Africa Centre for Energy Policy

THE ACEP RADAR

SCANNING ENERGY AND MINING GOVERNANCE

2018 MID YEAR EDITION

1. IS ECG BECOMING A SECRET GIVEAWAY?

The process to inject efficiency in the management of ECG through Private Sector Participation (PSP) which recently crystalized into the contested outcome of Meralco as the eventual winner of the bid is more than three years old.

The process, which began with some reasonable transparency at the initial stages (deeper engagement with stakeholders by MCC and MiDA),[1] suddenly became an epitome of controversy with many sides to simple questions about the process, local content and stakeholder participation. The discussion remained among government, MCC, MiDA and IFC.

MiDA shortlisted six applicants for the concession arrangement from the list of applicants who submitted intents to take over ECG. Four of the six dropped out of the process for reasons unexplained to date. Therefore, other stakeholders have had to rely on speculative reasons picked up in the grape vine, among which is the demands by those bidders for accurate data on the financial position of ECG and 51% local content prescription by government. One out of the remaining two was disqualified few days before final decision on the eventual winner (we won't comment on this further because the matter is in court). But the bottom line is that if one connects the dots of unexplained events, one would concludethat there was no competition for ECG takeover because transparency collapsed along the way.

ACEP does not doubt the competency of Meralco to manage the ECG; neither do we believe that Meralco is an altruistic company looking out for the best interest of the Ghanaian public. Ghanaians have to focus on and fight for their interest in the deal through shared understanding of the

[1] MCC is Millennium Challenge Compact, and MiDA is Millennium Development Authority

risks, expected gains, and the processes. This cannot be achieved through the almost apostolic representation by MiDA and Government on behalf of the broader society. MiDA and government have simply failed to engage the public on the most crucial aspects of the concession.

One thorny aspect of the concession was the injection of 51% local content demands. This is a government policy which resonates with many people who are apprehensive of the concession arrangement in the hands of foreign companies. Interestingly, the companies who openly exhibited their local partners dropped out of the race. The eventual winner, Meralco, has not indicated who its local partner(s) is/are, as MiDA has not disclosed anywhere that the 51% local participation in the approved bid has been taken up by a local entity. This fuels the speculation that Meralco is still looking for the local partner. If it is true that the winner of the bid did not have 51% local content prior to winning the bid, how fair then was the process to those companies who dropped off because of the local content demands? If all the companies had been told that they could go through the process and look for a local partner after winning the bid, that would have been enough to change the competition entirely.

Having won the bid is just one part of the process. Government now has to negotiate the details of agreement. This crucially must not happen without proper stakeholder engagement on the key deliverables, structure of reporting throughout concession's lifespan, and monitoring tools built into the agreement to support open tracking of performance of the concessionaire. ACEP is interested in broader engagement on the deliverables to ensure that

1. They are crisp and concise targets that are easy to track and measure.
2. Data on performance is available to the public. We need to know how the company is achieving its targets as may be agreed. This has to be published to allow independent analysis of the data and how it translates into savings for the public as intended.
3. Sanctions for nonperformance are clear and known to the public. Let the public know what sanctions apply to any missed deliverable.

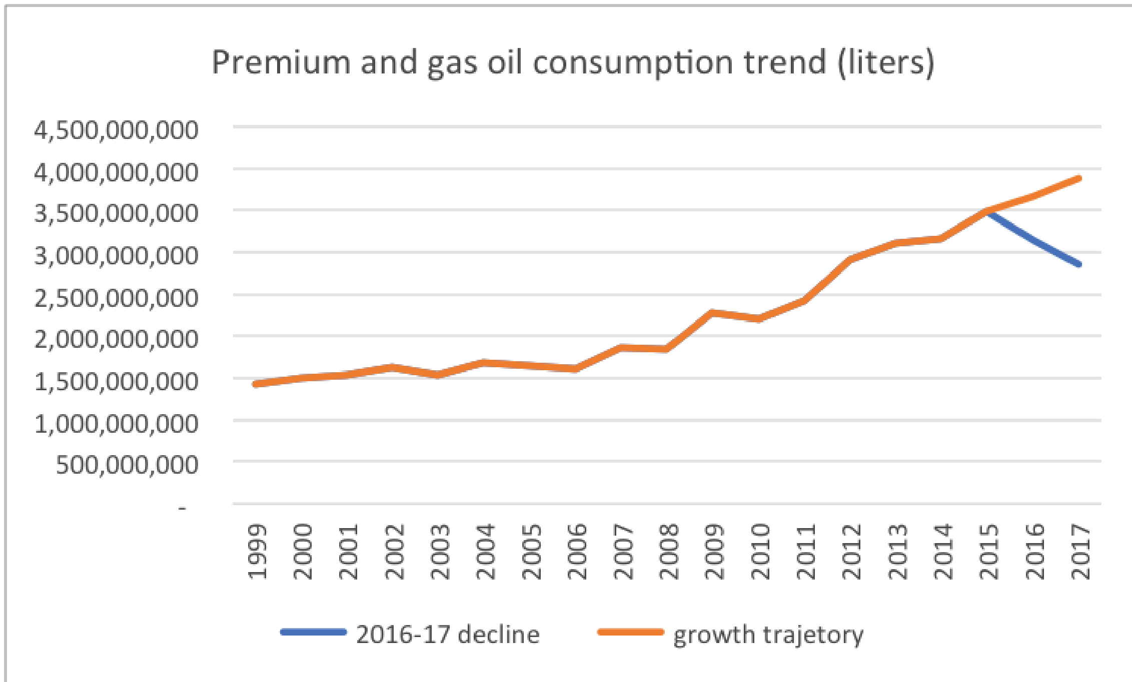
At this stage of the PSP process, ACEP would like to remind MiDA and government that there will be a mountain of resistance if stakeholders are not clear that the PSP represents the best interest of the Ghanaians.

2. FUEL SMUGGLING HURTING GHANA BEYOND AID – TRANSLATES TO LOSS OF GHC1.5 BILLION IN REVENUE IN 2017

Downstream petroleum sector contributes significantly to government revenue through taxes and levies. In 2017 government revenue from the sector reached GHS 4.7billion. This comprised road fund levy, Energy Sector Levies (ESLA), Energy Fund Levy and the Special Petroleum Tax (SPT). The outturn for 2017 represents 5% decline in the projections for the year even though oil prices were more favorable to have influenced the SPT to bring in more than the expected revenue. Government projects to receive GHS 5.2 Billion in 2018. This be missed if government is unable to deal with the challenge of fuel smuggling which is growing at an alarming rate.

The subject of fuel smuggling has been discussed and highlighted by industry players for the past two years as hurting the bottom-line of businesses and government revenue. The Bulk Oil Distribution Companies (BDCs) and Oil Marketing Companies (OMCs) have been at the forefront of this discussion to push State agencies to stop the illegal practice.

ACEP's analysis shows that in both 2016 and 2017, there was 10% decline in the consumption of the two major petroleum products sold at the pump; the worse ever in the history of domestic petroleum products (Premium and gas oil) consumption since year 1999.



Source: NPA and ACEP Analysis

In 2016 premium and gas oil consumption levels declined by about 330 million liters from projections for that year. By the end of 2017, the total decline in the consumption growth trajectory prior to 2015 reached 1 billion liters. ACEP estimates that the deviation represents a revenue shortfall of GHS 1.5 billion in potential revenue to the state for 2017 alone for the two products sold at the pump.

The scale of the revenue loss requires immediate governmental intervention to plug the leakages through the borders. In recent times actions by theNational Petroleum Authority and the Security Agencies resulted in the arrest of some smugglers on the high seas. However, ACEP is reliably informed that smuggling is still happening. What is even alarming is that fact that the illegal trade is spreading along the entire coastline of the country.

The consequence of fuel smuggling goes beyond indirect tax revenue loss to the state. Licensed industry players who have made investment decisions based on market information may miss expected outturns due to market distortions. Consequently, corporate taxes to the State will be impacted negatively as businesses struggle to sustain profitability. The risk to the banks cannot also be understated. compromises monitoring of product standards to protect consumers from off-spec products.

ACEP therefore recommends that the collaboration to deal with the canker should extend beyond State agencies to activate public participation through whistle blower actions with incentives that encourage people to report fuel smuggling to the NPA, GRA, and other relevant authorities. The Whistle Blower Act prescribes 10% compensation for individuals who assist the State to recover revenue. Government should set up a streamlined system that allows compensation to be paid in full and on time.

3. RUSSIA GO RUSSIA COME: GHANA REPLACES GAZPROM WITH ROSNEFT IN AN LNG DEAL

Rosneft, Russia's leading oil producer, announced a new deal with Ghana in a press release on Friday 25th May, 2018 to, among other things, supply LNG to Tema. ACEP's checks reveal contradictory positions on the deal. One source claims that Gazprom has assigned its interest in the earlier contract to Rosneft. Another source believes this is a new deal to save face after Gazprom pulled out of its deal with government. Regardless of the positions, ACEP urges government to disclose the content of the new contract to inform proper content discussion to ensure there is value for money.

ACEP's analysis of the Gazprom contract showed that government was not paying attention to the global dynamics in the LNG business which posed significant risk to the country and, to some extent the investor, relative to actual close of the business. The risk to the country manifested in the nature of the Gas Sale Agreement (GSA) and the location of the LNG regasification equipment at the busy Tema port, which is the cash cow of the country.

The agreement also sought to use Brent crude reference price to determine the price of LNG sold to the country.

This, ACEP, thought did not account for the increasing tradability of the commodity on its own terms, neither does its outcomes compare with the use of government-to-government arrangement nor the use of Henry Hub LNG price indexation. The trend in crude oil price today makes our predictions almost prophetic. At the time the GSA was negotiated, the formulae for LNG price yielded about $7/MMBtu. Today the same formulae would have pushed the price of the LNG to $9.8/MMBtu, triggered by the rise in crude oil price. Conversely, gas price has been relatively stable and, in some markets, declined.

This means the difference between the $7/MMBtu prices and $9.8/MMBtu price would have been an extra profit for the investor, at the expense of citizens; either through tariffs or risking the cash flow of GNPC, the off taker.

The Exit of Gazprom however, if minded, presented government with the opportunity to re-examine LNG imports in manner that surgically account for reasonable gas demand at a competitive price.

ACEP believes that given the price dynamics in Ghana, gas demand will largely be driven by the power sector with isolated industrial demands. We are aware of government's desire to encourage domestic gas use for industry and create a new petrochemical frontier for the region.

However, price and regional dynamics cannot be isolated from the wishes. Whereas Nigeria is providing gas for petrochemical industry at $1.5-$2/MMbtu, the best offering from government yet is $6.5 per MMbtu with blended price at $7.29 per MMBtu. This coupled with anticipated gas production from Other countries in the region and the promotion of continental free trade area, excess gas through imports may be stranded in Ghana at a high cost to the public in one form or the other.

We maintain that the prudent risk mitigation strategy for Ghana will be to procure standby Floating Storage and Regasification Unit (FSRU), which allows Ghana to use the LNG spot market to stabilize gas supply and demand imbalances.

The domestic gas in the short to medium term can suffice time of use demand.

The standby FSRU can provide a critical intervention in the mode of deployment of new power plant. Dual fuel plants have become almost automatic in Ghana because of fuel supply instability. But this comes at huge cost with implication on the electricity tariff. If Ghana procures an FSRU at a cost to the consumer of electricity, it will be much cheaper than almost conventional construction of dual fuel plants for the same security of supply considerations.

ACEP Hopes that the new deal accounts for these factors. We therefore request of government to provide details of the contract.

4. RENEWED PETROLEUM EXPLORATION DRIVE COMMENDABLE BUT IMMEDIATELY EXPOSES THE INADEQUACIES OF THE E&P ACT 919

Ghana's petroleum basins have lacked exploratory activities for the past four years even though the country has fifteen active petroleum agreements. This is the result of granting petroleum agreement to companies who are not technically and financially capable to explore the offshore blocks awarded. Lack of exploration means that once all the existing discoveries move into production (only Hess and MTA are yet to enter production phase), oil production will peak shortly after and start to decline in the next 7-10 years. Therefore, efforts to replace reserves is urgently needed, especially when about 80% of the petroleum basins are unexplored.

The recent announcement by the Ministry of Energy to award new blocks points to the reality that exploration cannot delay any further. The Ministry indicated that six blocks will be given out this year; three of those blocks will be awarded through competitive tendering, two under direct negotiation, and the remaining one given to GNPC to choose its own partner(s). These processes outlined are in line with the Petroleum (Explorations and Production) Act, 2016 (Act 919), and speak to the deficiencies highlighted by ACEP prior to the passage of the law.

Though the Act 919 provides for competitive bidding in section 10(3), it also gives unregulated discretion to the Minster to do direct negotiation per section 10(5) and (9). Subsection 9 of section 10 in particular provides thus;

Despite subsection (3), the Minister may, in consultation with the Commission, determine that a petroleum agreement may be entered into by direct negotiations without public tender, where direct negotiations represent the most efficient manner to achieve optimal exploration, development and production of petroleum resources in a defined area.

ACEP argued that the law should provide the circumstances under which the Minister could undertake direct negotiation to forestall possible abuse of the clause "most efficient manner". Parliament agreed with ACEP's position in the report of the Committee of Mines and Energy on the Bill and demanded that the section should be amended. Surprisingly the final Act did not reflect the recommendation of the Committee.

The failure of the Attorney General and Parliament to incorporate into the Act 919 a criterion to guide the Minister's discretionary power to abandon open and competitive bidding procedures has, today, made it possible for the Minster to decide which block will go for competition, direct negotiation and to GNPC without reasons. This raises important questions such as

1. Do we already know the companies who are going to take those blocks going for direct negotiation and what criteria guided the selection of those companies?
2. What criteria is being used to determine which blocks will go for competition or direct negotiation?

The answers to these questions could have been generated through the regulations to the E&P Act. However, several deadlines to pass the regulations have failed. The Ministry of Energy has represented that it has forwarded draft regulations to the Attorney for review and onward submission to Parliament. We see the development of the regulations as the collective responsibility of government; not one section of it. It is therefore not acceptable for the Ministry of Energy to play innocent and excuse itself for not passing the regulations in place.
We recommend that the Ministry should immediately engage the Attorney General to finalise the regulations on the E&P Act to provide guidelines for the implementation of the Act prior to the award of new blocks.

5. ATTORNEY GENERAL IS RIGHT - PAY AMERI OR RENEGOTIATE DIRECTLY WITH THEM

The reasons why government does not want to pay Ameri today were adduced by ACEP before the contract was signed. When ACEP raised value-for-money questions about the contract, the then Ministry of power convinced cabinet, parliament and itself that the deal was the best among available options. The essence of ACEP's intervention was to help

structure the deal in a manner that would avoid the current standoff between AMERI and the Ministry of Energy, and provide value for money for the ordinary citizen.

The Ministry has not been complying with payment obligations to Ameri because it is convinced that the contract is overpriced. However, it is not as simple as wishing it away. The Ministry unfortunately presents the case as if AMERI came to Ghana and fraudulently signed a deal with the Government of Ghana; the latter under duress. The Attorney General puts it more succinctly:
"the agreement was between GoG, a state party which is in a stronger bargaining position in all aspects than Ameri, a private corporate body".
What this means is that, the Ministry of Power, ECG, VRA, PURC, Cabinet, and parliament must collectively take responsibility for their failure to conduct due diligence. If these accountability structures were not able to protect public interest, it must be appreciated that the two representatives of Ameri that came to Ghana to negotiate the deal were also not philanthropists under any obligation to secure the best deal for Ghana. Subsequently, Ameri has become a more powerful party in the deal because the power plants were delivered in accordance with the contract.

Without any evidence of fraud, the Ministry of Energy will have to immediately implement the recommendations of the Attorney General on the matter. ACEP is aware that the Ministry has, recently, rather resorted to paying an amount assumed to be what is due METKA, Ameri's subcontractors at the value of $6 million monthly. This is a unilateral decision that depart from the terms of the contract between the parties.

Again, the Ministry is negotiating to extend the tenure of the contract from 5 years to 15 years with METKA. This approach does not show appreciation of the nature of the contract Ghana has with Ameri. The contract provides enough room for Ameri to get their money back with no regards to government's direct engagement with METKA. With the understanding of the sanctity of contract, the Bank of Ghana was guided and did not delay in renewing the letters of credit (LC) with JP Morgan. The LC can be drawn down without recourse to the state, a fact emphasised by the attorney General. Government will have to prevent drawdown of the LC to protect the image of the country in the global investor community.

The best option for Ghana is to get to negotiate with Ameri directly under various scenarios that adjust the contract in favour of Ghana. For example, the efficiency of the plant could be improved by engaging Ameri to invest in a steam component to avoid wasting Ghana's gas resources. If Ghana fails to negotiate and rather chooses to ignore Ameri, the contract provides enough protection for Ameri's entitlement, including drawing down the LC prior to litigation in a court of competent jurisdiction, exporting the equipment out of Ghana, and still claiming the outstanding value of the contract.

6. ACEP'S REVIEW OF THE 2017 RECONCILIATION REPORT ON THE PETROLEUM FUNDS

The 2017 budget was one of the most promising budgets which reflected years of advocacy by ACEP and other Civil Society Organisations for focused investment in the pro-poor sectors of education, agriculture, and health. ACEP took particular notice of the allocation of 53% of the oil revenues to the pro-poor sectors of the economy.

The budget also allocated almost the entire component of the Annual Budget Funding Amount (ABFA) allowed for recurrent expenditure to the government's flagship free SHS policy. The PRMA stimulates that up to 30% of the ABFA can be used for recurrent expenditure with the remaining 70% or more for capital expenditure. To the extent that the allocation to the free SHS constituted 26.5% of ABFA, there was - for the first time -greater clarity on what exactly the recurrent expenditures of the ABFA were. This, ACEP believed, would help to track the impact of not just the portion of ABFA that goes into physical infrastructure, but also recurrent expenditure; a positive deviation from what we are used to. Investing in education in particular fits into the key objective of the PRMA in Article 21(2) (b) to promote equality of economic opportunity with a view to ensuring the wellbeing of citizens.

However, the outturn of the receipts and expenditure of oil revenue in 2017 raises concerns about compliance with the Appropriation Act and the PRMA, in spite of commendable adherence to aspects of the laws. This has necessitated this media engagement.

In 2017, the total estimated receipt from oil was about $515 million. This amount was exceeded by almost 5% to about $540.4 million; the first time we attained and exceeded petroleum revenue projection since 2014. This is as result of higher than expected production volumes and most importantly, the setting of realistic benchmark price for Ghana's oil.

Disbursement and utilization of petroleum revenues

1. GNPC

Actual disbursement of petroleum revenues to GNPC was less than projected. GNPC projected to spend $273.6 million on both equity financing and net CAPI in 2017, but received $182 million.

The reasoning for the shortfall in disbursement to GNPC was the lower than expected equity financing expenditure of the Corporation.

There is however an issue of disregard for parliamentary oversight on GNPC's share of petroleum revenues. The Ministry of Finance received parliamentary approval to disburse $45.3 million to GNPC as its share of the net Carried and Participating Interest (CAPI). However, without recourse to parliament, the Ministry of Finance disbursed $78.6 million to the GNPC. This was GHC33.3 million in excess of approved budget.

2. ABFA and Ghana Petroleum Fund (GPF)

The Ministry was compliant with the Act in disbursing petroleum revenues to the ABFA and the Ghana Petroleum Funds. The full amount of $169 million allocated for the ABFA was disbursed. Similarly, the Ghana Petroleum Fund, comprising the Ghana Stabilisation Fund (GSF) and the Ghana Heritage Fund (GHF), received $203.8 million.

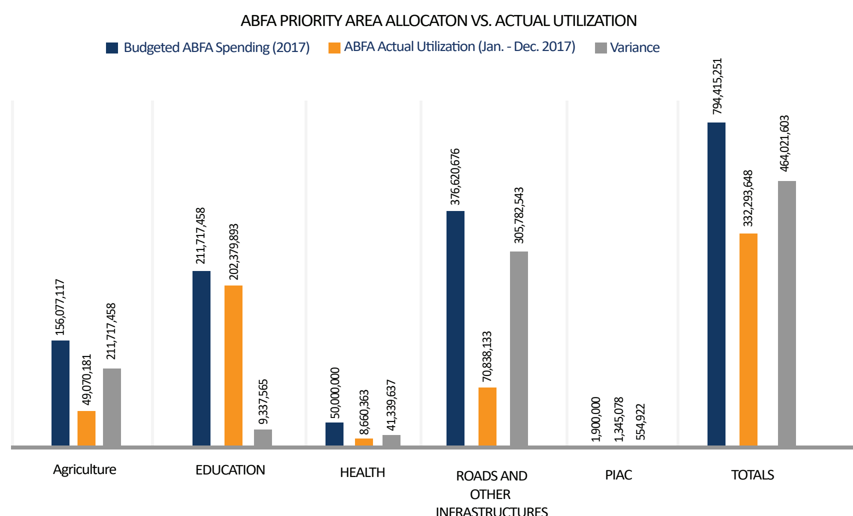
Utilization of the ABFA

Data from the reconciliation report on the Petroleum Funds show that the Ministry has been anything short of transparent, efficient, and detailed in ABFA utilization and reporting. The total disbursement of $169 million to the ABFA in 2017 translates to GHC733.2 million. This is GHC41.7 million short of the cedi equivalent of the projected disbursement to the ABFA in the reconciliation report, and GHC63.1 million in the 2017 national budget.

The Ministry of Finance conveniently revised the budgeted ABFA figures in the reconciliation report without corresponding explanations to adjustments made to budgeted expenditure on the priority areas.

Despite that government had GHC733.2 million of ABFA to spend on the priority areas in 2017, government spent only GHC 332.29 million but the Ministry of Finance failed to account for the unspent difference of GHC 400.9 million, representing 54.6% of total ABFA disbursed. The graph below presents details of the variance between ABFA allocation to priority areas (based on 2017 budget estimates) and ABFA actual utilization in those areas (based on the 2017 reconciliation report on petroleum funds).

Table 1: ABFA 2017 Priority Area Projection Vs Actual Utilization



Source: ACEP (2017) based on 2017 Reconciliation Report on Petroleum Funds and Budget Statement and Economic Policy for the 2017 fiscal year.

The unspent ABFA difference of GHC 400.9 million is more than enough to have funded the total budget variance of PIAC, education, health, and roads and other critical infrastructure. Where is the money, and why did that money not go to the priority areas when it was available? We are reminded of a similar event that happened in 2014 when an outstanding GHC600 million of ABFA was swept out of the accountability framework of the PRMA by the Bank of Ghana.

The reconciliation report, which was published at the end of the first quarter of 2018, is supposed to give a full account of petroleum revenues in the preceding year (2017). However, in the 2017 reconciliation report, the Ministry provides in paragraph 74 that the GH332.9 million ABFA expenditure on priority areas is a provisional indication of ABFA utilization for that year. This is very unacceptable, as it defeats the essence of a reconciliation report which is supposed to be a follow up to the 2017 annual report on petroleum funds, and present a true and complete picture of petroleum revenue receipts, disbursement, and utilization for the full year.

The Ghana Infrastructure Investment Fund (GIIF)

The PRMA provides in section 21(4) that for any financial year, a maximum of 25% of ABFA allocated to public investment expenditure shall be allocated to the Ghana Infrastructure Investment Fund (GIIF). In 2017, the Ministry of Finance presented, and Parliament approved, a zero budgetary allocation to the GIIF. However, the 2017 reconciliation report on the petroleum funds shows that an amount of $6.92 million was disbursed to the GIIF from the first TEN liftings in the first quarter of 2017. There are two main issues arising:

1. The 2017 national budget was read on 2nd March, 2017. This was 28 days' shy of end of the first quarter. Parliament also approved the budget on 15th March, 2017. The question therefore is, did the Ministry of Finance quickly turn around within 15 days after parliamentary approval to disburse unapproved funds to the GIIF? The Ministry of Finance's action constitutes blatant disregard for Parliament's authority in approving national expenditures.
2. By disbursing funds directly from TEN liftings to the GIIF, the Ministry of Finance clearly contravened the PRMA provisions on the source of funds to the GIIF, being the ABFA.

Recommendations

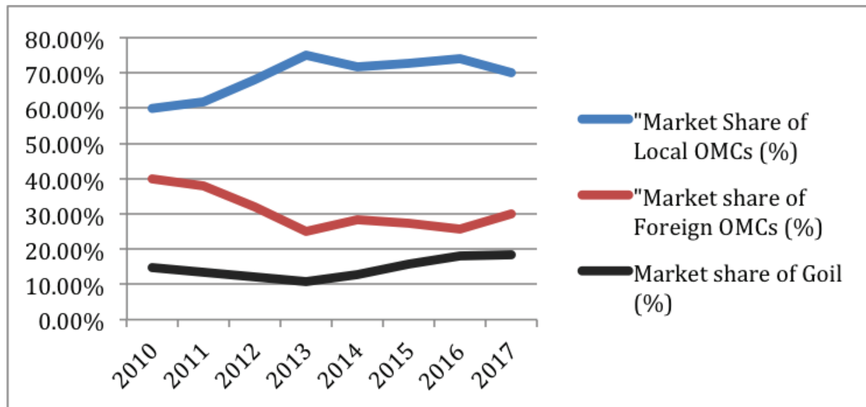
1. The Ministry of Finance must immediately account for the whereabouts of the GHC 400.9 million of the ABFA that was unutilized in 2017, and provide detailed reconciliation of the petroleum funds with accurate data and explanations to all the discrepancies.
2. The Ministry of Finance must seek the approval of parliament for expenditures outside the approved budget such as happened with disbursement to the GIIF in 2017, and the $33.3 million oil revenue disbursement towards GNPC's share of the net CAPI in that same year.
3. The Ministry of Finance must at all times comply with the disbursement architecture of petroleum revenues as provided for by the PRMA.
4. PIAC should follow up on the issues raised in their review of the 2017 reconciliation report on petroleum holding funds, and demand responses from the Ministry of Finance on behalf of citizens of Ghana in compliance with its role under section 52 of the PRMA.

7. DOWNSTREAM LOCAL CONTENT POLICY: A DRIVER OR DETERRENT OF FOREIGN INVESTMENT?

Local content policy has become an important tool for encouraging domestic sourcing of people, technology, finance, and goods in specialized segments of young economies around the world. The objective often is to increase local capacity and uptake in the critical industries in an economy. This often requires preferential treatment for local skills, technology and businesses with ultimate aim of advancing the socioeconomic life of local people. As a result, local content policies generate tension along the decision chain of foreign investors who ought to make compromises in compliance with such policies.

This requires that policy initiation properly analyses its relevance to ensure that the net benefit of policy changes is greater than any sacrifices made to imbibe new policies.

The Cabinet of Ghana recently approved a local content policy for the downstream petroleum sector. Hitherto, Ghana's petroleum downstream sector has been managed for some time by a blend of local and foreign participation. The introduction of deregulation in 2005 created more opportunities for local businesses and capital to deepen their involvement. The results show increased local participation and control of the sector. Bulk oil distribution is largely controlled by local businesses. The oil marketing segment has also seen increased control over the years by Ghanaians. Between 2010 and 2017 the market share of the local oil marketing companies grew from 60 to 70% while foreign participation dwindled (see figure 1).



Source: ACEP, 2018 [1]

The fundamental question that arises is, could this trend continue without necessarily legislating the exit of foreign participants? Critical examination of the downstream market shows significant challenges faced by local players which may not be remedied by legal betrothal of the sector with local participants. These include:

1. Access to local capital – the capital outlay for the downstream sector is s ignificant. This obviously creates a disadvantage for locals who do not have access to cheaper funds to be able to compete with their foreign counterparts. But this is a macroeconomic circumstance which can be manipulated to a limited extent. Else the consumer will be the bearer of the high capital cost.

2. The need to consolidate small local players - in terms of numbers, registered local players far outnumber the foreign players. Out of the 152 licensed Oil Marketing Companies, only four are foreign companies. The 148 local companies who operate in the 70% quadrant would improve their competitiveness if they agree to pool resources.

3. Improving corporate governance to raise capital - corporate governance challenges is a major issue for many of the downstream players. Some of them are run like sole proprietor business without strong boards to monitor effective management of the businesses to attract investment. These are important areas government can support local business to be competitive. When government decided to improve governance of Goil through dilution of shares, the evidence is expressed in its progressive growth of market share in the downstream sector as depicted on figure 1 above. Some other OMCs such as Petrosal, Zen Petroleum and Allied oil are evolving to accept the challenge to grow their business.

4. Government regulation -The competitiveness of local business in the sector is further inhibited by government's regulation and fees which put pressure on the limited resources of local businesses to invest. For example, private ownership of storage tanks attracts a regulatory annual capacity charge of $0.5 per metric ton. This means a private investment into 1 million tons storage will attract $500,000 in annual fees whether utilized or not. This kind of charges limits the adventure of investors into building facilities which may not be fully utilized, yet face direct competition from state institutions such as BOST and Tema Oil Refinery who are not subjected to these charges.

Local content remains important strategy for emerging economies for creating employment, developing technologies, and linkages in the local economy. In the specific case of Ghana's petroleum downstream sector, employment of locals is not a problem because the local content target of 98% employment of locals in the sector is already attained. The technology requirement for the sector comes in the form of ships,

[1] Based on data from NPA

laboratory equipment's, pipelines, tanks etc. which are sourced competitively in accordance with international standards. These requirements place enormous responsibility on government to ensure that research and technology institutions are well-resourced to generate the required alternative technologies for the sector. This makes it easier for local content policy to be complied with.

ACEP can conclude that the major challenge affecting local players in the sector remains financial and unwillingness to consolidate resources to improve competitiveness. Again, local content policies should not be anti-investment when the job created go to local people. The focus therefore should not be on ownership, but overall value created for the economy through jobs and taxes.

A lot of investment is required in the sector which cannot be raised entirely on the local front. Therefore, signals to external investors should not create apprehension for their decision to invest in Ghana. The implications of sectoral policies on the wider economy should also not be discounted. The wider investor community could be wondering when they will be asked to leave.

8.0 GOVERNMENT MUST PROPERLY RENEGOTIATE THE KARPOWER CONTRACT

Background

In June 2014, ACEP welcomed the decision by ECG to contract Karadeniz Holding of Turkey to deliver the Karpowership to generate 250MW of power to the grid. Our support was borne out of the relative short gestation period of delivering such power solutions. This early intervention was critical at the peak of the power crisis and therefore such attempt to bring solution was solution was encouraging.[1]

However, ACEP's support for the project deflated when the terms of the contract, leaked subsequently, revealed shocking

[1] See www.reportingoilandgas.org/ecgs-agreement-with-karadeniz-holding-commendable-but-more-need-to-be-done-to-ensure-its-realization/

investor take for a ten-year period with an increased capacity to 450MW. The agreed tariff delivered a total cash flow of $2.3billion discounted to $1.277 billion over the period for capital recovery alone, with illegal executive tax exemptions which were regularized by parliament in December 2016 after the elections; some few days before transition in government. Beyond the juicy guaranteed cash-flow and exemptions, the GNPC was roped in to provide $100million in an escrow account for the total capacity. Interestingly, while government contended that the cost was high because it was an emergency plant, the company insisted its powership is not an emergency solution. This further deepened the value for money demands from many citizens, organizations and individuals in the current governments who were then in opposition.

The problem of sole sourcing

The power barge was sole sourced when the energy crisis was worsening. At the time, promoting competitive tendering was not attractive to government because emergency became the favorite excuse for sustaining political procurement of power plants practiced by all governments since the 1990s when the generation capacity of Akosombo fell below growing demand. Power consumers were not given options, though many companies were lurking around at the time to get the chance to supply power to the country, which provided the opportunity to carefully select the company that could deliver the needed power on time at a competitive tariff. In the end, the justification for sole sourcing turned on its heard; the emergency contract signed in June 2014 took 18 months to deliver first power instead of 6 months. The entire 450MW capacity was delivered only in 2017; this is three clear year, which is enough to construct a cheaper conventional generation system.

In all these delays, the interest of the nation was enough to go back to the negotiation table to reverse the cutthroat deal which eventually would coincide with many planned generation additions, necessitating excess capacity which will eventually be paid for by the consumer.

Renegotiation of power contracts

In a policy statement issued in November 2016, ACEP recommended that all emergency power contracts that failed to deliver on their terms must be renegotiated into a regular IPP by the next government. ACEP commends and supports government's efforts at renegotiating power contracts that do not provide value for money. We believe the Karpower contract is one of those that have been renegotiated by the Ministry. However, ACEP would encourage the Ministry of Energy to be transparent on the processes of renegotiation and publish the details of contracts renegotiated.

The new Karpower deal

After more than a year in government, and apparent silence on the contract that was heavily criticized by the NPP, it was leaked into the media that government has renegotiated the Karpower deal from 10 years to 20 years which was later corroborated by the Ministry of Energy. Before we get into the terms negotiated, it must be established that ACEP's position on the Karpower contract has been that, renegotiating it, like many other power projects under construction, was an uncompromising good governance exercise whether the period of the contract was extended or not. The bottom line is that the contract was a bad deal that demanded governmental intervention.

Terms of the new deal

The Ministry of Energy has published comparative data to argue that the

new deal is better than the previous one. ACEP has taken a good look at the numbers and finds that the Ministry's renegotiated contracts focused on the politics of getting a comparatively better deal rather than the hard evidence that positions Ghana to optimize its interest in the transaction. The Ministry displayed oblivion to the terms of the original Karpower contract entered into by the previous government (tagged NDC1 in table 1, which is the original contract signed with Karpower), when it compared its renegotiated term with new terms referred to in this document as NDC2.

We compared the data provided by the Ministry and realized that some of the elements in the contracts had changed for the worse from the original contract that came into the public domain. Again there were elements on the contract that were out of the ordinary compared to other contracts signed in the power sector.

Operations and Maintenance Charges

Assuming that the data provided by the Ministry is accurate, it reveals that fixed Operations and Maintenance (FO&M) charges were renegotiated by the previous government upwards from 1.21 Cents per Kilowatt hour (/Kwh) to 2.014 Cents/Kwh and from 0.6425 Cents/Kwh to 1.048/Kwh for variable Operations and Maintenance (VO&M). This increased the O&M cost for Ghana from $64.8 million to $107 Million annually.

Table 1: *Operations and Maintenance Cost under the Original Karpower Deal, and the Renegotiated Karpower deals under the NDC and NPP Governments*

Operations and Maintenance (O&M)	Original (NDC1)	NDC 2	NPP
fixed (in US Cents)	1.21	2.014	1.1
variable (in US Cents)	0.6425[2]	1.048	0.83
Total O&M (in US Cents)	**1.8525**	**3.062**	**1.93**
Cost/Year US$	64,837,500	107,170,000	67,550,000

Source: Ministry of Energy

This increase in O&M for the investor is shocking, particularly at the time that the public outcry was for the contract to get better. What is even worse is that in that same renegotiated terms (NDC2), where O&M increased, capital recovery charge reduced from 4.85 cents to 4.261 Cents. This does not make sense, given that O&M cost is easier to negotiate downwards. The reduced capital recovery charge did not make any difference because of the higher increase in O&M cost. These were glaring anomalies that the Ministry of Energy should have paid attention to. The renegotiated O&M numbers by the NPP government is also worse than the original contract by 0.00775/Kwh (translating to an increased O&M cost of $3,055,050 per year, although better than the

O&M Annual Escalation

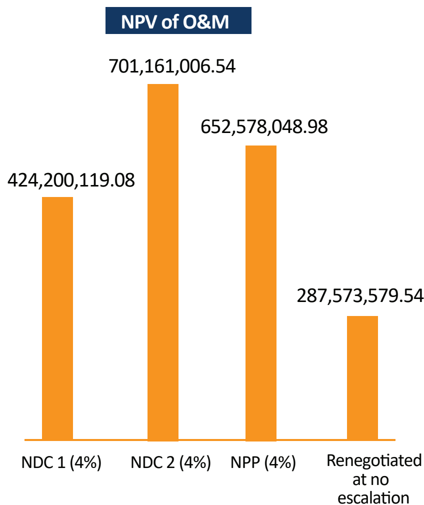
The Karpower contract granted minimum annual escalation of 4% for operations and maintenance. This is uniquely over generous to that contract in the power sector. While some contracts have zero escalation, others have real factor that multiply a base figure by the US Consumer Price Index (CPI). The real CPI is a fairer measure to compensate both parties for any oscillating market dynamics. However, Karpower got 4% escalation regardless of available projections that US CPI will exhibit average stability around 2.5% (according to the IMF).

Our analysis of the various O&M charges show that the 4% escalation granted Karpower increases the cost to the project significantly under all the scenarios.

[2] Based on weighted average of O&M charges applicable for fuel switching; two years of HFO at 0.83 cents and 8 years of gas at 0.58 cents

The NPV value for the Original contract was about $420 million. This increased to over 700 million in the NDC2 fiscal numbers, adjusting for the increase in the O&M charges. The O&M charges for the NPP gives an NPV of $652.6 million. All these figures are high compared to no escalation under the NPP renegotiated d
million. This shows that if the O&M had been renegotiated with a base value oscillating around the US CPI, as it is in the Early power contract, the total O&M cost will still be around the no escalation NPV of $287 million, plus or minus.

Figure 1: NPVs of O&M of the various Scenarios against no escalation



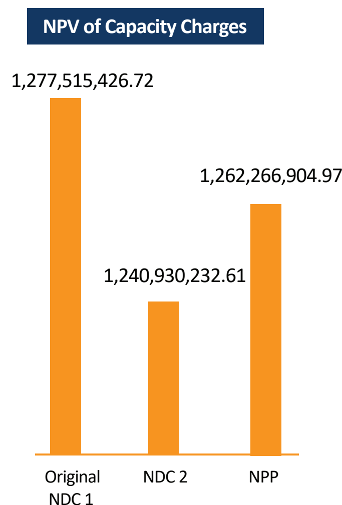
Source: ACEP's Analysis based of the contract and data from the Ministry of Energy

In essence the loss associated with O&M cost is more than $300 million in NPV whether it is the NDC2 or the NPP contract, both of which moved into implementation. are significantly worse than the original terms, as depicted on figure 1 above.

NPV of the capital recovery charges

The analysis show that the original contract had the highest capital recovery over the 10 year period. The NDC2 shows lower capital recovery over the same period, which is influence by the reduction in capacity charges from 4.85 cents to 4.261 Cents.

Figure 1: Discounted capacity charges for the three contract terms.



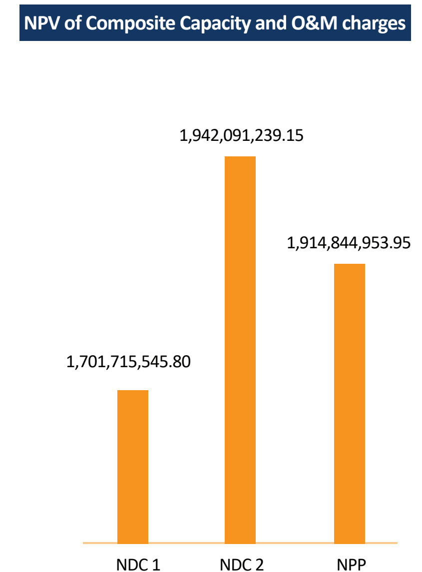
Source: ACEP analysis based on Contracts and information published by Ministry of Energy

Comparing NDC2 and the NPP terms of the contract with the original contract the analysis shows that the NDC 2 improved by $36.6 million while the NPP contract improved by

Composite Capital recovery and O&M charges

By applying 93% availability of the equipment to cash flows for investment recovery (capacity charges) and O&M charges for the three contract terms, the discounted figures show that the difference between the most expensive option (NDC2) and the least expensive option (the original contract) is about $240 million. Also, the difference between the NPP renegotiated terms for 20 years and the NDC2 (which is for 10 years) is $213 million.

Figure 2:: Comparative analysis of investor take of the three contract terms



Source: ACEP analysis of the contracts terms

The figure 1 above compares the discounted capacity charges of the original Karpower contract, the renegotiated deal by the previous government (NDC2) and the renegotiated contract by the NPP government. It is obvious that both renegotiations are worse than the Original contract which is also overpriced. The comparison shows that the NPP renegotiation of the contract, though better than NDC2, focused on spreading the NDC2 contract over the new 20-year period to achieve lower discounted value for that period without paying attention to the original contract to have known that they were negotiation on a contract that changed just before the change in government. This does not account for the obvious problem that the contract was overpriced. The review of the contract should have also accounted for the disparities in the original contract and the NDC 2, raising specific questions about why the O&M cost increased thereby worsening further the contract.

Efficiency of the Karpower plant and the extended contract period

The karpowership is fitted with Wartsila 50DF engines. These engines have high efficiency which is pushing Wartsila's dominance in the marine environment; for LNG takers, Cargo ships and FPSOs application. The engines deliver up to 7150kj/kwh which is comparable to some older model of Combine Cycle plants. When compared to plants such as Ameri and Early Power projects, the fuel savings is much higher on the Karpowership. We believe these important efficiency considerations went into the renegotiation of the contract to extend it for further 10 years.

ACEP believes the decision for extending the contract for 10years should also account for emerging technologies that provide greater value for the consumers of electricity. We therefore compared the savings from the renegotiated contract for the remaining 8years of the first 10 years with the opportunity cost of bringing in a more efficient plant (with heat rate of 5900kj/kwh) for the subsequent 10years, assuming Karpower was not extended after 10 years and replaced with a more efficient plant. The results indicate that the NPV of the savings for the 8years is equal to $208.6 million, whiles the opportunity cost of forgoing the more efficient option after the 10 years is $109.8 million (payments for the comparative inefficiency of the Karpower plant). This makes the Karpower extension acceptable on the account of fuel efficiency versus savings on a more efficient plant.

However, given the many Power Purchase Agreements (PPAs)on the Neck of the country, this extension of the contract increases the risk of paying for excess capacity.

Conclusion and recommendation

ACEP supports the renegotiation of all overpriced contracts in the power sector, particularly those hurriedly negotiated in the name of emergency during the power crises. This is a position we have campaigned for in the past 3 years. However, the process of renegotiating the contracts must be transparent and detailed to accommodate value for money as much as possible.

Our analyses show that there existed an original contract which presents a lower discounted cashflow compared to those renegotiated by the previous government and the current government. The NPP government's renegotiation of the Karpower deal presents a relief to power consumers when compared to the NDC2 contract but much worse when compared to the original contract. This indicates that the outcome of the negotiation could have been better had the government considered the terms of the original contract between Karpower and the ECG.

We also recognize that the efficiency of the plant makes it acceptable for the 10 years extension. However, given the number of plants committed to by Ghana it is unthinkable to keep

Karpower for another 10 years on a take-or-pay basis to feed into the current overcapacity. Again, much focus should have been on the renegotiation of the capacity and O&M charges to reflect the range of regular IPPs in the country if Ghana needed to extend the contract.

ACEP also observes that although the original Karpower contract was singed between Karpower and ECG, it appears that ECG has taken, if not sidelined, the back seat in all the subsequent negotiations done by the previous and current government. This is a clear example of the persistent political meddling in the procurement of power plants to the detriment of power consumers.

We therefore implore government to;

1. Take a second look at the Karpower agreement and renegotiate it to conform to existing rate by competitive IPPs in the country.

Government must be reminded that while it insists that the Karpower agreement was negotiated as an emergency power plant, the company never saw the arrangement as an emergency one. The subsequent delays in the delivery of the project justify this position. Therefore, government should operate with that understanding that Ghana got into a regular contract that is expensive.

2. Investigate the circumstances that led to the increase in the O&M charges under the contract. This may require the Auditor General to do a full-scale contract audit of the circumstances that led to the increase in O&M.

3. look at the escalation clause carefully in the contract and renegotiate same. It is anomalous, excessive and unfair to the consumer and all other power producers operating in Ghana.

4. Publish all other power contracts to enable independent analysis in the interest of the public.

5. Immediately develop a transparent system for the procurement of power plants in Ghana. This will improve the investment environment, by reducing the frustration of investors always looking for politically connected people to lead them and provide value to the consumer.