

OCTP – GHANA'S LARGEST FDI

A COMPLEX HYBRID PROJECT FINANCE AND RESERVE-BASED LENDING STRUCTURE WAS USED ON THE US\$1.35bn DEBT FINANCING TO SUPPORT VITOL'S WORKING INTEREST IN THE OFFSHORE CAPE THREE POINTS (OCTP) OFFSHORE OIL AND GAS PROJECT IN GHANA. BY **JOHN DEWAR AND OLIVER IRWIN OF MILBANK TWEED HADLEY & MCCLOY LLP.**

Documentation for Vitol's OCTP financing was signed in December 2016 and financial close was achieved in March 2017. The financing consists of the following four fully amortising debt facilities, along with an accordion option:

- A US\$400m UK Export Finance (UKEF) split into a US\$310m direct lending facility reflecting the very high level of UK content and a US\$90m UKEF covered facility;
- A US\$300m International Finance Corporation (IFC) facility split into a US\$235m IFC loan and US\$65m loan from IFC's managed co-lending portfolio programme;
- A US\$180m Multilateral Investment Guarantee Agency (MIGA) covered facility that provided commercial lenders with cover in respect of (i) currency inconvertibility and transfer restriction, (ii) expropriation, war, terrorism and civil disturbance and (iii) breach of contract; and
- A US\$470m uncovered commercial bank facility.

The financing was arranged and structured by UKEF, IFC, HSBC, ING, Société Générale and Standard Chartered Bank, which were later joined in the lending group by Mizuho, MUFG, Natixis and Bank of China.

For UKEF, this financing represents a number of notable firsts: this is the first time that a European export credit agency has supported a financing structure of this kind and it represents UKEF's first direct loan to a project in Africa. In addition, this financing was particularly noteworthy from the IFC and MIGA's perspective as the World Bank is supporting the overall development of the OCTP project through a unique combination of International Development Association (IDA) and International Bank for Reconstruction and Development (IBRD) guarantees, IFC direct funding and MIGA cover.

The project

The OCTP development comprises of three fields: the Sankofa and Gye Nyame gas fields and the Sankofa East oil field, which could eventually provide 1.5trn cubic feet of gas and 500m barrels of oil. Eni Ghana Exploration & Production Ltd (Eni Ghana) (44.44%) is the operator of the project with Vitol Ghana

Upstream (VUGL) (35.568%) and Ghana National Petroleum Corporation (GNPC) (20%) as its partners.

Vitol is the world's largest independent energy trader and Eni is a leading integrated oil and gas company with a strong track record as an operator for, among other projects, African deep-water developments. GNPC plays a central role in Ghana's energy sector as it enters into petroleum agreements on behalf of the Ghanaian government with respect to upstream oil and gas blocks, and acts as the gas aggregator with respect to natural gas supplies.

The OCTP block is a large deep-water development located approximately 60 kilometres offshore of the western region of Ghana. The development involves a floating production, storage and offloading vessel (FPSO), time chartered from Yinson Production, which will produce and process crude oil for export to international markets and natural gas for sale in Ghana.

The construction of the FPSO was financed separately to this financing, as this financing is limited to Vitol's working interest in the project and will be applied towards the project costs of well drilling, completion and flexible flow lines to the FPSO. Such an arrangement is not uncommon for projects of this nature.

The gas will be transported onshore from the FPSO via a subsea pipeline to an onshore receiving facility, after which it will be injected into the Ghanaian national gas grid via the existing West Corridor Gas Infrastructure Development Project pipeline. The gas is to be purchased by GNPC pursuant to a gas sales agreement (GSA) that provides for a long term take-or-pay arrangement with GNPC for a minimum volume of gas at a fixed price. GNPC will then on-sell OCTP gas to the downstream electricity generation sector.

Financing structure

This unique, first of a kind, financing combines aspects of a standard project financing – including long-term tenors based on take-or-pay offtake contracts, reserve accounts and the grant of security over the borrower's rights – with aspects of a reserve-based lending model such as annual borrowing base redeterminations.

In addition to annual redeterminations of the borrowing base amount, the financing structure incorporates interim redeterminations that are triggered by the occurrence of specific events. If VUGL's outstanding debt were to exceed the borrowing base following any such redetermination, there would then be a distribution block and a mandatory debt prepayment until such time that the outstanding debt had been reduced to the redetermined borrowing base amount.

In addition to combining project finance and reserve-based lending features, the terms of the financing also needed to reflect that VUGL was not the operator of the project, and therefore consequently had limited control in relation to the concession since a number of the key project contracts were entered into with the operator, Eni Ghana, a subsidiary of Eni SpA, and not with VUGL.

As shown in Figure 1, as VUGL is not a counterparty to a number of the key project contracts it therefore does not generally have direct rights under those contracts over which its lenders could take effective security. VUGL's lenders are therefore reliant on the controls and protections afforded to VUGL under the joint operating agreement between VUGL and Eni Ghana, and various protections afforded to VUGL's lenders under the terms of the financing were crafted to reflect this structure.

As is conventional in the oil and gas sector, the construction arrangements adopt a multi-contract approach such that no single contractor is responsible for the timely delivery of the project. In order to mitigate the risks arising out of this multi-contract construction procurement strategy, Vitol provided VUGL's lenders with a debt service undertaking (DSU) that will be partially released following the project's achievement of a minimum level of oil production, and fully released once a series of completion tests with respect to oil and gas production and sales have been satisfied. The provision of the DSU helps to insulate VUGL's lenders from the risk of cost overruns and commissioning delays.

Following the release of the DSU, VUGL's lenders will be taking commodity price risk on

the oil price as oil is traded on international markets, volume risk only relates to the performance of the oil production wells. However, production and price risks to the lenders are partially mitigated by the redetermination mechanisms built-in to the financing whereby any re-calculation of the borrowing base would take into account any anticipated change in revenues due to lower oil and gas production and/or lower oil prices.

The key OCTP gas offtake risk is related to the downstream power sector's ability to pay GNPC for the gas it purchases from the proceeds of power sales. In particular, Electricity Company of Ghana (ECG)'s financial performance, which is primarily derived from its collection rates, will impact the entire energy supply chain in Ghana.

In order to mitigate GNPC payment risk under the GSA, a comprehensive and elaborate payment security support mechanism was negotiated by various parties. This support mechanism requires GNPC to allocate its cash receipts in a predetermined way, and includes a US\$500m 17-year standby letter of credit provided by Standard Chartered Bank and HSBC, which is in turn guaranteed by the IDA. VUGL's lenders also benefited from an assignment of VUGL's rights under this IDA security support mechanism.

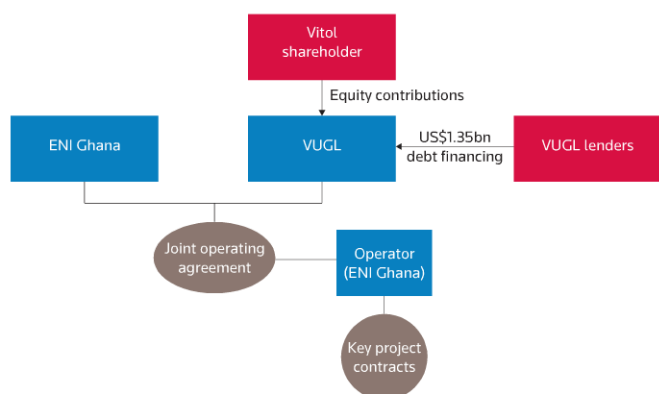
In the context of the OCTP gas offtake risk, the World Bank Group's broader support for the reform of Ghana's power sector will be key as part of the overall risk mitigation, supplementing the US\$500m IDA-backed letter of credit under the OCTP GSA payment security structure. Indeed, VUGL's lenders took significant comfort from the participation of IDA, IFC and MIGA in the OCTP financing, as well as the World Bank's wider commitment to Ghana's energy sector.

Driving Ghana growth

Ghana, with a population of over 27m, has suffered a number of macroeconomic shocks in recent years. A combination of water shortages for hydropower, erratic gas supplies from external sources, and delays in the development of domestic gas resources and new power plants have led to frequent power outages that have seriously affected its economic development. Developing domestic natural gas resources in Ghana is therefore a top priority for the Ghanaian government so as to enable it to obtain an affordable and secure supply of natural gas as fuel for its thermal power generation assets.

The gas produced by the OCTP project will, in addition to improving the reliability of domestic power generation, play a large part in effecting the substitution of cleaner and more affordable gas for the expensive and higher emission liquid fuels currently used as the predominant fuel supply for Ghana's thermal power generation assets.

FIGURE 1 - VITOL OCTP FINANCING STRUCTURE



Indeed, Ghana has now seen the construction and integration of every piece of infrastructure in the gas-to-power supply chain and the OCTP project forms part of a broad programme of support by the World Bank Group and the US Government through the Millennium Challenge Corporation (MCC) for Ghana. This support includes the provision of technical assistance for its energy sector reforms, assistance with the drafting of a new renewable energy law, the provision of off-grid energy services for remote communities, and support for private sector participation in the distribution utility, ECG, in order to improve its operations.

The MCC will invest up to US\$498.2m over a five-year period commencing in September 2016 to transform Ghana's power sector and stimulate private investment; this programme of investment is known as the "Ghana Power Compact". The compact will play a critical role in Power Africa, the US Government's initiative to double access to power on the African continent. To-date, the Ghana Power Compact is the largest US Government transaction under Power Africa.

Ghana's electricity has traditionally been generated predominantly by the 1,020MW Akosombo Hydroelectric Project. However, in recent years hydropower electricity generation has been complemented by thermal power generation capacity in order to meet Ghana's rapidly growing demand for power. At present, Ghana has no coal-fired or nuclear power plants, and the majority of its current

thermal power generation assets have dual fuel capacity (meaning that they can run on oil or gas).

Ghana currently suffers from a lack of access to reasonably priced natural gas, mainly due to interruptions to gas imported from neighbouring Nigeria through the West Africa Gas Pipeline (WAGP) and the current shortage of gas from Ghana's existing upstream oil and gas projects.

Given the historic unreliability of the WAGP gas delivery, the OCTP project is therefore seen by many as being crucial to the development of Ghana's power sector as it is expected that the gas from the project will fuel up to 1,000MW of domestic power generation for more than 15 years, which is approximately 40% of Ghana's currently installed thermal power generation capacity and 25% of its total estimated thermal power generation capacity in 2020. Taking into consideration energy security, net economic cost and price volatility, natural gas is now Ghana's choice of primary fuel for its domestic power generation.

- Milbank Tweed Hadley & McCloy LLP acted as counsel to the lenders and Portland Advisers acted as financial adviser to UK Export Finance. Standard Chartered Bank and Herbert Smith Freehills LLP acted as counsel to Vitol and Standard Chartered Bank acted as financial adviser to Vitol. The authors would like to express their gratitude to Geoff Knox and Frauke Bialokoz of Portland Advisers for their review of, and comments on, this article. ■



The Vinson Production FPSO arriving at the OCTP field