

RISKS AND BENEFITS OF  
**PUBLIC-PRIVATE PARTNERSHIP  
FINANCED ENERGY  
INFRASTRUCTURE PROJECT  
IN GHANA'S SANKOFA GAS**

---





## TABLE OF CONTENTS

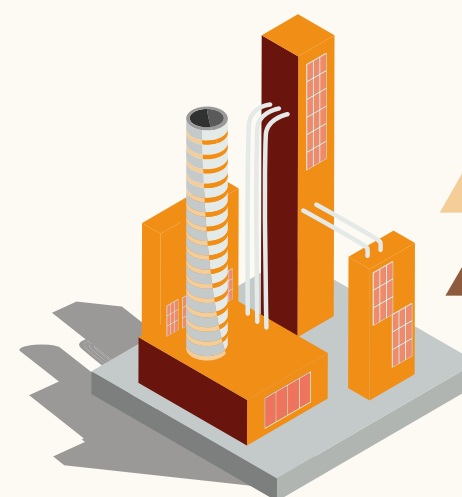
<b>1.</b>	<b>Introduction</b>	<b>3</b>
1.2.	Context	4
1.3	Objective of the paper	4
<b>2.</b>	<b>Ghana's institutional framework for PPPs</b>	<b>6</b>
2.1	Institutional Framework	6
2.2.	Ghana's PPP legal framework	7
<b>3.</b>	<b>The Sankofa Gas project</b>	<b>4</b>
3.2.	Table 2: Sankofa gas project results Chain	6
<b>4.</b>	<b>Findings</b>	<b>8</b>
4.1	Cost Effectiveness	8
4.2	Risk Allocations	9
<b>5.</b>	<b>The development outcomes of the Sankofa Gas Project</b>	<b>10</b>
<b>6.</b>	<b>Impact on democratic governance</b>	<b>11</b>
6.2	Limited Public Participation and Non-Comprehensive Risk Assessments	12
<b>7.</b>	<b>Integrating Environmental Considerations in Infrastructure Investments</b>	<b>12</b>
7.1	Upholding Environmental impact assessment standards	12
7.2	Upholding IFC Corporation Performance Standards for Environmental and Social Sustainability.	12
7.3	Protection of biodiversity	12
<b>8.</b>	<b>Key considerations on the findings</b>	<b>13</b>
8.1	Institutional and legal frameworks	13
8.2	Assessment of the effectiveness and efficiency of PPPs for Infrastructure projects	13
8.3	Cost Effectiveness and Risk Allocations	14
8.4	Democratic governance	14
<b>9.</b>	<b>Conclusion</b>	<b>14</b>
<b>10.</b>	<b>Recommendations</b>	<b>15</b>
11.1	Government of Ghana	15
11.2	World Bank Group and other International Financial institutions	15
	References	16

## 1.

## INTRODUCTION

Governments in Africa and the world over face a multiplicity of competing needs and often fall short of fiscal space to provide all the requisites demanded to meet the needs of their citizens. Among some of the top priorities for governments is the provision of efficient energy, a terrain comprising of both clean and fossil energy. After independence, Ghana earmarked the central role of economic development to the public sector with traditional procurement systems taking the limelight. Motivated by ideological and political considerations, Ghana witnessed a growth in public enterprises. However, the country witnessed a shift of emphasis from public sector to private sector in the 1980s due to continued underperformances of the public enterprises and the policy advice of IMF Structural Adjustment Programs<sup>1</sup>.

Instead of heralding public enterprise and traditional procurement reforms, a global shift that was supported especially by the World Bank Group championed more private sector engagement especially in infrastructure projects. Public-private partnerships (PPPs) are a long term contractual arrangement between the private and public sectors which involves delivering public services and infrastructure, rewards and risk sharing (Republic of Ghana 2011:2/ PPP Global campaign manifesto). PPPs have become the most valuable instrument for green energy projects financing<sup>2</sup>. Governments favour this financing modality as it only guarantees against private sector's future financial risk without compromising its current fiscal space. This is preferred when compared to the public sector route that would require capital investment and management expertise. The World Bank Group support through Multilateral Investment Guarantee Agency (MIGA) insurance and International Financial Corporation (IFC) lending has increased the appetite for private sector to utilise PPP arrangements as it guarantees profitability and reduces the risk of the business venture.



*the country witnessed a shift of emphasis from public sector to private sector in the 1980s due to continued underperformances of the public enterprises and the policy advice of IMF Structural Adjustment Programs.*

1 [https://mpr.ub.uni-muenchen.de/96732/8/MPRA\\_paper\\_96732.pdf](https://mpr.ub.uni-muenchen.de/96732/8/MPRA_paper_96732.pdf)  
 2 [https://link.springer.com/chapter/10.1057/9781137541482\\_9](https://link.springer.com/chapter/10.1057/9781137541482_9)



## 1.2 Context

Since 2010, Ghana faced unreliable electricity and frequent blackouts due to erratic supplies from hydropower generating plants which had shortages of fuel power generation. The country consumed costly imports of liquid fuels particularly from Nigeria for fuel generation<sup>3</sup>. Therefore, Ghana sought solutions to address its expanding power generation needs. In 2013, Ghana implemented several energy sector reforms meant to improve commercial and operational efficiency. These reforms included “increasing electricity tariffs and attracting private financing to fund the energy sector”<sup>4</sup>. However, these reforms did not result in any reliable delivery of power with Ghana facing increasing energy demands.

Ghana became de-facto more dependent on imported liquid fuels to power its electricity generation plants due to the increasing hydropower generation limitations. This forced the government to subsidise electricity, which cost the government 2.5% GDP per annum<sup>5</sup>. Low gas availability resulted in Ghana purchasing up to “US\$50 million per month of light crude oil (LCO) as fuel supply for power plants” (World Bank: 2014:2). The fuel import bill rose rapidly, due to several factors that included unreliable gas imports and erratic rainfall that limited hydropower production. With expensive fuels, Ghana faced delays in developing its domestic natural gas resources. The electricity subsidies were not sustainable as they put pressure on the country’s finances. Electricity access in Ghana is quite good and as of 2016, it was 78%, making Ghana one of the countries with the highest electricity access in sub-Saharan Africa. However, this access is hampered by 4.7% transmission losses and 23.5% distribution losses which is high compared to the 8.2 percent global average transmission and distribution losses (IFC 2018:22). In 2014, Ghana’s national budget accounted to 10% of its GDP.<sup>6</sup> It had current account deficits constraints which dampened investor confidence in Ghana’s ability to meet its commitments as public debt soared to 58% of GDP in August 2014<sup>7</sup>.

## 1.3 Objective of the paper

- To analyse the cost effectiveness and risky transfers of the Sankofa gas project in Ghana
- To evaluate and establish the development outcomes of the Sankofa gas project
- Account for how the Sankofa Gas project contribute to democratic governance
- To identify lessons that can be learned from the experiences of Ghana’s Sankofa gas project on infrastructure development in the energy sector.



<sup>3</sup> IFC, (2018) Estimating the effects of the development of the oil and gas sector on growth and jobs in Ghana (2015–30): A modelling and value chain analysis, page 9.

<sup>4</sup> World Bank (2018), Financial Solutions Brief, Ghana Sankofa Gas Project, page 2

<sup>5</sup> Ibid, page 1.

<sup>6</sup> World Bank (2014), Sankofa Gas project, project information document (PID) concept stage Report No: AB7680

<sup>7</sup> CEPA, (2015), Mobilising Finance for Infrastructure A Study for the UK Department for International Development (DFID), Ghana country case study, page 2



## 2. GHANA'S INSTITUTIONAL FRAMEWORK FOR PPPS.

### 2.1 Institutional Framework

The National Policy of Public Private Partnerships of 2011<sup>8</sup> is the country's guiding document for PPPs implementation in Ghana. According to the Policy, Ministries, Department & Agencies (MDAs) and the Metropolitan, Municipal & District Assemblies (MMDAs), in consultation with the various departments of the Ministry of Finance and Economic planning (MOFEP) are the PPPs procuring authorities. PPPs projects are managed by the PPPs Advisory Unit and the Project Financial Analysis Unit in the Public Investment Division in the MOFEP.<sup>9</sup> The Ministry is thus responsible for "all aspects of PPPs project development and implementation from project identification, appraisal, selection, procurement, operations, maintenance, performance monitoring and evaluation"<sup>10</sup>. Other relevant divisions in the Ministry of Finance that work on PPPs are the debt management division, the budget division, and the legal division. The country has an approval committee for all PPP projects chaired by the Minister of Finance. The committee comprises of various members including the Minister of Justice, the Attorney General, the Minister of Trade and Industry, the Chief Executive of the Ghana Investment Promotion Centre, Chief Executive of the Public Procurement Authority, the Executive Director of the Environmental Protection Agency; the chairman of the National Development Planning commission and the Head or Minister of the contracting entity<sup>11</sup>. The General Assembly of the Metropolitan, Municipal and District Assemblies for Local Government Authority projects, PPPs committee, Parliament and Cabinet act as the approving authority for all PPP projects depending on their size.

Specific to the energy sector, the institutional responsibility for managing gas is under the Ministry of Energy and Petroleum which is mandated with policymaking and oversight responsibilities for the energy sector. The Petroleum Commission is responsible for qualifying licensees, approving exploration and development plans, and implementing local content regulations in the power sector. The Ghana National Petroleum Corporation (GNPC) is the national oil company with responsibility for commercializing oil and gas.



*Specific to the energy sector, the institutional responsibility for managing gas is under the Ministry of Energy and Petroleum which is mandated with policymaking and oversight responsibilities for the energy sector.*

8 Republic of Ghana (2011), National Policy on Public Private Partnerships, Private participation in Infrastructure and services for better public service delivery, Ministry of Finance and economic planning.

### 2.2 Ghana's PPP legal framework

The Legal framework governing PPP implementation in Ghana is the Public Private Partnership Act of 2020 which guides the PPP process in the country. The Act provides for the development, implementation and regulation of PPP arrangements between contracting authorities and private parties for the provision of infrastructure and services. The Act regulates in its second schedule the PPP arrangements that can be entered into by Ghana. These includes Build Own Operate (BOO), Build, Own, Operate and Transfer (BOOT), Build, Operate and Transfer (BOT), Build, Transfer and Operate (BTO), Concession, Design, Build, Finance, Operate and Maintain (DBFOM), Develop, Operate and Transfer (DOT), Operation and Maintenance (O&M) and rehabilitate, Operate and Transfer (ROT) (MOFEP 2020:64). The National Policy on PPPs of 2011 was formulated to provide a clear and consistent process for all aspects of PPP project development and implementation from identification, appraisal, selection, procurement, performance monitoring and evaluation, operations and maintenance (PPP policy 2011). It requires the MOFEP to grant approval of PPPs projects in the following stages:

**Table 1. PPP approval stages**

Stage	Action
1	The approval of pre-feasibility and project viability
2	Review and approval of the full Feasibility Report
3	Review of project documentation, including the draft of the PPP Agreement /Concession
4	Review and recommendation of the evaluation report

Source: IBRD/World Bank 2015:14

The approval stages documented in Table 1 was meant to ensure transparency when PPPs are commissioned. Until 2020 Ghana has been guided by the National Policy of Public Private Partnerships of 2011. The PPP Act of 2020 is now the guiding document for all PPP engagements and is now currently being utilised for all PPP operations. Most PPP Policy components were reinforced in the PPP Act of 2020 and these two are not in conflict.

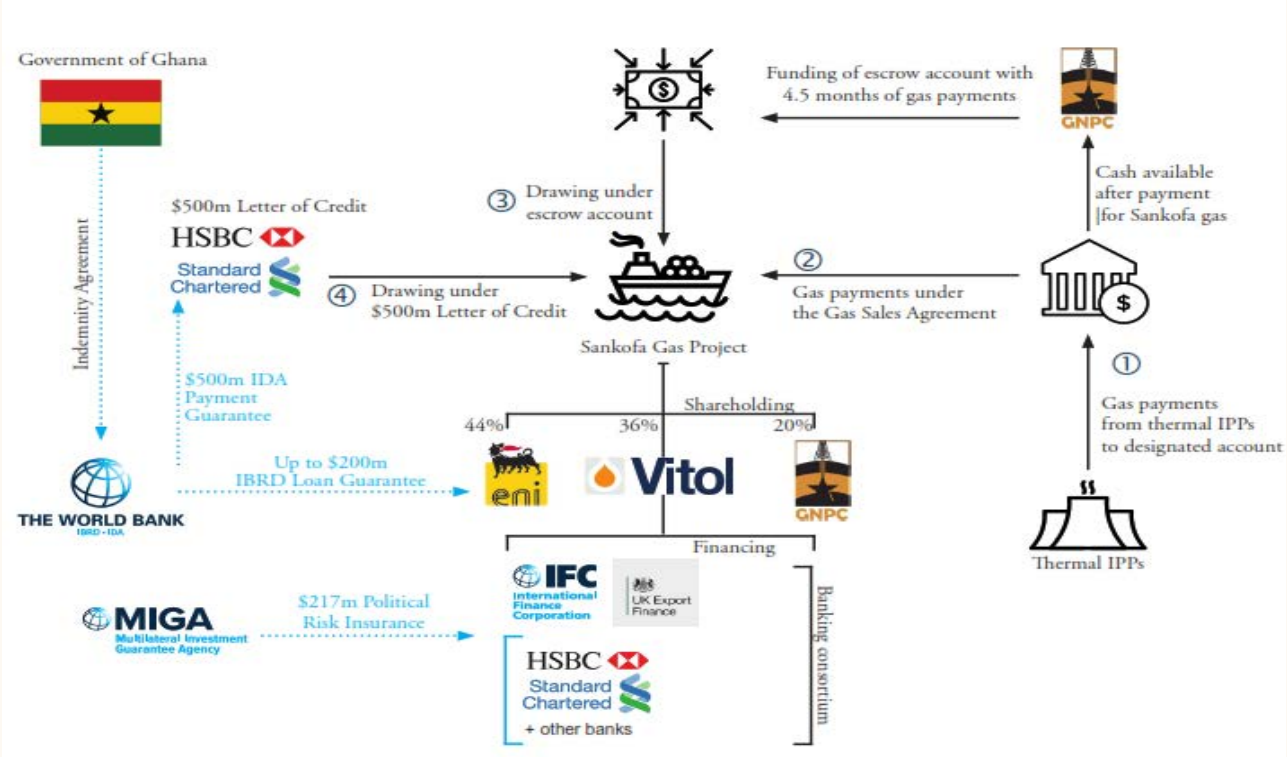




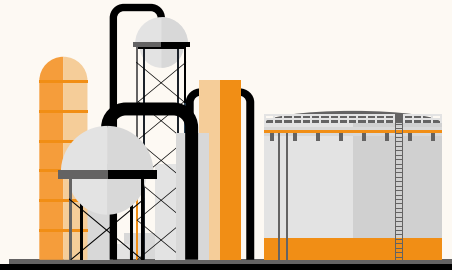
# 3. THE SANKOFA GAS PROJECT

An efficient and competitive energy sector is vital to a country's development. The Sankofa Gas field which was discovered in 2009 is part of an offshore Cape Three Points Project in the Western Region of Ghana in the Ellemabelle District. The project involves gas production from subsea production wells located 60km south of the village of Sanzule on the Western Ghanaian coast.

Figure 1: Sankofa Gas project guarantee structure



Source: World Bank (2018), Financial Solutions Brief, Ghana Sankofa Gas Project,



Specific to the energy sector, the institutional responsibility for managing gas is under the Ministry of Energy and Petroleum which is mandated with policymaking and oversight responsibilities for the energy sector.

The Sankofa gas project has complex financing and guarantee structure as presented in figure 1. It utilised standard project financing, long-term tenures based on take or pay contracts, reserve escrow accounts, and a multi-contractual approach. It adopts security clauses that facilitate financial security to Vitol and Eni that are determined by the GNPCs' ability in making repayments. It also has interim determinations enforced by Letters of credit and drawings of escrow accounts determined by the occurrence of specific events. A European export credit agency, the United Kingdom Export Finance (UKEF) put in US\$400million to the project. The project is also financed through a US\$300million loan from the IFC and a US\$470million uncovered commercial bank facility. MIGA covered lenders breach of contract, expropriation, war, terrorism, civil disturbance, currency inconvertibility and transfer restrictions cover (Dewar and Irwin 2017:52). The financing structure includes a bank consortium that includes the Standard Chartered Bank, Mizuho, MUFG, Natixis, the Bank of China, Société Générale, HSBC and ING. The overall development of the project was undertaken with substantial support from the World Bank through the IDA and IBRD.

The Sankofa gas project was developed through a partnership of the Ghana National Petroleum Corporation (GNPC), and two private energy companies, Eni of Italy and Vitol in the Netherlands. The project estimate required a total cost of US\$ 7.7billion (Ayaburi 2020:2). The GNPC is the national gas aggregator and a partner in all petroleum agreements in Ghana and acts as a strategic commercial vehicle for State participation in the oil and gas industry. It has the mandate to undertake exploration, development, production and disposal of petroleum and owns 20% of the project. Eni has 44.44% of the project shares. The company operates in 73 countries and specialises in natural gas exploration, field development and production; refining and chemicals activities; sale of gas, electricity and oil products (Eni-Ghana 2017:20). The Vitol Group, an energy and commodities company own 35.56% of the project. The company's primary business is the trading and distribution of energy products globally. Therefore, the project had stakeholders with experience in the energy sector.

In 2015 the World Bank group approved a US\$700million in guarantees for the Sankofa gas project through an International Development Association (IDA) guarantee payment of US\$500million that would support payments for gas purchases by Ghana National Petroleum Corporation and an International Bank for Reconstruction and Development (IBRD) enclave loan guarantee of \$200 million that enables the project to secure financing from its private sponsors (World Bank Group 2015:1). The Bank chose this project as it aligned with its strategic pillar number 2 of its 2013-2018 country partnership strategy. Pillar 2 was geared towards improving competitiveness and job creation by providing more efficient delivery of infrastructure services in the energy sector. The WBG 2013 Energy Directions Paper called for a scale up of WBG involvement by supporting natural gas development as a lower cost and cleaner fuel and the Sankofa project offered that<sup>12</sup>.

3.2. Table 2: Sankofa gas project results Chain

Activities	Outputs	PDOs/Outcomes	Longer Term Outcomes
<b>Activity 1:</b> (i) Drilling five gas producing wells linked to a floating production and storage unit on an oil tanker; (ii) Laying a 63 km, 22-inch subsea pipeline linked to an onshore receiving facility (ORF); and (iii) Construction of a 2.5 km link between ORF and an existing 20" pipeline supplying gas to thermal power generation plants	180 MMCFD of base load natural gas supply from Sankofa is used for thermal power generation over a period of 15 years, starting in 2018; imports of liquid fuels (LCO) for power generation are reduced;	Increased domestic gas supplies leads to (i) improved security of fuel supply for electricity generation; (ii) lower cost electricity generation; and (iii) enhanced prospects of further private sector financing for new power generation;	Further investment in exploration for oil and gas in Ghana's offshore waters;  Lower cost of electricity based on natural gas helps drive further economic growth and poverty reduction  Climate change benefits as a result of transition from liquid fossil fuels to natural gas for thermal power generation; gas becomes primary fuel for future power generation;
<b>Activity 2:</b> Support the structuring of a bankable transaction and mobilize private capital of a total \$8 billion for the project;	Use of guarantee instruments helps mobilize up to \$5.1 billion in private capital by 2018 for Sankofa Gas Development	Ghana is able to mobilize more private sector financing for expansion of the power sector through risk mitigation instruments such as guarantees;	

Source: Ghana Sankofa Gas Project P152670, World Bank (2020:3)



Government of Ghana embarked on the project with the intension to substantially reduce the expensive natural gas and liquid fuel imports. Nigeria was failing to supply the contracted volumes in agreed timelines. Projected long term benefits included offering reliable electricity supply to consumers of the Electricity Company of Ghana (ECG) at lower cost. For the government of Ghana, mobilising finance for this project from private capital would ensure success of the project. The country's fiscal space was blotted with other pressing needs hence the PPP route was most convenient. Table 2 above documents the results chain of the project which projected long term outcomes of lowered costs of electricity which would drive economic growth and poverty reduction.

Sankofa Gas Field Project is an integrated oil and non-associated gas (NAG) project which involves the development of the Sankofa main and east NAG, Gye Nyame NAG reservoirs and Cenomanian (Oil)<sup>13</sup>. Phase one included the development of the oil project while phase two was the development of the NAG project. The NAG is transported by a pipeline to a receiving facility and then delivered to the Ghana National Gas Company (GNGC). The NAG network consists of five gas producers linked by the flowlines systems to the John Agyekum Kufuor Floating, Production, Storage and Offloading (FPSO) unit via individual risers and flowlines<sup>14</sup>. The gas reservoirs are named Sankofa Main, Sankofa East and Gye Nyame. Sankofa gas is being supplied through a long-term Gas supply agreement. The contract has a flat price in real terms which gives Ghana 15 years of reliable and affordable domestic gas supplies. This contract also eliminates market price risks as the prices will be constant during the period covered by the contract.

### 3.3 Figure 2: Project timelines



Source: Eni Ghana 2017: 13

The first gas supplies from the Sankofa field to thermal power plants started in June 2018 and its operational lifespan is 20 years. It will be decommissioned after its lifespan in accordance with international guidelines and Ghana's laws for abandonment of oil and gas facilities. Figure 2 above presents the planned timelines for the project. However, project implementation did not follow the prescribed timelines. The project's initial operation was delayed from starting in May 2017. The delay in project delivery demonstrates that there is no guarantee that planned activities will be implemented in the specified timelines due to a lot of unforeseen challenges. This delay resulted in financial costs that Eni and Vitol negotiated with project funders. A payment package was agreed by Ghana, the oil companies' consortium, and the World Bank to cover for the production interruptions. Generally, the Government of Ghana was pleased with the overall completion timelines of the project.

13 World Bank (2014), Sankofa Gas project, project information document (PID) concept stage Report No: AB7680,

14 Eni and ERM, (2015) GHANA offshore cape three points oil block development Phase 2 Final Environmental Impact Statement

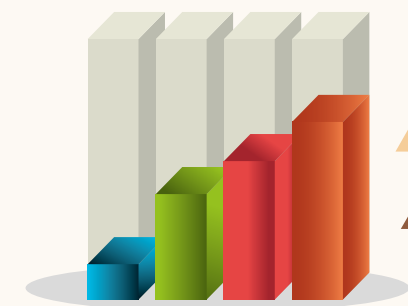




## 4. FINDINGS

### 4.1 Cost Effectiveness

The Sankofa gas project was anticipated to result in economic benefits for Ghana and GNPC through revenue of US\$2.3Billion and through fuel cost savings of \$1.2 billion (World Bank 2014:6). Payments for the gas supplied by GNPC only began in 2019 with extended delays in payments that extended into 2020. The GNPC faced liquidity constraints due to rising arrears worsened by a sector with state owned enterprises that lacked payment discipline. By end of March 2020, GNPC was in arrears to the tune of over US\$192 million which was equivalent to about 5 months of unpaid gas invoices (World Bank 2020:10). The Sankofa gas supplies agreement between Ghana National Petroleum Corporation (GNPC) and the private sector investors Vitol and Eni, has a take or pay clause that stipulates that GNPC must purchase 90 per cent of a predetermined quantity of gas produced, whether it is able to use it or not<sup>15</sup>. This prompted ENI and Vitol to drawdown US\$192million through the Letter of Credit to the IDA US\$500Million guarantee facility due to the delay in 2020<sup>16</sup>. However, new arrears of US\$170 million accumulated, and in April 2021 the contractors drew on a letter of credit for a second time<sup>17</sup>. Each drawdown is converted into a loan that GNPC should repay within a year in according to the contractual agreement to the issuing banks of the Letter of Credit. Any amount paid out by IDA under its guarantee would be subject to the indemnity and reimbursement obligations of Ghana to the World Bank in accordance with the terms of the Indemnity Agreement<sup>18</sup>. Therefore, the project puts fiscal pressure to the government of Ghana through GNPC. IDA will be entitled to exercise its remedies at its discretion, in whole or in part, against the country portfolio upon failure to repay the loan.



*The Sankofa gas project was anticipated to result in economic benefits for Ghana and GNPC through revenue of US\$2.3Billion and through fuel cost savings of \$1.2 billion (World Bank 2014:6).*

15 <https://www.brettonwoodsproject.org/2020/04/ghanas-sankofa-gas-project-backed-by-world-bank-brings-fiscal-pain/>

16 World Bank Group (2020), Ghana Sankofa Gas Project (P152670), implementation completion and results report on an IDA guarantee in the amount of US\$500 million and an IBRD enclave guarantee in the amount of us\$200 million for the republic of Ghana in support of the Sankofa gas project June 26, 2020. Available from: <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/601881593704591424/ghana-sankofa-gas-project>

17 World Bank Group (2021), GHANA 2021 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR GHANA, page 28

18 Ibid, page 10

Therefore, the risk of this investment is not falling to ENI or Vitol but on the Government of Ghana. The state is the residual fiscal risk holder of PPPs, a scenario that can undermine the financial sustainability of the national budget and subsequently lead to an unsustainable debt overhang. The IMF has warned other countries that poorly designed PPPs “impede the efficiency of public investment, and create large contingent liabilities, the realization of which could undermine fiscal and debt sustainability.”<sup>19</sup> In 2016 Ghana was according to the World Bank classified as at high risk of debt distress with its debt stock reaching 73.4 percent of GDP.<sup>20</sup> This meant that serving the debt would crowd out other critical government obligations as health and education spending<sup>21</sup>. IMF programmes between 2015-2018 severely impacted social spending. Therefore, resorting to utilising PPP approach was desirable to government as the public procurement route was already bloated with expenses. Due to the adverse effects of covid-19 Ghana has received a debt standstill as it failed to cope with its repayment obligations in 2020<sup>22</sup>. Based on the contractual agreement to the Sankofa gas project most of the financial risk falls to the Government of Ghana as is the case with many PPPs.

The cost effectiveness of the Sankofa gas project is also questionable. The gas reserves are modest in size and found in deep, offshore waters which raises its production costs and technical costs. At project appraisal the estimated rate of return of the project was 20.2% or US\$4Billion. However, at the closing date of the project, that is 31 December 2018, the rate of return was at 14% or US\$1.3Billion. These were 6.2 percent and US\$2.7billion lower than the appraisal estimates (World Bank 2020:40). Reasons for the variation was the deep fall in the global prices of crude oil and natural gas in the first quarter of 2020. Therefore, Ghana must ensure that it expands its market base for the natural gas so that it meets its 20year projections. However, Sankofa gas brings stability to the industry thereby contributing to efficiency and economic growth. It also poses some long-term negative impacts as climate change.



19 <https://exit.al/en/2019/07/04/imf-warns-again-ppps-are-fiscal-risk/>

20 <https://documents1.worldbank.org/curated/es/789521513998069567/text/GHANA-PAD-NEW-11292017.txt>

21 <https://www.theafricareport.com/28794/coronavirus-weathering-the-pandemic-and-elections-in-ghana/>

22 <https://www.theafricareport.com/28794/coronavirus-weathering-the-pandemic-and-elections-in-ghana/>



## 4.2 Risk Allocations

The take or pay arrangement to the Sankofa gas project provides the most debated risk of the project. GNPC is contracted to pay for 154mmscf of the Sankofa gas output even if there is no demand for it<sup>23</sup>. Ghana's Finance Minister said "the country was currently paying more than \$51 million a month under a take-or-pay contract for 154 mmscf per day on the Sankofa Offshore Cape Three Points gas alone, even though the country only takes 60 mmscf per day on average"<sup>24</sup>. Based on this, Ghana must renegotiate all take-or-pay contracts in the energy sector, by converting them to take-and-pay contracts as it is incurring financial losses. Despite all the available layers of financial guarantees in the project, Ghana's sovereign guarantee was still included in the agreement effectively ensuring that losses of the GNPC will be passed on to the state.

The National PPP policy mandates all PPP agreements to have a risk management framework (Republic of Ghana 2011:11). The PPPs policy section C.5 and the PPP Act section 5b on risk allocation also requires the allocation of risks to the party best able to control and manage the risks. The project included a comprehensive set of risk mitigation steps to ensure the success of the project. This also enhanced the creditworthiness of GNPC, which is the direct recipient of the Sankofa gas for the duration of the gas supply agreement (GSA). As risk mitigation Ghana is mandated to have a Government Disbursement Account (GDA) in which the GSA payments will be made together with the GNPC's debt service. After the disbursements, the remaining funds are expected to be used to replenish the Sankofa reserve escrow cash account and residual funds released to GNPC.

The GSA account is currently in place but is yet to be operationalised (World Bank 2020:37). If the proceeds from the GDA are insufficient, as a risk mitigation layer, the reserve or escrow account that should be funded by GNPC should be utilised. The escrow account should have equivalent to 4.5 months of gas sales which would be reduced to 3.5 months in the absence of default under the GSA during the first 5 years. "Gas sales of up to 4.5 months would result in US\$210million but GNPC only provided an initial US\$100 million for the account. This was depleted after the first invoices and has not since been replenished" (World Bank 2020:37). When the GDA and the escrow account mitigation measures fail, the project has two other mitigation strategies. These include the US\$500 million Commercial Bank Letter of Credit backstopped by IDA and the Sovereign Guarantee<sup>25</sup>. The Letter of Credit covers the risks for the two implementing companies ENI and Vitol. This covers close to one year of gas sales under the GSA. The sovereign guarantee makes Ghana liable for gas payments estimated around US\$600 million per year on average over the life of the GSA once all these mitigation measures of security are exhausted.

23 <http://country.eiu.com/article.aspx?articleid=1968370980&Country=Ghana&topic=Politics&subtopic=National+%26+provincial+initiatives>

24 <https://www.ghanabusinessnews.com/2019/07/30/government-to-renegotiate-take-or-pay-contracts-in-the-energy-sector/>

25 <https://www.brettonwoodsproject.org/2020/04/ghanas-sankofa-gas-project-backed-by-world-bank-brings-fiscal-pain/>





## 5.

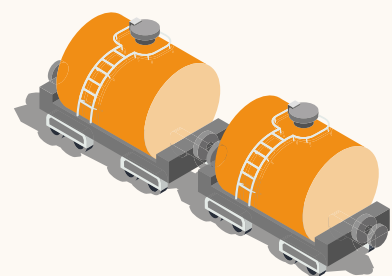
## THE DEVELOPMENT OUTCOMES OF THE SANKOFA GAS PROJECT

Ghana has had electricity challenges especially from 2013 to 2016 which undermined the country's economic growth. This was due to several factors such as insufficient gas flow coming from Nigeria through the West African Gas Pipeline and low water levels in the reservoirs for hydroelectricity. Government of Ghana envisaged the use of natural gas from Sankofa to generate electricity to improve the growth prospects for the country due to reliable electricity.

The oil and gas value chain comprises three segments: upstream, midstream, and downstream. Downstream activities include oil refining, transportation and storage, retail marketing. Midstream activities include gas processing, transportation and storage. Upstream activities include licencing, exploration and appraisal, development, production, appraisal, abandonment and decommissioning. Ghana's parliament passed two key legislations, the Petroleum Commission Act which established the Petroleum Commission for the regulation and management of the utilization of oil and gas resources, and the Petroleum Local Content and Local Participation Regulation LI2240 of 2014 to promote local participation in the oil and gas upstream. Through the laws, "All local and foreign contractor, subcontractor, license, corporation, or other allied entity carrying out oil and gas activities has a responsibility to ensure local content forms a central plank of its operations" (IFC2018:52).

As of December 2020, non-associated gas production from the Sankofa gas field was 70,355.70 MMscf<sup>26</sup> produced out of which 56,570.99 MMscf was delivered for power generation. (Ghana National Budget 2020:779) The Ministry of Energy in 2020 distributed 1,500 LPG cookstoves under the Rural LPG Promotion Programme which will be upgraded into a National Programme to cover peri-urban and urban areas as well. The new expanded programme will target homes, schools and institutions that use LPG for commercial catering. This has improved access to electricity even to the poor.

Domestic gas supply will be a cheaper source of fuel for electricity generation. Overall, "proven oil reserves in Ghana are estimated at 1.1 billion barrels, while proven gas reserves are estimated at 2.1 trillion cubic feet" (IFC 2018:1) which could have a huge developmental outcome. Due to the Sankofa gas project, Ghana has improved energy security by providing nearly two thirds of the fuel needed for the country's thermal power plants, compared to none when the project was approved in mid-2015.



Government of Ghana envisaged the use of natural gas from Sankofa to generate electricity to improve the growth prospects for the country due to reliable electricity.

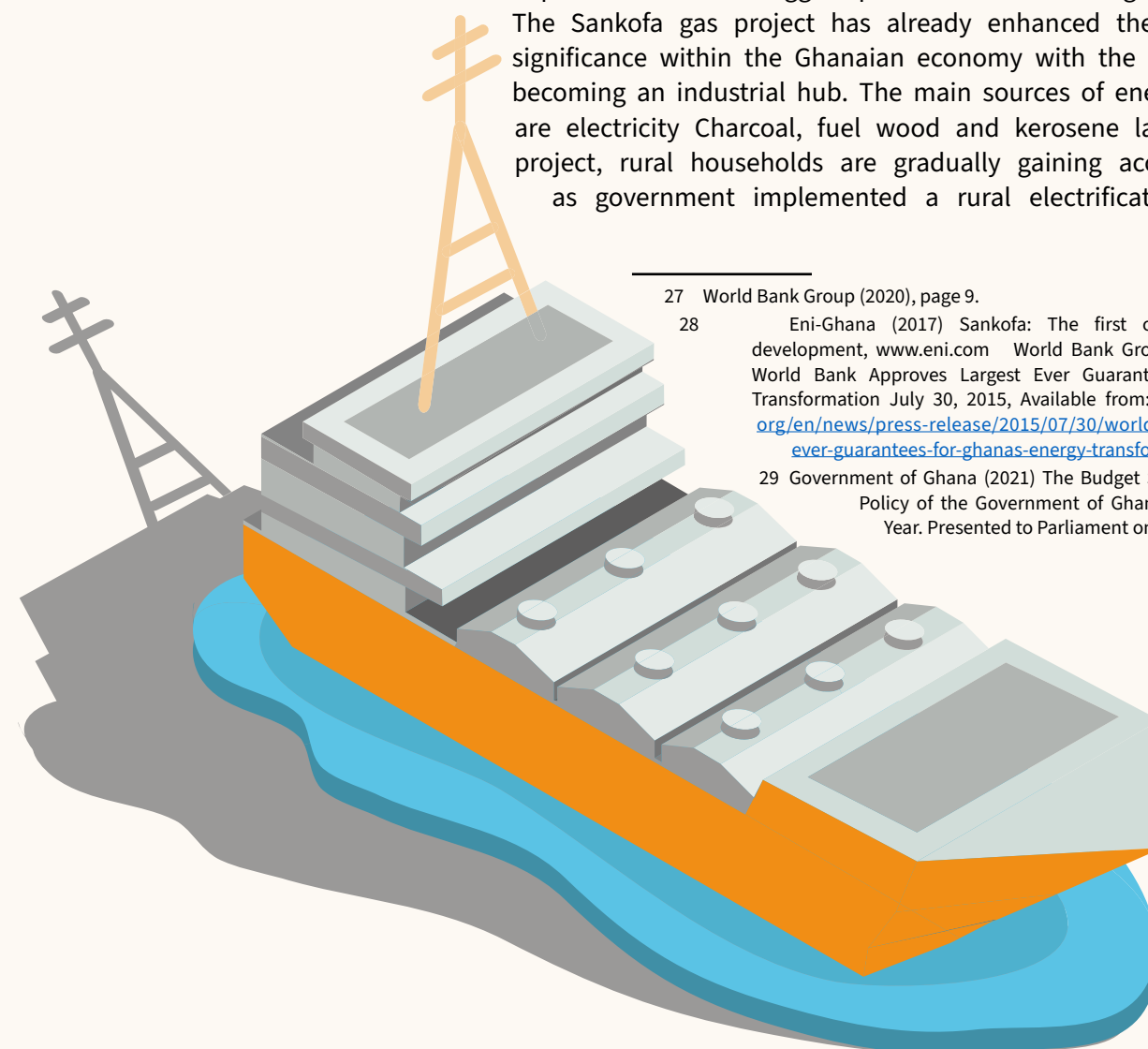
26 Gas quantity unit of measurement

<sup>27</sup> Sankofa gas has provided stability in Ghana's gas supply chain with electricity outages substantially reduced. It came in addition to already NAG from the Jubilee field, the TEN fields and gas imported from Nigeria. Therefore, the Sankofa gas project has met efficiency expectations to the energy industry

The immediate outcome of the oil and gas fields in the economy will be a diversification of the Ghana's exports. The major exports were gold and cocoa and crude oil will become the addition. The project has also benefited local businesses. Business for nonspecialized services such as civil engineering, construction, metal fabrication, and welding, increased due to the project (World Bank 2020). Ghana's local content regulations enforcement in 2014 ensured that certain goods and services were provided by local suppliers<sup>28</sup>.

Eni engages in community engagement projects that uplifts nearby communities. The energy sector is knowledge and technology intensive rather than labour intensive, thereby having minimum effect on job creation in the area. However, there has been skills and knowledge transfer through this project. "In 2016, Eni launched the inter-functional Local Content Assessment Model project with the aim of developing a simple and easily replicable model for assessing the direct, indirect and secondary effects of its activities in operating contexts" (Eni Ghana 2017:5). Through the Sankofa Gas project, 320 contracts have been awarded to indigenous companies with a value of US\$1.8billion. Eni has dedicated US\$2.2million in training and development for the locals including sending 25 students to study Degrees and Masters in Italian Universities (Eni Ghana 2017:15). The project also employed local personnel which contributed to employment creation. During operations, Eni employed 49 permanent Ghanaian employees on the FPSO from a total of 65, while the ORF employed 45 people 20% being expatriates and 80% being Ghanaians.

The Western Region is the highest contributor to the country's GDP with a wide variety of mineral deposits and is the biggest producer of various agricultural products. The Sankofa gas project has already enhanced the Western regions significance within the Ghanaian economy with the Ellembelle District becoming an industrial hub. The main sources of energy in this region are electricity Charcoal, fuel wood and kerosene lamps. Due to the project, rural households are gradually gaining access to electricity as government implemented a rural electrification programme<sup>29</sup>.



<sup>27</sup> World Bank Group (2020), page 9.

<sup>28</sup> Eni-Ghana (2017) Sankofa: The first oil from Ghana's OCTP development, [www.eni.com](http://www.eni.com) World Bank Group (2015), Press release, World Bank Approves Largest Ever Guarantees for Ghana's Energy Transformation July 30, 2015, Available from: <https://www.worldbank.org/en/news/press-release/2015/07/30/world-bank-approves-largest-ever-guarantees-for-ghanas-energy-transformation>

<sup>29</sup> Government of Ghana (2021) The Budget Statement and Economic Policy of the Government of Ghana for the 2021 Financial Year. Presented to Parliament on Friday, 12th March, 2021



## 6.

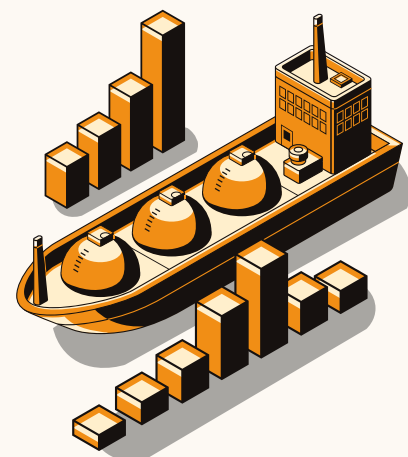
### IMPACT ON DEMOCRATIC GOVERNANCE

#### 6.1 Lack of Transparency.

Governance in Ghana is decentralised with ten administrative regions subdivided into Metropolitan, Municipal and Districts. Each District has an administrative assembly with appointed and elected officials. The project is being administered in the Ellembelle District which is headed by the District Chief Executive. The local government system in Ghana is constitutionally empowered to take administrative and developmental decisions on behalf of central government. The project has had public scrutiny. The decision to embark on the Sankofa gas project had been enshrined in the national development plans of Ghana. The Sankofa gas project poses political, regulatory, and governance challenges for the country. The Public Private Partnership Act, 2020 (Act 1039) which provides the legal, regulatory and institutional framework for the governance of Public- Private Partnerships is yet to have accompanying regulations to operationalise the Act. Though most contract details are available for scrutiny, these have not been adequately shared with the public.

#### 6.2 Limited Public Participation and Non-Comprehensive Risk Assessments

The project has not carried out a security risk assessment in a region prone to piracy attacks or assessments of the countries capacities or institutional coordination to handle disasters like oil spills that could be a threat to the rich marine life and ecosystems. However, the project provided a guarantee to Eni and Vitol for such risks. There is no evidence on the extent of public participation in the design, implementation, monitoring and evaluation of the project.



Governance in Ghana is decentralised with ten administrative regions subdivided into Metropolitan, Municipal and Districts. Each District has an administrative assembly with appointed and elected officials.

## 7.

### INTEGRATING ENVIRONMENTAL CONSIDERATIONS IN INFRASTRUCTURE INVESTMENTS

#### 7.1 Upholding Environmental impact assessment standards

The project operates with zero flaring and zero discharge policy (Eni Ghana 2017:7). Ghana's Environmental Assessment Regulations of 1999 requires an Environmental Impact Assessment (EIA) to be conducted on all projects that utilise the environment and an environmental permit to be issued for the continuation of the project. The Sankofa gas project performed the EIA and submitted the Environmental Impact Statement (EIS) to the Ghanaian Environmental Protection Agency (EPA) for their decision on whether to issue an environmental permit for the Project. The EPA is under the Ministry of Environment, Science, Technology and Innovation. It is responsible for environmental protection and improvements, issuing environmental permits, pollution reduction notices and waste management. The project was registered with EPA in December 2014 (Environmental Assessment 2015:14). This is constitutional as Article 36 of the constitution, chapter 6 states that "The State shall take appropriate measures needed to protect and safeguard the national environment for posterity; and shall seek co-operation with other states and bodies for purposes of protecting the wider international environment for mankind".

#### 7.2 Upholding IFC Corporation Performance Standards for Environmental and Social Sustainability.

The Sankofa Gas project considered the International Finance Corporation Performance Standards for Environmental and Social Sustainability of 2012 and the World Bank Group Environmental, Health and Safety (EHS) Guidelines (Environmental Assessment 2015:14). On the design of the project, the project locations were evaluated prior to selecting the project location utilising environmental, social, technical and logistic data. The selected area near Sanzule was selected in to minimize physical resettlement of people and interferences with cultural sites. Some areas were excluded to avoid disturbing the inhabited areas at the east of the gas pipeline corridor and cultural heritage sites at the West of the onshore pipeline section. To protect the ecosystem, waste management companies approved by Ghanaian authorities transported, recycled and disposed wastes utilising a Waste Management Plan developed by Eni Ghana. Air pollution from the project is within the range of Ghana EPA and IFC limit values.



To protect the ecosystem, waste management companies approved by Ghanaian authorities transported, recycled and disposed wastes utilising a Waste Management Plan developed by Eni Ghana.





### 7.3 Protection of biodiversity

Concentrations of metals in freshwater samples was within the WHO guideline limits, except for mercury. Surface water had no significant concentrations of oil and grease detected in the samples. This depicts the projects conformity to environmental standards. The project also places significant interest in the protection of biodiversity. It protects the Cape Three Points Forest Reserve and the Ankasa Conservation area which are in the general area of the project. The Cape Three Point Forest is known to provide habitat for over 170 species of birds. The project has not affected the fisheries sector contributes 4-5% to Agricultural GDP and employs about 10% of the population. The fishing trade is an important source of livelihoods in coastal communities of the Western Region and Ghana is rated as the third largest consumer of fish worldwide. However, the region has registered a decline in fisheries due to overfishing and illegal fishing methods. The project registers medium impact on local air quality due to the airborne pollutant emissions, on noise emissions, on groundwater resources, unplanned spills (medium) of fuels or chemicals.



## 8.

### KEY CONSIDERATIONS ON THE FINDINGS

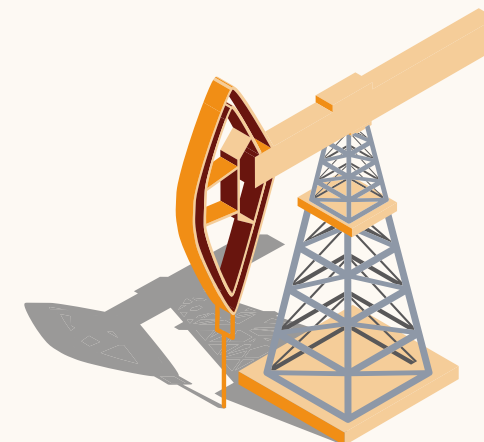
While there was genuine need for Ghana to improve its energy sector and end the mostly detested power cuts (dumsors), government offered over-generous PPP terms just to satisfy Ghana's thirst for gas supplies. The project exposes Ghana to too many risks and demonstrated the lack of investor confidence in the government of Ghana<sup>30</sup>. As demonstrated the biggest beneficiaries of this project are the two contracting companies Eni Ghana and Vitol Ghana. The key considerations from the findings are:

#### 8.1 Institutional and legal frameworks

Ghana's PPP Act of 2020 is in place and is in the process to be operationalised in 2021. The Sankofa Gas project was approved by government without a full approved environmental and social impact assessment report (ESIA) by the Environmental Protection Agency in accordance with regulations. The Sankofa gas project PPP contract including the indemnity agreement between the Republic of Ghana and International Development Association was signed in line with Ghana's national laws and Ghana's PPP policy framework. The agreement was signed by Ghana's Ministry of Finance with parliamentary approval.

#### 8.2 Assessment of the effectiveness and efficiency of PPPs for Infrastructure projects

There is no evidence of expansion of energy access to the poor and marginalised from the literature reviewed. The Sankofa gas project did not begin production in the planned timelines which also contributed to the deterioration of the country's debt profile. Ghana's gas emissions have risen due to the gas infrastructure<sup>31</sup>. Gas from Sankofa is meant to be consumed by thermal power plants and produce electricity which in turn was supposed to be paid by the Electricity Company of Ghana and the Northern Electricity Distribution Company to GNPC. However, only 11% of the gas sales has been paid by the power sector directly. The government of Ghana has paid for the rest<sup>32</sup>.



The Sankofa gas project did not begin production in the planned timelines which also contributed to the deterioration of the country's debt profile.

30 <https://newsghana.com.gh/ghana-to-make-losses-in-eni-gas-deal/>  
31 [https://unfccc.int/sites/default/files/resource/gh\\_nir4-1.pdf](https://unfccc.int/sites/default/files/resource/gh_nir4-1.pdf)  
32 World bank 2020, section 50





### 8.3 Cost Effectiveness and Risk Allocations

- The Sankofa gas project puts fiscal pressure as its off-take agreement for gas supply requires Ghana to make monthly payments equivalent to 0.7 percent of GDP annually<sup>33</sup>.
- The two private companies involved in the PPPs do not face any financial loss risk as they have an option to utilise the Letter of Credit option to redeem their losses should the project revenue fail to meet their expectation. The risk allocation therefore disenfranchises the government of Ghana as it provides a sovereign guarantee to the project.
- GNPC has not fulfil its payment obligations under the Gas Sales Agreement with Eni and Vitol resulting in the two private oil firms utilising the Letter of Credit option in 2020 and in 2021. This becomes a loan to GNPC that should be repaid in one year thereby increasing the country's indebtedness.
- The government of Ghana is liable for any foreseen project losses as it placed its sovereign guarantee to the project.
- The project is not demonstrating affordability as Ghana has not been able to consume all the produced gas and electricity resulting in payment deficits. This is against the value for money principle that underpin the justification to resort to PPP. Payments are to be paid to the private companies irrespective of demand.
- The take or pay clause in the PPP contract will undermine debt sustainability efforts of the country. For example, in 2019 Ghana was left with \$250 million worth of unused NAG. Also, at closing the project did not meet its appraisal estimated rate of return by US\$1.3Billion.

### 8.4 Democratic governance

- The Sankofa Gas project demonstrates limited public participation in project design, implementation, monitoring and evaluation of the project. It is only demonstrated when parliament approved the project. All the stakeholders did not put in place an effective communication strategy to ensure that the public was aware of the project objectives and project beneficiaries. This resulted in the media in Ghana reporting negatively that the gas was not going to benefit the country as it would not be consumed locally.

### 8.5 Environmental safeguards

- Sankofa Gas project completed an Environmental Impact Assessment which depicted the projects quest for biodiversity and overall environmental protection

## 9.

## CONCLUSION

The Sankofa gas project was a multi-stakeholder endeavour that included the Government of Ghana, the World Bank Group, Eni, Vitol and Ghana National Petroleum Corporation and the bank consortium was an unprecedented project in Sub-Saharan Africa. The project supported Ghana's shift from oil to gas fuelled power generation providing consistent available supply of gas which brought stability to electricity as well as economic as well as environmental benefits. It allowed Ghana to diversify its exports to include non-assorted gas. However, these benefits have come with a huge cost to Ghana in the short run due to reduced demand for electricity propelled by the unforeseen covid-19 pandemic which slowed down economic activities. The fact that the sales agreement came with a take or pay clause has resulted in Ghana paying for unused gas which has become the biggest financial risk of the project. The project currently puts Ghana at high risk of debt distress and exposed Ghana's inability to negotiate favourable terms of this PPP resulting in GNPC paying for unused gas. The IMF in 2014 had warned that 'PPPs can be used mainly to bypass spending controls and move public investment off budget and debt off the government balance sheet, while the government still bears most of the risk involved and faces potentially large fiscal costs'<sup>34</sup>. This has been the case for the project as government's GNPC is in a debt burden for failing to pay for unused electricity.



*The IMF in 2014 had warned that 'PPPs can be used mainly to bypass spending controls and move public investment off budget and debt off the government balance sheet, while the government still bears most of the risk involved and faces potentially large fiscal costs.'*

33 <https://www.imf.org/-/media/Files/Publications/CR/2019/1GHAEA2019001.ashx>

34 <https://www.imf.org/external/np/fad/2004/pifp/eng/031204.pdf>



## 10.

## RECOMMENDATIONS

## 10.1 Government of Ghana

- Public participation in PPP projects should also be enshrined in the PPP policy and the PPP Act to ensure that the voices of communities directly impacted by the projects are listened to.
- There is need to develop capacity within the Ministry of Energy and the Ministry of Finance to ensure that aspects of risk sharing, value for money and overall development benefits are clearly defined when either PPPs or PPAs are entered. This capacity should therefore be shared within the decentralised structures who have the constitutional mandate to enter such agreements on behalf of the state of Ghana.
- There is need to review the take or pay clause that is currently in the Sankofa GSA to make the project economically viable. Also, with regards to future PPAs, government should ensure that it pays only for used electricity as the current negotiated PPA's disadvantage the state.
- The local content regulation should also be enforced together with the PPP Act regulations to ensure maximum benefit of locals in development projects
- For financial viability of the Sankofa gas project government should meet all its contractual obligations in the project. Some of the areas that government can improve which are part of the contractual obligation include funding and replenishing the reserve escrow account, ensuring that there is the requisite infrastructure to transport the gas to the market especially in the eastern region.
- Government should also improve on revenue mobilisation in all sectors to fund budget deficits. It should ensure that gas revenue management is in line with Ghana's overall fiscal framework. National gas and oil companies, if not carefully governed, can become a source of corruption and mismanagement of revenues<sup>35</sup>

## 10.2 World Bank Group and other International Financial institutions

- While it is commendable that the World Bank Group managed to approve a project of this magnitude by mobilising funding to the project, the bank ought to ensure that the debt stock accumulating due to this project is sustainable.
- Despite the IMF programmes in 2009-2012 and 2015-2018, Ghana is still in high debt distress in 2021. There is need for entrenching prudent macroeconomic policies, ensuring debt sustainability, and pressing ahead with structural reforms to deliver a sustainable, inclusive, and green economic recovery<sup>36</sup>.

## REFERENCES

Ayaburi J & Bazilian M (2020) Economic Benefits of Natural Gas Production: The Case of Ghana's Sankofa Gas Project, Colorado School of Mines, Energy for growth Hub. Available from: [https://www.researchgate.net/publication/343834715\\_Economic\\_Benefits\\_of\\_Natural\\_Gas\\_Production\\_The\\_Case\\_of\\_Ghana%27s\\_Sankofa\\_Gas\\_Project?enrichId=rgreq-72733a48af65a08a63bc342f5d1a275b-XXX&enrichSource=Y292ZXJQYWdlOzM0MzgzNDcxNTtBUzo5MjgwOTQ2MTc2MDAwMDJAMTU5ODI4NjQwODcxMQ%3D%3D&el=1\\_x\\_3&\\_esc=publicationCoverPdf](https://www.researchgate.net/publication/343834715_Economic_Benefits_of_Natural_Gas_Production_The_Case_of_Ghana%27s_Sankofa_Gas_Project?enrichId=rgreq-72733a48af65a08a63bc342f5d1a275b-XXX&enrichSource=Y292ZXJQYWdlOzM0MzgzNDcxNTtBUzo5MjgwOTQ2MTc2MDAwMDJAMTU5ODI4NjQwODcxMQ%3D%3D&el=1_x_3&_esc=publicationCoverPdf) (Accessed 16 June 2021)

CEPA, (2015), Mobilising Finance for Infrastructure A Study for the UK Department for International Development (DFID), Ghana country case study, Cambridge Economic Policy Associates Ltd, London

Eni-Ghana (2017) Sankofa: The first oil from Ghana's OCTP development, [www.eni.com](http://www.eni.com) World Bank Group (2015), Press release, World Bank Approves Largest Ever Guarantees for Ghana's Energy Transformation July 30, 2015, Available from: <https://www.worldbank.org/en/news/press-release/2015/07/30/world-bank-approves-largest-ever-guarantees-for-ghanas-energy-transformation> (accessed on 28 October 2021)

IBRD/World Bank (2015), Benchmarking PPP procurement 2015, A pilot of 10 economies.

IFC, (2018) Estimating the effects of the development of the oil and gas sector on growth and jobs in Ghana (2015–30): A modelling and value chain analysis, Prospective Economic Assessment. World Bank; Washington DC

MOFEP (2020) Public Private Partnership Act; 2020, Ministry of Finance and Economic Planning; Available from: <https://mofep.gov.gh/sites/default/files/acts/PPP-ACT-1039.pdf> (Accessed on 22 July 2021)

Republic of Ghana (2011), National Policy on Public Private Partnerships, Private participation in Infrastructure and services for better public service delivery, Ministry of Finance and economic planning. Government of Ghana: Accra

World Bank (2014), Sankofa Gas project, project information document (PID) concept stage Report No: AB7680, World Bank: Washington DC

World Bank (2018), Financial Solutions Brief, Ghana Sankofa Gas Project, World Bank: Washington DC

World Bank Group (2020), Ghana Sankofa Gas Project (P152670), implementation completion and results report on an IDA guarantee in the amount of US\$500 million and an IBRD enclave guarantee in the amount of us\$200 million for the republic of Ghana in support of the Sankofa gas project June 26, 2020. Available from: <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/601881593704591424/ghana-sankofa-gas-project> (Assessed on 2 August 2021)

35 <https://resourcegovernance.org/sites/default/files/documents/ghanas-election-seven-extractives-governance-recommendations-for-the-next-government-web.pdf>

36 <https://www.imf.org/en/News/Articles/2021/07/20/pr21221-ghana-imf-executive-board-concludes-2021-article-iv-consultation>





African Forum and Network on Debt and Development  
31 Atkinson Drive, Hillside  
PO Box CY1517, Causeway  
Harare, Zimbabwe  
Tel: +263 242 778531/6  
Fax: +263 242 747878  
Website: [www.afrodad.org](http://www.afrodad.org)