## PUBLIC INTEREST AND ACCOUNTABILITY COMMITTEE (PIAC)



REVENUES FOR THE PERIOD

January to June, 2017

The 2017 Half Year PIAC report is in fulfilment of PIAC's statutory obligation under the Petroleum Revenue Management Act, 2011 (Act 815). The Act, as amended, enjoins PIAC to publish annually a semi-annual and annual report. The report is an independent assessment of the collection and management of the country's petroleum revenue for the period January – June 2017. PIAC



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## Acronyms and Abbreviations

| ABFA   | Annual Budget Funding Amount                          |  |
|--------|---|--|
| AGPP   | Atuabo Gas Processing Plant                           |  |
| API    | Additional Participating Interest                     |  |
| BBLS   | Barrels of Oil  |  |
| BOG    | Bank of Ghana   |  |
| BOPD   | Barrels of Oil per Day                                |  |
| BRENT  | Broom Rannoch Etieve Ness and Tarbat                  |  |
| CAPI   | Carried and Participating Interest                    |  |
| CIT    | Corporate Income Tax                                  |  |
| COLA   | Crude Oil Lifting Agreement                           |  |
| CSR    | Corporate Social Responsibility                       |  |
| СТР    | Cape Three Points                                     |  |
| DfID   | (UK) Department for International Development         |  |
| DPA    | Development Area                                      |  |
| DWT    | Deepwater Tano  |  |
| ECB    | European Central Bank                                 |  |
| Eol    | Expression of Interest                                |  |
| EPA    | Environmental Protection Agency                       |  |
| FEED   | Front End Engineering and Design                      |  |
| FPSO   | Floating Production Storage and Offloading            |  |
| GDP    | Gross Domestic Product                                |  |
| GHF    | Ghana Heritage Fund                                   |  |
| GIIF   | Ghana Infrastructure Investment Fund                  |  |
| GIZ    | German Corporation for International Cooperation GmbH |  |
| GJFFDP | Greater Jubilee Full Field Development Plan           |  |
| GNGC   | Ghana National Gas Company                            |  |
| GNPC   | Ghana National Petroleum Corporation                  |  |
| GoG    | Government of Ghana                                   |  |
| GOGIG  | Ghana Oil and Gas for Inclusive Growth                |  |
| GPF    | Ghana Petroleum Fund                                  |  |
| GRA    | Ghana Revenue Authority                               |  |
| GSA    | Gas Sales Agreement                                   |  |
| GSF    | Ghana Stabilisation Fund                              |  |

| ICT   | Information Communication Technology                   |  |  |
|-------|--|--|--|
| IMF   | International Monetary Fund                            |  |  |
| IPP   | Independent Power Producer                             |  |  |
| ITLOS | International Tribunal for Law of the Sea              |  |  |
| LNG   | Liquefied Natural Gas                                  |  |  |
| LOPI  | Loss of Production Insurance                           |  |  |
| LPG   | Liquefied Petroleum Gas                                |  |  |
| MMBOE | Millions of Barrel of Oil Equivalent                   |  |  |
| MMBTU | Million British Thermal Units                          |  |  |
| MMSCF | Million Standard Cubic Feet                            |  |  |
| MMSTB | Million Stock Tank Barrels                             |  |  |
| MoF   | Ministry of Finance                                    |  |  |
| MT    | Metric Tonnes  |  |  |
| NPA   | National Petroleum Authority                           |  |  |
| OCTP  | Offshore Cape Three Points                             |  |  |
| OECD  | Organisation for Economic Co-operation and Development |  |  |
| OPEC  | Organization of Petroleum Exporting Countries          |  |  |
| ORF   | Onshore Receiving Facilities                           |  |  |
| PA    | Petroleum Agreement                                    |  |  |
| PC    | Petroleum Commission                                   |  |  |
| PHF   | Petroleum Holding Fund                                 |  |  |
| PIAC  | Public Interest and Accountability Committee           |  |  |
| POD   | Plan of Development                                    |  |  |
| PRMA  | Petroleum Revenue Management Act                       |  |  |
| PURC  | Public Utilities Regulatory Commission                 |  |  |
| SGN   | Sankofa-Gye Nyame                                      |  |  |
| SOPCL | Saltpond Offshore Producing Co. Ltd                    |  |  |
| SURF  | Subsea Umbilical Risers and Flowlines                  |  |  |
| TEN   | Tweneboa-Enyenra-Ntomme                                |  |  |
| TGL   | Tullow Ghana Limited                                   |  |  |
| VRA   | Volta River Authority                                  |  |  |
| WAGP  | West African Gas Pipeline                              |  |  |
| WAPCO | West African Gas Pipeline Company                      |  |  |
| WCGIP | Western Corridor Gas Infrastructure Project            |  |  |
| WCTP  | West Cape Three Points                                 |  |  |
|       |  |  |  |

#### Foreword

The Public Interest and Accountability Committee, (PIAC), established in September, 2011, is tasked with the oversight responsibility of monitoring and evaluating the management of Ghana's petroleum resources by the Government and relevant stakeholder institutions.

This report is prepared, among others with information and data from the Ministry of Finance, Bank of Ghana, Petroleum Commission, Ghana National Petroleum Corporation, Ghana Revenue Authority, and Ghana National Gas Company.

It aims at keeping Ghanaians and other interested stakeholders constantly informed of how the country's petroleum revenues are being managed and utilised, as well as providing platforms for citizens' feedback to be collated and shared with duty bearers.

The Committee since its inception has published a total of 12 reports – six (6) Annual and six (6) Semi-Annual Reports - covering the period 2011 to June 2017.

The keen interest with which the good people of Ghana receive our reports is one of the Committee's motivations in analysing the revenue data as well as the investment position of the Ghana Heritage Funds.

The 2017 Semi-annual Report covers the period January to June 2017 and encompasses a broad range of issues associated with petroleum revenue management such as information on production, liftings, total revenues accruing, allocation and utilisation of these revenues by Government, and the management of the funds set aside in the Ghana Petroleum Funds (Ghana Stabilisation Fund and the Ghana Heritage Fund). The report also contains an examination of other issues and findings pertinent to the performance of various institutions charged with responsibilities in the Petroleum Revenue Management Act (PRMA) (Act 815), as amended by Act 893.

It is the expectation of the Committee that the general public will meticulously read the report and provide feedback especially during the public fora to be held following the launch of the report, or send comments via email to <u>secretariat@piacghana.org</u>, or call us on +233 (0) 302 242 006.

PIAC wishes to acknowledge the immense contribution of the Africa Regional Office of the Natural Resource Governance Institute (NRGI), for their continuous technical support to PIAC.

PIAC is also very grateful to the UK Department for International Development (DfID) through the Ghana Oil and Gas for Inclusive Growth (GOGIG) for the multiyear funding support to the activities of the Committee.

Furthermore, PIAC wishes to acknowledge the support of the GIZ's Good Financial Governance Programme for funding some of our public engagements.

Finally, PIAC wishes to commend the Ministry of Finance and the Government of Ghana for adhering to the PRMA by providing the budgetary support, as well as Parliament for its strong collaboration with the Committee.

We wish to thank the citizenry for their support and encouragement.

The Chairman, PIAC

## Executive Summary

In order to encourage civic engagement in Ghana's oil and gas sector through transparency, Section 51 of Ghana's Petroleum Revenue Management Act, 2011 (Act 815) mandates the Public Interest Accountability Committee (PIAC) to provide oversight and to monitor the management of petroleum revenues and expenditure. It is part of PIAC's mandate to publish two reports:

- A Semi Annual report covering January to June of each year, and
- An Annual report.

This is the 6<sup>th</sup> semi-annual report by PIAC. The methodology employed in coming up with this report included

- Analysis and reconciliation of data collected from the relevant stakeholder institutions;
- Interviews; and
- Independent verification of source documents.

#### Crude Oil Output

- 1. A total of 24,346,459.91 bbls of oil was produced from Ghana's three producing fields Jubilee, TEN and SGN from January to June, 2017. This was the highest half-year crude oil production since 2011.
  - a. Jubilee Field produced 15,233,025 bbls;
  - b. TEN Field produced 8,617,380;
  - c. SGN Field produced 496,054.91 bbls.
- The SGN Field achieved first oil in May 2017 with an average production of 8,132 bopd.
- 3. The volume of crude oil produced in Ghana since 2010 totalled 218,573,411 bbls as at the end of June 2017.

- 4. Two cargoes each were lifted from Jubilee and TEN, totalling 1,896,737 bbls and 1,992,245 bbls respectively, in the first half of 2017.
- 5. Closing stock balances at the end of June, 2017 for Jubilee and TEN were 1,758,833 bbls and 410,544 bbls respectively.

#### **Gas Production**

- 6. The raw gas produced from Jubilee, TEN and SGN Fields in the first half of 2017 totalled 31,673.96 MMScf.
- 7. A combined gas volume of 11,095.71 MMScf was exported to GNGC.
- 8. A total of 238.39 MMScf of raw gas exported from the TEN Field to GNGC was used as gas export trial after the TEN gas manifold was installed and commissioned.

#### **Petroleum Revenues**

- 9. Total Revenue paid into the PHF during the period (including interest earned on revenue awaiting distribution in the PHF account) was US\$272,678,033.62.
- 10. An amount of US\$149,782,454.43 of the total revenue was contributed by Jubilee liftings.
  - a. A further US\$100,028,906.76 of the total revenue was contributed by TEN liftings;
  - b. An amount of US\$607,081.91 was paid as revenue from Surface Rentals in respect of oil and gas block holdings;
  - c. An amount of US\$ 30,884.25 which ought to have been paid into the PHF was wrongfully paid into the account of GRA.
- 11. The total receipt of US\$272,678,033.62 is further categorised as follows:
  - a. Royalties contributed US\$69,551,247.59;

- b. Carried And Participating Interest (CAPI) contributed US\$132,147,370.39;
- c. Additional Participating Interest (API) contributed US\$48,112,743.20
- d. Surface rental contributed US\$607,081.916;
- e. Corporate Tax from GRA's tax audit on Kosmos (2011-2015) contributed US\$22,073,745;
- f. An amount of US\$185,845.53 was earned on revenue awaiting distribution in the PHF account.

#### Distribution and Utilisation of Petroleum Revenues

- 12. The total amount distributed from the PHF by the Bank of Ghana during the period under review was US\$277,793,329.69.
  - Annual Budget Funding Account received US\$84,729,337 for distribution to the priority areas, 60 percent more than the same period in 2016.
  - GNPC received an amount of US\$90,904,491.66 for the period under review.
  - The GSF and GHF received US\$71,511,650.68 and US\$30,647,850.28 respectively for the period under review.
  - The GHF as at the end of June 2017, stood at US\$311,048,928.47, returning 2.09 percent in the first half of 2017.
  - The GSF at the end of June 2017, stood at US\$280,300,731.14, returning 0.54 percent in the first half of 2017.
- 13. The Investment Advisory Committee has not been reconstituted following the change of government in January 2017. This is in contravention to section 29 of the PRMA.

- 14. An amount of GH¢53.14 million was disbursed from the ABFA account in the first half of 2017. This was spent on three out of the four priority areas:
  - a. Agriculture was allocated GH¢17.92 million;
  - b. Road, Rail and Other Critical Infrastructure received GH¢29.22 million (as transfer to GIIF);
  - c. Physical Infrastructure and Service Delivery in Education also received GH¢6 million.
- 15. There were no disbursements to:
  - a. Physical Infrastructure and Service Delivery in Health
  - b. PIAC
- 16. The disbursed amount from ABFA from January to June represents 6.67% of projected expenditure for 2017.

#### Petroleum Sector Indebtedness

- 17. No gas revenue was paid into the PHF by GNPC. VRA did not pay GNGC for lean gas supplied and GNGC did not also pay GNPC for the supply of raw gas.
  - a. GNGC's indebtedness to GNPC for gas supplied during the period stood at US\$34.09 million at the end of the first half of 2017;
  - b. GNGC's total indebtedness to GNPC as at the end of the period under review was US\$132.03 million;
  - c. VRA's indebtedness to GNGC for lean gas supplied during the period stood at US\$107.18 million (including interest).

#### **Other Highlights**

18. Several attempts by PIAC to obtain data from Tullow Ghana regarding their achieved crude oil prices for the period, proved futile.

- 19.GNPC has procured a Business Interruption insurance cover for its Jubilee and TEN operations.
- 20. GNPC's carried interest in SGN (OCTP) is 15 percent, an improvement over what it has in Jubilee and TEN fields though it must be noted that Act 919, passed in 2016, mandates a minimum carried interest of 15% and not 10% as was the case under the repealed Petroleum (Exploration and Production) Act 1984, (PNDCL 84).
- 21. GNPC's participating interest also increased from 3.64% in Jubilee Field to5 percent in TEN and SGN Fields.
- 22. Oil royalty also increased from 5 percent in Jubilee and TEN fields to 10 percent at 1,312 ft. water depth and 7.5 percent at water depth greater than 1,312 ft. in SGN Field.

#### Recommendations

Based on the above, PIAC makes the following recommendations for the consideration of the relevant state institutions:

- 1. GRA should undertake annual tax audits of the partners.
- 2. GRA and PC should collaborate more effectively to ensure that surface rentals due the State are accurately assessed and invoiced appropriately.
- 3. To forestall wrongful lodgment of surface rentals and other receivables, PC should ensure that oil companies are properly appraised on the requirements of the PRMA.
- 4. The Minister of Finance should ensure that proceeds from the Energy Bond are judiciously managed to eliminate spiraling debts which are threatening to compromise the financial integrity of government institutions involved in the commercial aspect of the energy sector.
- 5. GNPC should ensure that Business Interruption (BI) insurance cover is also procured for SGN.

- 6. The Minister of Finance should ensure that the Investment Advisory Committee set up under Section 29 of the PRMA, is reconstituted and functional.
- 7. PIAC urges the Minister of Energy to expedite the negotiations between GNGC and WAPCO on the use of the WAGP for the transport of gas from the Western Corridor (Atuabo) to the Eastern Corridor (Tema) to allow for the export of more gas from SGN Field.
- GNPC should as a matter of urgency complete the de-commissioning of the Saltpond field as the cost of funding skeletal staff in SOPCL is not a judicious use of resources.
- The relationship between GNPC and GNGC should be clearly delineated as there appears to be an ownership conflict between these two institutions, which do not augur well for the development of the industry, or the State at large.

## 1 INTRODUCTION

#### 1.1 Background

In an effort to ensure transparency in the generation and use of petroleum revenues, the Public Interest and Accountability Committee (PIAC), was established under Section 51 of the Petroleum Revenue Management Act (PRMA), 2011 (Act 815) and the amended Act 893.

The Committee has been tasked to:

- Monitor and evaluate compliance with the Act by Government and other relevant institutions in the management and use of the petroleum revenues and investments as provided by the Act;
- Provide space and platform for the public to debate whether spending prospects and management and use of revenues conform to development priorities as provided under Section 21(3); and
- Provide independent assessments on the management and use of petroleum revenues to assist Parliament and the Executive in the oversight and performance of related functions respectively.

This report is the sixth in the series of semi-annual reports.

#### 1.2 Scope

This report:

- Reviews compliance with recommendations and outcomes in previous PIAC reports;
- Analyses oil and gas production and liftings from January to June 2017;
- Verifies the accuracy of oil and gas revenues declared by state institutions;
- Confirms revenues allocated to the Annual Budget Funding Amount (ABFA) and the Ghana Petroleum Funds (GPFs); and
- Assesses the roles of bodies set up under the Act and their compliance with its provisions.

#### 1.3 Methodology

The study employed:

- Analysis and reconciliation of data collected from the relevant stakeholder institutions;
- Interviews;
- Independent verification of source documents.

The key institutions and stakeholders consulted include:

- Ministry of Finance
- Bank of Ghana
- Petroleum Commission
- Ghana Revenue Authority
- Ghana National Petroleum Corporation
- Ghana National Gas Company
- Ghana Infrastructure Investment Fund
- Oil companies

The draft of this report was validated by stakeholder institutions before publication.

#### 1.4 Outline of the Report

The report has twelve chapters.

- Chapters One to Three provide updates, current developments in the petroleum sector and analysis of production data.
- Chapters Four to Eight discuss petroleum revenue collection, distribution, utilisation and performance of the Ghana Petroleum Funds.
- Chapter Nine provides updates on the operations of Ghana National Gas Company.
- Chapter Ten: discusses the outlook for the industry for the rest of the year.
- Chapters Eleven to Twelve summarise the key findings, draw conclusions, and make recommendations.

## 2 DEVELOPMENTS IN THE OIL AND GAS SECTOR OVER THE PERIOD (JANUARY – JUNE 2017)

The period under review witnessed several developments in Ghana's upstream petroleum sector, most of which provide clear indications of a resilient industry. Crude oil prices have not appreciated to their 2014 levels. Consequently, global investments in upstream petroleum activities have slowed down. However, in Ghana, the period saw progress made towards the finalisation of the Greater Jubilee Full Field Development Plan (GJFFDP), the completion of work on the gas export facility on the Tweneboa-Enyenra-Ntomme (TEN) FPSO, and even faster progress toward the commissioning of the Sankofa-Gye Nyame (OCTP) project.

The Western Corridor Gas Infrastructure processing facility also continued to receive and process gas for the domestic market.

The Ghana – Cote d'Ivoire maritime boundary dispute before the International Tribunal for the Law of the Sea (ITLOS) has slowed the pace of preparations toward the development of the DWT/CTP project by Hess Petroleum.

#### 2.1 Greater Jubilee Field Operations and Cost Profile

The major development at Jubilee over the period was the resumption of discussions towards the finalisation and approval of the GJFFDP.

The following were the outcome of a review of the Plan of Development (POD) undertaken jointly by the Petroleum Commission and Tullow Oil Ghana Limited (TGL), the Operator, at the instance of the Minister for Energy:

 The Existing Jubilee FPSO Vessel will be used with expansion of the subsea architecture to accommodate additional wells required to economically exploit the Greater Jubilee Field (Jubilee, Mahogany, Teak resources).

- The plan for FPSO Expansion to maximize gas production was discarded after FEED studies showed it was not technically and commercially viable.
- Gas price negotiation between Tullow Ghana Limited (TGL) and GNPC is ongoing.
- Drilling and completion costs were reduced by about twenty nine percent (29%) from approximately US\$1.8 billion to 1.274 billion. A single rig (drilling unit) scenario is being considered for use on the Greater Jubilee and TEN Fields.
- The size of the proposed development area (DPA) is still under discussion to ensure compliance with the Petroleum Agreement which allows only 10% increase of the areal extent of an accumulation of petroleum as the DPA.
- The West Leo Rig contract which had an exorbitant day rate was abrogated following initial concerns raised by the Minister in December 2015, when the Operator submitted the Greater Jubilee Full Field Development Plan (GJFFDP) for approval.

| Expenditure Type                          | YEAR TO DATE (US\$) |
|---|---------------------|
| EXPLORATION & APPRAISAL - Jubilee         |                     |
| DEVELOPMENT - Jubilee DWT                 |                     |
| Phase 1                                   |                     |
| Development Drilling                      | -                   |
| Facility Design & Construction            | (7,455,903)         |
| Development General                       | (2,519,767)         |
| Capital Works                             | (1,624,156)         |
| Seismic & Studies                         | 6,233,684           |
| Project Management                        | 34,218              |
| Phase 1A                                  | (5,331,923)         |
| Development Drilling                      | 5,987,776           |
| Phase 1A+                                 | (5,987,776)         |
| Development (Drilling)                    | (724,257)           |
| Facility Design & Construction            | (2,370,157)         |
| Development (General)                     | 13,531              |
|   | (3,080,883)         |
| FPSO Charter Rate - Jubilee               | -                   |
| FPSO Purchase - Jubilee                   | -                   |
|   | (14,400,582)        |
| PRODUCTION - Jubilee DWT                  | 48,281,575          |
| OTHER COSTS -                             |                     |
| Inventory, FPSO Funding & Rig Prepayments | (69,325,439)        |
| INDIRECT OVERHEADS -                      |                     |
| Exploration                               | -                   |
| Development                               | 279,168             |
| Production                                | 250,000             |
|   | 529,168             |
| Jubilee Total                             | (34,915,278)        |

Table 2-1: Detailed Breakdown of Jubilee Costs (Jan – June 2017)

Source: GNPC, June 2017

| TEN Field Expenditure Type                | Year to date (US\$) |
|---|---------------------|
| EXPLORATION & APPRAISAL – TEN             |                     |
| TEN Pre-F.E.E.D.                          | -                   |
| TEN F.E.E.D.                              | -                   |
| TEN E&A                                   | -                   |
| E&A Total                                 | -                   |
| DEVELOPMENT - TEN                         |                     |
| Development Drilling                      | (25,697,442)        |
| Facility Design & Construction            | 118,972,628         |
| Studies, Survey, & Seismic                | -                   |
| Development (General)                     | 3,260,303           |
| TOTAL                                     | 96,535,489          |
| PRODUCTION – TEN                          |                     |
| TEN Production                            | 75,656,573          |
| TOTAL                                     | 75,656,573          |
| OTHER COSTS                               |                     |
| Inventory, FPSO Funding & Rig Prepayments | (114,381,423)       |
| INDIRECT OVERHEADS – TEN                  |                     |
| Exploration                               | -                   |
| Development                               | 1,500,000           |
| Production                                | -                   |
| TOTAL                                     | 59,310,638          |

Table 2-2: Detailed Breakdown of TEN Costs (Jan – June 2017)

Source: GNPC, June 2017

The period witnessed the commissioning of the TEN gas systems, such as the gas compressors, refrigeration, and topside gas export system. Performance tests were subsequently carried out on the facility. The tests revealed challenges with

gas turbine generators, the gas compression system, and the tulip of the High-Pressure Flare Tip. These have been remedied.

#### 2.2 Sankofa-Gye Nyame (SGN) Field Development and Cost Profile

The Petroleum Commission reported that the FPSO John Agyekum Kufuor set sail from Singapore on 1st March, 2017 and arrived at OCTP Field in Ghana on 10th April 2017.

Progress was made toward the commissioning of the overall OCTP integrated development project (Oil Phase and Gas Phase). The Petroleum Commission reported that the project had achieved eighty percent (80%) completion as at June 2017. First oil was received on 20<sup>th</sup> May 2017, three months ahead of schedule. The achieved average daily oil production as at the end of June was 12,099 bopd, with an annualised average daily oil production rate of 2,740 bopd against a target of 7,441 bopd. A total of 496,055 bbls has been produced to date, and is expected to rise as additional oil wells are completed and brought on stream in the next half of the year.

The Gas phase of the Project is 38.2% complete with first gas expected by July 2018. The Operator has however expressed concern about delay in the availability of the transportation facility for the evacuation of gas from the West (Aboadze Thermal Hub) to the East (Tema Thermal Hub) via the West African Gas Pipeline (WAGP) (Aboadze -Tema) for utilisation. The Petroleum Commission has however indicated that the Government of Ghana is working with all parties concerned (GNPC, GNGC, ENI, West African Gas Pipeline Company Limited (WAPCO) & IPPs) to ensure that all the necessary agreements (GSAs between GNPC and Thermal IPPs, GTA between GNPC/GNGC/WAPCO) are signed to allow for pipeline interconnection activities to be completed on schedule for gas transport.

The project has been split into five (5) principal activities for completion. The table below shows the completion status of these activities in the run-up to first gas.

| Activity                         | Percentage Completed (%) as at June |
|----------------------------------|-------------------------------------|
|                                  | 2017                                |
| Early works                      | 96                                  |
| Engineering, Procurement,        | 27.2                                |
| Construction and installation    |                                     |
| Turbo-compressor supply          | 83.1                                |
| Gas export sea-line pipes supply | 82.7                                |
| Gas export sea-line installation | 33.8                                |

Table 2-3 Completion Status of Onshore Receiving Facility (ORF) Activities

Source: Petroleum Commission, 2017

The Draft Crude Oil Lifting Agreement (COLA) of SGN Field is still under discussion with the partners.

#### 2.3 Voltaian Basin Exploration Project

GNPC continued its exploration and reconnaissance activities in the Voltaian Basin. The activities have focused on the validation of an anticipated petroleum system, recognised through previous geological and geophysical studies.

The Petroleum Commission reports that a concept paper governing GNPC's activities in the Voltaian basin was revised during the period, following the enactment of the Petroleum (Exploration and Production) Act, 2016, (Act 919). The revision was done with input from the Ministry of Energy and the Petroleum Commission.

Other notable developments in the Voltaian Basin are:

- Submission of the Environmental Impact Statement (permit plan, waste management plan, and monitoring budget), and the payment of permit fees to EPA;
- Re-tendering of the 2D Seismic Acquisition contract;
- Drafting of Contract for Procurement of Explosives & Detonators;
- Finalisation of the Social Performance Consultancy Contract;
- Submission of the Project Security Plan to the Petroleum Security Coordinating Committee and the Regional Security Committee; and
- Receipt of Expression of Interest (EoI) from 29 Seismic Processing Companies.

#### 2.4 Maritime Boundary Dispute with La Cote d'Ivoire

The International Tribunal for the Law of the Sea (ITLOS) will deliver its ruling with respect to the maritime boundary dispute between Ghana and La Cote d'Ivoire on the 23<sup>rd</sup> of September 2017.

Cote d'Ivoire contested the ownership of Ghana's oil fields with regards to the maritime boundary between the two countries. In April 2015, the Tribunal granted Cote d'Ivoire's request, and ordered Ghana to suspend all new drilling in the disputed area. This decision affected Tullow's activities in its TEN Field project, and restrained the Operator from drilling a scheduled additional 13 wells.

The dispute affected the planned development of Hess Petroleum's DWT/CTP project, and put in abeyance planned exploration activities of AGM Petroleum.

Activities on the DWT/CTP operated by Hess are currently at the predevelopment stage (post-appraisal). Hess made seven (7) discoveries out of which all but one (Cob-1) have been declared commercial. The main hub for the field is the Pecan discovery which has reserves estimated at 255 MMSTB. Potential reserves from the Hess field are estimated at 373.6 MMSTB.

The Operator is undertaking FPSO design competition which is expected to be completed by mid-July, 2017 while the FEED of Subsea Umbilical Risers and Flowlines (SURF) are ongoing.

It is anticipated that, following a favourable determination of the matter before ITLOS, Hess will submit a Plan of Development by the first quarter of 2018 and proceed with commercial evaluation of the bidders.

#### 2.5 Update on Decommissioning of the Saltpond Field

The Saltpond Field remains shut down, still awaiting decommissioning. In maintaining GNPC's skeletal staff on the production platform, the Corporation spent US\$74,192.57 on staff emoluments and maintenance related costs.

#### 2.6 Status of Oil Block Allocations

No new oil and gas licenses were issued during the period under review. There was also no relinquishment.

According to PC's records, 22 contract areas have so far been licensed in Ghana's offshore petroleum industry, with three currently in production. Those in production are the Jubilee Field which straddles West Cape Three Points and Deepwater Tano (Jubilee), Deepwater Tano Contract Area hosting the TEN Field), and SGN within the Offshore Cape Three Points Contract Area.

A contract area (Deepwater Tano-Cape Three Points Block) operated by Hess Petroleum is at the pre-development phase, with the rest at various stages of exploration.

The contract areas under licence and those relinquished are presented under appendixes.

## 3 PETROLEUM PRODUCTION AND SALES

#### 3.1 Crude Oil Production

A total of 24,346,460 barrels (bbls) of oil was produced from Ghana's three offshore Fields - Jubilee, TEN and SGN, from January to June, 2017. This represents a 53% increase over the first half of the 2016 production volume of 11,440,129 bbls, and the highest half-year crude oil production since 2011 as shown in Figure 1 below:

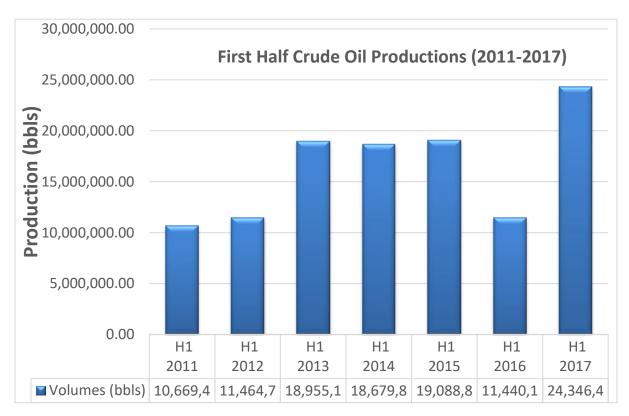


Figure 1: Half Year (H1) Crude Oil Production (2011-2017)

The sharp increase in half-year production figures as recorded in the first half of 2017 is attributable to the increased production from the TEN Field and the coming on-stream of the SGN Field.

| MONTH    | JUBILEE FIELD | TEN FIELD | SGN FIELD           | PRODUCTION | TOTAL      |
|----------|---------------|-----------|---------------------|------------|------------|
|          | (BBLS)        | (BBLS)    | (BBLS)              | DAYS       |            |
| January  | 1,851,668     | 1,302,460 | 0                   | 31         | 3,154,128  |
| February | 2,434,849     | 1,472,768 | 0                   | 28         | 3,907,617  |
| March    | 3,134,460     | 1,713,193 | 0                   | 31         | 4,847,653  |
| April    | 2,893,021     | 1,268,394 | 0                   | 30         | 4,161,415  |
| May      | 2,109,557     | 1,928,789 | 146,877.50          | 31         | 4,185,224  |
| June     | 2,809,470     | 931,776   | 349,177.41          | 30         | 4,090,423  |
| Total    | 15,233,025    | 8,617,380 | 496,055             | 181        | 24,346,460 |
| Daily    | 84,160        | 47,610    | 12,099 <sup>1</sup> |            |            |
| Average  |               |           |                     |            |            |

Table 3-1 Crude Oil Production from Jubilee, TEN and SGN – Half Year 2017

Source: GNPC, June 2017

Table 3-1 above shows production figures for Jubilee, TEN and SGN fields for the first half year 2017.

Average daily production for Jubilee and TEN fields recorded over the period were 84,160 and 47,610 bbls respectively. Average daily oil production at SGN for the period 20th May to end of June was 12,099 bbls. SGN annualised average daily production as at 30th June was 2,740 bbls.

There was a 25% increase over the 62,858 bbls average daily production recorded from the Jubilee Field in the first half of 2016. From Table 3-1, the Jubilee Field recorded its highest crude production volume in March and the lowest in January.

The TEN Field recorded its highest monthly production of 1,928,789 bbls in May, with the lowest of 931,776 bbls in June.

<sup>&</sup>lt;sup>1</sup> No. of days used for calculating daily average production for SGN is 41 days since the field came on-stream on 20th May, 2017

The SGN Field achieved first oil on 20<sup>th</sup> May 2017 with a monthly production of 146,877.50 bbls with a steady increase in production volume to 349,177.41 bbls in June 2017, averaging at 8,132 bopd at the end of the period under review.

The volume of crude oil produced in Ghana since commercial production began in 2010, totalled 218,573,411 barrels as at the end of June 2017.

#### 3.2 Gas Production

The associated gas produced from Jubilee, TEN and SGN Fields in the first half of 2017 totalled 31,673.96 million standard cubic feet (MMScf). This represents a 46.6% increase in production of raw gas compared to the 16,904 MMScf recorded in the first half of 2016. It is also the highest raw gas produced in a first half year since 2011, mainly due to additional production from the TEN and SGN fields as shown in Table 3-2 below.

| DESCRIPTION       | MONTH    | JUBILEE   | TEN       | SGN    |
|-------------------|----------|-----------|-----------|--------|
| ASSOCIATED GAS    | January  | 2,864.08  | 1,579.60  | -      |
| PRODUCTION        | February | 3,063.40  | 1,803.75  | -      |
| (MMSCF)           | March    | 3,972.98  | 2,249.87  | -      |
|                   | April    | 3,680.52  | 1,668.14  | -      |
|                   | May      | 2,585.41  | 2,581.18  | 207.43 |
|                   | June     | 3,550.99  | 1,356.16  | 510.45 |
| Sub-total (MMScf) |          | 19,717.38 | 11,238.70 | 717.88 |
| TOTAL (MMScf)     |          | 31,673.96 |           |        |

Table 3-2 Gas Production from Jubilee, TEN and SGN – Half Year 2017

Source: PC, June 2017

Table 3-3 below shows the volumes of raw gas exported to the Ghana National Gas Company (GNGC).

# Table 3-3 Raw Gas Exported to GNGC from Jubilee, TEN and SGN – Half Year 2017

| DESCRIPTION       | MONTH    | JUBILEE   | TEN    | SGN  |
|-------------------|----------|-----------|--------|------|
| RAW GAS           | January  | 1,570.35  | 0.00   | 0.00 |
| EXPORTED TO       | February | 242.38    | 0.00   | 0.00 |
| GNGC (MMSCF)      | March    | 2,299.59  | 0.00   | 0.00 |
|                   | April    | 2,383.29  | 0.00   | 0.00 |
|                   | May      | 2,048.17  | 233.89 | 0.00 |
|                   | June     | 2,313.54  | 0.00   | 0.00 |
| Sub-total (MMScf) |          | 10,857.32 | 233.89 | 0.00 |
| TOTAL (MMScf)     |          | 11,095.71 |        |      |

Source: PC, June 2017.

A combined gas of 11,095.71 MMScf was exported to the Atuabo Gas Processing Plant (AGPP); 238.39 MMScf of raw gas exported from the TEN Field to GNGC was used as a gas export trial after the TEN gas manifold was installed and commissioned in the period under review.

#### 3.3 Crude Oil Liftings

#### 3.3.1 Jubilee Field

The Jubilee Partners cumulatively lifted sixteen (16) parcels of crude oil totalling 15,166,071 bbls in the first half of 2017 compared to the eleven (11) liftings (10,526,448 bbls) that took place in the same period of 2016.

GNPC, representing the Ghana Group, lifted two (2) parcels of crude oil in the first six months of 2017 totalling 1,896,737 bbls compared to 13,269,334 bbls lifted by the other Jubilee Partners over the same period as depicted in Table 3-4 below. These liftings were in conformity with the Jubilee Field Crude Oil Lifting Agreement (COLA). GNPC's liftings for the period under review reduced by 46,395 bbls (approximately 2.4%) compared to its liftings for the same period in 2016 (1,943,132 bbls) and that of the other Jubilee Partners increased by approximately 35.3% from 8,580,316 bbls in the first half of 2016 to 13,269,334 bbls during the period under review.

Table 3-4 Crude Oil Lifting by the Ghana Group and other Jubilee Partners – Half Year 2017

| JUBILEE CRUDE OIL LIFTINGS            |                                      |                   |  |
|---------------------------------------|--------------------------------------|-------------------|--|
| (1st January, 2017 – 30th June, 2017) |                                      |                   |  |
| LIFTING DATE                          | JUBILEE PARTNER                      | QTY LIFTED (BBLS) |  |
| 12-Jan-2017                           | Anadarko & Sabre oil and gas limited | 950,339           |  |
| 29-Jan-2017                           | Tullow Ghana limited                 | 981,581           |  |
| 06-Feb-2017                           | Kosmos                               | 996,846           |  |
| 18-Feb-2017                           | Tullow Ghana limited                 | 911,989           |  |
| 27-Feb-2017                           | Anadarko & Sabre oil and gas limited | 995,182           |  |
| 09-Mar-2017                           | Ghana Group                          | 947,806           |  |
| 23-Mar-2017                           | Kosmos                               | 978,596           |  |
| 31-Mar-2017                           | Tullow Ghana limited                 | 949,524           |  |
| 14-Apr-2017                           | Anadarko & Sabre oil and gas limited | 995,360           |  |
| 17-Apr-2017                           | Tullow Ghana limited                 | 989,263           |  |
| 02-May-2017                           | Kosmos                               | 950,820           |  |
| 13-May-2017                           | Ghana Group                          | 948,931           |  |
| 24-May-2017                           | Anadarko & sabre oil and gas limited | 992,934           |  |
| 09-Jun-2017                           | Tullow Ghana limited                 | 988,567           |  |
| 16-Jun-2017                           | Kosmos                               | 967,616           |  |
| 22-Jun-2017                           | Tullow Ghana limited                 | 620,717           |  |
| TOTAL LIFTED                          |                                      | 15,166,071        |  |

Source: GNPC, 2017

As reported in the PIAC 2016 Annual Report, a closing stock of 1,691,879 bbls was carried over to 2017. The first six months liftings of 15,166,071 bbls by the Jubilee

Partners leaves a balance of 66,954 bbls, which when added to the 2017 opening stock sums up to a 2017 half year closing stock of 1,758,833 bbls.

#### 3.3.2 TEN Field

As shown in Table 5 below, the nine (9) parcels of crude oil lifted by the TEN Partners from January to June 2017 totalled 8,891,482 bbls. GNPC, representing the Ghana Group, lifted two (2) parcels of crude oil in the first six months of 2017 totalling 1,992,245 bbls and the other partners lifted seven (7) parcels. However, production for the period was 8,617,380 bbls. The difference of 274,102 bbls was from a 2017 opening stock (carried over from 2016) of 684,646 bbls leaving an end of half-year closing stock of 410,544 bbls of oil.

| TEN CRUDE OIL LIFTINGS<br>(January - June 2017) |                            |                   |  |  |
|---|----------------------------|-------------------|--|--|
| LIFTING DATE                                    | JUBILEE PARTNER            | QTY LIFTED (BBLS) |  |  |
| 18-Jan-2017                                     | Tullow Ghana limited       | 996,091           |  |  |
| 08-Feb-2017                                     | Tullow Ghana limited       | 997,179           |  |  |
| 04-Mar-2017                                     | Anadarko & PetroSA limited | 995,143           |  |  |
| 20-Mar-2017                                     | Ghana Group                | 996,588           |  |  |
| 06-Apr-2017                                     | Tullow Ghana limited       | 925,262           |  |  |
| 27-Apr-2017                                     | Kosmos Energy              | 995,593           |  |  |
| 14-May-2017                                     | Tullow Ghana Limited-0006  | 994,174           |  |  |
| 06-Jun-2017                                     | Anadarko & PetroSA Limited | 995,795           |  |  |
| 18-Jun-2017                                     | Ghana Group                | 995,657           |  |  |
| TOTAL LIFTED                                    |                            | 8,891,482         |  |  |

Table 3-5 Crude Oil Lifting by the Ghana Group and other TEN Partners – Half Year 2017

Source: GNPC, 2017

#### 3.4 Crude Oil Pricing

#### 3.4.1 Jubilee and TEN Crude Achieved Prices

The average unit price achieved by the Ghana Group for Jubilee Crude for the period under review was US\$51.13/bbl compared to a Government estimated

benchmark price of US\$56.14/bbl. Though there was a deviation from the estimated benchmark price, the achieved price fared favourably compared with the average Dated BRENT price of US\$50.04/bbl during the same period.

The Ghana Group's two cargoes lifted from the TEN Field also achieved an average unit price of US\$47.28/bbl, falling behind both the estimated benchmark price and the average dated BRENT price for the first six months of 2017.

Furthermore, the combined average achieved price for both Jubilee and TEN crudes for the first half of 2017 was US\$49.21/bbl, representing 1.66% and 12.34% deviations from the average dated BRENT and benchmark prices respectively.

Figure 2 below graphically compares the achieved prices of both Jubilee and TEN Fields with the dated BRENT price for the period under review.



#### Figure 2: PIAC Construct: Achieved Prices - Jubilee vs TEN vs BRENT

As depicted in Figure 2 above, whilst dated BRENT prices stayed fairly the same - a US\$0.30 Cent price change between the March and May prices, (0.60%

difference) - there was a marked difference in prices realised by the Ghana Group from the sale of both Jubilee and TEN Crude from the two liftings in March and May. There was an 11.17% price difference between the price realised for the first (US\$54.151/bbl) and second (US\$48.102/bbl) liftings from Jubilee, representing 11.17 percentage difference in prices. Similarly, a 7.76% price difference was achieved between sales from the first lifting of TEN Crude in March (US\$49.188/bbl) and the second lifting in May (US\$45.373/bbl).

#### 3.4.2 Ghana Group versus Jubilee and TEN Partners

As stated earlier, in respect of the period under review, the Ghana Group achieved an average price of US\$51.13/bbl and US\$47.28/bbl for Jubilee and TEN Crude respectively. The other Jubilee Partners similarly achieved averaged spot prices of US\$49.09/bbl for Kosmos, and US\$49.60/bbl for Anadarko. See Figure 3.

The other partners raked in higher revenues for the period under review partly from the higher achieved prices realised from the sale of a portion of their crude oil under their respective hedging programmes. From Figure 3, the respective hedging programme of these partners fetched Kosmos US\$54.01/bbl, and Anadarko US\$59.80/bbl. Several attempts by PIAC to obtain Tullow Ghana's achieved crude oil price proved futile.

The Partners insured their operations against business interruptions. In the first year of 2017, Tullow and Kosmos realised US\$54.30 million and US\$58.70 million respectively from their loss of production income (LOPI) insurance programmes.

However, as recommended in the PIAC Annual Report 2016, GNPC in the first half of 2017 completed negotiations for a Business Interruption (BI) cover in respect of the Jubilee and TEN Fields. The BI covers the Ghana Group's Carried and Participating Interests (CAPI) and Royalty for a maximum insured sum of US\$513 million against interruption to oil and gas production. The Jubilee Field was insured for an 18-month period and the TEN Field for 12 months. The price insured for Jubilee Crude is US\$47.50/bbl whilst that of TEN is US\$ 46.0/bbl. For gas, a uniform price of US\$2.75MMBtu for both fields has been negotiated. The insurance for gas also covers disruptions in the downstream facilities.

In addition to the price, the other variables insured are daily production, insured interest, maximum recovery period, and maximum exposure claimable by GNPC.

The total premium payable amounts to US\$6.38 million comprising US\$5.15 Million for CAPI, and US\$1.23 million for GoG royalty in both fields.

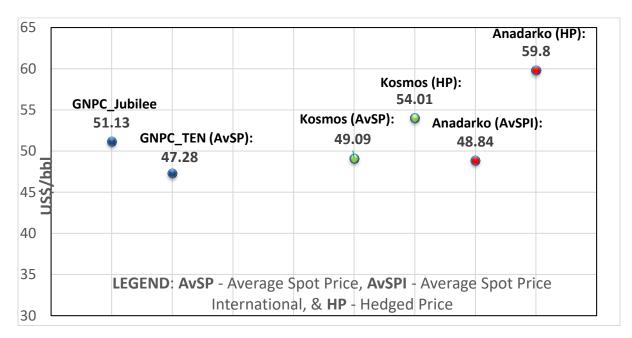


Figure 3: PIAC Construct: Comparison of Selling of Jubilee/TEN Partners

# 4 REVENUE COLLECTION AND MANAGEMENT

Petroleum Revenue, according to Act 815, includes receipts from Royalty, Initial (Carried) Interest, Additional Participating Interest, Petroleum Income Tax, Additional Oil Entitlement, and Surface Rentals.

The Act establishes a Petroleum Holding Fund at the Bank of Ghana, to receive and disburse petroleum receipts. The Ghana Revenue Authority is mandated by the Act to assess, collect and account for petroleum revenue from all sources due the Republic.

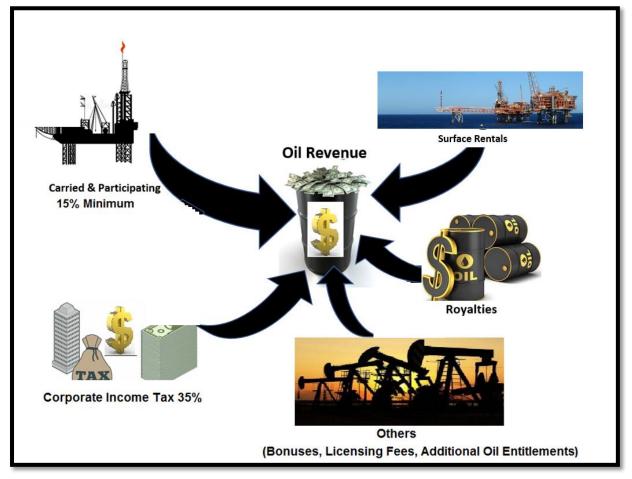


Figure 4: PIAC Construct: Sources of Petroleum Revenue

## 4.1 Fiscal Regime

The tables below (4-1 and 4-2) summarise the licensing information and fiscal regime for participating companies in Ghana's oil and gas fields. This serves as a guide for the assessment and collection of payments due the state.

|   | CONTRACT   | INFORMAT                     | ΓΙΟΝ   |  |  |
|---|--|------------------------------|--|--|--|
| <b>5</b>  | Petroleum Agreements<br>(PA) / Contracts   | Contract<br>Area_sq          | Equity Partners  | Recoverable<br>Reserves                                  | Peak Rate  |
| Field<br>Jubilee Field<br>(Including<br>Greater<br>Jubilee)         | West Cape Three Points<br>(WCTP) PA<br>Deepwater Tano (DWT)<br>PA<br>Unitisation and Unit<br>Operating Agreement<br>covering the Jubilee<br>Field Unit | km<br>1108,<br>1957,<br>2511 | Tullow (operator)<br>35.48%;<br>Kosmos 24.08%;<br>Anadarko 24.08%;<br>GNPC 13.64%;<br>Petro SA 2.73% | ~700 mmboe<br>(full field<br>estimate)                   | 120 Kbopd and<br>~100 mmscf/d<br>gas (Phase 1);<br>250 Kbopd |
| Tweneboa<br>Enyenra<br>Ntomme<br>(TEN) Field                        | Deepwater Tano PA  | 1108,<br>554                 | Tullow (operator)<br>47.18%; Kosmos<br>17.0%; Anadarko<br>17.0%; GNPC<br>15.0%; Petro SA<br>3.82%    | 240 mmboe<br>oil and 360<br>bcf gas                      | 80 Kbopd in<br>2018  |
| Offshore<br>Cape Three<br>Points (OCTP)<br>Field (Phase 1<br>and 2) | ОСТР РА  | 2080                         | ENI (operator)<br>44.4%; Vitol<br>upstream Ghana<br>35.6% and GNPC<br>20%                            | ~1.5 tcf of<br>gas and ~500<br>million<br>barrels of oil | Peak at 80<br>Kbopd and 170<br>mmscf/d gas in<br>2019        |

Table 4-1: Petroleum Licence Information

PIAC Construct

SUMMARY OF FISCAL TERMS

PUBLIC INTEREST AND ACCOUNTABILITY COMMITTEE (PIAC) Report on the Management of Petroleum Revenue for the First Half of 2017

| Field   | Oil<br>Royalty   | Gas<br>Royalty | Initial<br>Interest<br>(Free<br>Carried<br>Interest) | Additional<br>Interest<br>(Paying) | Petroleum<br>Income Tax | Surface Rentals   |
|---|--|----------------|--|------------------------------------|-------------------------|---|
| Jubilee<br>Field<br>(Including<br>Greater<br>Jubilee)                     | 5%   | 4.08%          | 10%  | 3.64%                              | 35%                     | <ul> <li>\$30 per sq. km Initial</li> <li>Exploration Period</li> <li>\$50 per sq. km 1st<br/>extension;</li> <li>\$75 per sq. km 2nd<br/>extension</li> <li>\$100 per sq. km</li> <li>Development &amp;<br/>Production Area</li> </ul>               |
| Tweneboa<br>Enyenra<br>Ntomme<br>(TEN) Field                              | 5%   | 3%             | 10%  | 5%                                 | 35%                     | <ul> <li>\$30 per sq. km Initial</li> <li>Exploration Period</li> <li>\$50 per sq. km 1st</li> <li>extension</li> <li>\$75 per sq. km 2nd</li> <li>extension</li> <li>\$100 per sq. km</li> <li>Development &amp;</li> <li>Production Area</li> </ul> |
| Offshore<br>Cape Three<br>Points<br>(OCTP)<br>Field<br>(Phase 1<br>and 2) | 10% @<br>1,312 ft<br>water<br>depth;<br>7.5% @<br>water<br>depth ><br>1,312 ft | 5%             | 15%  | 5%                                 | 35%                     | <ul> <li>\$30 per sq. km Initial</li> <li>Exploration Period</li> <li>\$50 per sq. km 1st</li> <li>extension</li> <li>\$75 per sq. km 2nd</li> <li>extension</li> <li>\$100 per sq. km</li> <li>Development &amp;</li> <li>Production Area</li> </ul> |

Table 4-2: Petroleum Fiscal Terms

PIAC Construct

PUBLIC INTEREST AND ACCOUNTABILITY COMMITTEE (PIAC) Report on the Management of Petroleum Revenue for the First Half of 2017

# 4.2 Half Year 2017 Petroleum Receipts from Crude Liftings

# 4.2.1 Revenue from Jubilee Field Crude Liftings

An amount of US\$52,660,593.80 was paid into the PHF in January being proceeds from the sale of the 984,163 bbls of crude oil lifted in December 2016 (lifting No. 35) from the Jubilee field.

The Ghana Group subsequently lifted 1,896,737 barrels from the Jubilee Field during the first half of 2017 (liftings Nos. 36 and 37), generating \$97,121,860.63.

| Date of<br>Lifting | Lifting<br>No. | Volume<br>(bbl) | Selling Price<br>(US\$) | Premium<br>(US\$) | Revenue (US\$) |
|--------------------|----------------|-----------------|-------------------------|-------------------|----------------|
| 27-Dec-16          | 35             | 984,163         | 53.428                  | 78,733.04         | 52,660,593.80  |
| 09-Mar-17          | 36             | 947,806         | 54.151                  | 75,824.48         | 51,400,467.19  |
| 13-May-17          | 37             | 948,931         | 48.102                  | 75,914.48         | 45,721,393.44  |
| Tota               | I              | 1,896,737       |                         | 230,472.00        | 149,782,454.43 |

Table 4-3 Crude Oil Lifting from Jubilee by the Ghana Group and the Associated Revenue - Half Year 2017

Source: GNPC, June 2017

## 4.2.2 Revenue from TEN Field Oil Liftings

The Ghana Group's first lifting (lifting No. 1) from the TEN Field was in **December 2016**. That first parcel was 996,459 barrels of crude oil, and yielded an amount of US\$51,008,736.21, which was paid into the PHF in January 2017.

There were 2 subsequent liftings by the Ghana Group in the first half of 2017; lifting No. 2 (996,588 barrels) and lifting No. 3 (995,657 barrels), totalling 1,992,245 barrels. Proceeds for lifting No. 2 was US\$49,020,170.54, and this was paid into the PHF in April. Proceeds from lifting No. 3 from TEN was due in July,

outside of this accounting period. Hence, total proceeds from the TEN Field paid into the PHF as revenue in the period under review was **US\$100,028,906.75**.

Table 4-4 Crude Oil Lifting from TEN by the Ghana Group and the Associated Revenue - Half Year 2017

| Date of<br>Lifting | Lifting<br>No. | Volume<br>(bbl) | Selling Price<br>(US\$) | Premium<br>(US\$) | Revenue (US\$) |
|--------------------|----------------|-----------------|-------------------------|-------------------|----------------|
| 08-Dec-16          | 1              | 996,459         | 51.09                   | 99,645.90         | 51,008,736.21  |
| 20-Mar-17          | 2              | 996,588         | 49.188                  | _                 | 49,020,170.54  |
| Tota               | 2              | 1,993,047       |                         |                   | 100,028,906.75 |

Source: GNPC, June 2017

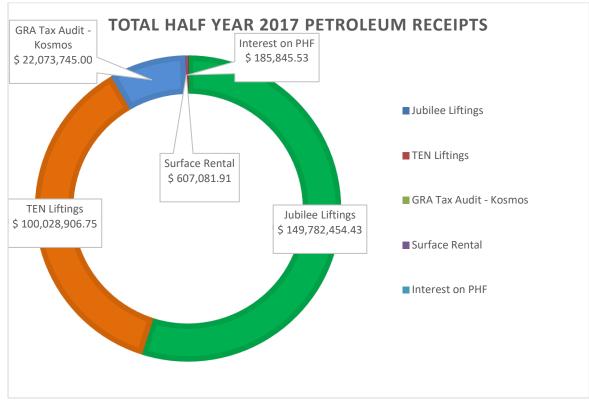
#### 4.2.3 Other Revenues

An amount of US\$22,073,745 was paid by Kosmos Energy as additional taxes resulting from a tax audit by GRA covering the period 2011 to 2015.

Also, during the period under review, an amount of US\$607,081.91 was paid into the PHF in respect of surface rentals from various companies.

In addition, interest of US\$185,845.53 was earned on undistributed funds held in the PHF over the period.

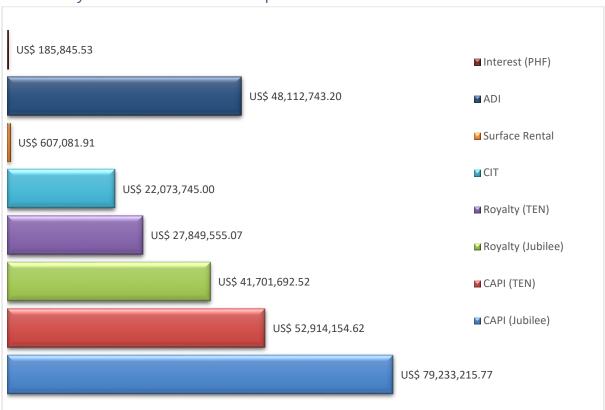
<sup>&</sup>lt;sup>2</sup> TEN Lifting No. 3 was in June 2017, and its associated revenue is not included in this table. It would be paid in July, outside of the first half of 2017



# 4.3 Total Half Year 2017 Petroleum Receipts

#### Figure 5: PIAC Construct: Petroleum Revenue – Half Year 2017

In the first half of 2017, a total of **US\$272,678,033.62** was paid into the PHF as petroleum receipts and interest, as illustrated in Figure 5 above.



# 4.4 Analysis of Petroleum Receipts – Half Year 2017

Figure 6: PIAC Construct: Petroleum Revenue – Half Year 2017

This analysis takes into consideration revenues from the five liftings for the Ghana Group as discussed above (in Table 4-3 and 4-4).

A summary of the accrued revenues under the various categories of revenue streams from petroleum is provided in Table 4-5.

| Item                               | Jubilee       | TEN           | Total          |
|------------------------------------|---------------|---------------|----------------|
| Carried and Participating Interest |               |               |                |
| (CAPI)                             | 79,233,215.77 | 52,914,154.62 | 132,147,370.39 |
|                                    |               |               |                |
| Royalty                            | 41,701,692.52 | 27,849,555.07 | 69,551,247.59  |
|                                    |               |               |                |
| Corporate Income Tax               | 22,073,745.00 | -             | 22,073,745.00  |
|                                    |               |               |                |
| Additional Participating Interest  | 28,847,546.13 | 19,265,197.07 | 48,112,743.20  |
|                                    |               |               |                |
| Surface Rental                     | 607,0         | 81.91         | 607,081.91     |
|                                    |               |               |                |
| Gas Revenue                        | -             | -             | -              |
|                                    |               |               |                |
| Interest from Petroleum Holding    | 185,845.53    |               | 185,845.53     |
| Fund                               |               |               |                |
|                                    |               |               |                |
| ΤΟΤΑΙ                              | L             |               | 272,678,033.62 |
| Source: DIAC Construct, June 2017  |               |               |                |

Table 4-5 Composition of Revenues from Jubilee and TEN for Year 2017

Source: PIAC Construct, June 2017

#### 4.4.1 Carried and Participating Interest (CAPI)

Table 4-6 Revenue from Carried and Participating Interest (CAPI) in the First Half of 2017

| CAPI                | Revenue from Q4-2016 | Q1              | Q2              | Total           |
|---------------------|----------------------|-----------------|-----------------|-----------------|
| Jubilee             | \$27,856,855.51      | \$27,190,262.86 | \$24,186,097.40 | \$79,233,215.77 |
| TEN                 | \$26,983,041.63      | \$25,931,112.99 |                 | \$52,914,154.62 |
|                     | \$132,147,370.39     |                 |                 |                 |
| Source: PIAC Constr | ruct                 |                 |                 |                 |

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Revenue realised under CAPI in the first half of the year from Jubilee and TEN amounted to \$132.15 million.

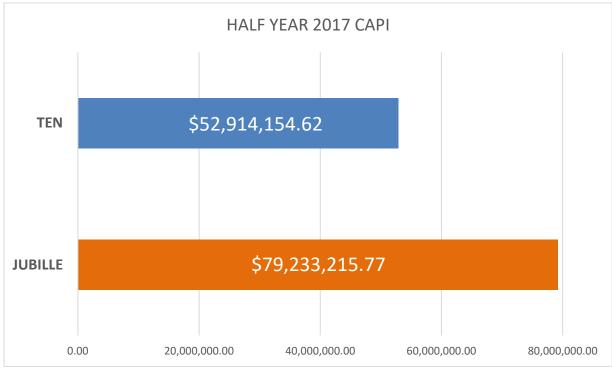


Figure 7: PIAC Construct: Half Year 2017 Paid Revenue from CAPI

#### 4.4.2 Royalties

#### Table 4-7 Revenue Derived from Royalty in the First Half of 2017

| Royalty | Revenue from Q4-2016 | Q1              | Q2              | Total           |
|---------|----------------------|-----------------|-----------------|-----------------|
| Jubilee | \$14,661,502.90      | \$14,310,664.67 | \$12,729,524.95 | \$41,701,692.52 |
| TEN     | \$14,201,600.86      | \$13,647,954.21 | -               | \$27,849,555.07 |
|         | TOTAL                |                 |                 | \$69,551,247.59 |

PIAC Construct, June 2017

Revenue for the period attributable to Royalty was \$69.55 million. Again, an amount of US \$28.86 million was in respect of 2016 operations. It should be noted

PUBLIC INTEREST AND ACCOUNTABILITY COMMITTEE (PIAC) Report on the Management of Petroleum Revenue for the First Half of 2017 that no royalty was received in Q2 from TEN because lifting (No. 3) was done in June and Royalty is expected in the second half of 2017.

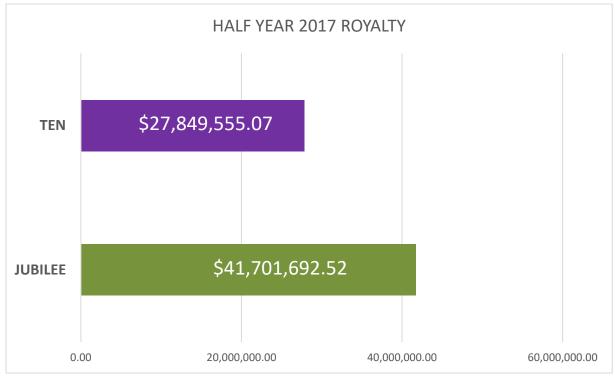


Figure 8: PIAC Construct: First Half of 2017 Revenue from Royalty

#### 4.4.3 Revenue from Additional Participating Interest

Table 4-8 Revenue Derived from Additional Participating Interest in the First Half of 2017

| API     | Revenue from Q4-2016 | Q1           | Q2           | Total         |
|---------|----------------------|--------------|--------------|---------------|
| Jubilee | 10,142,235.38        | 9,899,539.66 | 8,805,771.09 | 28,847,546.13 |
| TEN     | 9,824,093.73         | 9,441,103.34 |              | 19,265,197.07 |
|         | 48,112,743.20        |              |              |               |

PIAC Construct, June 2017

Ghana's 3.64% additional participating interest in Jubilee and 5% in TEN gave the nation US\$28.85 million and US\$19.27 million respectively. Total additional participating interest (API) for the period was therefore **US\$48.11** million.

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#### Figure 9: PIAC Construct: Half Year 2017 Revenue from API

## 4.4.4 Corporate Income Tax

In the first half of the year, Kosmos paid **US\$22,073,745**, which is the sum of additional assessment for 2011 to 2015 arising out of tax audit (US\$17,333,646), and interest on deferred tax payment (US\$4,740,099). Aside that payment, no tax was paid in respect of that period as the IOCs filed zero corporate tax returns for the first half of 2017.

#### 4.4.5 Surface Rentals

During the period under review, a total amount of US\$0.61 million was received in respect of surface rentals for block holdings. This includes arrears from 2016 and 2017 assessed surface rentals.

Springfield E&P's 2016 surface rental arrears of **US\$30,884.25** was wrongfully paid into GRA's account. It had not yet been transferred into the PHF as of 30<sup>th</sup> June 2017.

| Company                                      | Surface Rent (U\$) |
|--|--------------------|
| Hess Gh Exploration Limited                  | 150,750.00         |
| ENI Gh EP Ltd                                | 141,998.49         |
| PetroGulf Limited                            | 141,570.00         |
| Bluestar Exploration Gh                      | 78,230.00          |
| Tullow Ghana                                 | 59,261.22          |
| Kosmos Energy                                | 17,797.20          |
| Medea Development International<br>Ltd/GOSCO | 17,475.00          |
| TOTAL  | 607,081.91         |

Table 4-9 Revenue Derived from Surface Rent Paid in Half Year 2017

Source: Petroleum Commission

The assessed total surface rental from the operating companies for the full year 2017 is estimated at US\$1.21 million. (Appendix 3)

#### 4.4.6 Gas Revenue

There were no payments from GNPC/GNGC into the PHF in respect of gas revenue during the period under review.

Table 4-10 below presents the quantities of raw gas produced from the Jubilee, TEN and SGN fields, exported to GNGC, and the corresponding invoice amount for the credit of GNPC. Raw gas was sold at the PURC approved price of \$2.90 per MMBtu.

|          | GAS PRODUCTION | GAS EXPORT | INVOICED AMOUNT |
|----------|----------------|------------|-----------------|
|          | MMScf          | MMScf      | (US\$)          |
| January  | 2,864.08       | 1,570.35   | 4,827,237.46    |
| February | 3,063.40       | 242.38     | 745,085.96      |
| March    | 3,972.98       | 2,299.59   | 7,068,939.66    |
| April    | 3,680.52       | 2,383.29   | 7,326,234.76    |
| May      | 5374.02        | 2,281.97   | 7,014,769.63    |
| June     | 5417.60        | 2,313.54   | 7,111,825.03    |
| Total    | 24,372.60      | 11,091.12  | 34,094,092.50   |

| Table 4-10 Expected | Revenue from | Exported Ga | s - Half Year 2017 |
|---------------------|--------------|-------------|--------------------|
|                     |              |             |                    |

Source: GNPC, June 2017

Table 4-11 Expected GNGC Revenue from Processed Gas into Constituent Gas Products – First Half of 2017

|          | Raw GAS  | Raw GAS       | Lean Gas  | LPG               | Condensates       |
|----------|----------|---------------|-----------|-------------------|-------------------|
|          | Received | Received      | Produced  | Produced          | (Cubic Metres     |
|          | (MMScf)  | (MMBtu)       | (MMScf)   | (Cubic            | /M <sup>3</sup> ) |
|          |          |               |           | Metres            |                   |
|          |          |               |           | /M <sup>3</sup> ) |                   |
| January  | 1,570.35 | 1,664,564.64  | 1,438.74  | 10,861.67         | 1,857.59          |
| February | 242.38   | 256,926.19    | 206.95    | 1,650.44          | 314.74            |
| March    | 2,299.59 | 2,437,565.40  | 2,104.30  | 16,507.12         | 2,946.81          |
| April    | 2,383.29 | 2,526,287.85  | 2,194.64  | 17,092.39         | 2,988.53          |
| May      | 2,281.97 | 2,418,886.08  | 2,108.98  | 15,515.56         | 2,479.96          |
| June     | 2,313.54 | 2,452,353.46  | 2,140.65  | 16,764.00         | 2,759.36          |
| Total    | 8,809.15 | 11,756,583.62 | 10,194.26 | 78,391.18         | 13,346.99         |

Source: GNGC, 2017

GNGC processed raw gas into lean gas, LPG and condensate as shown inTable 4-11 above.

Table 4-12 shows GNGC's revenues and receivables from the sale of its products.

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| Invoiced<br>Company | Product     | Volume<br>(MT/MMBtu) | Total Invoice<br>(US\$) | Amount Paid<br>(US\$) | Amount<br>Outstanding<br>(US\$) |
|---------------------|-------------|----------------------|-------------------------|-----------------------|---------------------------------|
| Genser              | Condensates |                      |                         | 573,198.11            | (573,198.11)                    |
| ECO                 | Condensates | 794.32               | 233,897.37              | 247,139.84            | (13,242.47)                     |
| XF                  | Condensates |                      |                         | 45,573.00             | (45,573.00)                     |
| XF -<br>Interest    |             |                      | 54,655.68               |                       | 54,655.68                       |
| Globex              | Condensates | 4,651.81             | 1,044,719.61            | 1,452,742.58          | (408,022.97)                    |
| Med                 | Condensates | 3,332.76             | 952,670.32              | 631,303.05            | 321,367.27                      |
| Sage                | LPG         | 41,536.61            | 15,229,886.23           | 14,768,865.35         | 461,020.88                      |
| VRA                 | Lean Gas    | 11,324,825.97        | 100,138,641.15          | -                     | 100,138,641.15                  |
| VRA -<br>Interest   |             |                      | 7,042,280.39            |                       | 7,042,280.39                    |
| WangKang            | Lean Gas    | 693,077.30           | 6,128,466.69            | 3,056,583.54          | 1,608,686.08                    |
| Twyford             | Lean Gas    | 20,742.49            | 183,413.42              | -                     | 139,622.70                      |
|                     | Total       |                      | 131,008,630.86          | 20,775,405.47         | 108,726,237.60                  |

Table 4-12 GNGC Revenue from Processed Gas Products

Source: GNGC, June 2017

GNGC's Gross revenue over the period under review was US\$131.01 million. Lean Gas contributed US\$113.49 million out of which US\$7.04 million was interest on VRA's \$100.14 million indebtedness to GNGC. LPG sales generated \$15.23 million, and Condensates sales accounted for \$2.29 million out of which US\$54,655.68 is outstanding interest due GNGC from XF Company Ltd.

Detailed revenue statements for condensates, lean gas and LPG are presented in Appendixes 4, 5 and 6.

The price of lean gas remained unchanged from the same period in 2016 at US\$8.824 per MMBtu. The average price of condensate over the period under review was \$290.41 per metric tonne, fairly stable over the period. The price of LPG however fluctuated between US\$474.80 per metric tonne in March 2017 and US\$329.67 per metric tonne in June 2017, averaging at US\$363.57 per metric

tonne over the period. The average LPG price for the same period in 2016 was US\$290.37 per metric tonne.

#### 4.4.7 Additional Oil Entitlements

There were no revenues with respect to additional oil entitlements stemming from high crude prices and high profitability (IRR of 19% and above).

# 5 DISTRIBUTION OF PETROLEUM REVENUES

Ghana's petroleum revenues emanate from different sources. Accrued revenues are paid first into the PHF, an account held with the Bank of Ghana (BoG) before any disbursements are made.

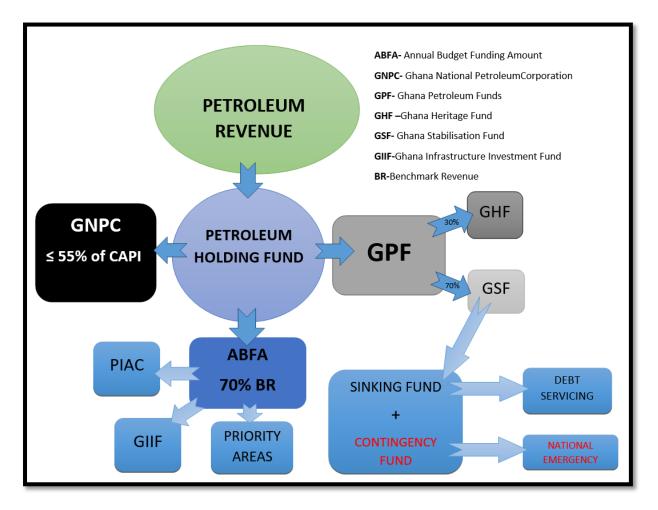


Figure 10: Distribution of Petroleum Revenue from the Petroleum Holding Fund

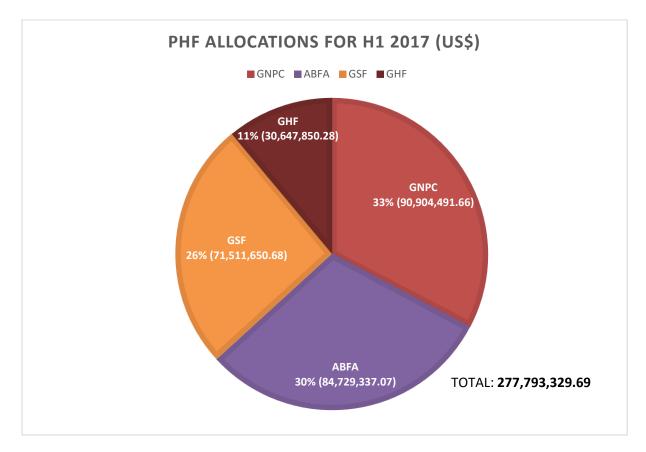
Source: PIAC Construct, 2017

Figure 10 above illustrates the distribution of petroleum revenues as mandated by the Act.

According to the Bank of Ghana, the total amount distributed from the PHF during the period under review was **US\$277.79 million**. This was made up of revenue from the 35th, 36th and 37th liftings from Jubilee totalling **US\$149.78** 

million and proceeds of the 1st and 2nd liftings from TEN totalling US\$100.03 million. Undistributed revenue brought forward from the end of 2016 distributed during the period was US\$27.98 million of which US\$27.36 million was received in the second half of 2016.

Figure 11 depicts the revenues allocated to GNPC, the Annual Budget Funding Amount, the Ghana Heritage Fund and the Ghana Stabilisation Fund for the first half of 2017. GNPC received the largest share of 33% followed by ABFA with 30%, and the Ghana Petroleum Funds with 37%. The amounts far exceed what was distributed in the first half of 2016.



## Figure 11: Allocation of Petroleum Revenues from the PHF

Source: PIAC Construct

Table 5-1 below shows monthly allocations for the first half of 2017, as compared with the second half of 2016. Total amount received by ABFA for the first half of

PUBLIC INTEREST AND ACCOUNTABILITY COMMITTEE (PIAC) Report on the Management of Petroleum Revenue for the First Half of 2017 2017 was US\$84.73 million compared to US\$53.31 million for the second half of 2016.

|           | Allocations  |              |              |              |               |
|-----------|--------------|--------------|--------------|--------------|---------------|
| H1 (2017) | GNPC         | ABFA         | GSF          | GHF          | TOTAL         |
|           | US\$         | US\$         | US\$         | US\$         | US\$          |
| JAN       | 21,900,634.0 | 39,516,617.4 | 11,854,985.2 | 5,080,707.9  | 78,352,944.7  |
| MAR       | 14,437,587.0 | 2,848,051.0  | 24,762,469.0 | 10,612,486.7 | 52,660,593.8  |
| MAY       | 32,173,781.6 | 42,364,668.5 | 18,365,322.4 | 7,870,852.4  | 100,774,625.0 |
| JUN       | 22,392,488.9 | -            | 16,528,873.9 | 7,083,803.1  | 46,005,166.0  |
| TOTAL     | 90,904,491.6 | 84,729,337.0 | 71,511,650.6 | 30,647,850.2 | 277,793,329.6 |
| H2 (2016) |              |              |              |              |               |
| AUG       | 24,145,013.2 | 17,023,897.8 | 5,107,169.3  | 2,188,786.8  | 48,464,867.2  |
| SEP       | 26,922,105.6 | 13,712,120.8 | 4,113,636.2  | 1,762,986.9  | 46,510,849.7  |
| DEC       | 14,660,940.3 | 22,573,778.4 | 6,772,133.5  | 2,902,342.9  | 46,909,195.3  |
| TOTAL     | 65,728,059.1 | 53,309,797.1 | 15,992,939.1 | 6,854,116.7  | 141,884,912.2 |

Table 5-1 Allocation of Revenues from PHF

Source: Bank of Ghana, 2017

## 5.1 Allocation to GNPC

GNPC received US\$90,904,419.66 for the half year representing 33% of the total amount allocated for CAPI and equity financing cost in the first half of 2017 as compared to US\$65.73 million in the second half of 2016 as shown in Table 5-1 above. In the first half of 2016, GNPC received US\$22.77 million from the PHF.

# 5.2 The Ghana Petroleum Funds

The Ghana Petroleum Funds refer to both the Ghana Stabilisation Fund (GSF) and the Ghana Heritage Fund (GHF). The GSF and GHF received US\$71.51 million and US\$30.65 million respectively for the period under review. This represents a combined percentage of 37% of the total amount disbursed in the first half of 2017. This was a significant increase over the disbursements in the second half of 2016, where GSF received US\$ 15.99 million and GHF had US\$6.85 million.

### 5.2.1 Ghana Stabilisation Fund

The Ghana Stabilisation Fund received US\$71,511,650 (26%) of disbursements from the PHF in the first half of 2017. This was an increase from the US\$15.99 million disbursement in the second half of 2016.

### 5.2.2 Heritage Fund

The Ghana Heritage Fund (GHF) received US\$30,647,850, representing 11% of the total allocations from the PHF.

## 5.3 Annual Budget Funding Amount

The Annual Budget Funding Account received US\$84,729,337, being 30% of the disbursements from the PHF for its approved priority areas.

### 5.3.1 Public Interest and Accountability Committee

In the period under review, PIAC did not receive any disbursement from the ABFA.

#### 5.3.2 Ghana Infrastructure Investment Fund

A total amount of GH¢29.22 million was transferred to the Ghana Infrastructure Investment Fund (GIIF) in January 2017 from ABFA, bringing total allocation to US\$75,402,772 since 2015, as shown in Table 5-2.

Table 5-2: Total Revenue Receipts, Investments and Accrued Interest into GIIF Since 2015

| Petroleum Revenue                | Amount (US\$) |
|----------------------------------|---------------|
| Total Revenue Receipts           | 75,402,772    |
| Total Investments in Instruments | 63,148,842    |
| Accrued Interest                 | 8,591,802     |

Source: GIIF, June 2017

In 2016, GIIF pledged US\$10 million to support part of the total cost of a number of market projects in the country, which were under the sponsorship of the

Ministry of Local Government and Rural Development. However GIIF, has been unable to fully redeem this pledge due to some monies owed it by the Ministry of Finance since 2015. This brings GIIF's commitments to various infrastructure projects to US\$ 172.50 million with an anticipated job creation of 105,600.

Details of these projects and their expected impacts are in Appendix 7.

# 6 PERFORMANCE OF THE GHANA PETROLEUM FUNDS

In the period under review, the performance of the Ghana Petroleum Funds' portfolios was mixed relative to the first half of 2016.

| Fund                              | First Half 2016 Return<br>on Investment (%) | First Half 2017 Return<br>on Investment (%) |
|-----------------------------------|---|---|
| Ghana Stabilisation Fund<br>(GSF) | 0.33  | 0.54  |
| Ghana Heritage Fund<br>(GHF)      | 4.93  | 2.09  |

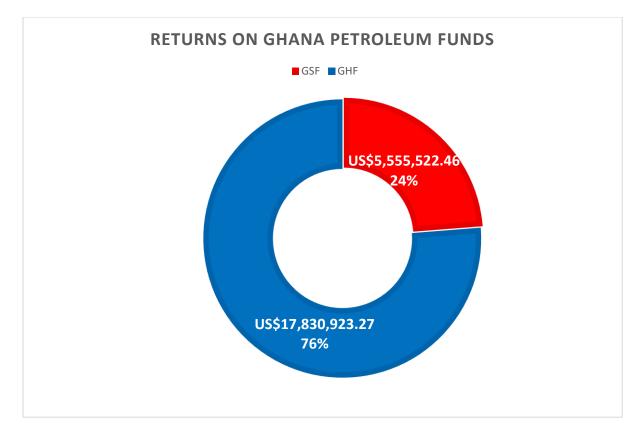
#### Table 6-1: Performance of Petroleum Funds

Source: Bank of Ghana

Performance was mixed due to the flattening of the US Treasury yield curve in the first half of 2017. In Europe, the European Central Bank (ECB) kept the key interest rates unchanged in pursuit of price stability.

The yield of the US 10-year Treasury note ended the first half 2017 at 2.304 percent compared to 2.444 percent at the end of second half of 2016, whilst the yield of the 2-year note ended the first half of 2017 at 1.382 percent compared to 1.188 percent at the end of 2016. On balance, the US Treasury yield curve flattened in the course of the first half of 2017.

At the end of June 2017, net profit on investment of the Ghana Petroleum Funds since inception was US\$23.39 million compared to US\$18.91 million at the close of 2016, illustrated below.



#### Figure 12: Total Returns on GSF and GHF since Inception

The PHF Account at the end of the first half of 2017, held a balance of US\$22.44, including a mandatory balance of US\$0.2 million.

## 6.1 Ghana Stabilisation Fund

The GSF returned 0.54 percent in the first half of 2017 compared to 0.33 percent in the same period 2016. This however, is a decline from the second half of 2016 when the return was 0.58 percent.

| US\$           |
|----------------|
| 207,748,663.49 |
| 71,511,650.68  |
| -1,884.66      |
| 1,042,301.63   |
|                |
| 280,300,731.14 |
|                |
| US\$           |
| 1,042,301.63   |
|                |
| -1,884.66      |
| 1,040,416.97   |
|                |

Source: BoG, June 2017

#### 6.2 Ghana Heritage Fund

The return on investment of GHF for the first half of 2017 was 2.09 percent compared to 4.93 percent for the same period in 2016. This however shows a rebound from the -2.99 percent in the second half 2016.

| Ghana Heritage Fund Account                        |                |  |
|--|----------------|--|
|  | US\$           |  |
| Opening book value (1st January, 2017)             | 276,962,291.34 |  |
| Receipt during the period                          | 30,647,850.28  |  |
| Bank Charges                                       | -10,385.69     |  |
| Realised Income                                    | 3,449,172.60   |  |
| Withdrawal   |                |  |
| Closing book value (30th June, 2017)               | 311,048,928.53 |  |
| Net Income for the Quarter Comprised the following |                |  |
| INCOME   | US\$           |  |
| Investment Income                                  | 3,449,172.60   |  |
| Less:  |                |  |
| Bank Charges                                       | -10,385.69     |  |
| Net Return for the period                          | 3,438,786.91   |  |

#### Table 6-3 Ghana Heritage Fund Statement

Source: BoG, June 2017

## 6.3 Bank Charges

Bank charges for GSF and GHF for the period were US\$1,884.66 and US\$10,385.69 respectively.

## 6.4 Investment Advisory Committee

The Investment Advisory Committee was established under Section 29 of the Act. The functions of the Investment Advisory Committee are to:

 Formulate and propose to the Minister the investment policy and management of the Ghana Stabilisation Fund and the Ghana Heritage Fund;

- Advise the Minister on the broad investment guidelines and overall management strategies relating to the Ghana Petroleum Funds and subsequently the Ghana Petroleum Wealth Fund that the Minister shall provide to the Governor, taking cognisance of international best practice of investments of a similar nature; and
- Develop for the Minister as part of the investment guidelines, the benchmark portfolio, the desired returns from and the associated risks of the Ghana Petroleum Funds and subsequently the Ghana Petroleum Wealth Fund taking into consideration the investment guidelines used by the Bank of Ghana for investments of a similar nature.

In the period under review, membership of the Investment Advisory Committee (IAC) had not been reconstituted following the change of government in January 2017.

The absence of an IAC to advise the Minister of Finance is in contravention of section 29 of the PRMA.

# 7 DISTRIBUTION OF ABFA

# 7.1 Selected Priority Areas for 2017-2019

The year 2016 marked the end of the four priority areas selected for ABFA allocations for the fiscal years 2014-2016. The Minister of Finance in his 2017 Budget Statement and Economic Policy of Government reviewed the priority areas for the utilisation of the ABFA for the 2017-2019 fiscal years, as shown in Table 7-1:

| No. | 2014-2016   | 2017-2019  |
|-----|---|--|
| 1   | Agriculture Modernisation   | Agriculture  |
| 2   | Road and Other Infrastructure   | Road, Rail and other critical<br>Infrastructure Development  |
| 3   | Expenditure & Amortisation of Loans<br>for Oil and Gas Infrastructure | Physical Infrastructure and Service<br>Delivery in Health    |
| 4   | Capacity Building (Including Oil and Gas)                             | Physical Infrastructure and Service<br>Delivery in Education |

#### Table 7-1 Reviewed Priority Areas for ABFA Utilisation

Source: MoF, 2017.

## 7.2 Distribution and Utilisation of ABFA Allocation

Out of the distributable amount of US\$277.79 million from the PHF for the period, the ABFA received US\$84.73 million (GH\$358.41 million, representing 30 percent). This allocation to the ABFA during the period under review represents 45% (US\$188.26 million) of programmed ABFA for 2017.

An amount of US\$18.62 million (GH¢78.69 million) was brought forward from 2016 as a balance on the ABFA Account, bringing the overall receivables by the

ABFA to US\$103.35 million (GH¢437.10 million) in the first half of 2017. This amount (GH¢ 437.10 million) represents a 60.44 percent increase over the amount available in the same period of 2016 (GH¢172.9 million).

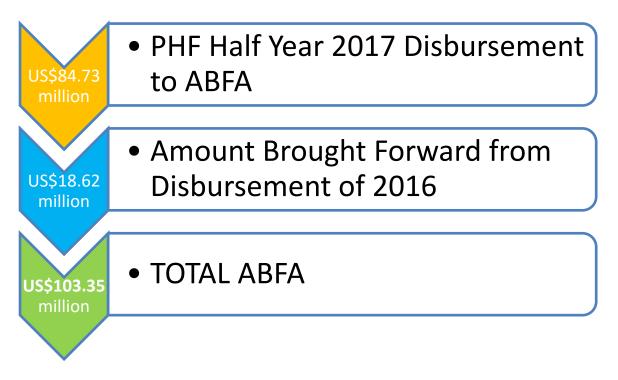


Figure 13: Half Year 2017 ABFA Amount

## 7.3 Analysis of 2017 (January – July) ABFA Utilisation

An amount of GH¢78.1 million (US\$18.62 million) was refunded into the Treasury Main (T-Main) Account in lieu of ABFA payments made from the T-Main in 2016.

As shown in Table 7-2 below, spending on Agriculture amounted to GH¢17.92 million. The amount was mainly in respect of the development of irrigation infrastructure, construction of Fisheries College in Anomabo, and counterpart funding for the Northern Rural Growth Programme.

As at the end of July 2017, there was no payment under GoG ABFA spending for Roads, Rail, and Other Critical Infrastructure. However, a total amount of GH¢29.22 million was transferred to the Ghana Infrastructure Investment Fund (GIIF) in January 2017. There was no spending under Physical Infrastructure and Service Delivery in Health.

An amount of GH¢6 million was spent under the Physical Infrastructure and Service Delivery in Education priority area.

Total disbursements from the ABFA from January to July 2017 was GH¢53,136,951.

| No. | Priority  | Programmed for 2017 | January - July 2017 |
|-----|---|---------------------|---------------------|
|     |   | (GH¢)               | Actuals (GH¢)       |
| 1   | Agriculture   | 156,077,117.00      | 17,916,586          |
| 2   | Road, Rail and other<br>critical Infrastructure<br>Development<br>(Transferred to GIIF) | 376,620,676.00      | 29,220,365          |
| 3   | Physical Infrastructure<br>and Service Delivery<br>in Health                            | 50,000,000.00       | -                   |
| 4   | Physical Infrastructure<br>and Service Delivery<br>in Education                         | 211,717,458.00      | 6,000,000           |
|     | <i>Public Interest And<br/>Accountability<br/>Committee (PIAC)</i>                      | 1,900,000           | -                   |
|     | TOTAL   | 796,315,251         | 53,136,951          |

Table 7-2: Programmed vs. First Half of 2017 Disbursements from ABFA

Source: Ministry of Finance, June 2017

Consequently, the balance in the ABFA account as at the ending of July 2017 stood at GH¢305.87 million. The GH¢53.14 million of ABFA expenditure on priority areas in the period January – July represents 6.67 percent of total programmed ABFA expenditure for the year.

Out of the Government's budgeted ABFA expenditure of GH¢796.32 million for 2017 for the four priority areas, GH¢238.89 million was for the supply of goods and services, whilst GH¢557.42 million was to be spent on capital expenditure.

# 8 UTILISATION OF GNPC ALLOCATION

GNPC received a total of US\$90.9million for the first half of the year 2017, comprising 30 percent share of net petroleum proceeds and equity financing obligations for Jubilee and TEN projects for the period. The breakdown is shown in the table below:

| RECEIPT                                   | SOURCE  | AMOUNT          |
|---|---------|-----------------|
| Level A Receipts (Equity Financing)       | Jubilee | US\$22.2million |
| Level B Receipts (30% of Net<br>Proceeds) | Jubilee | US\$25.8million |
| Level A Receipts (Equity Financing)       | TEN     | US\$29.6million |
| Level B Receipts (30% of Net<br>Proceeds) | TEN     | US\$13.3million |
| TOTAL AMOUNT RECEIVED                     |         | US\$90.90       |
| Source: PoG 2017                          |         |                 |

### Table 8-1 GNPC Receipts from PHF for the First Half of 2017

Source: BoG, 2017

Out of the total amount received, US\$78,516,153.05, representing 86.4 percent was spent on equity financing, exploration and development projects, capital projects, staff cost, maintenance cost of Saltpond Oil Field, and other operational and administrative expenditures.

The details are as follows:

| Cost Centre                              | Description  | Amount (US\$<br>million) |
|--|--|--------------------------|
| Jubilee Field                            | GNPC's share of production and development costs in the Jubilee Field  | 20.20                    |
| TEN Field                                | GNPC's share of production and development costs in the TEN Field  | 31.30                    |
| Exploration &<br>Development<br>Projects | Exploration & development activities in respect of OCTP,<br>Voltaian Basin, and North & South Tano projects  | 9.30                     |
| Staff Cost                               | Remuneration for technical and support staff   | 7.0                      |
| Administrative<br>Capital<br>Expenditure | Administration-related capital expenditure such as office equipment, furniture, fixtures & fittings  | 0.68                     |
| Capital Projects                         | Refurbishment of its landed properties in Accra, Tema and Sekondi-Takoradi.  | 4.20                     |
| LNG Projects<br>(Downstream<br>Projects) | Professional, advisory services and technical due diligence<br>on Liquefied Natural Gas (LNG) projects   | 0.80                     |
| General<br>Operating<br>Expenditure      | General operations: utilities, CSR, corporate travels,<br>training, communication expenses, professional services,<br>ICT-related activities, general repairs and maintenance, as<br>well as vehicle repairs & maintenance | 4.90                     |
| SOPCL                                    | Emoluments and cost of maintaining skeletal staff on the rig pending decommissioning   | 0.074                    |

## Table 8-2: First Half Year Expenditure - GNPC

Source: GNPC, June 2017

PUBLIC INTEREST AND ACCOUNTABILITY COMMITTEE (PIAC) Report on the Management of Petroleum Revenue for the First Half of 2017

## GNPC's Cash Balance at the End of Reporting Period

At the end of the reporting period, GNPC had a net balance of US\$12.39 million out of its US\$90.9 million allocation, which when added to cash brought forward of US\$68.03 million, brings the company's cash position as at the end of the period to US\$80.42 million.

GNGC did not honour invoices submitted to it by GNPC for gas supplies for the period under review.

# 9 OPERATIONS OF GHANA NATIONAL GAS COMPANY

Ghana National Gas Company (GNGC) was incorporated in 2011 as a limited liability company to build, own and operate infrastructure required for the gathering, processing, transporting and marketing of natural gas resources in the country. GNGC's responsibilities include the processing of evacuated associated gas from the Jubilee Field, TEN, and SGN.

The key assets of GNGC include the Offshore Pipeline, the Onshore Pipeline, the Gas Processing Plant, the NGLs Export System, and the Office Complex at Atuabo, collectively referred to as the Western Corridor Gas Infrastructure.



Figure 14: Atuabo Gas Processing Plant

The capacity of the Atuabo Gas Processing Plant is 150 MMscf per day. GNGC processes raw gas received from GNPC into LPG, lean gas and condensates. The LPG is sold locally to Sage Petroleum for distribution to local retailers while the lean gas is sold to Volta River Authority, Wangkang and Twyford. The Condensates are sold to ECO, Med, and Globex.

GNGC is a subsidiary of GNPC. As the gas aggregator for the nation, GNPC supplies raw gas to GNGC for processing for a fee.

80% of GNGC's lean gas is supplied to VRA to fire its thermal plants.

The first 200 bcf of associated gas from the oil and gas fields is given to the Government of Ghana free. Any gas beyond 200 bcf is sold to Ghana Gas directly from the producers at a price determined by PURC and NPA.

Upstream activities of GNGC are regulated by the Petroleum Commission. The Energy Commission regulates the midstream activities, and downstream activities are regulated by NPA and PURC.

GNGC's indebtedness to GNPC for the supply of raw gas in the period under review stood at US\$34.09 million. At the end of 2016, GNGC owed GNPC US\$97.94 million. Total indebtedness of GNGC to GNPC as at the end of June 2017 stood at US\$132.03 million.

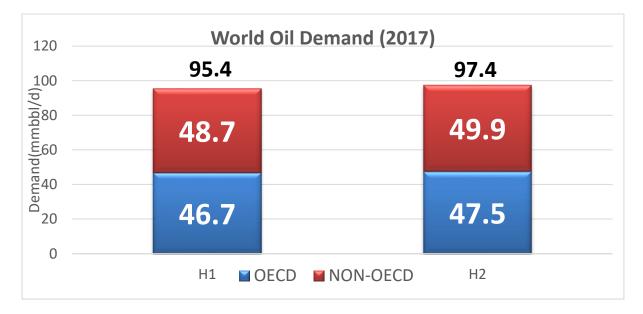
GNGC on the other hand is owed US\$100.14 million by VRA for the supply of lean gas, and an additional US\$7.04 million in interest.

# 10 PETROLEUM REVENUE OUTLOOK

## 10.1 World Oil Market Prospects for the Second Half of 2017

According to the International Monetary Fund (IMF), the gradual recovery of the world economy continues and stronger-than-anticipated growth in the first quarter of 2017 has lifted global growth forecast for 2017 to 3.4 percent, up from 3.1 percent in 2016. The second half of 2017 is expected to continue with this positive momentum. Global oil demand is therefore forecast to pick up in the second half of 2017.

According to the Organisation of Petroleum Exporting Countries (OPEC), the second part of the year will exhibit a 2 million barrels per day (mmbbl/d) increase in total consumption in line with the seasonal average of 97.4 mmbbl/d, compared to 95.4 mmbbl/d in the first half of 2017, as shown in Figure 12 below. In the Organisation for Economic Co-operation and Development (OECD) countries, an increase of approximately 0.2 mmbbl/d year-on-year demand is forecast. Demand is also projected to rise by an average of 1.0 mmbbl/d year-on-year in the second half of 2017 in the non-OECD regions, driven by China and India.



#### Figure 15: Global Oil Demand - 2017

Source: OPEC, 2017



OPEC forecasts the price to increase to US\$62.13/bbl.

Figure 16: Global Oil Price Forecast for Second Half of 2017

Source: OPEC, 2017

## 10.2 Government's Projections

An annual average production volume of 43,875,920 bbls of oil (averaging 120,208 bopd) was projected by the Government for the three producing fields of Jubilee, TEN and SGN (expected in second half 2017).

Gas production volumes have been projected at 30,672.17 MMScf, owing mainly to the accelerated production of first gas from TEN Field. However, output from the Jubilee Field is expected to decline due to the turret remediation exercise planned for the second half of the year.

Projected revenue for the full year for the Ghana Group is estimated at US\$515.64 million, down from the original US\$741.77 million, at a revised benchmark price of US\$56.14/bbl, down from the original price of US\$73.23/bbl. This means the 2017 first half-year actualised revenue of US\$249.81 million represents approximately 48.45% of the projected annual revenue of US\$515.64 million.

# 11 SUMMARY OF KEY FINDINGS

- 1. A total of 24,346,459.91 bbls of oil was produced from Ghana's three producing fields; Jubilee, TEN and SGN, from January to June, 2017. This was the highest half-year crude oil production since 2011.
  - a. Jubilee Field produced 15,233,025 bbls;
  - b. TEN Field produced 8,617,380;
  - c. SGN Field produced 496,054.91 bbls.
- The SGN Field achieved first oil in May 2017 with an average production of 8,132 bopd.
- 3. The volume of crude oil produced in Ghana since 2010 totalled 218,573,411 bbls as at the end of June 2017.
- 4. Two cargoes each were lifted from Jubilee and TEN, totalling 1,896,737 bbls and 1,992,245 bbls respectively in the first half of 2017.
- 5. Closing stock balances at the end of June, 2017 for Jubilee and TEN are 1,758,833 bbls and 410,544 bbls respectively.
- 6. The raw gas produced from Jubilee, TEN and SGN Fields in the first half of 2017 totalled 31,673.96 MMScf.
- 7. A combined gas volume of 11,095.71 MMScf was exported to GNGC.
- 8. A total of 238.39 MMScf of raw gas exported from the TEN Field to GNGC was used as a gas export trial to GNGC after the TEN gas manifold was installed and commissioned.
- GNPC achieved an average unit price of US\$51.13/bbl and US\$47.28/bbl for Jubilee and TEN Crudes respectively for the period under review as against a Government estimated benchmark price of US\$56.14/bbl.
- 10. There was an 11.17% price difference between the price realised for the first (US\$54.151/bbl) and second (US\$48.102/bbl) liftings from Jubilee. Similarly, a US\$3.82 price difference was realised between sales from the

first lifting of TEN Crude in March (US\$49.188/bbl) and the second lifting in May (US\$45.373/bbl), representing a price differential of 7.76%.

- 11. Several attempts by PIAC to obtain Tullow Ghana's achieved crude oil price proved futile.
- 12. GNPC has negotiated a Business Interruption insurance cover for its Jubilee and TEN operations.
- 13. Total Revenue paid into the PHF during the period (including interest earned on revenue awaiting distribution in the PHF account) was US\$272,678,033.62.
  - An amount of US\$149,782,454.43 of the total revenue was contributed by Jubilee liftings.
  - A further US\$100,028,906.76 of the total revenue was contributed by TEN liftings.
  - An amount of US\$607,081.91 was paid as revenue from Surface Rentals in respect of oil and gas block holdings.
  - An amount of US\$185,845.53 was earned on revenue awaiting distribution in the PHF account.
  - An amount of US\$30,884.25 which should have been paid into the PHF, was wrongfully paid into the account of GRA instead of the PHF.
- 14. Total receipt of US\$272,678,033.62 is categorised as follows:
  - a. Royalties contributed US\$69,551,247.59;
  - b. Carried And Participating Interest (CAPI) contributed US\$132,147,370.39;
  - c. Additional Participating Interest (API) contributed US\$48,112,743.20
  - d. Surface rental contributed US\$607,081.916;
  - e. Corporate Tax from GRA's tax audit on Kosmos (2011-2015) contributed US\$22,073,745;

- f. An amount of US\$185,845.53 was earned on revenue awaiting distribution in the PHF account.
- 15.No gas revenue was paid into the PHF by GNPC. VRA did not pay GNGC for lean gas supplied and GNGC did not also pay GNPC for the supply of raw gas.
  - a. GNGC's indebtedness to GNPC for gas supplied during the period stood at US\$34.09 million at the end of the first half of 2017;
  - b. GNGC's total indebtedness to GNPC as at the end of the period under review was US\$132.03 million;
  - c. VRA's indebtedness to GNGC for lean gas supplied during the period stood at US\$107.18 million (including interest).
- 16. GNPC's carried interest of 15 percent in SGN (OCTP) is an improvement over what it has in Jubilee and TEN fields.
- 17. Similarly, GNPC's participating interest (additional) has also increased from 3.64% in Jubilee Field to 5 percent in TEN and SGN Fields.
- Oil royalty also increased from 5 percent in Jubilee and TEN fields to 10 percent at 1,312 ft. water depth and 7.5 percent at water depth greater than 1,312 ft. in SGN Field.
- 19. The total amount distributed from the PHF by the Bank of Ghana during the period under review was US\$277.79 million.
- 20. The Annual Budget Funding Amount wasUS\$84,729,337 for distribution to the priority areas for the first half of 2017, 60 percent more than the same period in 2016.
- 21. GNPC received an amount of US\$90,904,491.66 million for the half year.
- 22. The GSF and GHF received US\$71.51 million and US\$30.65 million respectively for the period under review.
- 23. GHF at the end of June 2017 stood at US\$311.05 million, returning 2.09 percent in the first half of 2017.

- 24. GSF at the end of June 2017 stood at US280.30 million, returning 0.54 percent in the first half of 2017.
- 25. The Investment Advisory Committee has not been reconstituted following the change of government in January 2017. This is a contravention of Section 29 of the PRMA.
- 26. An amount of GH¢53.14 million was disbursed from the ABFA account in the first half of 2017. This was spent on three out of the four priority areas:
  - a. Agriculture received GH¢17.92 million.
  - b. Road, Rail and Other Critical Infrastructure received GH¢29.22 million (as transfer to GIIF).
  - c. Physical Infrastructure and Service Delivery in Education received GH¢6 million.
- 27. There were no disbursements to:
  - a. Physical Infrastructure and Service Delivery in Health
  - b. PIAC
- 28. The disbursed amount from ABFA from January to June represents 6.67% of projected expenditure for 2017.

# 12 CONCLUSIONS AND RECOMMENDATIONS

## 12.1 Conclusions

The period under review witnessed the coming on-stream of first oil from the SGN Field in May 2017. The turnaround from the disappointing output of 2017 was characterised by improvements in both crude oil and raw gas production, as well as receipts from the sector. A total of 24,346,459.91 bbls of oil was produced, representing a 53 percent increase over the first half of the 2016 production volume of 11,440,129 bbls. Indeed, the output was the highest half-year crude oil production since 2011, with total receipts of US\$149.78 million from the oil liftings.

There was a test run of gas from the SGN Field when 238.39 MMScf of gas was piped to GNGC. A total of 11,095.71 MMScf out of the 31,673.93 MMScf raw gas produced was exported to GNGC at the Atuabo Gas Processing Plant.

On the downside, there were no revenues in the form of corporate tax in respect of the half-year production. However, a GRA tax audit for the period 2011-2015 on Kosmos, resulted in the latter paying US\$22.07 million into the PHF.

Once again, GNGC was unable to pay for the raw gas supplied by GNPC mainly as a result of the failure of VRA to pay for the lean gas sold to it over the period. Whilst GNGC's indebtedness to GNPC over the period stood at over US\$30 million (cumulatively at more than US\$130 million), VRA also owed GNGC US\$100.14 million in the same period.

In the period under review, GNPC completed negotiations for a Business Interruption (BI) cover (oil and gas production) for the Carried and Participating Interests (CAPI) and Government of Ghana (GoG) Royalty for a maximum insured sum of US\$513 million in respect of the Jubilee and TEN Fields. PIAC commends GNPC for this and continues to urge GNPC to regularly assess their business risks against oil price volatility to insure their operations against business interruptions.

PIAC has noted that the amount of raw gas exported to the Atuabo Gas Processing Plant as a percentage of gas produced has improved. However, the Committee is still concerned that too much of the produced raw gas is flared.

PIAC observes with some concern that the Investment Advisory Committee established under the PRMA appears not to be active in the first half year. PIAC recognises the invaluable role the Advisory Committee could play in ensuring good returns are made on the GHF and GSF.

Finally, PIAC notes that only 14.83 percent of the ABFA allocation to the MoF was actually spent on 3 of the four priority areas, with no disbursement made for Physical Infrastructure and Service Delivery in Health between January and July 2017.

### 12.2 Recommendations

The following recommendations are made for the consideration of the various institutions with the hope of continual management improvements of the petroleum sector:

- 1. GRA should undertake annual tax audits of the partners.
- 2. GRA and PC should collaborate more effectively to ensure that surface rental due the State are accurately assessed and invoiced appropriately.
- 3. To forestall wrongful lodgment of surface rentals and other receivables, PC should ensure that oil companies are properly appraised on the requirements of the PRMA.
- 4. The Minister of Finance should ensure that proceeds from the Energy Sector Bond are judiciously managed to eliminate spiraling debts which are threatening to compromise the financial integrity of government institutions involved in the commercial aspect of the energy sector.
- 5. GNPC should ensure that Business Interruption (BI) insurance cover is also procured for SGN.

- 6. The Minister of Finance should ensure that the Investment Advisory Committee set up under Section 29 of the PRMA, is reconstituted and functional.
- 7. PIAC urges the Minister of Energy to expedite the negotiations between GNGC and WAPCO on the use of the WAGP for the transport of gas from the Western Corridor (Atuabo) to the Eastern Corridor (Tema) to allow for the export of more gas from SGN Field.
- 8. GNPC should as a matter of urgency complete the de-commissioning of the Saltpond field as the cost of funding skeletal staff in SOPCL is not a judicious use of resources.
- 9. The relationship between GNPC and GNGC should be clearly delineated as there appears to be an ownership conflict between these two institutions, which do not augur well for the development of the industry, or the State at large.

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BoG, 2017, Petroleum Holding Fund and Ghana Petroleum Fund, Semi Annual Report, January 1 – June 30, 2017

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Petroleum Commission, 2017, Semi Annual Report to PIAC

# ANNEXES

#### 1. Licensed Contract Areas Offshore Ghana

| CONTRACT AREA                                  | CONTRACTOR<br>PARTIES   | OPERATOR             | STAGE OF<br>OPERATION |
|--|---|----------------------|-----------------------|
| West Cape Three<br>Points                      | <ol> <li>Kosmos<br/>Energy</li> <li>Tullow Ghana<br/>Ltd</li> <li>Petro SA</li> <li>Anadarko</li> <li>GNPC</li> </ol> | Tullow               | Production            |
| Deepwater Tano<br>Contract Area                | <ol> <li>Kosmos<br/>Energy</li> <li>Tullow Ghana<br/>Ltd</li> <li>Petro SA</li> <li>Anadarko</li> <li>GNPC</li> </ol> | Tullow               | Production            |
| Offshore Cape<br>Three Points<br>Contract Area | <ol> <li>Eni Ghana<br/>E&amp;P Ltd</li> <li>Vitol<br/>Upstream<br/>Ghana Ltd</li> <li>GNPC</li> </ol>                 | Eni Ghana E&P<br>Ltd | Production            |
| Cape Three Points<br>Block 4                   | 1. Eni Ghana<br>E&P Ltd   | Eni Ghana E&P<br>Ltd | Exploration           |

|   | <ol> <li>GNPC</li> <li>Explorco</li> <li>Vitol</li> <li>Upstream</li> <li>Tano Ltd</li> <li>Woodfields</li> <li>Upstream</li> <li>GNPC</li> </ol> |                            |                     |
|---|---|----------------------------|---------------------|
| Deepwater Tano-<br>Cape Three Points<br>Block | <ol> <li>Hess Ghana<br/>Ltd</li> <li>Lukoil</li> <li>Fuel Trade</li> <li>GNPC</li> </ol>  | Hess                       | Pre-<br>Development |
| East Cape Three<br>Point                      | <ol> <li>Medea</li> <li>Development</li> <li>Ltd</li> <li>Cola Natural</li> <li>Resources</li> <li>GNPC</li> </ol>                                | Medea<br>Development Ltd   | Exploration         |
| South Deepwater<br>Tano                       | <ol> <li>AGM</li> <li>Petroleum</li> <li>Ghana Ltd</li> <li>GNPC</li> <li>Explorco</li> <li>GNPC</li> </ol>                                       | AGM Petroleum<br>Ghana Ltd | Exploration         |
| South-West Tano<br>Block                      | <ol> <li>Heritage</li> <li>GNPC</li> <li>Explorco</li> </ol>  | GOSCO<br>{Heritage+GNPC}   | Exploration         |

|  | 3. GNPC   |                             |             |
|--|---|-----------------------------|-------------|
| Ultra-Deepwater<br>East Keta Block           | <ol> <li>Heritage</li> <li>GNPC</li> <li>Explorco</li> <li>Blue Star</li> <li>GNPC</li> </ol>   | GOSCO<br>{Heritage+GNPC}    | Exploration |
| Shallow Water<br>Cape Three Points<br>Block  | <ol> <li>Sahara Energy<br/>Fields Ghana<br/>Ltd</li> <li>Sapholda E&amp;P<br/>Ltd</li> </ol>  | Sahara Energy<br>Fields     | Exploration |
| South West<br>Saltpond Block                 | <ol> <li>Brittania U</li> <li>GNPC</li> </ol>   | Brittania U                 | Exploration |
| Offshore Cape<br>Three Points<br>South Block | <ol> <li>UB Resources</li> <li>Houston         <ul> <li>Drilling</li> <li>Management</li> <li>RoyalGate</li> <li>Ghana Ltd</li> <li>GNPC</li> </ul> </li> </ol> | UB Resources                | Exploration |
| South-West Cape<br>Three Points<br>Block     | <ol> <li>Eco Atlantic</li> <li>PetroGulf</li> <li>GNPC         <ul> <li>Explorco</li> <li>A-Z</li> <li>GNPC</li> </ul> </li> </ol>                              | Eco Atlantic<br>(PetroGulf) | Exploration |
| Expanded Shallow<br>Water Tano Block         | 1. Erin Energy  | Erin Energy                 | Exploration |

| Central Tano<br>Block                | <ul> <li>2. Base Energy</li> <li>3. GNPC</li> <li>1. Amni <ul> <li>International</li> <li>Petroleum</li> <li>Dev Company</li> </ul> </li> <li>2. GNPC</li> </ul>              | Amni<br>International<br>Petroleum Dev<br>Company | Exploration |
|--------------------------------------|---|---|-------------|
| Onshore/Offshore<br>Keta Delta Block | <ol> <li>Swiss African         <ul> <li>Oil Company</li> <li>Ltd</li> </ul> </li> <li>PetVolta         <ul> <li>Investments</li> <li>Ltd</li> </ul> </li> <li>GNPC</li> </ol> | Swiss African Oil<br>Company Ltd                  | Exploration |
| West Cape Three<br>Points Block 2    | <ol> <li>Springfield</li> <li>E&amp;P</li> <li>GNPC</li> <li>Explorco</li> <li>GNPC</li> </ol>  | Springfield E&P                                   | Exploration |

Source: PC & GRA, June 2017

### 2. Relinquished Contract Areas

| CONTRACT AREA                         | CONTRACTOR<br>PARTIES  | OPERATOR                      | DATE OF<br>RELINQUISHMENT           |
|---------------------------------------|--|-------------------------------|-------------------------------------|
| East Keta                             | <ol> <li>Eni</li> <li>Afren</li> <li>Mitsui</li> <li>Gulf</li> <li>GNPC</li> </ol>                             | Eni                           | 18 <sup>th</sup> May, 2015          |
| Accra Contract<br>Area                | <ol> <li>Azonto</li> <li>Top Ghana<br/>Ltd</li> <li>Afex Ghana<br/>Ltd</li> </ol>                              | Azonto                        | 23 <sup>rd</sup> September,<br>2014 |
| Offshore Saltpond                     | <ol> <li>Oranto</li> <li>Stone         <ul> <li>Energy</li> <li>Ghana Ltd</li> <li>GNPC</li> </ul> </li> </ol> | Oranto                        | 2 <sup>nd</sup> January, 2015       |
| Cape Three Points<br>Deep Water Block | <ol> <li>Lukoil<br/>Overseas<br/>Ghana Ltd</li> <li>Vanco</li> <li>GNPC</li> </ol>                             | Lukoil Overseas<br>Ghana Ltd  | 27 <sup>th</sup> October, 2014      |
| Saltpond                              | <ol> <li>Lushann<br/>Eternit<br/>Energy Ltd</li> <li>GNPC</li> </ol>   | Lushann Eternit<br>Energy Ltd | 18 <sup>th</sup> August, 2016       |

Source: PC & GRA, June 2017

| Operator   | Contract Area   | Acreages<br>outstanding as<br>of Dec 31, 2016<br>(sq. km) | Period of Activity (2017) | <i>2017 Estimated<br/>Amount-US\$</i> |
|--|---|---|---------------------------|---------------------------------------|
| Tullow Ghana Ltd                                 | Deepwater Tano<br>Contract Area                       | 617   | Development/Production    | 59,050                                |
| Hess Ghana<br>Exploration Ltd                    | Deepwater Tano/Cape<br>Three Points                   | 2,010   | Second Extension          | 150,750                               |
| Eni Ghana<br>Exploration &<br>Production Ltd     | Offshore Cape Three<br>Points (OCTP) Contract<br>Area | 693   | Development/Production    | 22,600                                |
| Kosmos Energy<br>Ghana Ltd                       | West Cape Three Point                                 | 464   | Development/Production    | 17,797.20                             |
| Medea Development                                | East Cape Three Points                                | 1,565   | Initial Exploration       | 78,250                                |
| AGM Petroleum                                    | South Deep Water<br>Tano                              | 3,482   | Initial Exploration       | 174,100                               |
| Erin Energy Gh. Ltd                              | Shallow Water Tano                                    | 1,508   | Initial Exploration       | 75,400                                |
| Amni Int. Pet. Ghana                             | Central Tano  | 278   | Initial Exploration       | 13,900                                |
| GOSCO/Heritage                                   | South West Tano Block                                 | 175   | Initial Exploration       | 8,750                                 |
| GOSCO/Heritage                                   | East Keta   | 2,239   | Initial Exploration       | 111,950                               |
| Sahara Energy Fields<br>Ghana                    | Shallow Water Cape<br>Three Points Block              | 1,500   | Initial Exploration       | 112,500                               |
| Eco Atlantic/AZ<br>Petroleum/Perogulf            | South-West Cape<br>Three Points Block                 | 944   | Initial Exploration       | 47,200                                |
| Britannia -U                                     | South West Saltpond                                   | 2,050   | Initial Exploration       | 102,500                               |
| UB Resources Ltd                                 | Cape Three Points<br>South                            | 755   | Initial Exploration       | 37,750.00                             |
| Eni Ghana<br>Exploration &<br>Production Ltd     | Cape Three points<br>Block 4                          | 1,127   | Initial Exploration       | 40,448.49                             |
| Swiss African Oil<br>Company Limited             | Onshore/Offshore<br>Keta Delta Block                  | 3,000   | Initial Exploration       | 137,671.23                            |
| Springfield<br>Exploration and<br>Production Ltd | West Cape Three<br>Points Block 2                     | 673   | Initial Exploration       | 14,658.49                             |
| Т  | otal  | 23,092  |                           | 1,205,383.16                          |

## 3. Assessed Surface Rent Charges of Companies for Year 2017

Source: GRA and PC, June 2017

# 4. GNGC Revenue from Lean Gas

| Lean Gas Statement |          |                   |                |                       |                          |  |
|--------------------|----------|-------------------|----------------|-----------------------|--------------------------|--|
| Month              | Company  | Volume<br>(MMBtu) | Value (US\$)   | Pre-finance<br>(US\$) | Net Receivable<br>(US\$) |  |
| January            | VRA      | 1,562,334         | 13,814,780.26  | -                     | 13,814,780.26            |  |
|                    | Wangkang | 153,278           | 1,355,344.37   | 323,594.14            | 1,031,750.23             |  |
| February           | VRA      | 203,654           | 1,800,792.91   | -                     | 1,800,792.91             |  |
|                    | Wangkang | 41,116            | 363,564.09     | 86,802.45             | 276,761.64               |  |
| March              | VRA      | 2,337,678         | 20,670,680.50  | -                     | 20,670,680.50            |  |
|                    | Wangkang | 159,584           | 1,411,106.83   | 336,907.66            | 1,074,199.17             |  |
| April              | VRA      | 2,449,701         | 21,661,237.67  | -                     | 21,661,237.67            |  |
|                    | Wangkang | 153,710           | 1,359,162.56   | 324,505.75            | 1,034,656.81             |  |
| May                | VRA      | 2,380,521         | 21,049,522.20  | -                     | 21,049,522.20            |  |
|                    | Wangkang | 115,925           | 1,025,051.98   | 244,735.45            | 780,316.53               |  |
|                    | Twyford  | 1,481             | 13,094.09      | 3,126.27              | 9,967.82                 |  |
| June               | VRA      | 2,390,938         | 21,141,627.60  | -                     | 21,141,627.60            |  |
|                    | Wangkang | 69,465            | 614,236.86     | 146,651.62            | 467,585.24               |  |
|                    | Twyford  | 19,262            | 170,319.33     | 40,644.45             | 129,674.88               |  |
| TOTAL              |          | 12,038,646        | 106,450,521.26 | 1,506,987.79          | 104,943,533.47           |  |

Source: GNGC, 2017

#### 5. GNGC Revenue from LPG

| LPG Statement           |             |                    |               |                    |                    |
|-------------------------|-------------|--------------------|---------------|--------------------|--------------------|
| Month                   | Volume (MT) | Price<br>(US\$/MT) | Value (US\$)  | Discount<br>(US\$) | Net Revenue (US\$) |
| January                 | 2,684.22    | 406.20             | 1,090,331.38  | 114,261.56         | 2,319,215.57       |
|                         | 3,028.86    | 443.45             | 1,343,145.75  |                    |                    |
| February                | 1,283.64    | 468.50             | 601,387.21    | 25,672.88          | 575,714.33         |
|                         | 0           | -                  | -             |                    |                    |
| March                   | 3,253.95    | 474.80             | 1,544,974.51  | 149,842.40         | 3,187,878.87       |
|                         | 4,238.17    | 423.00             | 1,792,746.76  |                    |                    |
| April                   | 4,774.72    | 392.40             | 1,873,600.91  | 168,458.24         | 3,075,329.87       |
|                         | 3,648.19    | 375.58             | 1,370,187.20  |                    |                    |
| May                     | 4,852.84    | 360.83             | 1,751,049.54  | 184,289.80         | 3,027,476.99       |
|                         | 4,361.65    | 334.90             | 1,460,717.25  |                    |                    |
|                         | 5,462.20    | 353.50             | 1,930,885.93  | 188,207.22         | 3,044,270.60       |
| June                    | 3,948.17    | 329.67             | 1,301,591.89  |                    |                    |
| TOTAL                   | 41,536.61   | 4,362.83           | 16,060,618.33 | 830,732.10         | 15,229,886.23      |
| Source: GNGC, June 2017 |             |                    |               |                    |                    |

#### Condensate Statement – January to June 2017 Monthly Value Value (US\$) Volume/Month Month Company Volume Price (US\$/MT) (MT) (MT) (US) January Globex 422.93 281.53 204,018.88 1215.51 352,971.09 284.28 298.83 ECO 29.21 281.53 50,603.56 141.82 298.83 Med 140.91 281.53 98,348.65 196.36 298.83 February Globex 194.33 307.73 59,801.17 282.56 Med 86,952.19 88.23 307.73 27,151.02 March Globex 396.28 319.55 286,079.78 1609.94 472,374.90 567.17 281.13 Med 118.36 319.55 186,295.12 528.13 281.13 April Globex 680.82 253.45 324,567.88 2087.86 492.88 583,811.60 308.42 Med 412.98 253.45 224,142.44 387.37 308.42 ECO 113.81 308.42 35,101.28 Globex 305.11 May 544.19 258,865.06 1831.67 530,141.64 355.96 260.78 460.94 216,756.48 Med 305.11 291.89 260.78 ECO 178.69 305.11 54,520.11 Globex 429.75 294.5 204,070.19 1751.35 June 497,719.21 273.67 283.22 Med 303.91 294.5 199,976.60 403.68 273.67 ECO 150.99 294.5 93,672.42 179.8 273.67 TOTAL 8778.89 290.409286 2,523,970.63 8,778.89 2,523,970.63

#### 6. GNGC Revenue from Condensates

Source: GNGC, June 2017

# 7. GIIF Projects

| Project<br>Code<br>Name   | Disbursem<br>ent Date | Sector  | Instrument             | Amount<br>(US\$)             | Total<br>Project<br>Cost<br>(US\$<br>M) | Multipli<br>er (each<br>US\$ 1<br>of GIIF<br>money) | Likely<br>Jobs to<br>be<br>created |
|---|-----------------------|---|------------------------|------------------------------|---|---|------------------------------------|
| Ghana<br>Airports<br>Company<br>Ltd<br>Capital<br>Investme<br>nt<br>Program<br>me | August<br>2016        | Transpo<br>rtation                              | Senior Debt            | 30<br>million                | 400                                     | 13.3x   | 400                                |
| Project T<br>1  | December<br>2015      | Tourism   | Senior<br>Debt/Equity  | 4<br>million/4<br>million    | 16.7                                    | 2.1x  | 150                                |
| Project<br>Telco  | Q1 or Q2<br>2018      | Telecom<br>municati<br>ons,<br>Media<br>and ICT | Senior<br>Debt/Equity  | 26<br>million/8<br>million   | 42                                      | 1.2x  | 100,000                            |
| Project E<br>1  | Q1 or Q2<br>2018      | Energy  | Senior<br>Debt/Equity  | 15<br>million/1<br>5 million | 70                                      | 2.3x  | 200                                |
| Project E<br>2  | Q4 2017               | Energy  | Equity                 | 5.5<br>million               | 1,000                                   | 181.8x  | 500                                |
| Project<br>TR 1   | Q2 or Q3<br>2018      | Transpo<br>rtation                              | Equity/Senio<br>r Debt | 40<br>million/1<br>0 million | 460                                     | 8.3x  | 4,000                              |
| Project<br>TR 2   | Q1 2018               | Transpo<br>rtation                              | Equity                 | 15<br>million                | 70                                      | 4.7x  | 350                                |
| TOTAL   |                       |   |                        | 172.5<br>million             |   | 11.7x   | 105,600                            |

Source: GIIF, June 2017

| 8. | Petroleum | Funds Semi-Annual Report |
|----|-----------|--------------------------|
|----|-----------|--------------------------|

| Ghana Petroleum Funds- Semi Annual Report: Jan 1 - Ju | un 30 2017     |
|---|----------------|
| Schedule 2  |                |
| GHANA PETROLEUM FUNDS                                 |                |
|   |                |
| GHANA STABILISATION FUND AC                           | COUNT          |
|   | US\$           |
| Opening book Value (1 Jan 2017)                       | 207,748,663.49 |
| Receipt during the period                             | 71,511,650.68  |
| Bank Charges  | (1,884.66      |
| Realised Income                                       | 1,042,301.63   |
| Withdrawal  |                |
| Closing book Value(30 Jun 2017)                       | 280,300,731.14 |
| Net Income for the Quarter comprised the Following    |                |
| INCOME  | US\$           |
| Investment Income                                     | 1,042,301.63   |
| Less:   |                |
| Bank Charges  | (1,884.66)     |
| Net Return for the Period                             | 1,040,416.97   |
| GHANA HERITAGE FUND ACCO                              |                |
| GRANA HERITAGE FOND ACCO                              | US\$           |
| Opening book Value (1 Jan 2017)                       | 276,962,291.34 |
|   | 30,647,850.28  |
| Receipt during the period<br>Bank Charges             | (10,385.69)    |
| Realised Income                                       | 3,449,172.60   |
| Closing book Value( 30 Jun 2017)                      | 311,048,928.53 |
| Net Income for the Quarter comprised the Following:   | 511,040,920.55 |
|   | US\$           |
| Investment Income                                     | 3,449,172.60   |
| Less:   | 3,773,172.00   |
| Bank Charges  | (10,385.69     |
| Net Return for the Period                             | 3,438,786.91   |

Source: Bank of Ghana, June 2017

