the two industries blossom.

The Commission has been instrumental in ensuring effective community engagements and sensitisation of local communities in the coastal districts about petroleum activities to avert any disagreements, agitation, uprising or conflicts which may arise due to loss of livelihoods or inadequate socio-economic interventions. The establishment of the Safety Zone Management Programme to educate fishermen on the reasons and consequences of the continuous incursions of fishing activities around offshore installations and facilities has gone a long way to manage community expectations.

The Commission, in collaboration with the Jubilee Partners and Fisheries Commission, has also developed the Safe Sea Access Framework (SSAF) to prevent and manage conflicts among the users of marine space. The SSAF was borne out of a study which forms part of the Marine Fisheries Advisory Committee's (MFAC) Action Plans to ensure strategic coexistence of oil and gas and fisheries sector, and other users of the marine space.

6 CONCLUSION

The sustainable management of petroleum resources is critical to the socio-economic development of the Ghanaian economy. The Petroleum Commission, with the mandate to regulate and manage the utilisation of petroleum resources, has taken bold steps to institute policies, regulations, guidelines, systems and programmes to ensure optimum and efficient exploitation of petroleum resources for the overall benefit and welfare of Ghanaians.

The Commission, through its collaborative effort, will continue to enhance transparency, deepen cooperation among industry players, promote investment in oil and gas exploration and ensure accelerated development of Ghanaians and Ghanaian businesses in the upstream petroleum industry.