

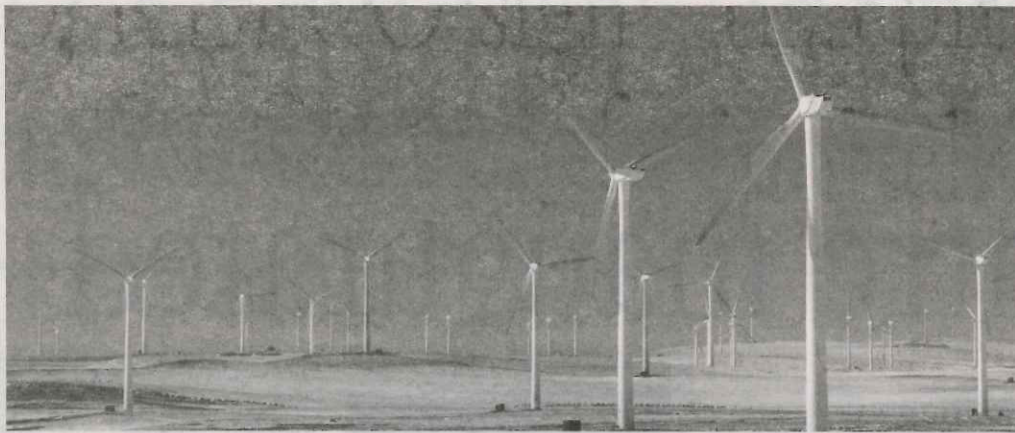


Wind power generation; experts visit South Africa

As part of efforts for the country to consider wind power generation, a 15-member delegation of engineers energy experts from the country have visited Lekela, a renewable power generation company in South Africa.

The visit by the 15 engineers and managers from the Ghana Grid Company (GRIDCo), and the Electricity Company of Ghana (ECG), was designed to share best practice on connecting renewable sources of energy like wind power to a country's national grid.

The Ghanaian delegation visited Lekela's Loeriesfontein and Khobab wind farms. Each site has an installed capacity of 140 MW and both were recently connected to South Africa's Eskom grid, providing a parallel



for the Ghanaian experts to research.

The delegation attended 'Grid Code testing' for each site. This is undertaken before a wind farm can be connected to a country's national energy grid. For commercial operations a wind farm must be tested to certify that it complies with both performance requirements and

the grid code.

The Vice President of Business Development for Sub-Saharan Africa at Lekela, Mr Mikael Schoultz, said, "one of the great advantages of wind power is the short time it takes from construction starting to energy being produced."

"The more knowledge we can share between African

nations on processes like this, the quicker we can work together to deliver clean, sustainable power to homes and businesses. Adding 225 MW of clean wind energy to Ghana's existing hydro power plants will help deliver the reliable electricity supply the country will benefit from."

The Director of

Engineering at GRIDCo, Mr Samuel F Kwofie, said, "this proved a highly valuable trip. We are looking forward to the construction, integration and operation of the Ayitepa wind project, beginning next year. As the first utility scale wind farm in Ghana, it will add considerable energy to Ghana's grid and lay the groundwork to build more renewable energy sources in the country."

"Our visit to the Loeriesfontein wind farm in South Africa has deepened our understanding of wind technology. It has also made clear the technical benefits wind energy brings to the grid, particularly in voltage stability," he added.

The General Manager for Regulatory and Governmental Affairs of ECG, Mr Ebenezer Baiden, said "the visit and training sessions were an eye

opener to the Ghanaian Delegation in three ways: First, it provided a clear understanding of the prerequisites for commissioning a wind farm, processes required and the criteria for acceptance of test results."

He said the visit also afforded the team the opportunity to know how wind power projects could support grid balancing and dispatch.

The South African based company intends to build and operate Ghana's first utility scale wind project, the 225 MW wind farm at Ayitepa.

Financial close and construction are expected to start in 2018 and the first electricity will be ready to flow to the grid nine months later.

As a result of the short construction phase, preparing the grid connection has quickly become a priority.

Coal is significance to global electricity generation

By Desmond DAVIES

Despite legitimate concerns about pollution and greenhouse gas emissions, coal will continue to be significant in the future, the International Energy Agency (IEA) has said.

It urges "greater efforts...by government and industry to embrace less polluting and more efficient technologies to ensure that coal becomes a much cleaner source of energy in the decades to come".

According to the IEA's recent World Energy Outlook 2017, in the last 16 years, nearly all those who gained access to electricity worldwide did so through new grid connections, mostly from fossil fuels - 45 per cent of which came from coal.

Such electricity generation was "playing a crucial role in industries such as iron and steel".

In Nigeria, where the government is pushing to develop a full-fledged steel industry, it has been decided that 30 per cent of the country's electricity should come from coal.

But the government has been careful in handing out licences for mining coal for power generation.

"One of the processes for the issuance is that applicants must have power generating licence before they can be granted licences for coal mining in the country," the Minister of Mines and Steel Development, Dr. Kayode Fayemi, said recently.

"We have dictated that coal deposits in the country would only be awarded for power and licences for mining of coal deposits would only be awarded to those who want to generate electricity.

"Since the inception of

this administration, no licence for coal has been awarded which is not for the purpose of power generation.

"So, if you acquire a licence for mining coal you have to also have that for power," Dr. Fayemi added.

According to Foraminifera Market Research, a Lagos-based market research company, Nigeria's coal is one of the most bituminous in the world owing to its low sulphur and ash content and therefore the most environmental friendly.

This would fit in with the campaign for cleaner energy sources, the company said, adding that nearly three billion tonnes of indicated reserves had been identified in 17 coalfields, with over 600 million tonnes of proven reserves in

Nigeria.

The country currently generates about 3,000 megawatts of electricity and it has been estimated that it would require at least 40,000 megawatts to support its moves to be among the top 20 economies in the world by 2020.

Experts estimate that a coal powered plant in Nigeria would cost one-sixth of the amount of gas and since coal is also used to power railways in the country, Foraminifera says "coal mining and processing is highly needed".

Dr. Fayemi is all for using coal power to resolve Nigeria's erratic electricity supply.

Addressing mining communities and companies in Enugu recently, he said that the government would partner with the African Development Bank

(AfDB) to fund coal projects in the country.

"While the \$150 million World Bank loan recently approved for the sector may not cover coal projects, arrangements have been reached with the AfDB to fund coal projects in order for the country to take advantage of its huge coal reserves to solve its power problems," he said.

Dr. Fayemi said that the AfDB funding would be made available to investors who could establish coal power plants that generated as much as 500 megawatts.

"We have an existential need for power in this country, and we have to do something about it and we can get power from coal which we have in abundance," he explained.

Dr. Fayemi said he wanted

the private sector to set up coal power plants to provide electricity for their industries, noting that the Dangote Group, the country's largest cement producer, was one such business.

The IEA report was welcomed by the World Coal Association (WCA), which is holding a forum in London next week on the link between coal and the Sustainable Development Goals (SDGs).

WCA Chief Executive Benjamin Sporton said: "It's in powered up grids in developing Asia and Africa where governments have identified a role for low emissions coal technology to meet their integrated energy access and climate objectives.

"Twenty-four countries including major economies

such as India, Nigeria and throughout Southeast Asia have identified low emissions coal technologies as critical to powering their economic development while reducing emissions in their Paris Agreement pledges."

Mr Sporton added: "This highlights the need for investment in a range of technologies, including coal.

"There is a perception that global energy access and climate objectives can be achieved without coal, a claim this report contradicts.

"That is why the World Coal Association continues to call for international support from development banks and other institutions for low emission coal technologies to be deployed where they are needed."

'Regularised and standardised mining sector could lead to job creation'

continued on back page

Ghana Chamber of Mines are putting extremely high premium on the mining sector. We want the mining sector to yield revenue much more than it is doing and to be a sector which creates jobs and a sector which is world class."

He indicated that the GSA stood ready to facilitate the work of the Chamber of Mines by providing the industry with the necessary standards in line with best global practices.

"The mining sector is big business. We know that business thrives in an atmosphere of trust. And the whole point of standardisation is to build trust. If you are buying

precious minerals, especially gold you want to ensure that you get your monies worth," he said.

To the international community this is going to serve notice that Ghana is opened for higher level of business in the gold industry. We are happy to say that we've already started the process of beginning to hallmark precious minerals so as you buy them you know that these have been certified by GSA and that adds huge value," Prof. Dodoo stated.

Signing on behalf of the Ghana Chamber of Mines, its Chief Executive Officer, Mr. Sulemanu Koney said the Chamber is committed to creating value for the country and one of the areas to do this is to work with other partners

to deepen the integration of the mining industry into the wider economy.

He said the more value the country was able to retain would depend on the linkage between the mining industry and the rest of the economy, adding that the many opportunities within the mining value chain could be harnessed only if the requisite standards are in place.

"To promote local content naturally we want to ensure that the standards of the inputs which go into the mining industry are first class because we are talking about first class industry. And we can think of no better ally than the Ghana Standards Authority because they are tasked by law to ensure

standards of various activities within the country," Mr Koney said.

"So we are quite happy to collaborate with the GSA to ensure that the whole agenda of local content and the need for us to deepen the integration of the mining industry into the rest of the economy is not seen as a fluke because we have milestones to guide us and we believe that with the effort we will be able to improve manufacturing," he added.

Mr Koney said the mining industry should be able to engender growth within other sectors of the economy, especially manufacturing but this could only be done if there are the requisite standards to feed into a world-class industry

like the mining industry.

He expressed the hope that the journey would be mutually beneficial not just for Ghana Standards Authority or the Chamber of Mines but the whole economy, adding that the basic steps initiated would provide the fillip for our industries to actually veer into other economic opportunities within the wider sub-region.

"We believe that we are taking the very vital and important steps for us to actually grow our economy but not only the extractives, particularly mining but just to make sure that we are able to pull manufacturing and other sectors that have anything to do with mining along," he said.