



OWENA EXPLORATION

A leading bitumen mining, refining and marketing company
in sub-sahara africa



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**“Nigeria has vast minerals
that are still untapped.
Through responsible mining,
we contribute to growing the
economy from the extraction
of these resources.”**

Executive Summary



Nigeria is greatly endowed with large deposits of natural bitumen at Agbanu, Ondo State. The country was reported to have a proven reserve of about 42.47 billion tones of bitumen, a quantity which is estimated to be the second largest in the world, but yet to be explored for economic purposes. Nigeria is currently working toward full development of bitumen exploration so as to meet not just the requirement within the country, but to make it a foreign exchange channel for the country. Nigeria's executive council has endorsed and opened its doors to private investors who are looking for opportunity in the local production of bitumen in the country in line with the presidents policy of promoting 'made-in-Nigeria' goods.

Through responsible mining, we contribute to growing the economy through responsible extraction of these resources. Our operations provide various benefits to the Nigerian economy in terms of employment, affordable raw materials, road infrastructure, improved standards of living in the mining communities through CSR and much more.

Owena's business model and service proposition are founded on four simple and related core values – integrity, efficiency, reliability and innovation.

With our operations focused on mining, refining and marketing of bitumen products, our orientation to our customers is absolutely tailored around their needs as we recognize and respect the fact that each entity has a special approach to meeting their organizational targets

We learn tremendously from our customers, suppliers, regulators and other stakeholders who have taken note of our commitment to making a difference through honest and ethical business practice.

At Owena we believe that our people are our business – the company's value derives ultimately from them. It is on their expertise, innovation, drive and relationships that we depend for the development and growth of our business.





About Us

Owena Exploration is a young, vibrant and diverse company, making strides in the area of bitumen exploration. Due to the existing economic advantages, local governmental support and partners across the world, the company is strategically positioned to explore, refine and market bitumen affordably to partners and customers across the length and breadth of sub-sahara africa.

Our Mission

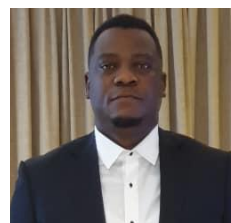
Owena Exploration Company seeks to contribute to improving economic standards through participation in road development and supplying industrial need for bitumen products. Owena Exploration seeks to accomplish this through exploration, refining and marketing of quality bitumen while serving our customers and society responsibly and profitably in an original way .

Our Vision

Owena Exploration will be amongst the top 10 in the exploration, refining and trading of bitumen products in the next 8 years via the acquisition of state of the art technology, highly skilled and committed personnel and a focus on contributing to local economic improvement & sustainability



Executives



Director
Sanusi Richmond
Funsho



Director
Alhaji Musa
Ibrahim Mantu



Bitumen in Nigeria

In Nigeria, bitumen occurs naturally at few locations, and the deposits are found typically on surface and sub-surface. This implies that they occur on the uppermost layer of the earth, as well as in the strata below the earth's surface. For this reason, miners apply both surface and subsurface mining to extract bitumen from its ores in Nigeria.

Bitumen is found in massive quantities mainly in the south-western part of Nigeria, specifically in tar sand of Ilubirin, Loda and Agbabu in Ondo. Other places are Lagos, Ogun, and central southern region, Edo state. Nigeria has bitumen deposits extending around 120km approximately, thus ranking the second largest in world's bitumen deposits.

In Ondo state, the estimate of the amount of bitumen available for extraction (i.e. the probable reserve) is 16 billion barrels. Bitumen deposits which are found naturally in Ondo State have two basic concentrated forms, which are: seepages and outcrops of bitumen - tar sands that yield bitumen and require further extraction processes.

Then the second form is the lower viscous bitumen; these are the seepages mainly gotten from wells without obvious connection with sand. Generally, the total estimated reserve of bitumen in Nigeria is about 42.74 billion metric tonnes, which to a large extent remains to be exploited for years.

The entire probable reserve of bitumen is scattered along these major states of Nigeria which include; Ondo, Ogun, Delta, Bayelsa and Rivers. In the global estimation of oil and bitumen reserve, Nigeria is ranked no.6 with approximately 38 billion barrels in place.





“ Nigeria is ranked as one of the first five countries in the world endowed with largest deposit of natural bitumen





Products

Oxidized Bitumen

Oxidized bitumen is mainly used for industrial purposes such as roof installation, flooring, industrial mastics, pipe coating, paints etc. Oxidized bitumen is categorized based on softening points and penetration rate. For example oxidized bitumen 85/40 is a type of bitumen which softening point in oxidized bitumen is much higher than in regular bitumen causing lower thermal sensitivity.

Penetration Grades

In the past the penetration index was defined based on the assumption that thermal sensitivity in the bitumen used in road construction was zero. Bitumen is thermoplastic material meaning that it becomes pliable or moldable above a specific temperature and returns to a solid state upon cooling. Penetration rate bitumen is graded based on penetration and softening point tests.

Viscosity Grade

Bitumen is graded based on absolute viscosity at 60 degrees Celsius or kinematic viscosity at 135 degrees Celsius. The SI physical unit of dynamic viscosity is Poise and kinematic viscosity is expressed in Centi Stokes

Oratech

A complete IT services and solution provider, Oratech helps Owena transform technology, operations and service delivery to meet business challenges. Through this partnership we are deploying state of the art technology solutions, to manage our operations refining and marketing operations as an organization. With this enhancement in our operations, we are able to provide safer working conditions through improved communication, automation, more sophisticated transportation, and enhanced emergency response measures

Pasagard

Pasagard Oil Company, our technical partners, provide professional technical consultancy services to the mining of bitumen, encompassing multi-disciplinary technical studies for exploration through to development, operation and closure. Pasagard was established in 2003 with the aim of operating and operating six bitumen refineries in Tehran, Arak Shazand, Abadan, Tabriz, Shiraz and Bandar-Abbas refineries with annual production capacity of over 4 million tons per year. Due to the existing technical and economic advantages, the company currently holds more than half of its domestic market share. It also owns a large share of Iran's bitumen export market with two export terminals and storage capacity of over 160,000 tons. As our technical partners, Pasagard would provide

Our Partners



Bitumen Export



Price of Bitumen

The unit price for bitumen commodity was \$265 per ton around 2016, which is the FOB, "Free On Board", respective cost involved in the delivery for 185 kg drum and 150 kg drum of bitumen. Recently, the price of bitumen commodity ranges between \$200.00-\$300.00 US dollars. Currently, the price of bitumen, particularly the emulsion type in Nigeria market is N175 per liter.

While 100% pure petroleum bitumen with 180 /150kg of weight, packaged in standard new steel drums costs N210, 489.

High Bitumen Import Countries

The countries listed below are majorly known for the importation of natural bitumen and asphalt.

- Iran
- France
- China
- Bahrain
- Oman





To meet the rising requirements for durability of the road surfaces, we contribute to developing alternative methods of improving bitumen to meet this need

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