RENEWABLE ENERGY

Ghana

LEXOLOGY
Getting The Deal Through

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Renewable Energy

Consulting editors

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Quick reference guide enabling side-by-side comparison of local insights into market and legal frameworks; treatment of environmental attributes; government incentives and authorisations; dispute resolution; utility-scale renewable energy projects; hydropower; distributed generation; energy storage; foreign investment considerations; offtake arrangements; decommissioning; transaction structures; and recent trends.

Generated 18 March 2022

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MARKET FRAMEWORK

Government electricity participants

Who are the principal government participants in the electricity sector? What roles do they perform in relation to renewable energy?

The principal government participants in the Ghanaian electricity sector are as follows.

Ministry of Energy

The Ministry of Energy, headed by the Minister of Energy, is responsible for energy policy formulation, implementation, monitoring and evaluation as well as the supervision and coordination of activities of Ghana's energy sector agencies.

Energy Commission

The Energy Commission is the government's energy policy adviser. The Commission makes energy policy recommendations to the Minister of Energy. It is also the technical regulator of Ghana's renewable energy industry and is committed to developing and elaborating national policies and strategies for all renewable resources. The Energy Commission is also responsible for regulation and licensing in the renewable energy sector.

Volta River Authority

Although previously responsible for the generation, transmission and distribution of power, the Volta River Authority (VRA)'s mandate has now been restricted to the generation of electricity. The VRA has, therefore, diversified its power generation portfolio to take advantage of available and sustainable sources of energy mainly hydro and natural gas, liquified petroleum products and other renewables. The Authority owns and operates various hydro, solar and thermal plants across the country.

Bui Power Authority

Bui Power Authority (BPA) was established by the BPA Act 2007 (Act 740), with a mandate to plan, execute and manage the Bui Hydroelectric Project, which was commissioned in 2012 and is still in operation. The project, which has been renamed the Bui Generating Station, is a peaking plant with the capacity to generate 404MW of hydro-generated power. Besides executing renewable energy projects on behalf of the government of Ghana, BPA is also mandated to undertake its own renewable energy activities and to undertake clean energy alternatives in Ghana.

Ghana Grid Company Limited

Ghana Grid Company Limited was established in 2006 to engage in the exclusive operation of the National Interconnected Transmission System (NITS). Its primary function is to develop and promote competition in Ghana's wholesale power market by providing non-discriminatory and open access to the NITS for all participants in the power market particularly, power generators and bulk customers.

Electricity Company of Ghana Ltd

The Electricity Company of Ghana is a limited liability company wholly owned by the government of Ghana. The Company is responsible for the distribution of electricity in nine Operational Regions in the southern part of Ghana namely, Accra East, Accra West, Tema, Eastern, Central, Volta, Western and Ashanti. It purchases bulk of its power requirements from the VRA, as its major supplier, and other independent power producers (IPPs) such as Sunon Asogli Thermal Power, AMERI, Karpowership and CENIT Power Energy Limited.

Northern Electricity Distribution Company Limited

The Northern Electricity Distribution Company (NEDCo) is a wholly owned VRA subsidiary. NEDCo's current operations extend to the northern parts of Oti, Ashanti and Western North regions. Although NEDCo's operations cover about 64 per cent of the geographical area of Ghana, the customer density of the operating area is low with access to electricity in the NEDCo operational area put at 65 per cent as at December 2017 as against about 84 per cent for the whole country.

Public Utilities Regulatory Commission

The Public Utilities Regulatory Commission was established in October 1997 under the Public Utilities Regulatory Commission Act 1997 (Act 538) as a multi-sector regulator to regulate the provision of electricity and water utility services. It is responsible for approving rates chargeable for the purchase of electricity from renewable energy sources by public utilities. They also approve charges for grid connection and determine rates chargeable for wheeling electricity from renewable energy sources.

Bulk Oil Storage and Transportation Company

Bulk Oil Storage and Transportation Company (BOST) is a private limited liability company owned by the government. It is mandated to develop a network of storage tanks, pipelines and other transportation infrastructure for energy resources throughout the country. With respect to renewable energy, BOST is responsible for biofuel transportation and storage.

Environmental Protection Agency

The Environmental Protection Agency is responsible for regulating the environment and implementing national environmental policies. In the renewable energy sector, they ensure environmentally sound and efficient use of both renewable and non-renewable resources in the process of national development.

Ghana Standards Authority

Ghana Standards Authority (GSA) is an agency of government responsible for developing, publishing and promoting standards in the country. The GSA does this through standardisation, metrology and conformity assessment activities including testing, inspection and certification. This ensures that products or goods and services produced in Ghana, whether for local consumption or for export are safe, reliable and are of good quality. In the area of renewable energy, they are responsible for developing standards for renewable energy technologies and biofuel.

Private electricity participants

Who are the principal private participants in the electricity sector? What roles do they serve in relation to renewable energy?

The principal private electricity participants in Ghana are IPPs and a private power distribution company. Most of the IPPs in Ghana produce power either from solar or thermal gas-fired power plants. The IPPs include the Takoradi International Company Limited, Sunon Asogli Power, TAQA Ghana, Cenpower Generation Company Limited, Karpowership Ghana Company Limited, CENIT Energy Limited, AKSA Energy Company Ghana Limited, BXC Solar/ Meienergy, Trojan Power and Early Power. The only private electricity distribution company operational in Ghana is the Enclave Power Company, which is licensed by the Energy Commission to distribute and sell electricity to all customers within the Free Zones Enclave in Tema and serves about 50 industrial customers.

Definition of 'renewable energy'

Is there any legal definition of what constitutes 'renewable energy' or 'clean power' (or their equivalents) in your jurisdiction?

Under the Renewable Energy Act of Ghana 2011 (Act 832), renewable energy means the energy obtained from non-depleting sources including wind, solar, hydro, biomass, bio-fuel, landfill gas, sewage gas, geothermal energy and ocean energy and any other source designated in writing by the Minister of Energy.

Framework

What is the legal and regulatory framework applicable to developing, financing, operating and selling power and 'environmental attributes' from renewable energy projects?

There are several acts, regulations and guidelines that govern operations within the renewable energy sector.

The Energy Commission Act 1997 (Act 541) was passed to govern the transmission, sale, distribution and wholesale supply of electricity. The Renewable Energy Act 2011 (Act 832), however, is the primary legislation for the development, management, utilisation and adequate supply of renewable energy for the generation of heat and power and for other related matters. The Renewable Energy Licensing Manual for service providers in the Renewable Energy Sector also establishes a framework for licensing service providers as stipulated by Act 832.

In addition, the Public Utilities Regulatory Commission regulates utility services in the electricity and water sectors. Other relevant regulations include the Local Content and Local Participation (Electricity Supply Industry) Regulations 2018 (LI 2354), Renewable Energy Sub-Code for National Interconnected Transmission System, the Renewable Energy Sub-Code for Distribution Network and Net Metering Sub-Code for Connecting Renewable Energy Generating Systems to the Distribution Network in Ghana.

There is no specific legal framework in Ghana for environmental attributes where renewable energy credits or certificates are traded or sold. However, Ghana ratified the United Nations Framework Convention on Climate Change in 1995 and acceded to the Kyoto Protocol in 2002. The Kyoto Protocol established flexible market mechanisms such as the international emissions trading, clean development mechanism (CDM) and joint implementation. The CDM allows a country with an emission reduction or limitation under the Kyoto Protocol to implement an emission-reduction project in developing countries. The projects can earn saleable certified reduction credits that can be counted towards meeting Kyoto targets. The Environmental Protection Agency was mandated to be the Designated National Authority for the

implementation of the Kyoto Protocol. However, since its appointment there has been only one approved CDM project that was not renewable energy related.

Stripping attributes

Can environmental attributes be stripped and sold separately?

No, environmental attributes cannot be stripped and sold separately in Ghana except for those accepted under the CDM process established by the Kyoto Protocol.

Nonetheless, under the law, there exists a net metering scheme that permits owners of renewable energy generating facilities to offload excess energy they generate to the grid. The owners are then given credit to set off against electricity purchased from the distribution utility.

Government incentives

Does the government offer incentives to promote the development of renewable energy projects? In addition, has the government established policies that also promote renewable energy?

There are numerous incentives for the promotion and development of renewable energy. First, there are duty and VAT exemptions enjoyed by participators within the renewable energy industry. All solar panels imported into Ghana are exempt from VAT and industrial or energy plant, machinery or equipment are exempt from import duty. Additionally, all off-grid solar system components are VAT exempt as well.

Second, the government has established a renewable energy fund that provides financial resources for the promotion, development, management and utilisation of renewable energy sources.

Businesses registered with Ghana Investment Promotion Centre receive benefits such as tax incentives, protection against nationalisation or expropriation among others.

In addition, there is a mandatory purchase policy that obliges electricity distributors, bulk customers or fossil fuel-based wholesale electricity suppliers to procure a percentage of their total purchase of electricity from a renewable energy source. The Renewable Energy Act was recently amended to enable consumers of electricity in Ghana, benefit from reduced cost of electricity generation from renewable energy sources through competitive procurement instead of the feed-in tariff scheme.

The recently published Renewable Energy Master Plan proposes incentives for renewable energy manufacturing and assembling firms including substantial tax reduction; exemption of materials, components, equipment and machinery that cannot be obtained locally for manufacturing or assembling, from import duty and VAT up to the year 2025; and exemption from import duty on plants and plant parts for generating electricity from renewable energy sources.

Are renewable energy policies and incentives generally established at the national level, or are they established by states or other political subdivisions?

Renewable energy policies are generally established at the National level. Most policy objectives are approved by Parliament in the form of legislation such as the Renewable Energy Act. The legislative provisions in the Act may further authorise the Minister of Energy to formulate the necessary policy for achieving the objects of the legislation.

Purchasing mechanisms

What mechanisms are available to facilitate the purchase of renewable power by private companies?

Currently the Energy Commission allows for private persons with a maximum demand of at least 500KVA consistently for a consecutive period of three months or a minimum annual energy consumption of 1 million kilowatt-hours to be designated as bulk customers and to obtain a bulk customer permit from the Energy Commission. A bulk customer, holding a valid permit, can purchase electricity from a renewable energy source at a price negotiated between the bulk customer and a licensed wholesale supplier of power. A bulk customer can also directly own and operate its own wholesale renewable energy production facility. Most of these private arrangements can be implemented without the involvement of a utility counterparty. Utility counterparties are, however, still relevant especially if a connection would have to be made to a transmission or distribution channel for the supply of the power generated.

Legislative proposals

Describe any notable pending or anticipated legislative proposals regarding renewable energy in your jurisdiction.

Draft mini-grids regulations have been prepared and been in discussion since 2017. The draft regulations would apply to the development and operation of mini-grids with generation capacities of up to 1MW. Under the draft regulations, persons and companies installing and operating mini-grids that provide between 100kW to 1MW of distributed generation capacity will be required to obtain a licence. Further, applicants will be required to obtain an additional licence if an existing system is expanded beyond 100kW capacity.

Furthermore, in the early part of 2021, the government of Ghana was considering merging the Public Utilities Regulatory Commission and the Energy Commission into one entity to enhance efficiency in the regulation of the energy sector.

Drivers of change

What are the biggest drivers of change in the renewable energy markets in your jurisdiction?

The following are the biggest drivers of change in the renewable markets in Ghana:

National electrification: The government of Ghana initiated the preparation of a National Electrification scheme in 1989 as its principal policy to extend electricity to all parts of the country by 2020. In the pursuit of this electrification policy, Ghana has been over dependent on thermal and hydro sources of electricity generation, which has resulted in a power crisis. Thus, there is a need for energy diversification due to the over reliance on hydropower and fossil thermal plants for electricity.

Climate change and environmental concerns: climate change as a result of emissions from hydropower and thermal plants has become a worldwide threat hence the need for alternative energy sources, including renewable energy.

High Demand: The demand for electricity has far exceeded its supply and there is the need to meet the shortfall in power supply by exploiting alternative sources of energy.

Disputes framework

Describe the legal framework applicable to disputes between renewable power market participants, related to pricing or otherwise.

Under the Renewable Energy Act, the Renewable Energy Board has the mandate to, at its own initiative or at the request of a licensed person, set up an arbitration panel under the Alternative Dispute Resolution Act 2010 (Act 798). The panel will arbitrate and settle any dispute that arises between licensees where the parties concerned cannot reach an agreement.

A similar provision exists in the Energy Commission Act for licensees under that Act. The Energy Commission Act also provides an avenue for persons aggrieved by a modification, suspension or cancellation of a licence to raise a complaint with the Minister for Energy who is obliged to make a decision within 30 days. Upon the expiry of this period, a person may apply to the courts for relief.

Parties in a renewable energy transaction also have the option of resorting to any of the available dispute resolution mechanisms available in Ghana for the settlement of their disputes. This includes recourse to the courts or either arbitration or mediation under the Alternative Dispute Resolution Act.

UTILITY-SCALE RENEWABLE PROJECTS

Project types and sizes

Describe the primary types and sizes of existing and planned utility-scale renewable energy projects in your jurisdiction.

The primary types of existing utility-scale renewable projects are biomass and waste to energy, solar energy, wave and tidal energy and wind energy.

Biomass and waste-to-energy

In 2018, Biomass contributed to 44.6 per cent of the total energy consumption in Ghana. This energy is consumed mostly in households in the form of charcoal or firewood. Currently, there is no utility scale biomass power plant operational in Ghana, however, companies such as African Plantation for Sustainable Development and Kwamoka Energy Ghana Limited have plans to install 60MW and 6MW biomass plants respectively.

Solar

The Energy Commission has issued Siting Clearance Permits to 16 independent power producers (IPP) for utility-scale solar projects. However, only one of these IPPs has proceeded with the construction of a utility-scale solar plant, with a capacity of 20MW. At present, 42.5MW utility scale solar PV systems have been connected to the national grid.

Wave and tidal energy

A local Ghanaian company, TC Energy, in collaboration with Swede Energy, is constructing a Tidal Wave Power Plant at the confluence of the Volta River and the Gulf of Guinea, at Ada Foah, in the Greater-Accra Region. This has attracted investors who have now pledged US$2 billion towards the entire project set to start soon. The project is backed by a power purchase agreement (PPA) between TC Energy Limited and the Electricity Company of Ghana (ECG) to offtake

up to 1,000MW of power from the project.

Wind energy

The Wind Farm Ayitepa by Upwind Ayitepa Ltd is for the time being the first wind park in Ghana and the largest in West Africa. The wind farm is located in Ningo Traditional area of the Ningo-Pampram District. Once operational, it will supply the Ghana Grid Company Limited (GRIDCo) transmission systems with more than 700,000MWh of clean, locally produced, sustainable and cheap electricity per year. There will be up to 75 turbines, each with a capacity ranging from 3 to 4.5MW. This amount of electricity will meet the needs of more than 150,000 Ghanaian households (assuming 10 people per household and an electricity consumption of 400kWh per capita and year).

Development issues

What types of issues restrain the development of utility-scale renewable energy projects?

The following are some of the issues that restrain the development of utility-scale renewable energy projects:

- macroeconomic situation in Ghana;
- financing terms and conditions such as high commercial interest rates, limited tenor loans, high inflation and currency depreciation;
- unavailability of data and information resources;
- limited availability of experienced personnel to undertake technology and feasibility assessments and to demonstrate, maintain, and operate renewable energy structures;
- power sector entities, regulators, financiers, and domestic investors have limited knowledge and experience in the development and deployment of renewable energy technologies;
- difficulty in obtaining equipment and spare parts and the lack of infrastructure to support usage; and
- awareness and information barriers leading to reluctance by the general public to adopt renewable energy for fear of its reliability.

HYDROPOWER

Primary types of project

Describe the primary types of hydropower projects that are prevalent.

The following are the primary hydropower projects in Ghana.

The Akosombo Hydro Electric Power Plant is a rock-fill embankment dam with a design station capacity of 1020MW. Owned by the Government of Ghana through the Volta River Authority, its major offtaker is the Electricity Company of Ghana (ECG).

Kpong Hydro Electric Power Plant is a rock fill embankment dam with a design station capacity of 160MW and a design annual energy of 1000GWh. Owned by the government of Ghana through the Volta River Authority, the plant has ECG as its largest offtaker.

Bui Dam is a gravity roller-compacted concrete dam with an installed capacity of 404MW from four generating units including three 133.33MW Francis Turbine Units and a 4MW Turbinette. The project is owned and managed by Bui Power Authority (BPA) on behalf of the government of Ghana. The Electricity Company of Ghana is its largest offtaker. The BPA is looking forward to expanding its production capacity and taking on more offtakers.

Tsatsadu Generating Station is a micro-hydropower plant with a capacity of 45kW. The project is owned and managed by BPA on behalf of the government of Ghana. It consists of a concrete diversion weir, an intake structure, diversion channel, a forebay, steel penstock, a powerhouse and a transmission line to tie the electricity generated into the national distribution grid.

What legal considerations are relevant for hydroelectric generation in your jurisdiction?

There are various relevant legal considerations for hydroelectric generation in Ghana. Some of these considerations include the acquisition of the land and resettlement of people affected by the generation of hydroelectricity. BPA Act, for example, deals with such matters. Additionally, there are various regulatory authorities that need to be involved in hydroelectric generation, such as the Ministry of Energy, Forestry Commission, Environmental Protection Agency and Municipal Assemblies.

DISTRIBUTED GENERATION

Prevalence

Describe the prevalence of on-site, distributed generation projects.

The government has established a net-metering scheme for the purpose of encouraging 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. Distributed generation sources include solar home systems (both standalone and net-metering systems), solar street and community lighting systems, standalone wind systems, and mini-grids (which could be made of single or hybrid technologies). There is also a rising prevalence of small-scale solar PV (for rooftop and lantern applications), and solar water heating systems in the hospitality industry. A 715kWp solar PV net-metered installation is in operation at the Noguchi Memorial Institute for Medical Research of the University of Ghana with funding support from the Japanese government.

The government has introduced the Solar Lanterns Promotion Program (SLAP), which is working toward its goal of distributing 2 million high-quality solar lanterns in deprived remote/off-grid communities through various subsidy schemes. Since the launch of the SLAP in 2013, a total of 80,000 solar lanterns have been procured through the government of Ghana budget and over 50,000 solar lanterns have been sold at a 70 per cent subsidy to target beneficiaries.

Types

Describe the primary types of distributed generation projects that are common in your jurisdiction.

Distributed generation of electricity has been championed by the government of Ghana as a means to reduce over-reliance on hydroelectric power. Distributed generation sources include solar home systems (both standalone and net-metering systems), solar street and community lighting systems, standalone wind systems and mini-grids (which could be made of single or hybrid technologies). This initiative has been encouraged by government projects such as the Solar Lanterns Promotion Program, which is working toward its goal of distributing 2 million high-quality solar lanterns in deprived remote or off-grid communities through various subsidy schemes.

Regulation

Have any legislative or regulatory efforts been undertaken to promote the development of microgrids? What are the most significant legal obstacles to the development of microgrids?

There is currently no specific legislation or regulation governing microgrids. However, a draft regulation was prepared in 2017 and is still under discussion. The government has, nevertheless, put in place various strategies to promote the development of micro-grids in Ghana. This includes the creation of special funding envelopes (government of Ghana budgets, loans, grants, rural electrification levy, etc) dedicated for mini-grid development. The most significant obstacle to the development of microgrids in Ghana is the absence of a regulatory framework governing the licensing and operation of microgrids.

Other considerations

What additional legal considerations are relevant for distributed generation?

Although there is regulatory support for net metering, the regulators are yet to redefine the modalities for electricity exchange under the net metering scheme and approve the draft procedures and guidelines for enrolment of customers as well as the contract framework. This will help to properly track and manage the small-scale installations.

ENERGY STORAGE

Framework

What storage technologies are used and what legal framework is generally applicable to them?

There are no major storage projects for power generated from renewable energy in Ghana. The most common mode of energy storage in Ghana is the use of lithium-ion batteries for storing Solar energy. This is used for small-scale solar projects. A licence is required for commercial storage of energy in Ghana. The licensee is required to install a facility for the storage, which will be inspected for suitability by the Energy Commission.

Development

Are there any significant hurdles to the development of energy storage projects?

Yes, there are significant hurdles to the development of energy storage projects in Ghana. These include:

- lack of technical know-how and expertise;
- unavailability of new technology;
- lack of experts to install, operate and maintain storage projects; and
- monetary restrictions for conducting feasibility studies and developing energy storage projects.

FOREIGN INVESTMENT

Ownership restrictions

May foreign investors invest in renewable energy projects? Are there restrictions on foreign ownership relevant to renewable energy projects?

Foreign investors are allowed to invest in renewable energy projects in Ghana. The law requires a company operating in the renewable energy space to be locally incorporated. However, a company engaged in a commercial activity within the renewable energy sector is required to have a minimum local participation of 15 per cent at commencement of operations with a target level participation of 51 per cent within 10 years of operation. Also, an entity established to manufacture electrical equipment, electrical appliances or renewable energy equipment shall have a minimum equity participation of 40 per cent by an indigenous Ghanaian company.

Equipment restrictions

What restrictions are in place with respect to the import of foreign manufactured equipment?

Under the law, equipment is to be sourced locally in accordance with the mandatory local content requirements. A certified electricity service provider that requires equipment, must therefore purchase that equipment from an entity that manufactures the equipment in the country in accordance with the local content targets. A certified electricity service provider that contravenes this requirement will be liable to forfeit the use of the equipment imported in addition to the full import duty and levies on the equipment. All imported equipment is also required to meet the standards set by the Ghana Standards Board.

PROJECTS

General government authorisation

What government authorisations must investors or owners obtain prior to constructing or directly or indirectly transferring or acquiring a renewable energy project?

To construct, transfer or acquire a renewable energy project, an investor or owner would require approval from the Energy Commission. Prior to constructing a renewable energy project, investors would have to put in an application for the requisite licence required for the renewable energy project in question. Licences are generally required for commercial activities in the renewable industry sector relating to production, transportation, storage, distribution, sale and marketing, exportation and re-exportation, installation and maintenance.

Offtake arrangements

What type of offtake arrangements are available and typically used for utility-scale renewables projects?

The type of offtake arrangement used for utility scale renewable energy purchase is a power purchase agreement (PPA). A public utility is, however, prohibited from negotiating a PPA with a generator of electricity or to contract power from a renewable energy source unless the contracted power has gone through an open and competitive procurement process. The major offtaker in Ghana is the Electricity Company of Ghana (ECG). ECG satisfies its payment obligations through the cash waterfall mechanism in which it pays its debt by distributing the revenues from the sale of the electricity proportionately among the relevant energy sector players involved in the electricity supply value chain.

Procurement of offtaker agreements

How are long-term power purchase agreements procured by the offtakers in your jurisdiction? Are they the subject of feed-in tariffs, the subject of multi-project competitive tenders, or are they typically developed through the submission of unsolicited tenders?

Electricity procured from a wholesale supplier shall be procured in accordance with the annual energy supply and demand plans and must be done through a competitive procurement scheme consisting of a tendering process and an auction scheme. A public utility shall not negotiate for a PPA with a generator of electricity or contract power for electricity generated from a renewable energy source unless the contracted power has gone through an open competitive and transparent procurement process.

Operational authorisation

What government authorisations are required to operate a renewable energy project and sell electricity from renewable energy projects?

To operate and sell electricity from renewable energy projects, one would have to obtain a licence from the Energy Commission. It is important to note that a separate licence is required for each commercial activity within the renewable energy supply chain.

Decommissioning

Are there legal requirements for the decommissioning of renewable energy projects? Must these requirements be funded by a sinking fund or through other credit enhancements during the operational phase of a renewable energy project?

As part of licensing requirements under the Renewable Energy License Manual, applicants for licences are required to make and implement adequate arrangements and adhere to prescribed procedures for undertaking decommissioning programmes for the plant or any process that may affect safety and the environment. They are also required to submit any prescribed programmes and arrangements for decommissioning of the plant or part thereof for prior approval by the Energy Commission. Decommissioning should also conform with the relevant Environmental Protection Agency guidelines.

TRANSACTION STRUCTURES

Construction financing

What are the primary structures for financing the construction of renewable energy projects in your jurisdiction?

The primary funding structure for financing renewable energy projects in Ghana are grants from Development Banks and project finance (for large-scale projects). Due to general high interest rates and inflation, commercial banks in Ghana do not usually tend to finance the construction of renewable energy projects.

Operational financing

What are the primary structures for financing operating renewable energy projects in your jurisdiction?

The primary funding structures for operating renewable energy resources are the operating and finance leasing structures, hire purchase and conditional sale arrangements and debt-structured project financing arrangements (for large-scale renewable energy projects).

UPDATE AND TRENDS

Recent developments

Describe any market trends with respect to development, financing or operation in the renewables sector or other pertinent matters.

There is currently an over-abundance of power supply in Ghana caused by the signing of many power purchase agreements (PPAs) by the government of Ghana. Therefore, there is currently a moratorium on the signing of PPAs for the purchase of renewable energy. Consequently, the Energy Commission has temporarily suspended the issuance of new wholesale supply licences.

The Energy Commission is currently running a Green Financing Scheme called Sustainable Use of Natural Resources and Energy Finance Scheme (SUNREF). This innovative programme is part of a worldwide initiative to mobilise public and private banks to finance private sector investments involving green technologies and sustainable energy. In addition, the EU is supporting the programme by financing the technical assistance component, as well as providing an investment grant to eligible projects. In Ghana, financing under SUNREF can be accessed through Calbank and Ghana Commercial Bank.

Describe any notable pending or anticipated legislative proposals.

There are ongoing discussions to introduce:

- regulations for construction, operation and maintenance in the renewable energy industry;
- a revised energy policy;
- a bio energy policy; and
- wood fuel regulations.

Jurisdictions

Bulgaria	Gugushev & Partners Law Office
Denmark	Poul Schmith/Kammeradvokaten
Ecuador	Tobar ZVS
Egypt	Mazghouny & Co
Ghana	Ferociter
India	Khaitan & Co
Indonesia	ABNR
Italy	CMS Italy
Japan	Nishimura & Asahi
Netherlands	Van Doorne
Nigeria	Foundation Chambers
Pakistan	Raja Mohammed Akram & Co
Poland	Squire Patton Boggs
Portugal	PLMJ
Spain	King & Wood Mallesons
Tanzania	Velma Law
Turkey	Bozoğlu Izgi Attorney Partnership
United Kingdom	Milbank LLP
USA	Milbank LLP