



JOSEPH AYO BABALOLA UNIVERSITY LAW JOURNAL

VOL. 6 NO. 1 (2018)

CONTRIBUTORS AND ARTICLES

EUTHANASIA: AN APPRAISAL OF THE RIGHT TO DIE
O. B. AKINOLA, Ph.D & OLOREDE, G. O. 1-17

*AN EXAMINATION OF THE POWER OF THE
LEGISLATURE TO SUSPEND ITS MEMBER FOR
MISCONDUCT IN NIGERIA, AMERICA AND THE
COMMONWEALTH* 18-37
**OLUFEMI ABIFARIN Ph.D, J.O. OLATOKE SAN Ph.D,
& STEVE ROSS OMISORE Ph.D,**

*FINANCING RENEWABLE ENERGY PROJECTS IN
NIGERIA: OPTIONS AND ALTERNATIVES* 38-57
**J.O. OLATOKE SAN, Ph.D, OLUFEMI ABIFARIN Ph.D,
& N.O.A. IJAIYA Ph.D**

*"NAIJA FEMINISM": A TYPOLOGY OF AFRICAN
FEMINISM* 58-73
GANIAT MOBOLAJI OLATOKUN Ph.D

*ENHANCING INTERNAL PARTY DEMOCRACY AND
TRANSPARENCY: A CHALLENGE TO AFRICAN
CONSTITUTIONALISM* 74-99
ABDULFATAI O. SAMBO Ph.D

*LIFTING THE CORPORATE VEIL BY THE COURT:
NIGERIA AND ENGLAND IN FOCUS* 100-126
**AHMED. A. MUHAMMED-MIKAAEEL, LL.M &
FATIMAH. F. ABDULRAZAQ (MRS.) Ph.D**

*AN OVERVIEW OF THE RELEVANCE OF ULTRA VIRES
DOCTRINE UNDER THE NIGERIA COMPANY LAW* 127-135
ZUHAIR JIBRIL, PhD & JUSTICE J.T.A. FISHIM, PhD

*THE EXTENT OF THE POWERS OF NATIONAL JUDICIAL
COUNCIL IN THE APPOINTMENT OF AND EXERCISE OF
DISCIPLINARY CONTROL OVER A STATE CHIEF JUDGE
THE RIVERS STATE OF NIGERIA 2014 CONSTITUTIONAL
CRISIS AS A CASE STUDY* 136-151
ABAYOMI B. SHOGUNLE

**JOSEPH AYO BABALOLA UNIVERSITY
LAW JOURNAL**

This Journal may be cited as

JABU-L.J Vol. 6 NO. 1, 2018

**PUBLICATION OF THE COLLEGE OF LAW
JOSEPH AYO BABALOLA UNIVERSITY
(Established by Christ Apostolic Church World
Wide
and the First Entrepreneurial University in
Nigeria)**

**IKEJI-ARAKEJI,
OSUN STATE, NIGERIA**

ISSN 2449-1853

EDITORIAL BOARD

Prof. Olufemi Abifarin Ph.D

Editor in Chief

Professor Joke Oyewumi

Editor

EDITORIAL BOARD MEMBERS

Prof. Adamu Ibrahim

Prof. Gbadamosi Olaide Abass

Dr. Philip O. Odiase

Dr. O.A. Ogunyemi

EDITORIAL ADVISORY BOARD

Professor Olusoga Olopade

Professor A.O. Muzan

Professor Dominic Asada

Professor A.O. Alubo

Professor D.F. Tom

Professor Olubayo Oluduro

Professor A.A. Borokini

FINANCING RENEWABLE ENERGY PROJECTS IN NIGERIA: OPTIONS AND ALTERNATIVES

By:

J.O. OLATOKE PH.D, FACULTY OF LAW UNILORIN,
OLUFEMI ABIFARIN PH.D, FACULTY OF LAW EDO UNIVERSITY
IYAMHO

&

N.O.A. IJAIYA PH.D FACULTY OF LAW UNILORIN

Abstract

For more than a century, the world's main sources of energy have been fossil fuels. Hydro electricity and nuclear energy together contribute some 9% of present world annual energy consumption and the biofuels in the form of firewood, or other combustible plants or animal materials are thought to provide about a tenth of the total.

However, the finite nature of fossil fuel energy resources has raised some questions about its long term sustainability. The intricate interplay of demand, but there is also concern over the impact on the environment of burning fossil fuels. It is for this reasons that serious consideration is being given to alternatives to these fossil fuels in the form of renewable energy. A sustainable renewable energy policy and projects will definitely involve cost which only budgetary allocations may not be able to meet, therefore there is the need to look at other financing options like Sukuk. We contend in this paper that Nigeria as a member of organization of Islamic countries can utilize Sukuk to raise fund in accordance with Islamic principles which forbid interest to finance renewable energy in Nigeria. This will minimize cost and ensure quality of the projects.

Man's Natural Resources

From where does man derive his energy? Man has been able to harness the energy of plants and animals, water, fire, wind, steam, soil and its minerals.¹⁴⁶

These constitute his natural resources. Natural resources can be subdivided into renewable and non-renewable resources.

Renewable Resources

The sun, wind, water, forest are categorized as renewable resources because they are not dependent on reserves as in fossil fuel. Their energy sources seem virtually inexhaustible.

The sun - the star of our solar system - provides light and heat on which life on earth depends. Without it, there would always be night and we could all die from cold. The inoyement of the "earth relative td the sun gives us the seasons. The gravitational pulls of the sun arid the nioon oii the earth result in the tides. Solar energy has been used In many ways throughout human history. It can provide the world far more energy than fossil fuel and nuclear power put together. The simplification of the technology needed to extract and star; solar energy fogregular domestic¹⁴⁷ use requires 'fine-tuning. Like all stars, however, the sun will not remain hot and bright forever. It is believed that in billions of years it will die out.

Wind is another natural force recognized by man from the earliest times as a source of energy. The first ships were propelled by the wind. It was the sources of power for wind mills. It has been used to turn wheels of water pumps and to generate and stem electricity in accumulators. The problem with wind energy is that its strength is inconsistent and unreliable.

Water is another important renewable resource. It is the life force of all growing plants and animals. Nothing lives without it. Water is a great source of power. The water-mill is one of m'an s earliest successful attempts to harness nature's energy. The falling and driving power of water operates hydro-electric power stations. Huge dams are constructed to conserve this water power and release it through special outlets which turn turbines and so work electric generators.¹⁴⁸

Forest resources are also renewable. In many cultures they constitute the foundation for man's economic activities. Forest resources encompass not only the resources obtained from forests in the strict biological sense of the word; they include resources from all wild-land not cultivated, together with the waters flowing through them. Some useful products from the forest include fuel, wood, charcoal, fibres, poles, timbers, fruits and nuts, bark, for-age, edible leaves,

¹⁴⁶ Anon. (1975). Coal - In Man and Materials, edited by Ian Ridpath. Macmillan Education Publishers: London, pp. 1-33.

¹⁴⁷ Anon. (1975). Minerals - In Man and Materials, edited by Ian Ridpath. Macmillan Education Publishers: London, pp. 1-33.
¹⁴⁸ Hiley, K. (1979). Forces of Nature, Science and Innovations in Young Children's Encyclopedia. Hamlyn Publishers.

wildlife, chemicals such as alkaloids, dyes, gums, resins, latex, essential oils and pharmaceuticals.

The protective and regulatory functions of forests make them also a Vital resource. The multi-storeyed structure of a typical forest is more efficient in intercepting rain-drops than less complex plant covers. The forest therefore, more efficiently reduces run-off, floods and soil erosion. It promotes deep percolation of rain water; regulating quality and timing of release of stream-flow. The forest also absorbs, stores and releases carbondioxide¹⁴⁹, oxygen and water thus regulating their quantities in the environment and maintaining their quantities in the environment and maintaining their global balance. The forest intercepts, absorbs and transforms solar radiation during photosynthesis. It decreases wind velocity and thus helps to conserve humidity. The forest is used as shelter-belts and wind-breaks. It provides shelter for many plants and animals. In cultures where fertilizers are not traditionally used, shifting cultivation relies on the forest regeneration for rejuvenating the soil. Many nutrient conserving mechanisms involved in forest soil resuscitation are little understood.¹⁵⁰

Non-Renewable Resources

The non-renewable resources occur mainly as mineral or fossil fuel resources. Although their deposits may be enormous, but they are not limitless. They may be found in the ground, sea, or beneath the sea bottom.

Minerals are naturally occurring chemicals eg. Aluminum, Copper, Gold, Uranium that make up rock and stone. They occur as ore or in a pure form. About 1,500 different minerals are known¹⁵¹. Minerals are components of many household goods such as talcum powder, graphite in "lead" pencil, salt in food. Other domestic appearances of minerals show in salt as preservatives; "iodine" or epsom salt in medicine cabinets; borax in bleaches, soaps and detergents; antimony and sulphur in the head and phosphorus on the striking surface of the safety matches. Minerals also feature in jewelry and as time keeper when we contemplate the quartz.

Sand, limestone, rock, marble, chalk, dolomite, gypsum, and lime in cement are used in building and as structural materials. Clay and especially the form kaolin are useful in ceramics. Rock phosphates, potash and mineral sodium nitrate are compounded into fertilizers. Corundum and magnetite are used in abrasive papers (sand paper). Asbestos, Mica and talc (soapstone) are either heat or acid

¹⁴⁹Harley, J. (1978), The Objectives of Conservation, Unasylva Vol. 30: 25

¹⁵⁰F.A.O. (1979), Forestry Development In Nigeria: Project Findings and Recommendations: (Rome UNDP/FAO) 1979

¹⁵¹Anon. (1982), Ecological Effects of Increasing Human Activities On Tropical and Sub-Regional Forest Ecosystems. Reports on the UNESCO.

resistant and used as good electrical insulators. Many minerals like sulphur and bauxite are essential in industry.¹⁵²

Perhaps the most important commodity in the world today is oil. Petroleum runs through the veins of modern civilization just as blood is needed by the body. Products from oil have transformed our way of life. They include synthetic¹⁵³ fibres and plastics, detergents and synthetic rubber, explosive TNT, insecticides, weed-killers and fertilizers, paints and anti-freeze solutions, ink, pharmaceuticals and cosmetics, waxes for candles and 'polishes'.

Oil is a lubricant. It protects metals from dirt and from the corroding effect of air and water. Bitumen, pitch, tar, asphalt are used for road surface, in waterproofing roofs and for sealing dry batteries. Food happens to be a remarkable new use of oil. Protein needed by man and livestock is produced by micro-organisms living on oil. Toxicity test shows that such protein is safe and pure.¹⁵⁴

The most familiar use of oil is perhaps as a fuel. Oil and its natural gas provide more than half the world's energy. Trucks, modern trains, most ships and heavy machinery run on and large space rockets. Natural gas liquified under pressure finds use as cigarette lighters and for domestic cooking.¹⁵⁵

Energy Reserves, Production and Consumption

a. Fuel Wood:

The utility posture adopted in presenting the world's natural resources under-scores the pressure they undergo. For example, the estimated total area of natural forests of Africa was put at 645.43 million ha in 1975. By the year 2000, these forests of the continent are estimated to shrink to 188.2 million ha. Woody vegetation in all the sub-regions of Africa is threatened with extinction through over exploitation, mismanagement and conversion to agriculture. Wasteful utilization and biodeterioration of products harvested from forest contribute to the rising consumption. Demand of wood products results from rising population and attempts to improve material standards of living. More importantly, extensive forest areas may be destroyed in the process of obtaining a few commercially desirable forest species.¹⁵⁶ The rate of forest disappearance in Nigeria estimated at 250 km² per year in the

¹⁵²Anon. (1975), Oil-In Man and Materials, edited Ian Ridpath, Macmillan Education Publishers: London pp. 1-33

¹⁵³MAB/UNEP regional training Seminar on impact of human activities on the Rain Forest Ecosystem. 15-27 March 1982. University of Ibadan, Nigeria

¹⁵⁴E.O. PRO. (1960), Problems of Forest Conservation in Africa. (Addis Ababa, United National Economic Commission for Africa No. E/AF/76/025)

¹⁵⁵I. M.K. (1979), Exploiting Fossil Fuels in Industry and Technology. Published by the Reader's Digest Association, London pp. 968

¹⁵⁶I. M.K. (1979), The Endless Search For Power in industry and Technology. Published by the Reader's Digest Association London, pp. 972-973.

mid 1970s is expected to rise to 1290 km² per year by the end of this century. Surprisingly, more than 90 percent of wood in Nigeria consumed is for fuel wood. Fuel wood, in spite of other energy sources for cooking and domestic heating will remain the single most important forest product in the foreseeable future.

b. Oil and Natural Gas.

The Middle East has the largest reserves of oil and natural gas in the world. A flourishing trade in crude oil exists between oil producing and oil consuming nations. Saudi Arabia, Kuwait, Iran, former USSR, Iraq, United States of America, Libya, United Arab Emirates, Nigeria, China, Venezuela, Indonesia, United Kingdom, Algeria, Canada, Ecuador, Qatar, Norway, Oman, Pakistan, Australia, Brunei contain some of the largest world reserves. High energy consumption seems to go hand in hand with national wealth. The United States of America, the richest country in the world, has about 6% of the world population but consumes about a third of the world's total energy production. On the average, the richer nations consume about 20 times as much energy as the poorer countries. Until the drastic historic change on the crude oil prices in 1973,¹⁵⁷ consumption had historically doubled every ten years. Since then, attitudes to energy consumption in industrialized countries have substantially changed. Emphasis is now being placed on conservation,

c. Coal:

The world's major reserves of Coal occur in former USSR, United States of America, China, India, West Germany, South Africa, Canada, Poland, Australia, Japan, United Kingdom, former Czechoslovakia and Yugoslavia, Germany, France, Spain, Belgium, South Korea and Bulgaria. Coal has two main advantages over fossil fuels. First, the reserves are much greater and secondly, the largest deposits occur in countries with the highest energy consumption. In the past four decades, coal's share of the world's energy market has consistently dropped yielding its premier position to oil. Economic and environmental considerations make exploitation of certain coal reserves unacceptable. Strip mining and open casts, for example, result in extensive damage of the environment.¹⁵⁸

d. Nuclear Power

The United States of America has the largest known reserves of Uranium. Other countries with large deposits include Canada, South Africa, Sweden, Australia, France, Niger, Gabon, Argentina, Spain, Central

African Republic, Portugal, Japan, Yugoslavia and Denmark. Large reserves may occur in other countries than those listed. The principal nuclear programmes of the world are located in United States of America, United Kingdom, France, Canada, Germany, Japan, Spain, Sweden, Switzerland, Italy and India.¹⁵⁹

Nuclear power's contribution to the world's energy supplies is about 2 percent. Although nuclear power is utilized in electrical power, the greater danger of nuclear power is found when directed towards weaponry. For this reason, a strong attempt at the monopoly of nuclear technology in armament is pioneered by the world powers. Disposal of radioactive waste is another complication leading to arguments against use of nuclear fuel.¹⁶⁰

What to do

Modern civilization is heavily dependent on the world's energy re-sources renewable or non-renewable. For the renewable resources of the Sun, Water and Wind, research into more effective management strategies is advocated. With respect to the diminution of forest resources only radical changes in the present management practices accompanied by aggressive afforestation programmes are required - if wooded ecosystems adequate to supply the needs of now and the future are to exist.

End of the supply of nuclear and fossil fuel may mean the end of the world's civilization as we know it today. Unfortunately, the earth contains both energy sources in finite amounts. Their sudden disappearance would reduce the world's carrying capacity for man unless some alternative sources of energy are developed. For example, alcohol had been developed in Brazil from cassava a renewable resource to fuel cars. Such cars produce, less pollution than fossil fuel. In the long run, however, a reduction in the consumption pattern and a conservation of energy, no matter whether it is from renewable or non-renewable sources can guarantee the world's energy resources lasting long.¹⁶¹

IMPERATIVE OF RENEWABLE ENERGY IN NIGERIA

Renewable Energy in Nigeria

Renewable energy utilization in Nigeria will contribute to meeting energy security and needs, mitigation of climate change and the promotion of economic development. According to the World Bank, "the growth in demand in the Nigerian power sector is expected to continue to increase by around 10 per cent per annum in the medium term, reaching 10,000 MW Megawatt (medium growth

¹⁵⁷ Ibid., 976-977

¹⁵⁸ Oja—Adam B. A. and DE. Iyamabo (1977), Conservation of Natural Vegetation in Nigeria. Environmental Conservation, Vol 4:217. Richardson, P. W. (1977), Tropical Forests and Wood Lands: An Overview, Agro-Ecosystems, Vol. 3, pp. 225. Sibey, C. Bruce, (1979), The How and Why Book of Oil-Texasworld

¹⁵⁹ Ibid
¹⁶⁰ Ibid
¹⁶¹ Ibid

rate scenario) to 14,000 MW (high growth scenario) by the end of the decade".¹⁶² Deforestation through tree felling to meet basic household energy needs is prevalent.¹⁶³ Self-generation using petrol and diesel engines is very common in Nigeria to counter the intermittent power supply.¹⁶⁴

Nigeria is also contributing to environmentally damaging activities, particularly increasing its global share of greenhouse gas (GHG) emissions, as a result of the reliance on fossil fuel for electricity generation.¹⁶⁵ The creation of a sustainable energy future, therefore, requires the diversification of Nigeria's energy potential to alternative energies such as renewable energy sources.¹⁶⁶ Currently, the carbon emission profile from "solid, liquid, and gas fuels and gas flaring" in Nigeria is put at 0.5 metric tonnes per capita.¹⁶⁷ There is the tendency that it will continue to rise should Nigeria continue its development along that current path without giving consideration to large-scale deployment of renewable energy.

The Nigerian electricity market is segmented into generation, transmission and distribution.¹⁶⁸ At the inception of the electricity market in Nigeria, as in the case of most developing countries, the generation, distribution and transmission of electricity was seen as the responsibility of the government.¹⁶⁹ The sector is being liberalized and unbundled to encourage private sector participation.¹⁷⁰ The economy is generally open to private investors and there is no restriction on foreign enterprise investment.¹⁷¹ Foreign enterprises can invest in Nigeria upon registration with the appropriate authorities in Nigeria.¹⁷² The mere fact that the law has granted private investors such an opportunity to invest in the power sector will not be sufficient for investors to venture into renewable energy

¹⁶² Peter Kayode Oniemola Powering Nigeria through Renewable electricity investments, Legal framework for Progressive Realization Journal of Sustainable Development Law and Policy Vol. 6, Issue 1 2015 P. 83, World Bank, Nigeria-Nigeria Power Sector Guarantee Project World Bank, Washington, DC 2014) <<http://documents.worldbank.org/curated/en/2014/04/19391811/nigeria-nigeria-power-sector-guarantee-project>> accessed 10 January 2015.

¹⁶³ Federal Ministry of Environment, Nigeria and Climate Change: Road to Cop15-Achieving the best outcome for Nigeria (Federal Ministry of Environment 2009) 53.

¹⁶⁴ M.O. Oseni, "Improving Households' Access to Electricity and Energy Consumption Pattern in Nigeria: Renewable Energy Alternative" (2012) 16 Renewable and Sustainable Energy Reviews 3967, 3974.

¹⁶⁵ R.B. Eregha, "Sustainable Energy and Sustainable Development: Which Way Forward for Nigeria?" in A. Adenikinju, A. Iwayemi and W. Iledare, Green Energy and Energy Security Options for Africa: Proceedings of the 2012 Conference of the Nigerian Association of Energy Economics (Ibadan: Atlantis Books 2012) 304.

¹⁶⁶ S.O. Oyedepo, "On Energy for Sustainable Development in Nigeria" (2012) 16 Renewable and Sustainable Energy Reviews 2583, 2589.

¹⁶⁷ World Bank, "CO2 Emissions (metric tonnes per capita)" <<http://www.data.worldbank.org/indicator/EN.ATM.CO2E.PC/countries/NG-ZF-XNPdisplay=default>> accessed 10 January 2015.

¹⁶⁸ K. Eim and A. Oni, "Nigeria" in David L. Schwartz (ed.), The Energy Regulation and Markets Review (Law Business Research Ltd 2012) 200.

¹⁶⁹ O. Onazi, "Reframing Public Goods: Human Rights, Community and Governance in the Third World" (PhD Thesis, University of Edinburgh 2010) 133.

¹⁷⁰ Oke (n 6) 9.

¹⁷¹ See generally K.U.K. Ekwueme, "Nigeria's Principal Investment Laws in the Context of International Law and Practice" (2005) 40 (2) Journal of African Law 177, 177-206.

¹⁷² Companies and Allied Matters Act Cap C20 LFN 2004 ss 19 and 20; Nigerian Investment Promotion Commission Act Cap N1 17 LPN 2004, ss 17 and 20.

without specifically addressing the challenges that can inhibit the promotion of renewable energy within the structure and governance of the electricity market.

BARRIERS TO RENEWABLE ELECTRICITY INVESTMENTS

This section seeks to elaborate the barriers to renewable energy investment.

In the Nigerian power sector. It shows that challenges have impeded the possible incorporation of renewable energy into the Nigerian energy system. It, therefore, makes a case for the development of a legal framework to address the challenges of promoting investment in renewable energy in the electricity sector.

Overlapping Roles and Lack of Clarity of Purpose of Institutions

A clear institutional framework for renewable energy is lacking in Nigeria.¹⁷³ There are many institutions playing varied roles in the power sector. These institutions include the Energy Commission of Nigeria (ECN), Nigerian Electricity Regulatory Commission (NERC) and Federal Ministry of Power. The EPSR Act sets out in detail the regulatory functions of NERC, cutting across the activities of the power sector. NERC is charged with the responsibility of the promotion of competition and private sector participation in the power sector; establishing relevant operating codes, safety, security, and reliability and quality standards; providing appropriate consumer rights and obligations on the use of electricity services; licensing of electricity activities and monitoring of the operation of the electricity market.¹⁷⁴

In discharging its responsibilities, NERC is required by law to consider the following: the creation, promotion and preservation of efficient industry and market structures and ensuring optimal utilization of resources for the provision of electricity services; maximizing access to electricity services through the promotion and facilitation of distribution systems to consumers; ensuring adequacy of electricity supply to consumers; ensuring that prices charged by licensees are sufficient to finance their activities and include reasonable earnings for efficient operations; safety, security, reliability and quality of electricity of services in electricity generation and distribution to consumers; and ensuring that regulation is fair and balanced for licensees, consumers, investors and other stakeholders.¹⁷⁵

¹⁷³ S.O. Oyedepo, "Towards Achieving Energy for Sustainable Development in Nigeria" (2014) 34 Renewable and Sustainable Energy Reviews 255, 269.

¹⁷⁴ *Ibid* 5 32 (1).

¹⁷⁵ *Ibid* 8 2 (2).

NERC can also be referred to as the technical and economic regulator of the Nigerian power sector.¹⁷⁶ NERC is expected to facilitate efficiency, competition, and equity in the Nigerian power sector and among its stakeholders.¹⁷⁷ From the examination of the functions of NERC, it can be deduced that the provisions are designed to create an atmosphere of comfort for IPPs, investors and their financiers.¹⁷⁸

NERC can make regulations for the sector on matters within the powers and functions itemized. Section 96 (1) of the EPSR Act 2005 provides that NERC "may make regulations prescribing all matters which by this Act are required or permitted to be prescribed or which, in the opinion of the Commission, are necessary or convenient to be prescribed for carrying out or giving effect to" the EPSR Act 2005. The list of areas in which NERC could make regulations include administration of the affairs and proceedings of the NERC; matters relating to licencing; fees, levies, and other charges; "investments, assets, and properties, and the interest in such assets and properties, in connection with the electricity industry"; customer-related issues; resource procurement policies pertaining to licensees; regulation of rural electric schemes and investment; monitoring of market power monitoring, mitigation and enforcement; regulation of third party access granted by transmission and distribution licensees; imposition of fines and penalties on defaulters of the regulation.¹⁷⁹

Apart from the NERC, the general policy direction of the electricity sector is the key responsibility of the Federal Ministry of Power, headed by a minister. The ministry issues general policy directions to NERC on matters concerning electricity and overall system planning and coordination of the sector.¹⁸⁰ The minister can make declarations for the initiation of a more competitive electricity market in the country by virtue of Section 24 of the EPSR Act 2005.¹⁸¹ NERC is under obligation to prepare and submit to the minister a yearly report that the sector has reached a Stage warranting progress to a more competitive electricity market before the minister makes a formal declaration that the electricity market is competitive.¹⁸²

¹⁷⁶ Latham & Watkins, "Nigerian Power Sector Reforms: Opportunity Challenges for Investment" www.lw.com/thoughtLeadership/m-and-up/power-sector-reforms accessed 10 January 2015.

¹⁷⁷ Y. Omorogbe, *Why We Have 720 Energy* (University of Ibadan Press 2008) 50.

¹⁷⁸ K. D. Larson, "Sparkling a Spread? Regulatory Efforts to Stimulate Independent Power in Nigeria" (2008) 3, (2) *Texas Journal of Oil, Gas, & Energy Law* 151, 159.

¹⁷⁹ EPSR Act 2005, s 96 (2) (a)-(q). The NERC (Permits for Captive Power Generation) Regulations 2008; Regulations on Embedded Generation 2012; Independent Electricity Distribution Network (IEDN) Regulations 2012 are examples of the numerous regulations issues by NERC pursuant to its powers under s 96 of the EPSR Act 2005. See T. Oyewunmi, "International Best Practices and Participation in a Private Sector Driven Electricity Industry in Nigeria: Recent Regulatory Developments" (2013) 8 *International Energy Law Review* 306, 310-311.

¹⁸⁰ EPSR Act 2005, s 35.

¹⁸¹ B. Saidu, "Commitment to Legal and Regulatory Reform: An Analysis of the Legal and Regulatory Framework of the Electricity Supply Industry in Nigeria" (2011) 29 (3) *Journal of Energy & Natural Resources Law* 355-82, 360.

¹⁸² EPSR Act 2005, s 24 (2).

It is required that the degree of privatization must be considered.¹⁸³ There must be a sufficient number of potential competitive entities in order to check any abuse of the market.¹⁸⁴ Furthermore, regard should be given to the existence of other preconditions, including necessary meter information and technologies that are required for the operation of a competitive electricity market.¹⁸⁵ The minister in consultation with the president of Nigeria and the National Council on Privatization, having been satisfied that the electricity market in the country has attained a stage where a more competitive market ought to be established, will issue a declaration to that effect.¹⁸⁶ Other functions of the minister include recommending to the president the approval of market rules developed by system operators.¹⁸⁷

The Energy Commission of Nigeria (ECN) Act 1979¹⁸⁸ established the ECN as the coordinating agency for energy matters in Nigeria.¹⁸⁹ The ECN has the function of the strategic planning of energy; policy co-ordination and performance monitoring for the whole energy sector, setting guidelines on the utilization of energy; developing recommendations for the exploitation of new sources of energy.¹⁹⁰ Within the ECN is the Department for Renewable Energy Sources established under the Act.¹⁹¹ There is no linkage of the ECN with NERC and the Federal Ministry of Power in the EPSR Act 2005. The express relevance of the ECN is currently questionable. Could it really be referred to as the coordinator of the energy sector strictly speaking? There is a possibility of overlap of functions and one would wonder which should prevail over the other in terms of giving directives to the sector.

The absence of a clear coordination of the institutions for the development of renewable energy in Nigeria has negatively impacted on its growth.¹⁹² Redefining the legal duties of the institutions may be desirable so that investors are not confused. They should be able to identify who plays what role in the sector. For example, in participating in demonstration projects, should the action for initiation of such projects be directed to the Federal Ministry of Power or to ECN? Even the Federal Ministry of Environment has claimed it has initiated and implemented projects on renewable energy in Nigeria. The projects include the

¹⁸³ *Ibid* s 24 (2) (a).

¹⁸⁴ *Ibid* s 24 (2) (b).

¹⁸⁵ *Ibid* s 24 (2) (c).

¹⁸⁶ *Ibid* s 24 (3). See Saidu (n 34) 360.

¹⁸⁷ EPSR Act 2005, ss 20, 26 and 88. See also O. Arowolo, "Licensing Electricity Business in Nigeria: Issues and Comments" (2006) 1 *International Energy & Taxation Law Review* 29, 30.

¹⁸⁸ Established by Act No. 62 of 1979, as amended by Act No. 32 of 1988 and Act No. 19 of 1989 (Cap E10, Laws of Federation of Nigeria, 2004).

¹⁸⁹ See I. Worika, "Energy Development and Utilization in Africa" in A. J. Bradbrook, R. L. Lyster, R. L. Otiinger and W. Xi, *The Law of Energy for Sustainable Development* (Cambridge University Press 2005) 354.

¹⁹⁰ ECN Act 1979, s 5.

¹⁹¹ *Ibid* s 2(b).

¹⁹² B. L. Efurumbe, "Barriers to the Development of Renewable Energy in Nigeria" (2013) 2 (1) *Scholarly Journal of Biotechnology* 11, 12.

construction of grid-connected solar PV plants in the six geopolitical zones, Nigeria and wind energy projects in six states.¹⁹³ It also claimed to have initiated 'Waste to Energy Projects' in six states.¹⁹⁴

The Federal Ministry of Environment is the coordinating ministry on environmental matters. As part of the approval process for any energy project, it must conform to the Environmental Impact Assessment Act 1992 as contained in Section 2 of the Environmental Impact Assessment Act 1992.¹⁹⁵ In the same vein, Section 70 of EPSR Act makes the provision of an environmental impact assessment, approved by the Federal Ministry of Environment, a precondition for the grant of generation, transmission, system operation, distribution or trading licence.¹⁹⁶ It would therefore be appropriate for the Ministry to confine itself to its role while more specialized governmental agencies are charged with the task of initiating renewable energy projects.

High Cost of Renewable Energy Projects

A major drawback to the development of renewable energy in the Nigerian power sector is the expensive technologies needed.¹⁹⁷ Furthermore, renewable energy technologies are still very new to Nigeria.¹⁹⁸ The up-front capital cost for renewable energy in the country is higher than that of conventional energy projects.¹⁹⁹ Investors are less likely to invest in renewable energy sources, knowing that they may not be able to generate profit because of the high start-up capital. Bongaerts and Dogbe argues that, generally, electricity from renewable energy sources is more expensive than conventional energy sources and that fiscal or incentive mechanisms are needed to enable them to play a meaningful role in the total energy balance.²⁰⁰ On the need to support solar energy, the Lagos State Ministry of Energy and Mineral Resources observe that: "Traditionally, the cost of a solar installation may be 3-5 times the cost of deploying a fossil fuel fired solution of similar capacity".²⁰¹

¹⁹³ The Federal Ministry of Environment's Renewable Energy Programme, "Investment Areas" <<http://renewableenergy.gov.ng/invest/investmentareas/>> accessed 10 January 2015.

¹⁹⁴ Ibid.

¹⁹⁵ Saidu (n 34) 362.

¹⁹⁶ Ibid.

¹⁹⁷ S. Amadi, "Ethics and Values in Sustainable Development" <www.nercng.org/index.php/nerc-documents/func-startdown/267/> accessed 10 January 2015.

¹⁹⁸ Kalu Uduma and Tomasz Arciszewski, "Sustainable Energy Development: The Key to a Stable Nigeria" (2010) 2 Sustainability 1558, 1565.

¹⁹⁹ National Planning Commission (NPC), Report of the Vision 2020 National Technical Working Group on Energy Sector (NPC, 2009) 57.

²⁰⁰ C. Bongaerts and G. Dogbe, "Optimal Institutional Arrangements and Instruments for the Promotion of Energy from Renewable Sources" in M. Faure, J. Gupta and A. Nenjes (eds), Climate Change and the Kyoto Protocol: The Role of Institutions and Instruments to Control Global Change (Edward Elgar Publishing Limited 2003) 201.

²⁰¹ Lagos State Ministry of Energy and Mineral Resources, Consultation Document for the Development of a Renewable Energy Policy (Lagos State Ministry of Energy and Mineral Resources 2012) 14.

There are many reasons for the higher cost. For example, mechanisms for storing the energy sources due to their variability in supply are also expensive.²⁰² Investors in Nigeria will have to arrange for such storage batteries, which will result in an increase in the unit cost of electricity generation.²⁰³ The effectiveness of solar energy will be dependent on the availability of the sun and the way it can be converted into energy.²⁰⁴ Investors and lenders are usually unwilling to finance projects, which by their nature will result in negative cash flow or value fluctuations.²⁰⁵ Therefore, investors will not divert their funds to invest in projects that are capital intensive until there is the assurance that they will recoup their investment. The perception of the government is similar to that of private investors because of the cost involved in the development of renewable energy projects.²⁰⁶ A proactive approach should have been the case. It has been well established within the context of traditional macroeconomic theory that where there is inadequacy of incentives, leading to shortage of revenue and profit, companies will not be encouraged to enter the market and invest as they are not likely to recoup their investment.²⁰⁷ Applying the theory to the development of renewable energy sources, which by their nature require technologies that involve high capital outlay, financial barriers will continue to affect the integration of renewable energy into the energy market.²⁰⁸

As confirmed by the Global Environmental Facility (GEF), renewable energy projects involve "a different financing profile with typically much higher upfront capital costs. This makes them more sensitive to the cost of capital, which in a country like Nigeria, is high due to additional informational, technical, regulatory, financial and administrative risks, which such projects entail".²⁰⁹ Thus, in a cash-constrained economy such as Nigeria, due to high cost, monies may be used to meet other competing investments instead of venturing into renewable energy projects.²¹⁰

Financing Option

In financing Renewable energy projects debt or equity arrangements with foreign and local financial Institutions are important. The following foreign and local

²⁰² N. Farquhar, "Energy, Security, Climate: Converging Solutions" (2009) 29(1) Journal of Land, Resources Environmental Law 1, 10-11.

²⁰³ MS Adaramola, "Viability of Grid-connected Solar PV Energy System in Jos, Nigeria" (2014) 61 EleCtrical Power and Energy Systems 64, 64.

²⁰⁴ K. Hogg and R. O'Regan, "Renewable Energy Support Mechanism: An Overview" in M. Bonass and M. Rudolf, Renewables: A Practical Handbook (Globe Business Publishing Limited 2010) 33.

²⁰⁵ UNEP, Financial Risk Management Instruments for Renewable Energy Projects (United Nations Publication 2004) 13.

²⁰⁶ See Oke (n 6) 318.

²⁰⁷ I.R. Wiener, "Sharing Potential and the Potential for Sharing: Open Source Licensing as a Legal and Economic Model for the Dissemination of Renewable Energy Technology" (2006) 18 The Georgetown International Environmental Law Review 277, 292.

²⁰⁸ Ibid 292.

²⁰⁹ GEF, Promoting Low Carbon Energy Solutions in Nigeria Energy Power Supply, available at: <www.thegef.org/gef/project_detail?projID=5345> accessed 10 January 2015.

²¹⁰ Ibid (n 45) 12.

financial Institutions could be of tremendous assistance in financing renewable energy in Nigeria both at short or long term arrangements:

Foreign

- (1) World Bank
- (2) International Monetary Fund (IMF)
- (3) African Development Bank (AFDB)
- (4) Islamic Development Bank by virtue of Nigeria's membership of Organisation of Islamic Countries, and;

Local

- (1) Issuing of Bonds through CBN
- (2) Commercial and Conventional Banks Individual or as Consortium of Banks
- (3) Microfinance Banks by way of syndicated loans
- (4) Cooperative Societies, syndicated loans also be taken from financially strong Cooperative Societies

Donor Agencies

Possibility of donor agencies are not ruled out but Nigeria should be wary of the conditionalities that may be attached to foreign loans and donations.

PUBLIC-PRIVATE PARTNERSHIP (PPP) FINANCING OPTION

Public-private partnership (PPP) is a funding model for a public infrastructure project such as a new telecommunications system, airport or power plant. The public partner is represented by the government at a local, state and/or national level. The private partner can be a privately-owned business, public corporation or consortium of businesses with a specific area of expertise.

PPP is a broad term that can be applied to anything from a simple, short term management contract (with or without investment requirements) to a long-term contract that includes funding, planning, building, operation, maintenance and divestiture. PPP arrangements are useful for large projects that require highly-skilled workers and a significant cash outlay to get started. They are also useful in countries that require the state to legally own any infrastructure that serves the public.

Different models of PPP funding are characterized by which partner is responsible for owning and maintaining assets at different stages of the project. Examples of PPP models include:

Design-Build (DB): The private-sector partner designs and builds the infrastructure to meet the public-sector partner's specifications, often for a fixed price. The private-sector partner assumes all risk.

Operation & Maintenance Contract (O & M): The private-sector partner, under contract, operates a publicly-owned asset for a specific period of time. The public partner retains ownership of the assets.²¹¹

Design-Build-Finance-Operate (DBFO): The private-sector partner designs, finances and constructs a new infrastructure component and operates/maintains it under a long-term lease. The private-sector partner transfers the infrastructure component to the public-sector partner when the lease is up.

Build-Own-Operate (BOO): The private-sector partner finances, builds, owns and operates the infrastructure component in perpetuity. The public-sector partner's constraints are stated in the original agreement and through on-going regulatory authority.

Build-Own-Operate-Transfer (BOOT): The private-sector partner is granted authorization to finance, design, build and operate an infrastructure component (and to charge user fees) for a specific period of time, after which ownership is transferred back to the public-sector partner.

Buy-Build-Operate (BBO): This publicly-owned asset is legally transferred to a private-sector partner for a designated period of time.

Build-lease-operate-transfer (BLOT): The private-sector partner designs, finances and builds a facility on leased public land. The private-sector partner operates the facility for the duration of the land lease. When the lease expires, assets are transferred to the public-sector partner.

Operation License: The private-sector partner is granted a license or other expression of legal permission to operate a public service, usually for a specified term. (This model is often used in IT projects.)

Finance Only: The private-sector partner, usually a financial services company, funds the infrastructure component and charges the public-sector partner interest for use of the funds.

²¹¹ Lawrence Atsegbua and E.O. Erhagbo, 'Proposing and effect tool for Combating Climate Change in Nigeria: Renewable energy as an Alternative', *Ajayi Crowther University Journal* Vol. 1 (2016) P. 152

Special Trust Fund for Renewable Energy Projects

Special trust fund is another way of sourcing for financing renewable energy in Nigeria. A trust fund is a special type of legal entity that holds property or fund for the benefit of another person, group or organisation.²¹² Trust funds are a functional entity given life by state legislature of the state which the trust is created. Trust can be set up to promote scientific investigation and discovery, it can be used to fund a very important project like renewable energy projects in Nigeria.

The Sukuk Option in Renewable Energy Financing in Nigeria

Meaning and Nature of Sukuk

As the price of oil crashes to a low level not experienced in the last two decades the Nigerian state is facing challenges on how to sustain existing public infrastructure and embark on the development of badly needed new ones. Alternative funding outside conventional sources will need to be identified and explored. Islamic bonds or Sukuk provides a viable sources of infrastructure financing in Nigeria. Sukuk is an aspect of Islamic finance which is emerging steadily as a global financing model. Islamic finance is now firmly established in many predominantly Muslim countries and some non-Muslim nations. Many countries are opening windows of Islamic finance within existing national legal framework and institutional structures of Western conventional financial practices.²¹³ It is estimated that over 75 countries and 435 institutions are practicing Islamic banking and finance in one form or other with a capital and investment base of over US\$1 trillion as at 2015- and this amount is projected to rise to about US\$4 trillion by 2020.

Islamic finance is based on Shariah principles that draw inspiration from Qur'an injunctions and the Sunnah (sayings and practices) of the Holy Prophet (S.A.W.).²¹⁴ to avoid exploitation in trade and commerce Islamic financial

²¹² <https://www.googleweblight.com/...> Accessed on 15-08-18

²¹³ Suleman Ismail Nchi, *Alternative Public Infrastructure financing in Nigeria: The Sukuk Option*. NALT 2016 Conference proceedings P. 673. On general principles of Islamic finance and economics see R. Ali, (ed.) *Islamic Finance: A Practical Guide*, (London: Globe Business Publishing, Ltd., 2008); M. A. El-Gamal, *Islamic Finance Law, Economics and Practice*, (Cambridge: Cambridge University Press, 2006); M. M. Merwally, *Essays on Islamic Economics*, (Calcutta: Academic Publishers, 1993). A. Muhammad, *Understanding Islamic Finance*, (Hoboken, N.J.: John Wiley and Sons, 2007); M. S. Chaudhry, *Fundamentals of Islamic Economic System*, (Lahore: Burhan Education Trusts, 2003); M. Fahim Khan, *Essays on Islamic Economics*, (London: Islamic Foundation); F. Pryor, "The Islamic Economic System", *Journal of Comparative Economics*, Vol 9 J. R. Presley, and J. G. Sessions, "Islamic Economics: The Emergence of a New Paradigm", *The Economic Journal*, May, 1994; M. S. Chaudhry, "Fundamentals of Islamic Economic System", www.muslimintents.com/shaafi, (2003), (visited 17/2/16)

²¹⁴ Holy Qur'an, chapter 2: 275: "God has permitted trade and has forbidden interest". This prohibition on interest is not unique to the Holy Qur'an and a similar idea is contained in the authoritative texts of Judaism, Hinduism, Buddhism and in the Holy Bible. In fact, the words of Jesus Christ as recorded in Luke 6:35 instructs Christians to "Lend freely hoping for nothing again". Deuteronomy 23: 19-20 and Exodus 22:25 denounce interest as well. Thus, for the Christians who lived in the Middle Ages, the church considered interest as a sin of usury. Earlier, the Greek Philosopher, Aristotle, had criticised interest, calling it "The most hated sort of wealth getting".

models prefer partnership over a hierarchical relationship in investment and commercial transactions and so they all promote profit and loss sharing arrangements. The religion of Islam insists on ethical and social responsibility in commercial and trade transactions and so it forbids riba (interest), investment in activities that are haram²¹⁵ (sinful or unlawful), preventable uncertainty (gharar), speculation, gambling and better (maysir), hoarding and other unethical trade practices that the religion generally regards as unfair and exploitative. Islamic finance in the form of banking, insurance and a bonds market is experiencing growth, albeit a slow one, in Nigeria. In response to the issuance of a regulatory framework on non-interest banking by the Central Banking of Nigeria, the first fully Islamic bank in Nigeria, Jaiz Bank, was set up in 2011. The bank was given a license to undertake "non-interest banking". Other commercial banks have also opened on Shariah principles. Islamic insurance or Takaful is also gradually funding its feet in Nigeria. Many insurance companies now have windows of Takaful-insurance that offer products and services to Muslims who are wary of conventional insurance products and services because they are interest-based and non-Shariah-compliant. The Islamic capital market in Nigeria is also gradually taking shape. The Securities and Exchange Commission (SEC) has released regulations on the issuance of Islamic bonds, Sukuk, which are intended to be alternatives to conventional debt market instruments.²¹⁶ The first issuance of sovereign Sukuk bonds in Nigeria was in 2013 by Osun State, which used the Ijarah (lease) framework to issue its Shariah-complaint bond worth 10 billion Naira (\$US62 million then) in September, 2013. The revolutionary step taken by Osun State has set the stage for the development and exploitation of Islamic bonds in Nigeria as a source of financing major public Nigeria companies, will follow suit and tap into the profitable and secure fast-growing global Islamic bonds market.

The Concept of Sukuk

Sukuk (singular: Sakk) is an Arabic term, which means "certificates."²¹⁷ Sukuk is a financial certificate in Islamic finance that is the equivalent of a conventional bond. A bond is "an interest-bearing certificate issued by the government or business, redeemable on a specified date."²¹⁸ Generally, fixed-income, interest-bearing bonds are unlawful under Islamic law. Sukuk are, therefore, securities that comply with Shariah principles on investment by not charging or paying interest (riba), which SHariah emphatically prohibits. Sukuk bonds, therefore,

²¹⁵ Haram denotes anything completely forbidden by Shariah, i.e it is sinful or unlawful and punishable by Allah and the state. Halal refers to that which is allowed or lawful. A Halal act is often rewarded by Allah.

²¹⁶ 4 New Rules/Amendments to the Rules and Regulations of the Securities and Exchange Commission Rules on Sukuk Issuance in Nigeria, (Pursuant to section 313 (6) of the Investments and Securities Act 2007), 2012/2013.

²¹⁷ See S. Nchi, *The Nigerian Law Dictionary*, (Jos: Green world Publishing Company, Ltd, 2011).

²¹⁸ Webster's Dictionary and Thesaurus, Op. cit.

differ from conventional bonds when are interest-based and “merely confer ownership of a debt while Sukuk grants the investor a share of an asset along with the commensurate cash flow and risk.”²¹⁹ Sukuk can be equated to a bridge that links the issuer, usually a sovereign government or a larger corporation, and the investor who purchases the redeemable bond certificate for a stated period.

General Features and Forms of Sukuk

The conceptual framework of Sukuk as a capital market model is based on an underlying structure of Islamic finance and the Shariah principles that built it. The issuance of Sukuk must always be structured in a manner that complies with Shariah requirements.²²⁰ The Accounting and Auditing Organisation for Islamic Financial Institutions (AAOIF), a body widely accepted as an authority in setting out Shariah principles and standards on commercial and finance, has listed 14 different kinds of Sukuk which include Ijarah-Sukuk, Sukuk-al Musharakah, Sukuk-al Muzra, Sukuk-al Musharasa, etc. The most familiar and frequently used ones are Ijarah-Sukuk and Sukuk-al Musharah finance. Sukuk-al Muzra relates to agriculture-based bonds, which allow investors a share of the produce of agricultural land while Sukuk-al Muqarasa are bonds relating to land, trees or crops. The most popular structure being used for Sukuk issuance is Ijarah. Its attraction lies in its familiarity and non-complex nuances. Thus, An Ijarah-based facility can, in essence, be structured as a sale and leaseback, consisting of a sale from the party requiring funds to the financiers of lease of equipment or other asset(s) for rent, with such assets being rented with full maintenance assumed by the lessee. In order to facilitate the leasing structure the funding banks will purchase an asset or pool of assets from the issuer and then lease it or them back to the issuer on the agreed commercial terms. These kinds of Ijarah structures are now being used mostly in project finance by governments and large construction firms undertaking major development infrastructural projects. Some underlying preliminary requirements for an Ijarah-based Sukuk issue include the asset being Shariah-compliant and fit for the investment purpose in terms of equal value to the amount of finance being raised. The Sukuk instrument must also state the amount and period of lease payments, which must be agreed to before the

²¹⁹ Islamic Development Bank, <https://www.thisiswhy.is/irj/go/km/docs>. Visited 10/5/2016”

²²⁰ This means that for any Sukuk issuance to be valid under Islamic law it must satisfy certain necessary criteria, which include: The issuer must not be involved in activities that are haram, i.e. prohibited by Shariah, e.g. that relate to alcohol, gambling, pork, lewd entertainment, armaments, etc.

The structuring and issuance of the Sukuk must not be interest-based since interest or usury (riba) is completely prohibited by Islamic law. While gain or profit is allowed in Islam, it should not be from interest-based transactions;

The issuer must own the assets it wishes to use in the Sukuk financing structure;

The assets must be halal, i.e. not the type prohibited by Shariah, e.g. a casino, and it must be in existence at the time of issuance.

Sukuk are structured to pay a fixed profit rate rather than a fluctuating coupon rate.

Sukuk are commonly backed or based on real estate or infrastructure.

Sukuk must grant the investor a shareholding in the asset or entity that is backing the credit of the issue.

This allows the Sukuk holder to acquire equity holding in the asset or equity participation in the transaction instead of a fixed-income return which Islamic law prohibits.

issuance. There is an exception to the general rule that the Sukuk asset must exist at the time of contract. An example of this exception may arise under a project finance situation. In such a situation, one option is for the financiers to use an Ijarah forward arrangement to follow or support an Istisnah (construction) contract where there are no assets yet in place to support the Sukuk issuance. Under the Istisnah contract the issuer makes an undertaking to produce designated assets (which may already be under development or about to be purchased) with payments to be made either in lump sum or in instalments within an agreed period²²¹. Musharakah-based Sukuk are built on a joint venture framework using the general principles of Musharakah finance. The Musharakah structure basically requires an unincorporated joint venture vehicle to be formed by the financiers and the issuer. Through this medium a partnership is built between the financier and issuer thus allowing them to invest capital or services and share in the profit or losses of the transaction. The issuer contributes assets while the financier provides the funds that the joint venture will use to buy the assets to be used for the business transaction to make profit. Under this arrangement the Sukuk holder will retain the credit risk of the issuer via a purchase undertaking. It is on the basis of this undertaking that repayment is made by the issuer buying “units” in the joint venture on each date of the periodic distribution of such “units” for a price that is equal to the agreed amount of return (in some cases this includes the amortization of principal).²²²

Global Growth of Sukuk

While the Sukuk market is growing fast in many countries, it can be said to be still in its infancy. Global issuance of Sukuk hit a record high of Over \$US200 billion in 2013 up about 60 % from the previous year, with Malaysia, Saudi Arabia and Indonesia dominating. Non-Muslim countries like Britain, Kenya, South Africa, etc, have also joined the Sukuk bond market.²²³ As Sukuk bonds are experiencing these tremendous growths certain challenges have already emerged and while they are being addressed more challenges will inevitably still develop along the way. Nonetheless, the growth and popularity of Sukuk is on the fast track globally and Muslim and non-Muslim investors are finding it to be a more secure ethical alternative to conventional bonds. This, in itself, is a positive development and will lead to new and more complex structures being developed to meet the increasing global demand for Sukuk bonds around the world.

²²¹ See B. Aquil, and I. Mufti, “Innovation in the Global Sukuk Market and Legal Structuring Considerations”, in Ali (ed.), *Islamic Finance*, loc. cit., p. 101

²²² *Ibid*, p. 120

²²³ See “Sukuk- A Growing Story”, Wall Street Journal, 5th November 2013. www.online.wsj.com/ad/article

Regulation of Sukuk Issuance in Nigeria

In a bid to promote financial inclusion and grow the capital market in the country, Nigeria's Securities and Exchange Commission, SEC, exercising its authority under section 313 (6) of the Investments and Securities Act 2007, issued rules regulating the issuance of Sukuk bonds in Nigeria on 28th February, 2013. It is hoped that with these rules in place the Sukuk bonds market will become properly established to attract the large Muslim population in the country because of its Shariah-compliance. From 2017 to date the federal government has invested over #100 billion Sukuk bond on 25 roads throughout Nigeria.²²⁴ This can be extended to renewable energy projects for sustainable development of the energy section in Nigeria.

Using Sukuk to Build Economic Inclusion and Finance Infrastructure Such as Renewable Energy in Nigeria

The issuance of Sukuk bonds in Nigeria will have advantages. One such advantage is that it will result in financial inclusion in the country by bringing its large Muslim population into its emerging capital markets thereby promoting national economic inclusion and political integration. Another advantage is that it will attract large scale Islamic finance from cash-rich Muslim countries in the Middle East and Asia to help it undertake major infrastructural development projects. Access to Islamic bonds by the state entities in Nigeria will assist in raising funds for the development of new public infrastructure and the maintenance of existing ones. Nigeria has the right demographic indices to emerge as a major hub for Islamic finance with its large Muslim population. Already, the Central Bank of Nigeria (CBN) had bought shares in the Malaysian International Islamic Liquidity Management Corporation, IILMC, based in Kuala Lumpur, which issued Sukuk bonds in 2013.²²⁵ Nigeria is a member of the Governing Board of the IILM and this will expose the country to Islamic capital markets around the world. The current efforts to develop an Islamic capital market in Nigeria should be sustained as combined with the conventional capital market it will expand investment opportunities and open the country's capital market to investors from many countries, especially the oil-rich states of the Middle East.

²²⁴ Sukuk bond: 10 Contractors get #100 billion for 25 road projects the nationonline.net>Sukuk-bond-cont

²²⁵ Reuters 4th September 2014, www.reuters.com/articles/2014 visited on 10-03-16

CONCLUSION

In this paper, we have underscored the importance of renewable energy in modern Nigeria in order to avail the hazards of the present non-renewable energy use and we also gave various funding options available to the government ranging from bankloans, public private partnership special trust fund and Sukuk. However, we hasten to add that of all these options, Sukuk remain primus as an interest free-financial system. It will reduce the cost of renewable energy projects and enhance the quality and durability of the projects. Presently in Nigeria, Sukuk is being utilized to construct roads in various part of Nigeria by the federal government. The sign post of Sukuk funded section is erected everywhere along Okene-Benin Express way construction. So if Sukuk band is being utilized to construct roads, the same gesture can be extended to renewable energy.

RECOMMENDATIONS

Sukuk is a financial certificate that is the equivalent of a conventional bond in Islam finance. Generally, fixed-income, interest-bearing bonds are unlawful under Islamic law because Islam prohibits interest in financial and commercial transactions. Sukuk are securities that comply with Shariah principles on investment by not charging or paying interest (riba). Sukuk bonds differs from conventional bonds in the sense that while conventional bonds are interest-based and only confer ownership of a debt Sukuk bonds grant an investor a share of the asset that is the object of investment and any commensurate cash flow and accompanying risk. The emergence of Sukuk as a global profitable capital market product has made state and business entities to increasingly explore it for large scale infrastructure development financing and as investment opportunity. This interest is driven principally by pragmatic economic drive and objectives so as to tap the huge pools of liquidity available in many Muslim countries, especially in the Middle East and Asia. As Nigerian state entities faces challenges on how to sustain energy infrastructure and embark on the development of alternative funding outside conventional sources will need to be identified and exploited. Islamic bonds provide a viable source of alternative infrastructure development financing and investment options in Nigeria. The development of an Islamic capital market in Nigeria should be seen in the context of its numerous national economic advantages and not as a proselytizing project. A developed Islamic securities market in Nigeria will promote economic inclusion and expand the capital market of the country. Nigerians should be encouraged to invest in Sukuk bonds which will provide badly needed capital for investment in renewable energy development.