

GLI GLOBAL
LEGAL
INSIGHTS

Energy

2022

10th Edition

Contributing Editors: **Michael Burns & Julia Derrick**

glg global legal group

CONTENTS

Preface	Michael Burns & Julia Derrick, <i>Ashurst LLP</i>	
Expert analysis chapter	<i>Global Overview of the Energy Legal Market</i> Andreas Gunst, Natasha Luther-Jones & Kenneth Wallace-Mueller, <i>DLA Piper</i>	1
Jurisdiction chapters		
Angola	Claudia Santos Cruz, Catarina Levy Osório & António Magalhães Ramalho, <i>Morais Leitão, Galvão Teles, Soares da Silva & Associados</i>	11
Austria	Dr. Thomas Starlinger & Mag. Laurenz Götzing, <i>Schima Mayer Starlinger Attorneys at Law</i>	17
Canada	Sharon Wong & Christine Milliken, <i>Blake, Cassels & Graydon LLP</i>	25
China	Jihong Wang & Dingduo Chen, <i>Zhong Lun Law Firm</i>	36
France	Jocelyn Duval, Chloé Dahéron & Noémie Lenormand, <i>Kalliopé</i>	47
Ghana	NanaAma Botchway & Elorm Kwame-Kota Zormelo, <i>N. Dowuona & Company</i>	56
Greece	Yannis Seiradakis & Eleni Stazilova, <i>Bernitsas Law</i>	66
Italy	Piero Viganò, Giuliano Proietto & Ernesto Rossi Scarpa Gregorj, <i>Gitti and Partners – Studio Legale Associato</i>	84
Japan	Sadayuki Matsudaira, <i>Nishimura & Asahi</i>	99
Malawi	Ahmed Mussa, Lusungu Gondwe & Lozindaba Mbvundula, <i>Ritz Attorneys at Law</i>	104
Mozambique	Claudia Santos Cruz, Tiago Arouca Mendes & Ana Corrêa Cardoso, <i>Morais Leitão, Galvão Teles, Soares da Silva & Associados</i>	111
Nigeria	Othuke Ononeme & Chioma Barbara Achinike, <i>Brickmans Law</i>	118
South Africa	Matthew Ash & Kelsey Pailman, <i>Norton Rose Fulbright South Africa Inc</i>	132
United Kingdom	Julia Derrick, Antony Skinner & Justyna Bremen, <i>Ashurst LLP</i>	141
USA	Regina Speed-Bost, <i>SB Law, PLLC</i>	158

Ghana

NanaAma Botchway & Elorm Kwame-Kota Zormelo
N. Dowuona & Company

Overview of the current energy mix, and the place in the market of different energy sources

Ghana's energy mix consists of a combination of hydroelectric, thermal (predominantly fuelled by natural gas, heavy fuel oil, light crude oil and diesel fuel oil)¹ and renewable energy² sources.³ Thermal and hydroelectric sources represent over 99% of the generation capacity in the country. The total power generated for 2020 was 19,716.59 Gigawatt hours (GWh), with 7,293.23GWh (36.99%) from hydro sources and 12,365.09GWh (62.71%) from thermal sources.⁴

Hydroelectricity is generated from three power plants: the Akosombo and Kpong Generation Stations, operated by the state-owned Volta River Authority (“**VRA**”); and the Bui Generation Station, operated by the state-owned Bui Power Authority (“**BPA**”).

Thermal power is generated from a combination of private and public sector outputs operated by VRA and a variety of Independent Power Producers (“**IPPs**”). Three state-owned and five⁵ privately owned plants generate energy from the eastern enclave of the National Interconnected Transmission System (the “**national grid**”) while two state-owned and three privately owned plants generate power from the western enclave of the national grid.⁶

Solar energy generation accounts for less than 1% of total power generation in Ghana. The country is, however, taking steps to diversify and increase the weighting of solar and wind energy in its energy mix. Generation capacity in Ghana continued to outweigh demand in 2020 as a result of emergency measures taken between 2014 and 2017 to address major energy shortfalls that occurred over the period. By the end of 2020, Ghana had an installed power generation capacity of 5,134MW, with a dependable capacity of 4,710MW⁷ and a peak demand of 3,090MW in December 2020.⁸

Changes in the energy situation in the last 12 months which are likely to have an impact on future direction or policy

Energy transition

In common with most other energy producers, the Ghanaian energy sector has been affected by a global reduction in the demand for fossil-fuels, triggered by the COVID-19 pandemic, and the global energy transition, which has led to a decreased appetite for capital expenditure from international oil companies in-country.⁹

Against this backdrop and in a climate in which local participation is being prioritised, the Government has indicated its intention to take a more active role in exploration and production activities, with the goal of ensuring maximum recovery of Ghana's oil and gas

resources. GNPC Explorco, a subsidiary of the state-owned Ghana National Petroleum Corporation (“GNPC”), has been earmarked to acquire assets and become an operator,¹⁰ and on 5 August 2021, a joint parliamentary committee approved the potential acquisition by GNPC Explorco of a significant stake in the Deepwater Tano Cape Three Points and South Deep Water Tano blocks.

Increase in domestic demand for electricity

Although domestic energy demand initially declined during the three-week lockdown period in April 2020, demand levels eventually surpassed the 2019 system peak demand by 10.2% due to the Government’s easing of COVID-19 restrictions and subsidisation of household utility bills. System peak demand for 2021 is projected to be 3,304MW, representing an increase of 6.9% over 2020 peak demand. Total energy consumed in 2020, including losses, was 19,717GWh against a projection of 19,685GWh.¹¹ The projected energy consumption, including transmission system losses for 2021, is projected at 21,266GWh; an increase of 7.8% over 2020 consumption.¹²

Added generation sources – construction of Bui Solar Farm, Amandi and Bridge Thermal Power Plants, Tema LNG Terminal, Pwalugu Multi-Purpose Dam

A number of generation sources have been added to Ghana’s energy mix in 2020 and 2021.

Bui Solar Farm

The BPA, as part of the first phase of a 250MW solar project, commissioned Ghana’s first hydro-solar hybrid power generating system in December 2020 which includes a 5MW floating solar PV system, and a 22.25MW solar farm. The solar generation system was connected to the national grid as of April 2021 and will be studied for performance and output as a basis for implementing the remainder of the project.¹³ The Government, through its Renewable Energy Masterplan 2019, has committed to increasing the proportion of non-hydro renewable energy in the national energy generation mix to 1363.63MW and to accumulating carbon savings of about 11 million tonnes of CO₂ by 2030, in line with Ghana’s sustainable development goals.

Bridge Power Plant and Amandi Power Plant

The construction of the 144MW Bridge Power Plant, fuelled by liquified petroleum gas (“LPG”) and natural gas, was completed and is to be fully commissioned in 2021. The plant has been commissioned for LPG and pending Energy Commission approval, is set to begin to run its turbines on natural gas.¹⁴

The 203MW Amandi Power Plant, fuelled by light crude oil and natural gas, has been undergoing test-runs; it is currently at the licensing stage and is expected to become operational in 2021. The functionality of these plants will increase the proportion of generation from thermal sources in the energy mix by a projected 68.5% for 2021.¹⁵

The increasing share of electricity supply from thermal generation sources, which is largely dependent on hydrocarbon imports, is a potential concern due to possible local currency depreciation and the volatile international energy prices driven by the COVID-19 pandemic, OPEC+ tensions and the energy transition. Electricity tariffs are Ghana cedi-denominated, while power utility companies tend to purchase fuels in United States dollars; any depreciation of the Ghana cedi against the United States dollar poses financial challenges to utility companies. Moreover, with thermal plants being predominantly fuelled by gas, any prolonged disruptions in gas flow would severely undermine the reliability of electricity supply.¹⁶

Pwalugu Multipurpose Dam and Irrigation Project

The Pwalugu Multipurpose Dam and Irrigation Project, which will aim to improve the stability of power supply in the northern part of the country and includes 60MW hydropower and 50MW solar components, is at the environmental assessment and approval stage of

implementation. The Government has indicated that a draft Environmental and Social Impact Assessment report has been submitted to the Environmental Protection Agency for review.¹⁷

Review of electricity tariffs

The Public Utilities Regulatory Commission (“**PURC**”) has signalled an imminent major electricity tariff adjustment for 2021 and the review process is ongoing, as PURC engages with national utility companies and reviews proposals for price adjustments.¹⁸ The PURC announced a 5.94% upward adjustment in the electricity tariff in the fourth quarter of 2019 which remained unchanged throughout 2020.

Developments in government policy/strategy/approach

Energy sector reform programme

The Government has continued its implementation of the Energy Sector Recovery Program (“**ESRP**”), initiated in May 2019 with the goal of improving financial sustainability within Ghana’s energy sector. The ESRP is being implemented in three phases over the course of five years. The first phase, which began in 2019, included the setting up of an Energy Sector Recovery Task Force, tasked with reducing shortfalls in energy sector revenue caused by inefficient management. The second phase, which is currently in progress, aims to resolve the difficulties posed by the take or pay generation capacity arrangements and the oversupply of gas by matching supply and demand, renegotiating terms with IPPs, completing gas infrastructure and tackling pricing and policy actions to reduce gas tariffs in the power sector. The third phase, stated to take place before 2023, is to be developed by the Energy Sector Recovery Task Force for review and approval by the Cabinet.

During the first phase of the ESRP, in 2019, the Government imposed a moratorium on the signing of new PPAs and gas supply arrangements and suspended all ongoing negotiations on such agreements until further notice or unless properly exempted by the Government on a case-by-case basis.¹⁹ The Government concurrently announced that it would no longer accept unsolicited proposals in relation to the supply of power or gas.

Since then, the Government has successfully renegotiated terms with some IPPs. For example, the Energy Commission announced in December 2020 that the Government had secured terms with CENIT Energy Limited (“**CEL**”) for an amended power purchase agreement (“**PPA**”) under which CEL has agreed to convert to a tolling structure and transfer all resulting cost savings to ECG. Additionally, CEL agreed to a further reduction in the capital recovery tariff of 38.9%, resulting in reported savings to the Government in excess of US\$200 million for the remaining term of the PPA.²⁰ A second IPP, Cenpower Generation Company Limited (“**Cenpower**”), has signed a gas supply agreement with the Ghana National Petroleum Corporation and has committed to switching its primary fuel from light crude oil to natural gas. The gas supply agreement will reportedly result in estimated cost savings of US\$3 billion for the remaining term of the PPA.²¹

However, not all renegotiations have been successful. Ghana Power Generation Company Ltd (“**GPGC**”), an IPP that entered into a PPA with the Government during a period of major power disruptions in June 2015, obtained an arbitration award of USD134 million with interest of USD30 million against the Government in early 2021, for early termination of its PPA (this is discussed in further detail below under “Judicial decisions, court judgments, results of public enquiries”).

The Government has stated that all other PPA negotiations are continuing. Over the past year, the Government reports that it has paid over US\$ 1 billion to IPPs under PPAs.²² Ghana’s

electricity distribution utility, the Electricity Company of Ghana (“**ECG**”) has also paid GHS 2.7 billion to defray the considerable energy sector debt.²³ As at 2019, net sector arrears of the energy sector totalled in excess of USD\$2.74 billion.

In June 2019, E.S.L.A. PLC, a special purpose vehicle (“**SPV**”) established with the purpose of resolving energy sector debts, announced the successful issuance of a 10-year, Ghana cedi bond to mature in 2029. In March 2020, E.S.L.A. PLC announced the re-opening of a 12-year Ghana cedi bond to mature in December 2031. At the end of 2020, the value of outstanding bonds amounted to GHS7,629.50 million.²⁴ Proceeds from the bonds are to be used to settle part of the outstanding debts and other obligations due to suppliers and other creditors within the energy sector.

Developments in legislation or regulation

Energy Sector Levies (Amendment) Act, 2021 (Act 1064)

The Energy Sector Levies (Amendment) Act, 2021 (Act 1064) imposes an Energy Sector Recovery Levy and a Sanitation and Pollution Levy on specified petroleum products. The Energy Sector Recovery Levy is charged on petrol, diesel and LPG, while the Sanitation and Pollution Levy is charged on petrol and diesel. Revenue from these levies is intended to support the payment of capacity charges and bills including support for feedstock and to promote sanitation and curb pollution in the country.

The Petroleum Hub Development Corporation Act, 2020 (Act 1053)

The Petroleum Hub Development Corporation Act, 2020 (Act 1053) establishes a Petroleum Hub Development Corporation (the “**Corporation**”) to promote and develop a Petroleum and Petrochemicals Hub (the “**Hub**”). The Hub is intended to be an area with a network of infrastructure for the processing of crude oil and raw natural gas into petroleum and petrochemical products for the purpose of trading, storage, transportation and distribution. The Hub will be designated as a free zone area and will be expected to engage in the supply of petroleum and petrochemical products to satisfy the demands of the domestic market and the West African sub-regional market.²⁵ The Corporation may be granted a tax waiver or variation, subject to parliamentary approval.

Renewable Energy (Amendment) Act, 2020 (Act 1045)

The Renewable Energy (Amendment) Act, 2020 (Act 1045) establishes a competitive procurement scheme to deliver a competitive market rate for electricity generated from a renewable source. The Act also establishes a net-metering scheme to encourage self-generation of electricity from a renewable energy source on a power cost reduction or a climate change mitigation basis and not for income generation. This Act is intended to enable consumers of electricity to benefit from the reduced cost of electricity generation from renewable energy sources through competitive procurement, instead of the feed-in-tariff scheme, as part of the Government’s efforts in mitigating climate change.²⁶

Bui Power Authority (Amendment) Act, 2020 (Act 1046)

The Bui Power Authority (Amendment) Act, 2020 (Act 1046) authorises the BPA to develop renewable energy and other clean energy alternatives in the country. The BPA is mandated to execute renewable energy projects and manage assets in the renewable energy sector on behalf of the State. It must also undertake renewable energy activities and any other energy alternative activities for the purpose of generating electric power.²⁷

Public Private Partnership Act, 2020 (Act 1039)

The Public Private Partnership Act, 2020 (Act 1039) regulates contracts between public

contracting authorities and private parties for the provision of public infrastructure and/or services. It requires partnership agreements to be governed by Ghanaian law and outlines the applicable procedures for the procurement and entry into partnership agreements. The Act also seeks to ensure the use of local content and promotion of technology transfer in relevant projects. The Act has also introduced a framework for the approval of Public Private Partnership (“PPP”) projects, which are now subject to appraisals by relevant appraisal authorities. For example, the Public Investment Unit of the Ministry of Energy is responsible for the appraisal of PPPs involving the Electricity Company of Ghana.

Revenue Administration (Amendment) Act, 2020 (Act 1029)

The Revenue Administration (Amendment) Act, 2020 (Act 1029) establishes an Independent Tax Appeals Board to hear and determine appeals against decisions of the Commissioner General of the Ghana Revenue Authority with respect to the objections of tax decisions. Prior to this amendment, the only avenue for taxpayers to seek redress against tax decisions was the courts. The Appeals Board is intended to expeditiously deal with tax appeals and reduce the number of tax-related cases in the courts. The panel comprises 11 members appointed by the Minister of Finance. A person who is dissatisfied with the decision of the Appeals Board may appeal to the court within 30 days from the date the decision was served on the person.

Judicial decisions, court judgments, results of public enquiries

The Republic vs. The Energy Commission ex parte Power Distribution Services Ghana Ltd CM/MISC/0482/2020

In 2018, ECG entered into a lease assignment agreement and a bulk supply agreement with Power Distribution Services Ghana Limited (“PDS”), and PDS entered into a government support agreement with the Government of Ghana, acting through the Ministry of Finance, under which PDS would take over and manage assets and operations of ECG and take over the distribution of electricity in the southern distribution zone of the country.

This concession arrangement, which was intended to run for 20 years, was part of the ECG “Financial and Operational Turnaround Project” (“FOTP”), one of six projects under a five-year economic development programme, entered into with the support of the Millennium Challenge Corporation (“MCC”) and aimed at making improvements to the infrastructure of the southern distribution network, increasing reliability and power access to key markets and advancing energy efficiency programmes.

In order to operate this concession arrangement, PDS was required to obtain certain licences from the Energy Commission. On 30 July 2019, however, these licences were suspended (and the concession arrangement therefore put on hold), on the basis of claims by ECG of “fundamental and material breaches” of PDS’ obligations in relation to the provision of two demand guarantees given in connection with the concession arrangement. In October 2019, the concession arrangement was terminated.

Following these events, PDS filed an application against ECG, the Energy Commission and the Attorney-General (A-G). In the suit, PDS argued that the commission had failed to give it a fair hearing before terminating the concession agreement and, therefore, breached the rules of natural justice and the requirements of the Energy Commission Act, 1997 (Act 541). PDS requested the court to quash the decision of the Energy Commission and to declare it as null and void and sought compensation for loss of revenue under the concession arrangements.

In July 2021, a Commercial Division of the Accra High Court dismissed PDS’ application, maintaining ECG’s decision to terminate the concession agreement, citing, in particular,

PDS' failure to exhaust the internal dispute resolution mechanism provided by the Energy Commission Act, 1997 (Act 541). In the interim, the Energy Commission has issued new operating licences to the ECG and assets have been returned to it for self-management.

Springfield Exploration and Production Ltd. ("Springfield") v. Eni Ghana Exploration and Production Ltd ("Eni") and Vitol Upstream Ghana Ltd ("Vitol") [2021] DLHC10548

Eni is the operator of the Sankofa field, located in the Offshore Cape Three Points block, which began production in 2017. Vitol also holds an interest in the Offshore Cape Three Points block, along with the GNPC. Springfield is the operator of the Afina field, located in the West Cape Three Points 2 block. The Afina field is not yet producing. Springfield completed a 3D seismic data valuation and drilled one exploration well, Afina-1x, in 2018.

In April 2020, the Minister of Energy issued a directive under section 34 of the Petroleum (Exploration and Production) Act, 2016 (Act 919) requiring the Sankofa field and the Afina field to be unitised, on the basis of a purported finding that the accumulation of petroleum in the Afina and Sankofa fields is connected, extending across both blocks, and requiring Eni, Vitol, and Springfield to enter into a unitisation agreement accordingly.

In July 2020, Springfield commenced proceedings against Eni and Vitol in the Accra High Court, seeking, amongst other things, an order compelling Eni and Vitol to comply with the Minister of Energy's directive to unitise the Sankofa and Afina fields and develop them as one unit, and an order requiring income, profits and other funds due to Eni and Vitol from exploration and production at the Sankofa field to be paid to Springfield. This substantive case is ongoing and no substantive judgment has yet been issued.

In October 2020, on the basis that the Minister of Energy considered no significant progress had been made by the parties to voluntarily agree the terms of a unitisation, the Minister of Energy issued a further directive to Eni, Vitol and Springfield imposing terms and conditions for the unitisation.

ENI and Vitol contested both these directives, including: on the grounds that Springfield had not provided sufficient data or supporting evidence to substantiate a finding that the Sankofa and Afina were in dynamic hydrocarbon communication; that the Afina discovery was commercially recoverable (in particular, that commercial flow rates could be achieved); or that unitisation would be the appropriate strategy for development to ensure optimum recovery.

In April 2021, ENI and Vitol issued judicial review proceedings in Ghana to challenge the legality of the Minister of Energy's directives. These proceedings are ongoing and no substantive judgment has yet been issued.

On 25 June 2021, the Commercial Division of the High Court in Accra issued a decision following an application by Springfield for interim relief in respect of Springfield's own proceedings, as described above, which ordered that 30% of all revenues accruing to Eni and Vitol from exploration and production activities from the Sankofa field must be preserved and paid into an interest-bearing escrow account until the substantive case is determined.

Having unsuccessfully appealed the High Court's ruling, Eni and Vitol, on 16 August 2021, filed a notice of arbitration under the UNCITRAL rules pursuant to the arbitration provisions of the Offshore Cape Three Points petroleum agreement.

ENI and Vitol assert that the Minister of Energy's directives to require unitisation (amongst other matters) constitutes a breach of the stabilisation regime under the Offshore Cape Three Points petroleum agreement and a breach of Ghanaian and international law, including that it is contrary to the procedure for unitisation set out in Act 919 and the Petroleum (Exploration and Production) (General) Regulations, 2018 (L.I. 2359) passed thereunder.

Eni and Vitol are seeking damages together with a declaration that the unitisation directive and subsequent related directives by MoE represent a breach of its Petroleum Agreement with Ghana and orders preventing all parties from taking further action to implement the unitisation.

*GPGC LIMITED vs. the Government of the Republic of Ghana – PCA CASE NO 2019-0*²⁸

GPGC entered into an emergency purchase agreement (the “EPA”) with the Government of Ghana in 2015 to procure two GE LM 6,000 combined cycle power plants to supplement electricity generation sources at the height of a power crisis which beset the country from 2011–2016.

In August 2017, a number of existing power purchase agreements, entered between IPPs and the Government (including the EPA), were reviewed by a committee constituted by the Government (the “PPA committee”).

In February 2018, GPGC was issued with a “Termination Notice”, by the Government in respect of the EPA, on the grounds that: (i) the parties had not mutually agreed an extension of the period for the fulfilment of conditions precedent – which had not been concluded; (ii) certain conditions subsequent for the achievement of financial close and full commercial operation date had not been fulfilled; (iii) GPGC had yet to obtain a licence from the Energy Commission to engage in business or commercial activity for the sale of electricity; and (iv) GPGC had started construction on site without the necessary siting and construction permits, such that its construction activities were illegal.

GPGC in response, rejected the Termination Notice and requested a retraction of the notice and a confirmation from the Government that the EPA remained fully operative. After a refusal by the Government to accede to these requests, GPGC accepted the Government’s repudiation and terminated the EPA. GPGC then commenced arbitration proceedings against the Government in respect of the repudiation at the Permanent Court of Arbitration, London.

In January 2021, the Arbitration Tribunal concluded that the true reason for the Government’s repudiation of the EPA was a cost/benefit analysis by the PPA Committee, namely that performance of the EPA would be expensive, that all of the electricity generated under it would be excess and that the Government could negotiate a settlement based on termination against a payment of USD18 million as opposed to the payment of an excess capacity charge of USD24.9 million *per annum* over the contract period of four years.

The Arbitration Tribunal found that the EPA had been validly terminated by GPGC on account of the Government’s repudiatory conduct and ordered the Government to pay to GPGC the full value of the Early Termination Payment, together with Mobilisation, Demobilisation and preservation and maintenance costs in the amount of USD134,348,661, with interest.

The Government subsequently brought an application before the High Court of Justice of England and Wales for an extension of time to bring a challenge against the Arbitration Tribunal’s award.²⁹ This application was dismissed by the court because of the length and circumstances of the Government’s delay in challenging the award and the absence of an adequate explanation for it.

Major events or developments

West African Gas Pipeline interruption

The country experienced major power interruptions between January and April 2021, triggered by a pigging exercise on the West African Gas Pipeline, which supplies natural gas from Nigeria to Ghana for electricity generation.³⁰ The PURC in a preliminary report

on the interruptions has identified technical issues with the national grid, and delays in the implementation of capital projects required to improve network reliability and availability as contributing factors to the interruptions in supply.

Tema LNG Terminal

Natural gas supply is expected to increase and become more reliable through the operationalisation of the Tema Liquefied Natural Gas (“LNG”) project, the first offshore LNG-receiving terminal in sub-Saharan Africa in 2021. Shell Gas and Power BV is expected to deliver LNG, which will be regasified by the Tema LNG Terminal Company and then ultimately be delivered to GNPC. The expected volume to be added is 125 MMscfd.³¹

Proposals for changes in laws or regulations

Petroleum Revenue Management Act, 2011

In connection with the proposed expanded role of the GNPC in exploration and production activities within the country, as discussed above, the Government has suggested that the Petroleum Revenue Management Act, 2011 (which provides the framework for collection, allocation and management of petroleum revenue) may require amendments to allow the Ghana National Petroleum Corporation to enter into reserve-based lending transactions in order to raise the financing independent of central Government.³²

Proposed merger of Energy Commission and Public Utilities Regulatory Commission

The Government is considering a merger of PURC, Ghana’s independent utility tariff and consumer interest regulator, and the Energy Commission, the country’s energy resource regulator and licensor.³³ Such a merger would likely require amendments to: (i) the Public Utilities Regulatory Commission Act, 1997 (Act 538), which establishes the PURC and empowers it to regulate the provision of public utility services to consumers; and (ii) the Energy Commission Act, 1997 (Act 541), which established the Energy Commission to provide for the regulation, management, development and utilisation of energy resources and the granting of licences for the transmission, wholesale supply, distribution and sale of electricity and natural gas, refining, storage, bulk distribution, marketing, and sale of petroleum products.

* * *

Endnotes

1. Electricity Supply Plan for Ghana, Energy Commission – Supply Plan Committee (2021), p. 43.
2. Although “hydro” is defined as a renewable energy source under Section 2 of the Renewable Energy Act, 2011, it is treated separately from other renewable sources, such as solar, in most analyses by the Energy Commission.
3. Electricity Supply Plan for Ghana, Energy Commission – Supply Plan Committee (2021), p. 29 being solar and biogas.
4. Electricity Supply Plan for Ghana, Energy Commission – Supply Plan Committee (2021), Executive Summary p. iv. Note: the figures given in the Electricity Supply Plan for Ghana are slightly different to those in the Energy Commission’s 2021 Energy Outlook for Ghana, which states that in 2020, hydro contributed 29.9% of total installed capacity, conventional thermal plants contributed 69% of the total installed capacity and renewable sources accounted for 1.1%.
5. Bridge Power plant constructed. Electricity Supply Plan for Ghana, Energy Commission – Supply Plan Committee (2021), p. 32.

6. Twin City replaces Amandi. Electricity Supply Plan for Ghana, Energy Commission – Supply Plan Committee (2021), Table 2.15.
7. 2021 Energy Outlook for Ghana. Executive Summary, p. ii.
8. Electricity Supply Plan for Ghana, Energy Commission – Supply Plan Committee (2021), p. 22.
9. Mid-Year Fiscal Policy Review of the 2021 Budget Statement and Economic Policy of the Government of Ghana p. 54, para. 315, Ministry of Finance (2021).
10. Mid-Year Fiscal Policy Review of the 2021 Budget Statement and Economic Policy of the Government of Ghana p. 55, para. 316.
11. 2021 Energy Outlook for Ghana. Executive Summary, p. ii.
12. 2021 Energy Outlook for Ghana. Executive Summary, p. 41.
13. <https://www.graphic.com.gh/news/general-news/bui-adds-22-25mw-solar-power-to-augment-national-grid.html>.
14. Electricity Supply Plan for Ghana, Energy Commission – Supply Plan Committee (2021), p. 49.
15. Electricity Supply Plan for Ghana, Energy Commission – Supply Plan Committee (2021), p. 32. 2021 Energy Outlook for Ghana. Executive Summary, p. 26, 31.
16. Electricity Supply Plan for Ghana, Energy Commission – Supply Plan Committee (2021), p. 40.
17. PMDP Annual Progress Report (2020) <https://www.vra.com/pwalugu/PMDP%20Annual%20Progress%20Report%202020.pdf>.
18. PURC 2021 Major Tariff Review – Communiqué 3.
19. Para. 757 of the 2021 Budget Statement and Economic Policy.
20. MOF/GA/D3/4, Press Release on 25 September, 2020.
21. MOF/GA/D3/4, Press Release on 7 December, 2020.
22. MOF/GA/D3/4, Press Release on 3 December, 2020.
23. MOF/GA/D3/4, Press Release on 3 December, 2020.
24. Paragraph 145 of the Annual Public Debt Report for the 2020 Financial Year.
25. Petroleum Hub Development Corporation Act, 2020.
26. <https://www.parliamentary.gh/news?CO=98>.
27. <https://www.parliament.gh/news?CO=99>.
28. <https://jsumundi.com/en/document/decision/en-gpgc-limited-v-the-government-of-the-republic-of-ghana-final-award-tuesday-26th-january-2021>.
29. <https://jsumundi.com/en/document/decision/en-gpgc-limited-v-the-government-of-the-republic-of-ghana-judgment-of-the-high-court-of-justice-of-england-and-wales-2021-ewhc-1574-tuesday-8th-june-2021>.
30. Report on Preliminary Investigations into Erratic Power Supply. Press Release on Erratic Power Supply (11th March, 2021).
31. GNPC initiates LNG project to guarantee long-term supply (<https://ghanaweb.com>); Ghana's Tema LNG terminal to get first cargo – Offshore Energy (<https://offshore-energy.biz>).
32. Mid-Year Fiscal Policy Review of the 2021 Budget Statement and Economic Policy of the Government of Ghana p. 55, para. 316.
33. <https://thebftonline.com/11/06/2021/purc-energy-commission-to-merge-amin-adam/>.

**Nana Ama Botchway****Tel: +233 30 263 2043 / Email: nanaama@ndowuona.com**

Nana Ama Botchway is the founder and managing partner of N. Dowuona & Company. She has advised on significant investments and divestments in Ghana and other parts of Africa including the GBP117.7 million acquisition of a multinational utility-scale solar company by Europe's largest renewable energy generator, advising on the proposed acquisition of a Ghanaian oil exploration company by a major international oil company as part of a USD8 billion African asset acquisition and conducting due diligence on the restructuring of a USD135 million loan to a multinational oil and gas service company. Additionally, she has advised companies on regulatory and commercial considerations for operating in Ghana's upstream oil and gas, and power generation industries. She also advised the IFC in connection with the Ghana Power Compact with the Millennium Challenge Corporation.

**Elorm Kwame-Kota Zormelo****Tel: +233 30 263 2043 / Email: elorm@ndowuona.com**

Elorm Kwame-Kota Zormelo is an associate at N. Dowuona & Company. His recent work includes conducting due diligence on the GBP117.7 million acquisition of a multinational utility-scale solar company by Europe's largest renewable energy generator, advising on the proposed acquisition of a Ghanaian oil exploration company by a major international oil company as part of a planned USD8 billion African asset acquisition and conducting due diligence on the restructuring of a USD135 million loan to a multinational oil and gas service company. In addition to this, he has advised various companies on regulatory requirements for operating in Ghana's upstream oil and gas industry, including local equity participation and content requirements for foreign investors, and has advised on the regulatory and commercial considerations for establishing electricity power generation companies in Ghana.

N. Dowuona & Company

Solis House GL-056-7567, Adembra Road, East Cantonments, Accra, Ghana

Tel: +233 20 201 4464 / +233 24 431 9936 / URL: www.ndowuona.com

www.globallegalinsights.com

Other titles in the **Global Legal Insights** series include:

AI, Machine Learning & Big Data

Banking Regulation

Blockchain & Cryptocurrency

Bribery & Corruption

Cartels

Corporate Tax

Employment & Labour Law

Fintech

Fund Finance

Initial Public Offerings

International Arbitration

Litigation & Dispute Resolution

Merger Control

Mergers & Acquisitions

Pricing & Reimbursement