

INTERROGATING A THEORETICAL FRAMEWORK FOR RENEWABLE ENERGY GOVERNANCE IN NIGERIA

By

Andrea Ajibade*

ABSTRACT

In the last two decades environment and sustainability have replaced energy security and geopolitical perspectives for global energy study and analysis. Studies observe the benefits of renewable energy technology for the environment and energy resources. Thus, renewable energy for electricity use developed in reaction to environmental concerns about the effects of non-renewable energy sources on the natural environment. Nigeria's electric power sector stands much to gain from the promotion use and development of renewable energy technology. However, Nigeria's legal framework for electricity use from RE is incoherent and unsustainable; it is an energy framework crying out for change. Hence, the paper recommends a fresh approach to formulate a coherent legal framework for renewable energy technology that promotes energy sustainability, mitigates climate change and assists social development. It posits such an approach is best achieved from a theoretical framework constructed from resource curse, sustainable development and critical race theories. The paper contends such an approach will lead to a coherent legal framework for RE which will ultimately secure good energy governance for Nigeria. The paper found that the success or otherwise of renewable energy governance in Nigeria rests on the formulation of a legal framework that is anchored and operates on principles of good governance namely, inclusiveness transparency equity and responsiveness.

KEYWORDS: Renewable Energy Governance, Resource Curse, Critical Race Theory, Sustainable Development.

1.1 Introduction

In the last two decades environment and sustainability have replaced energy security and geopolitical perspectives for energy analysis and study. A shift in focus to environment and sustainability-based analysis will secure long term socio-economic and environmental benefits for Nigeria. Climate change has altered perspectives on renewable energy technology and triggered transition in the way energy is considered and managed. This is owed to the fact that energy production and consumption is the largest source of

greenhouse gas emissions.¹ Against this background, the formulation of a coherent legal framework for renewable energy technology in Nigeria becomes an essential requirement.

Benefits of a clear and comprehensive framework will enable effective energy governance, aid social development and improve Nigeria's ability to comply with commitments to mitigate climate change under requirements of the UNFCCC and its Intended Nationally Determined Contributions,² key measures which include work towards reduced gas flaring, energy efficiency and an improved electricity grid.³

Conversely, the regulation of renewable energy technology in Nigeria is scattered across policy documents prepared by multiple government bodies. This makes it hard to translate or identify Nigeria's policy for the implementation of this energy source. Overlapping objectives and a scattering of policies across ministerial departments risk confusion and ability to identify objectives. To address this problem Nigeria must adopt a lucid and consistent approach to renewable energy technology and governance; one which displays commitment to principles that are transparent, inclusive, responsive and equitable. This will increase capacity and balance energy in an environmental friendly manner. Renewable energy offers relief from the negative impact of non-renewable energy sources on the environment and provides a sustainable solution to protecting and preserving Nigeria's energy resources.

The paper posits a coherent and strong framework for renewable energy technology made less arduous will create an improved understanding of the interrelationship between energy and environment; moreover it will encourage collaboration and cooperation between public and private stakeholders. This is because a legal framework which embraces all stakeholders incorporating their views in the decision making process, will improve understanding and appreciation of the management and control of energy resources. Demand for this is apt given Nigeria's poor history of energy management and governance.

This paper interrogates theories to form and facilitate a legal framework for renewable energy technology; it recommends an approach to renewable energy governance anchored on transparent, responsive equitable and inclusive principles. Ultimately the paper aims to achieve energy governance in Nigeria operated on principles of good governance.

The paper opens with an introduction. Part II provides Clarification of Terms while Part III critically analyses and interrogates theories to support the reformulation of a legal

¹Energy production and consumption represents 70% of global greenhouse gas emissions; See, International Energy Agency, available online at; <http://www.iea.org/topics/energy/poverty/> (Accessed June 2016).

²President Buhari of the Federal Republic of Nigeria, approved Nigeria's Intended Nationally Determined Contribution in September 2015; See, 'Nigeria's INDC', available at https://www4.unfccc.int/submissions/INDC/Published%20Documents/Nigeria/1/Approved%20Nigeria's%20INDC_271115.pdf (Accessed August 2016)

³Parties under the UN Framework Convention on Climate Change, were invited following decision 1/CP.19 to intensify domestic preparations for their INDC towards achieving objectives under Article 2.

framework for the implementation of renewable energy technology. Part IV discusses how good governance can bring about sound energy governance in Nigeria while Part V is the conclusion.

1.2 Contextual Background

A. Renewable Energy Governance

Several definitions of the term governance exist. These include a government's ability to make and enforce rules; the action, system or manner of governing; the way a government, company or body exercises control and authority.⁴ Governance refers to the mechanisms, relations and processes by which a body or state is controlled and directed. According to the Institute on Governance, Governance determines who has power, who makes decisions, and how other players make their voice heard and how account is rendered.⁵ Governance is also a process through which interests may be accommodated and operative action taken. It includes formal institutions and regimes empowered to enforce compliance as well as informal arrangements. Despite multiple definitions most rest on three pillars: authority, decision-making and accountability.⁶

For the purpose of this paper, renewable energy governance concerns mechanisms, processes and relations which determine the establishment of policies. It concerns, how stakeholders interact to achieve a common goal; a broad and dynamic, complex process of decision-making and the power to determine policy or initiate the process of law-making. It examines processes concerned with decision-making, accountability and the integration of renewable energy resources into the Nigerian economy. Critical analysis and application of theories such as critical race, resource curse and sustainable development are applied to mechanisms and processes that facilitate renewable energy governance in Nigeria.

The International Renewable Energy Agency (IRENA)⁷ defines renewable energy as energy produced from renewable sources in a sustainable manner. Renewable energy resources⁸ provide an alternative to non-renewable energy forms such as fossil fuels. Energy generated for electricity provides hot water, heating cooling and refrigeration. For more than a century non-renewable energy sources such as fossil fuels generated for these purposes were never in doubt especially as they provided comfort for modern day

⁴ Rhodes, R. A. W. 'The New Governance: Governing Without Government'. *Political Studies*, (1996) 44(4); 652-667; Also, N. Gunningham, 'Confronting the Challenge of Energy Governance; *Transnational Environmental Law*', (2012), 1(1) at 119-135 and finally see, Institute of Governance, Canada <http://www.iog.ca>. (Accessed March 2016)

⁵ *Supra*.

⁶ Fukuyama, F. 'Defining Governance' Centre for Global Development, Working Paper 314 (2013); available online at: http://www.cgdev.org/files/1426906_file_Fukuyama_What_Is_Governance.pdf. (Accessed May 2015)

⁷ See, Statute of IRENA, Article III signed in Bonn, World Conference Centre, 26 January 2009; available online at https://www.irena.org/documents/uploadDocuments/Statute/IRENA_FC_Statute_signed_in_Bonn_2601_2009_incl_declaration_on_further_authentic_versions.pdf.

⁸ Renewable energy is energy from a source that is not depleted when used; examples include solar, wind, tidal and wave energy; also geothermal; hydropower, ocean and thermal energy. This paper concerns the study of renewable energy sources for electricity purposes.

living.⁹ However, the new approach to energy study and analysis brings their continued and unchecked use and effects on the environment into question. Today, they are considered as unfriendly resources their use of which must be monitored and even preserved. Hence, the need for the formulation of a legal framework for renewable energy governance. Today, availability and effects of energy sources are pressing concerns.

B. Energy Security

Energy Security is the uninterrupted availability of energy sources at an affordable price.¹⁰ It has many dimensions: long term energy security mainly deals with timely investments to supply energy in line with economic developments and sustainable environmental needs. Whereas, short term energy security is linked to the negative economic and social impacts of either physical unavailability of energy, or prices that are not competitive or are overly volatile.¹¹ For Omorogbe, energy security embraces infrastructure and concerns the security of assets used for the supply of energy products such as pipelines, installations and intellectual property;¹² it also extends to security of personnel.

Energy supply is arguably the most important aspect of energy security due to state reliance upon it for socio-economic development. Energy supply as a priority issue is summed up well by Omorogbe who observes it as; the security of continued, reliable, and regular supply of the energy source to all consumers, including unimpeded access, with necessary efficient administration and infrastructure. Energy security is crucial and critical to all states but more so in Nigeria and Africa where socio-economic underdevelopment abounds.¹³

1.3 Examination of Theories

a. Resource Curse Theory

Prior to the 1970s conventional wisdom was that resource abundance equaled development; thus in the 1950s the belief that, the possession of a sizable and diversified natural resource endowment is a major advantage to any country embarking upon a period of rapid economic growth was not unusual.¹⁴ This belief was echoed by mainstream economist and development theorist Rostow in 1961 who argued that natural

⁹ See, International Energy Agency, 'What is Energy Security?' available online at; <http://www.iea.org/topics/energysecurity/subtopics/whatiseenergysecurity/+&cd=2&hl=>. (Accessed May 2016)

¹⁰ *Supra*.

¹¹ *Supra*. at 5.

¹² See, Omorogbe, Y. 'Regional and National Frameworks for Energy Security in Africa', Ch. 5 in Barton, B. Redgwell, C. et al, 'Energy Security: Managing Risk in a Dynamic Legal and Regulatory Environment' (Oxford University Press: 2004) pp121-141 at 125.

¹³ Eberherd, A. et. al 'Africa Underpowered: The State of the Power Sector in Sub-Saharan Africa', AICD Background Paper No. 2 (2008); See generally, Barton, B. and Redgwell, C., Renne, A. and Zillman, D., 'Energy Security in the Twenty-First Century' pp457-473, Energy Security: Managing Risk in a Dynamic Legal and Regulatory Environment' (Oxford University Press: 2004).

¹⁴ Rossner, A. 'The Political Economy of the Resource Curse: A Literature Survey', Institute of Development Studies (IDS) UK, Working Paper 268 (2006); at Introduction. Geographer Norton Ginsburg as cited in Higgins 1968.

resource endowments would enable developing countries make the transition from underdevelopment to industrial development. Rostow based his observation on the fact that this had been done for countries such as Australia, the United States and Great Britain. However, concerns about the notion that resource endowments equal economic prosperity developed after the first oil price shock of 1973-74 when the price of crude oil quadrupled on the international market within three months.¹⁵

The resource curse theory is traced to the period 1970 -1990 when a body of research prompted by events in the price of oil, begun to question the fact that resource wealth sometimes fails to yield economic prosperity. Obviously, resource curse theorists concluded this on a restrictive approach; however, the fact resource wealth sometimes falls short of economic prosperity and development is undisputed. Nigeria's oil wealth, traded on global markets for several decades has not brought prosperity to its people. Though hard to reconcile, this theory cannot be overlooked. Sachs and Warner¹⁶ demonstrate the negative correlation between oil volatility and poor economic growth. Specifically, they highlight a negative relationship between natural resources and economic growth during the period 1970-1990. In the same way Auty,¹⁷ finds that in the period 1960-1990, the per capita incomes of resource-poor countries grew two to three times faster than those of resource wealthy states.

The resource curse theory has varying dimensions but its greatest link is to resource abundance and poor economic growth.¹⁸ Studies by Sachs and Warner¹⁹ disclose what appears consistent, that high resource intensity correlates with slow economic growth. Further, that no overlap exists from resource wealthy countries and economic prosperity.²⁰ Notwithstanding observations of Sachs and others, resource wealth has brought prosperity and development to the six Gulf Cooperation Council member countries;²¹ this reveals weakness of the theory. Dutch Disease and Rentier State²²

¹⁵Ross, M. 'How the 1973 Oil Embargo Saved the Planet', Available online at, <http://www.foreignaffairs.com/articles/north-america/2013-10-15/how-1973-oil-embargo-saved-planet>. (Accessed March 2016).

¹⁶Sachs, J. and Warner, A. 'The Curse of Natural Resources' European Economic Review 45 (Centre for International Development: Harvard University, 2001) pp 827-838, at 828.

¹⁷Auty, R. and Gelb, A. 'The Political Economy of Resource Abundant States' in Auty A. (ed.) (2001), Resource Abundance and Economic Development, (Oxford, Oxford University Press (2001)) pp126-144.

¹⁸Rossler, A. 'The Political Economy of the Resource Curse: A Literature Survey' The Institute of Development Studies Working Paper, (UK, April 2006) at para.2.

¹⁹Their findings reveal that, between 1970 and 1990, none of the countries with abundant natural resources grew rapidly adding further strength to the resource curse theory.

²⁰Supra note 4.

²¹Member countries of the GCC are Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates.

²²Ohije, K. 'Extractive Economies and Conflicts in the Global South: Re-Engaging Rentier Theory and Politics in Democracy and Inequality in Nigeria', Journal of Developing Societies 30 (2014) 1-24. Rentier theory purports that top state officials and private middlemen in resource wealthy states collude with exploitative agents of international capital. In such a scenario revenue from resource wealth is distributed among an elite group and fair distribution among sectors of the society is withheld. M. Ross, 'How the 1973 Oil Embargo Saved the Planet', Available online at, <http://www.foreignaffairs.com/articles/north-america/2013-10-15/how-1973-oil-embargo-saved-planet>. (Accessed March 2016).

²²Sachs, J. and Warner, A. 'The Curse of Natural Resources' European Economic Review 45 (Centre for International Development: Harvard University, 2001) pp 827-838, at 828.

theories being strands of the resource curse theory, illustrate the negative developments that can arise where resource abundance leads to economic dependence.²³ Sachs Warner and Auty, explain the windfall nature of revenues from exported energy resource(s) and their tendency to boost economies. They observe, states which experience energy sector boom are lulled into a false sense of security. It follows that such states render non-oil/gas/mineral traded sectors of the economy uncompetitive in the global market and vulnerable to crowding out.²⁴ Dutch Disease is likened to the period in Nigerian history when prior to discovery of oil it enjoyed booming agricultural, forestry and palm oil industries that were the envy of the world.²⁵ Overtime these industries were neglected or crowded out; they are yet to recover.

A poor record of poverty alleviation, extreme inequality of wealth, entrenchment of undemocratic regimes, poor decision-making, degradation of the environment and human rights abuses characterize resource wealthy states. Resource curse theorists suggest political regimes with these characteristics, are an off shoot of natural resource abundance linked to low levels of democracy.²⁶ This is supported in the findings of Wantchekon who examined data of one hundred and forty one countries, between 1950 and 1990 and found that a one per cent increase in natural resource dependence increased the probability of authoritarian government by 8 per cent.²⁷ These findings are consistent with Nigeria's history of coercive rule by military regimes which span two to three decades.²⁸

A common problem of resource cursed states is the way extractive resource wealth flows into the economy. In Nigeria energy resources are the property of the state and revenues

²² Auty, R. and Gelb, A. 'The Political Economy of Resource Abundant States' in Auty A. (ed.) (2001), *Resource Abundance and Economic Development*, (Oxford, Oxford University Press (2001)) pp126-144.

²² Rossler, A. 'The Political Economy of the Resource Curse: A Literature Survey' The Institute of Development Studies Working Paper, (UK, April 2006) at para.2.

²² Their findings reveal that, between 1970 and 1990, none of the countries with abundant natural resources grew rapidly adding further strength to the resource curse theory.

²² *Supra* note 4.

²² Member countries of the GCC are Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates.

²² Ohieje, K. 'Extractive Economies and Conflicts in the Global South: Re-Engaging Rentier Theory and Politics in

²³ The term Dutch disease emanates from the 1970s when it was first applied to the decline in the manufacturing sector of the Netherlands. This decline was linked to inflation and the appreciation of the Dutch currency after the country begun exporting gas in the late 1960s. Essentially, inflation led to a contraction of the non-oil, gas or mineral traded sector(s) due to the rising price of exports and the lessening price of imports.

²⁴ Crowding out is linked to the Dutch Disease argument and occurs; *when a large extractive project ...stakes first claim to scarce resources, the rest of the economy finds it difficult to secure factors such as capital, labour and specialist services, all of which gravitate towards the cash-rich sector.* See, P. Stevens, G. Lahn and J. Kooroshy, 'The Resource Curse Revisited: Energy Environment and Resources', Research Paper, Chatham House, The Royal Institute of International Affairs (London:2015), pp. 1-48, p. 10.

²⁵ Aghalino, S.O. 'British Colonial Policies and the Oil Palm Industry in the Niger Delta Region of Nigeria, 1900-1960' African Study Monograph, 21(1): 19-33 (Ilorin: 2000) p 27.

²⁶ Wantchekon, L. and Lam, R 'Political Dutch Disease' (2002) pp 1-25;

Available at <http://www.nyu.edu/gsas/dept/politics/faculty/Wantchekon/research/dutch.pdf>. (Accessed January 2016)

²⁷ *Ibid.* at 13.

²⁸ Wantchekon, L. 'Why do Resource dependent Countries Have Authoritarian Governments?' Yale University (1999) pp1-33; Available at: <http://www.isn.ethz.ch/Digital-Library/Publications/Details/?lang=en&id=30411>. (Accessed February 2016)

from them accrue to government.²⁹ Furthermore, the capital-intensive nature of the sector and foreign-investment dependency means, the sector requires small amounts of labour relative to its contribution-to-economy and, in many cases, has limited links to the rest of the economy.³⁰ This fosters uneven distribution of wealth.³¹

Nigeria's power sector has suffered substantially due to lack of sound energy governance; electricity supply barely meets the demands of one quarter of its population. Energy deficit, lack of energy security and frequent halts in the provision of premium motor spirit or petrol reinforce resource curse theory. Essentially, the circumstances amount to poor decision-making and bad governance. Nigeria is a model example for scholars who propound this theory. It is one of the largest producers of crude oil globally, a member of OPEC and a foremost participant of the global oil industry.³² Its energy wealth has failed to translate to social, economic or political prosperity. Despite findings of Sachs and others contributing factors of Nigeria's poor energy governance have been ignored. Such factors include Nigeria's political historical and colonial history. These factors helped shape the social, economic and political landscape of Nigeria and cannot be ignored. Rosser observes flaws in the findings of Sachs and others, for Rosser the theory derives from, economic development performance solely on the basis of the size and nature of natural resource wealth to the exclusion of significant historical and political factors which actually determine economic and development outcomes.³³ Against this observation, how fair is it to accept that resource wealthy states are unlikely to translate their resource wealth to social and economic prosperity?

Resource curse theory unravels well up to a point but, has its limitations and shortcomings. Firstly, not all resource wealthy states have failed to translate natural resource wealth to economic development and prosperity; countries of the Gulf Cooperation defy the resource curse theory. Sachs and others attempt to explain why resource wealthy states fail to achieve economic development and prosperity from too narrow an approach which lends itself to generalization. This limited approach examines economic outcomes based solely on a single resource-type that is dominant in an economy which, in itself indicates problems of governance.

This paper observes, the failure of research theorists (Sachs and Warner, Auty, Gelb and Ross) to consider factors which directly affect the ability of resource wealthy states to economically develop and prosper is significant. The resource curse theory as

²⁹ Section 44(3) of the Constitution vests the entire property and control of all minerals, mineral oils and natural gas in, under or upon any land in Nigeria in, under or upon the territorial waters and the Exclusive Economic Zone of Nigeria in the Government of the Federation.

³⁰ Emblematic of the oil and gas sector is the poor opportunities for lower skilled. It is common for most opportunities to exist for the highly skilled. Consequently, income inequality increases because those with higher skill levels usually come from the highest income quintile.

³¹ *Supra* note 27.

³² A permanent intergovernmental Organisation created at the Baghdad Conference September 10-14, 1960 by Iran, Kuwait, Saudi Arabia and Venezuela; Nigeria has been a member since 1971. For full further details go to http://www.opec.org/opec_web/en/about_us/24.htm. (Accessed June 2016)

³³ A. Rosser, 'The Political Economy of the Resource Curse: A Literature Survey' Institute of Development Studies (2006, UK) Working Paper 268.

propounded by these scholars enjoyed popularity at a time when Nigeria a former colonised state, left to govern its resources, lacked technical expertise and knowledge. The peculiar relationship between former colonized states found to possess abundant resources and their former colonialist overlords in the post-colonial era, is ignored. Such a relationship affected how former colonised states were regarded by European states especially against notions of internal colonialism which post-colonial and critical race theorists allege operated and remained long after independence.³⁴

The resource curse theory presents a dismal picture for energy development in Nigeria. In line with Rosser, Maloney challenges the methodology and conclusions of early resource curse theorists. He argues there is little evidence based on long term data that resource wealthy states generally underperform. Maloney contends that, resources have in fact played an integral role in the success of numerous successfully industrialized countries; and further, that growth processes take place across the long run and probably cannot be convincingly summarized by cross-section regressions of a highly turbulent 20-year period at the end of the twentieth century.³⁵ Critics of this theory contend poor economic growth is far from unique to resource wealthy states. They observe non-resource wealthy states also suffer poor economic growth in the same period.

Acceptance of the resource curse theory, implies natural resource endowment is bad for development and fosters political pathology. Rather than accept this view rational assessment of factors which contributed to Nigeria's energy sector in the past must be considered. Thus, the weight to be attached to this theory is questionable. For energy-wealthy states like Nigeria, the resource curse theory developed at a time when there existed a mutual dependency between Nigeria and international energy corporations largely owned and controlled by the West.³⁶ Nigeria relied on the experience and expertise of international energy corporations and in exchange these corporations operated at will, with disregard for regulations and laws. This was due to poor governance measures over several decades by different government administrations.³⁷ The theory developed at a time when demand for fossil fuels dominated energy markets. This continued until the gradual rise in environmental awareness and development of renewable energy as an alternative to fossil fuels. Today, energy markets of most developed states are diversified and include renewable and alternative energy forms;³⁸ whereas, the energy markets of

³⁴Internal colonialism occurs where the capital or economic dominant part of a country treats a distant region just as it might a genuinely foreign colony.

³⁵ Maloney, W. F. 'Innovation and Growth in Resource Rich Countries' Central Bank of Chile Working Papers No.148, (2002) pp 1-37.

³⁶ The term *West* is used to refer to the industrialized countries of Europe, North America, Australia and New Zealand. See, Huntington, S. 'The Clash of Civilisations and the Making of World Order' New York Touchstone 1997 at 46-47.

³⁷ The period also saw the development of rentier elites that is, politicians who pocketed the revenues of the energy industry. *Supra* at note 22.

³⁸ As far back as 2005 the United States had approximately one quarter installed capacity of wind power as Europe. Development of renewable energy has risen significantly since then. For example in its first administration, the Obama administration developed 11,000 megawatts of wind energy to the power grid of the United States. It is estimated the US could generate up to eleven trillion kilowatt hours of wind power per year; Earth Policy Institute available at <http://www.earth-policy.org>. (Accessed May 2016)

developing states are economically constrained and face tougher energy and environmental choices.³⁹

A major advantage resource wealthy states hold over resource-poor ones is that they have a commodity in global demand. Stevens and others suggest, resource wealthy countries break the resource curse by displacing the resource upon which their economy thrives and look to other areas to aid development. But how easy is this to achieve? The obvious answer is through diversification of the economy over time. For Stevens, the key to true diversification is to use the new asset...to create a stream of income that continues to flow when resources are exhausted.⁴⁰ When economies experience poor market returns; diversification provides a cushion from market volatility and this aids economic stability.

Nigeria's track record of energy governance raises many questions. Governance is central to the overall management and administration of a state, including the economy. According to the World Bank, governance (conceptually) is defined as the rule of the rulers, typically within a given set of rules. It is the process by which authority is conferred on rulers, by which they make the rules, and by which those rules are enforced and modified. Effective governance pertains where there is enforcement of laws policies and implementation. Crucial to this is the entrenchment of rule of law, transparency and accountability. Energy governance in Nigeria is centralized, hierarchical, and inflexible. It is the root cause of Nigeria's underdevelopment which has obvious negative impact on environmental protection concerns. Poor energy governance has caused widespread environmental abuse and inability of government entities to govern Nigeria's energy sector effectively. A more responsive system of energy governance and re-think of existing approaches is required.

A legal framework based on principles of good governance is fundamental to the development of policies that preserve resources, protect the environment, and of legislation that is respected.⁴¹ Resource wealth can bring growth and development when governments are prepared to follow international initiatives and baseline standards on good governance. These include securing optimum contractual terms, ensuring revenue transparency, institution and local capacity building.⁴² Rosser and Maloney, confirm the fluidity of the theory and the attention to energy wealth and economic development for them, is significant; it strikes a clear warning that good governance is at the centre of development, not resource wealth. It reinforces the need to avoid mistakes of the past and encourages the establishment of strong institutions and infrastructure to support renewable energy governance in Nigeria.

³⁹ The Renewable Energy Division (RED) of the Nigerian National Petroleum Corporation, created by Presidential Directive (2005) is mandated to introduce renewable energy initiatives in line with provisions of the Kyoto Protocol, to which Nigeria is signatory. NNPC's Green Gasoline is a biofuel programme for the production of fuel-ethanol and bio-diesel that is designed to reduce carbon dioxide emissions and improve air quality; Available online at <http://www.nnpcgroup.com/NNPCBusiness/midstreamventures/RenewableEnergy.aspx>. (Accessed March 2016)

⁴⁰ *Supra* at note 27.

⁴¹ Fagbohun, O., 'Environmental Law, Legislation and Policy Making in Sub-Saharan Africa' in *Environmental and Sustainability: Issues, Policies and Contentions*. University Press PLC (Ibadan) 2011, at Chapter 8, 155.

⁴² *Ibid* note 27 at 21.

The resource theory's straight-jacket, black and white approach is rejected as dated. A broader approach is required to analyse why energy abundant states fail to enjoy economic prosperity. Thus, this paper aligns strongly with the notion that adoption of good governance principles will assist in the formulation of a coherent legal framework for renewable energy and thus bring about sound energy governance and management in Nigeria.

b. Critical Race and Post-Colonial Theories

The struggle with principles of democracy and good governance is a familiar one for post-colonial African states. It is unfortunate that, so long after independence low levels of development and polarised wealth characterize the Nigerian economy. Nigeria itself is loaded with negative connotations such as corruption, kidnapping, disease, slavery, refugees, political abuse, oppression and poverty. A quintessential development paradox is that in the midst of oil development and resource wealth Nigeria remains an extremely poor country.⁴³

There exists a group of theories which have as their focus the development of post-independent African states. Critical Race and Post-Colonial theories, are relevant to Nigeria's colonial past. Their common concerns mean they speak the same language; to varying degrees.⁴⁴ As observed by Ahluwalia post-colonialism is charged with being a discourse of Third World theory while Dirlik claims that post-colonialism, is a child of post-modernism... and that, this can be observed in the manner in which post-colonial critics acknowledge their debt to both post-modernist and post-structuralist thinking.⁴⁵

Historically, critical race theory (CRT) concerned itself with the struggles of various minority groups in the United States (US); its area of focus was the black experience and their struggle for social justice.⁴⁶ However, CRT developed a theoretical methodology that equally applies to the struggles of other subordinated groups.⁴⁷ CRT is useful in the analysis of underdevelopment of Nigeria since independence while post-colonial theory applies directly to the complexities and dynamics of African politics.⁴⁸

These theories share perspectives on the social economic and political development of Africa. They are of particular interest in the analysis and relevance of globalisation from the African perspective. The thrust of these theories is that Nigeria's energy resources

⁴³ See, 'Poverty in the Midst of Plenty: The Challenge of Growth with Inclusion', A World Bank Poverty Assessment; Population and Human resources Division, West Africa Department: 1996; available online at; <http://www.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTPOVERTY/EXTPA/O,contentMDK:20204610-menupk:435735-pagePK:1489>. Also, World Bank April 2014. (Accessed February 2015)

⁴⁴ Ahluwalia, P., 'Politics and Post-Colonial Theory: African Inflections' Routledge Publishers, (London: 2001) at 2.

⁴⁵ Dirlik, A. 'The postcolonial Aura: Third World Criticism in the Age of Global Capitalism' Critical Inquiry. Vol.20 No.2 (Winter: 1994) pp328-356.

⁴⁶ CRT is by no means limited to the black struggle for social justice in the US. CRT methodology has applied to sexual minorities in their struggle for social justice also. See, Cain, P., 'Stories from the Gender Garden: Transsexuals and Anti-discrimination Law', 75 DENV. U. L. Rev. 1321 (1998).

⁴⁷ *Ibid.* at 1325; (for example feminists and transsexual groups).

⁴⁸ It analyses how African identity has been constituted and reconstituted by examining the rise of nationalism and de-colonisation.

would have aided socio-economic growth and development, but for the meddling of former colonial states to formulate rules and principles under international law which ensure their subjugation. Essentially, these theorists contend, the institutions and rules established after independence, enabled European and Western states to extend their exploitation control and domination over former colonial states like Nigeria.

At the heart of CRT is the question, what does race, have to do with it?⁴⁹ CRT highlights non-neutrality and the subjective nature of law, especially international law; for CRT scholars Delgado, Bell, Crenshaw Williams and Matsuda⁵⁰ CRT is characterized by an orientation around race that seeks to attack a legal system which disempowers people of color.⁵¹ Critical race thinking is steeped in European-American post-modernism; it challenges the concept of international law, its significance and application to developing countries like Nigeria. For CRT scholars it is of no surprise that European domination in post-colonial states and colonial enterprises were founded on traditional natural law beliefs, which originated in Europe and formed the bedrock of its jurisprudence. For theorists Delgado, Bell, Crenshaw Williams and Matsuda such beliefs perpetuate and dominate European thinking. Part of these beliefs were scribed not only in treaties and agreements among European states, but also in leading texts on international law that gave credence to the notion that it was the God-given right of European states to dominate and colonise African states. Strength for this is found in the writings of Pomeroy who stated;

It seems to be a law of Providence that the peoples who are unfitted to develop the resources of the earth shall give way to those that have the stronger race life, the most enduring persistence, the energy which transforms the forest and the wilderness into the farm, the village, and the city.⁵²

Pomeroy, traced international law to Christian morality and God's endowment of man with universal conscience and ability.⁵³ CRT scholars argue inter alia that justification for European domination in Africa is found in the words of Pomeroy. For them, Pomeroy's words echo beyond the period of colonialism and manifest in the continued domination of non-European states today through various international institutions like the United Nations and the World Bank; this includes the International Energy Agency which these theorists contend, are focused on assisting developed states to craft better economic policies as opposed to improving governance in developing states.

⁴⁹ The origin and development of critical race theory is best explained by Freeman who states:

CRT rises as a direct challenge to an American post-civil rights legal and political culture that misidentifies and distorts the character and nature of legal reforms purporting to address racial and gender inequities. In other words it bares the duplicity of the neutrality of law.

⁵⁰ These are recognized as the founding scholars of the critical race theory.

⁵¹ Bell, D. 'Who's Afraid of Critical Race Theory?' *Uni. Ill. L. Rev.* 893, (University of Illinois Law Review 1995).

⁵² See, Pomeroy, J., 'Lectures on International Law in Time of Peace' originally published by Cambridge: The Riverside Press 1886 at p. 81;

available online at <http://archive.org/stream/lecturesoninteroopomegoogpage/n48/mode/2up> . (Accessed January 2012)

⁵³ *Ibid.* at 83.

CRT challenges the notion that international law is a coherent body of rules universally applicable to all humanity, without regard to nationality, culture, religion, philosophy and applies equally to all states is challenged by CRT. For them, analysis of the universality of international law explains Nigeria's socio-economic underdevelopment; underdevelopment which for CRT scholars such as Matua is the outcome of social injustices and oppressions. The international legal, political, cultural and economic orders are deliberately designed to maintain the control and subjugation of states throughout the world, particularly the Third World.⁵⁴ For Matua international law is a medium for conquest and domination. It is not by chance that non-European states fail to develop because international law successfully alienates states through manipulation, exploitation and degrading social hierarchies.

In the same vein Andrews, observes that international law had ceased to be a European law only to become a law of the great powers...and that, While it may in principle no longer have been serving political colonization, it did not cease ...to be a means of economic domination... It modifies only the form, not the substance of domination.⁵⁵ Scholars such as Andrews⁵⁶ unmask the veneer of equality of international law while feminist scholars such as Charlesworth⁵⁷ expose the patriarchal institutions and values in which, they claim international law is entrenched.

Mechanisms of control are deployed through the state and its institutions;⁵⁸ they are channels for the implementation of international laws, rules and principles. Mechanisms of control reinforce pre-colonial beliefs espoused by Pomeroy at the turn of the nineteenth century.⁵⁹

Andrews argues, the strengthening of international capitalist structures override the ability of national governments to control the economy.⁶⁰ This is well illustrated in Nigeria's period of structural adjustment programmes (SAPs) of the World Bank and the International Monetary Fund which weakened state institutions and led to huge

⁵⁴ Matua, M. 'Critical Race Theory and International Law: The View of An Insider-Outsider', 45 Villanova Law Review, 840-853 (2000) at 849.

⁵⁵ P.E. Andrews, 'Making Room for Critical Race Theory in International Law: Some Practical Pointers', 45 Villanova Law Review, 856-883 (2000) at 858.

⁵⁶ *Ibid.* at 858.

⁵⁷ Charlesworth, H. et al., 'Feminist Approaches to International Law', 85 Am. J. Int'l Law 613, (1991) at 614.

⁵⁸ The statist model is used to impose limitations upon the national institutions of states with the aim of making them weak. Arguably, the dominant global economic model of the free market provides a vehicle of implementation for the statist model. The economic model is unhampered by government restraint and sets out to deliberately weaken the capability and traditional role of national governments. Analysis of the statist model under CRT helps explain underdevelopment in energy rich countries like Nigeria.

⁵⁹ As noted by Andrews;

Loan conditionalities force national governments to dismantle regulatory controls, restrict subsidies to tax holidays for investors, and build appropriate transport and communication infrastructure. The efforts made to facilitate the movement of capital along transnational global circuits are matched only by less successful efforts to restrain the movement of labor through migration. *Ibid.* note 60 at 864.

⁶⁰ *Ibid.* note 60 at 863.

indebtedness and excessive loans.⁶¹ Excessive terms and conditions of the SAPs virtually sealed Nigeria's fate of perpetual indebtedness and underdevelopment. For post-colonial theorist Adejumobi⁶² energy is at the heart of development and yields benefit where order and good governance prevail. For Adejumobi failure to incorporate human rights and good governance terms in loan structures hinder rather than help African development. Thus, rising poverty and underdevelopment in energy abundant states is attributed to the policies of international institutions such as the World Bank⁶³ and, the notion they exist to assist developing states is rejected.

However, the notion that responsibility for Africa's development rests with developed states, is a hard one to push especially against Nigeria's track record for energy governance.

UN agencies have conducted countless programmes to assist African development. In its environmental assessment of Ogoniland,⁶⁴ the UN Environment Programme (UNEP) prepared a report in which it made recommendations to rehabilitate Ogoniland;⁶⁵ recommendations the Nigerian government have now adopted.⁶⁶ Much is placed on the responsibility of international institutions to develop Africa. It is to be noted that environmental degradation in Ogoniland occurred under de facto and de jure Nigerian governments recognised under international law.⁶⁷ Furthermore, Nigeria enjoys characteristics of a state under international law and the doctrine of Westphalian sovereignty⁶⁸ which recognizes the equality of states.⁶⁹

⁶¹ Structural Adjustment Programmes (SAPs) introduced in Nigeria in 1986 reformed the country's foreign exchange system, trade policies, and business and agricultural sectors. See, World Bank Documents, (1994/05/13 'Nigeria – Structural adjustment program: policies, implementation, and impact' Washington, DC: World Bank; available at <http://documents.worldbank.org/curated/en/1994/05/698340/nigeria-structural-adjustment-program-policies-implementation-impact>. (Accessed January 2016)

⁶² Adejumobi, S. 'Africa and the Challenges of Democracy and Good Governance in the 21st Century', available online at: <http://unpan1.un.org/intradoc/groups/public/documents/cafrad/unpan008483.pdf> (Accessed January 2016)

⁶³ For example the World Bank lends money to governments and government agencies for development projects. It has imposed stringent conditions or structural adjustment programs on recipient countries. These conditions force recipient countries to adopt reforms such as deregulation of capital markets, privatization of state companies and downsizing of public programs for social welfare. See, Global Policy Reform, 'The World Bank' available online at: <https://www.globalpolicy.org/social-and-economic-policy/the-three-sisters-and-other-institutions/the-world-bank.html> (Accessed May 2016).

⁶⁴ Ogoniland is part of Nigeria's oil rich producing area. It became the focus of the world when Human Rights Activist and Environmentalist Ken Saro-Wiwa was executed with nine others known as the *Ogoni 9*, following a shambolic tribunal in November 1995, under the administration of late Military Dictator Sani Abacha. See, Human Rights Watch Report, 'The Price of Oil' 1999 (New York).

⁶⁵ UNEP, 'Environmental Assessment of Ogoniland', (2011); available at https://www.postconflict.unep.ch/publications/OEA?UNEP_OEA.pdf.

⁶⁶ Responsibility for environmental degradation and widespread pollution is shared between multinational oil corporations, militant groups and pipeline vandals. Despite various reports government failed to adopt recommendations on rehabilitation and management of militant groups. The President of the Federal Republic of Nigeria in June 2016 declared clean-up of Ogoniland which is likely to take several years.

⁶⁷ Lauterpacht, H., 'Recognition in International Law', (Grotius Classic Reprints Series) 2012 at p23.

⁶⁸ The Westphalian principle is named after the *Peace of Westphalia*, signed in 1648 which ended the *Thirty Year War*; a war in which major continental European states – the Holy Roman Empire, Spain, France Sweden and the Dutch Republic, agreed to respect one another's territorial integrity. The *Westphalian principles* are central to international law. See,

Despite credible perspectives for underdevelopment. Critical race and post-colonial theories are criticized for their relaxed approach to responsibility of developing states to effectively control and govern their resources. Notwithstanding, Nigeria must shoulder some responsibility for endemic failure to develop and efficiently govern its energy resources. Thus, these theories encourage ability and capacity to self-govern, without the negative influence of external forces of developed states; they encourage African states to search for solutions that encourage self-development and ignite a zeal for a critical approach to renewable energy governance which requires Nigeria to reverse poor socio-economic and technological development, and build strong energy institutions and infrastructure. This, in the long run will, enhance overall national development and achieve effective renewable energy governance. If nothing else these theories flag a warning that Nigeria must, be wary but diligent in the search for energy policies which enhance development and protect its environment. Essentially, these theories serve as a reminder of the vulnerable, subordinate positions of African states in the international community.

c. Sustainable Development

Major philosophical and theoretical perspectives make up this multidimensional and dynamic concept which continues to evolve with human development. In short, the terrain for sustainable development is vast. To borrow from Ratner, the most appropriate way to understand sustainable development and sustainability is as a dialogue of values.⁷⁰ Its dynamic nature means it applies to most social, economic and political endeavours. Blewitt highlights the multidimensional nature of sustainable development. He defines sustainable development as a process with an end goal; a social goal, which includes ideals of justice, participation equality empowerment and institutional sustainability.⁷¹ Ecological goals, concerned with biodiversity preservation, resource conservation and ecosystem resilience or, an economic goal with a focus on growth, efficiency and material welfare. Sustainable development recognizes the non-static nature of the concept which interrelates and straddles various disciplines.

Notwithstanding the multidimensional nature of the concept, Robinson and Tinker⁷² note; one of the main obstacles to establishing a common conceptual framework incorporating, ecological social and economic concerns is the absence of consensus among experts; which can lead to difficulty understanding policy development. On the other hand, the concept is an advantage for challenges that require a dynamic and

Kissinger, H., 'World Order: Reflections on the Character of Nations and the Course of History', (2014) Allen Lane Publishers.

⁶⁹Westphalian sovereignty affords Nigeria and all states sovereignty over its territory and domestic affairs, to the exclusion of all external powers. At the heart of Westphalian sovereignty is the principle of non-interference that one state has no right to interfere in the domestic affairs of another state.

⁷⁰Ratner, B., 'Sustainability as a Dialogue of Values: Challenges to the Sociology of Development', *Sociological Inquiry*, Vol 74, No. 1, pp59-69 (2004).

⁷¹Blewitt J., 'Understanding Sustainable Development' (2008) Earthscan London at 27.

⁷² Robinson J. and Tinker J., 'Reconciling Ecological, Economic and Social Imperatives: A new conceptual framework', in Schrecker, T., (ed.) 'Surviving Globalism: The Social and Environmental Challenges', (1997) St. Martins Press, (New York).

multidimensional approach like the analysis of renewable energy governance. A major concern with a multidimensional approach is the risk of conflict among the goals.

For Sands, ideas underlying the concept have a long history in international law, the concept first begun to appear in treaties in the 1980s.⁷³ The principle that states should ensure the development and use of their natural resources in a sustainable manner is most relevant to the discussion at hand. Although the concept can be traced to the Stockholm Conference on the Human Environment in 1972,⁷⁴ the definition most widely used comes from the Report of the WCED, often referred to as the Brundtland Report.⁷⁵ It notes, the strategy for sustainable development aims to promote harmony among human beings and between humanity and nature.⁷⁶ Thus, the way human beings interact with one another and the natural environment is significant to the attainment of sustainable development.

Dresner observes, the concept of sustainable development grew out of a need for political compromise between the global environmental management and protectionism aims of the North and the human health and development needs of the South;⁷⁷ For Dresner, sustainability is a concept which combines post-modernist pessimism about the domination of nature with almost Enlightenment optimism about the possibility to reform human institutions.⁷⁸ Balancing concerns for the natural environment and limiting the needs of humankind is significant. This turning point in man's awareness, interaction and thinking about the environment is critical for development of renewable energy, which assists in the achievement of sustainable energy.

The Stockholm Declaration,⁷⁹ Rio Declaration⁸⁰ and World Summit⁸¹ have each played a significant role in drawing attention to the consequences of man's development upon the

⁷³ Sands, P. 'Principles of International Environmental Law: Volume I Frameworks, Standards and Implementation' (Manchester University Press: (1995) at 198.

⁷⁴ For the full text of the Declaration of UN Conference on the Human Environment, Stockholm, 1972, see Birnie, P. W. and Boyle, A., 'Basic Documents on International Law and the Environment', Chapter 1, p.1.; available online at; <http://www.unep.org/Documents/Multilingual/Default.asp?documentid=97>. (Accessed January 2015)

⁷⁵ See, Report of the World Commission on Environment and Development, (the Brundtland Report), Our Common Future, 43 (1987) Oxford University Press. The Report defines sustainable development as development that meets the needs of the present without compromising the ability of future generations to meet their own needs; it is a process of change in which the exploitation of resources, the direction of investments, orientation of technological development and institutional change are all in harmony and enhance both current and future potentials to meet human needs and aspirations.

⁷⁶ *Supra* note 65.

⁷⁷ Dresner, S., 'The Principles of Sustainability', Earthscan 2008 (London, UK) Ch.5 .

⁷⁸ Freeman, M., 'Introduction to Jurisprudence', Seventh Edition, (Sweet and Maxwell) 2001 at 120. The Enlightenment period grew in the eighteenth century and is known as the age of reason. It was a period when great thinkers such as Vico (1668-1774) Montesquieu (1689-1755) Smith (1723-1790) and Hume (1711-1776) questioned the basis of ordered human society.

⁷⁹ See, Declaration of the UN Conference on the Human Environment, U.N. Doc. A/CONF.48/14/Rev.1(1973); 11 ILM 1416 (1972).

⁸⁰ See, Rio Declaration on Environment and Development, Rio de Janeiro, 3 to 14 June 1992, U.N. Doc. A/CONF.151/26/REV.1, Vols. I-III (1992).

⁸¹ See, Report of the World Summit on Sustainable Development, Johannesburg, South Africa, 26 August-4 September 2002; U.N. Doc. A/CONF. 199/20.

environment.⁸² Sustainable development as stated in the Rio Declaration, asserts a right to development to meet the needs of present and future generations. Principle 2 of the Rio Declaration firmly reiterates the sovereign right of states to exploit their own resources in accordance with their environment and development policies.⁸³ Sustainable development is concerned with achieving balance, balancing economic growth against environmental considerations. For example, zero economic growth is unlikely to save the ozone layer. The United Nations Sustainable Development Goals and Declaration on the Decade of Sustainable Energy (announced by the UN Secretary-General)⁸⁴ seek to address global access to energy and highlight the impact of energy upon the environment.⁸⁵ To date numerous treaties and instruments have come about directly as a result of harm caused to the environment from energy.

Economic growth theory puts human beings at the centre of the environment where they control and dominate for selfish existence;⁸⁶ whereas theory of deep ecology advocates a return to the simple ways of managing nature and the environment. The non-human environment is at the heart of deep ecology theory, emphasis is placed on a moral duty to respect plants, animals and nature, which they believe have a right to co-existence.⁸⁷

Environmental degradation and deterioration generally, has been more rapid than in previous millennia of organised human society; today the point of no return where environmental degradation is irreversible is real and present.⁸⁸ Nigeria's vulnerability to climate change speaks to the need to establish an efficient energy system. A sustainable development approach which captures the need for man to develop (economic theory) and at the same time protect the natural environment (ecology theory) is called for. Two important features exist in the relationship between energy use and production and sustainable development. The first is the importance of adequate energy services for satisfying basic human needs, improving social welfare, and achieving economic development. Secondly, the production and use of energy should not endanger the quality of life of current and future generations and should not exceed the carrying capacity of

⁸² The United Nations Intergovernmental Panel on Climate Change (IPCC) established 1988, is mandated to assess scientific technical and socio-economic information relevant to understanding the scientific basis of risk of human induced climate change.

⁸³ Permanent Sovereignty Over Natural Resources (PSNOR) is a principle of international law found in UN General Assembly Resolution 1803(XVII), available at https://www.legal.un.org/avl/ha/ga_1803.html (Accessed January 2016).

⁸⁴ See, 'UN Decade of Sustainable Development for All: Report of the Secretary General' September 2014 New York also, UN General Assembly Resolution A/69/395.

⁸⁵ See, Ajibade, A., 'The UN General Assembly *Decade of Sustainable Energy for All* and the Prospects for Sub-Sahara Africa in 2024', *forthcoming* Journal of International Law and Diplomacy, UNILAG.

⁸⁶ From a biblical perspective God proclaimed that man should have dominion over the earth and all that existed within it. In the Holy Bible, it is written that heaven belongs to the Lord alone, but He gave the earth to the human race, see Psalm 115 verse 16.

⁸⁷ Redgwell, C., 'Life, the Universe and Everything: A Critique of Anthropocentric Rights', in Boyles, A. and Anderson, M. (eds.) 'Perceptions of the Environment, Human Rights Approaches to Environmental Protection', Oxford University Press (1996) at 72-87.

⁸⁸ Leal-Arcas, R., and Filis, A., 'Certain Legal Aspects of the Multilateral Trade System and the Promotion of Renewable Energy', *forthcoming* in C. Lim and B. Mercurio, (eds.), 'International Economic Law after the Crisis: A Tale of Fragmented Disciplines', (Cambridge University Press) at 3.

ecosystems.⁸⁹ For example, more than half Nigeria's population lack access to basic energy services, while the majority of energy poor are rural dwellers who rely mostly on fuel wood, this has devastating impact on the environment and human health. Continued depletion of Nigeria's energy and natural resources (forests) to satisfy energy needs causes environmental degradation which in some cases is irreparable.

Historically, sustainable development revolved around two approaches. The first being strong sustainability, a notion which contends, natural resources or minerals can be depleted so long as the ecosphere or environment is protected in the process. Supporters of strong sustainability assert a planet over people approach and posit, that the planet cannot be substituted. The idea of substitution forms part of the second approach namely, weak sustainability which dwells on the means of achieving sustainability. The principle of substitution is at the heart of weak sustainability and is viewed from an economic dominant perspective.⁹⁰ It is based on an assumption that, all forms of capital are substitutable for each other. According to substitution idealists, human or man-made capital (technology) can substitute natural capital; natural capital being natural resources like oil and gas. A major feature of weak sustainability is that compensation for substituted capital stock is made as a form of investment in another capital stock. Weak sustainability implies any form of capital can be run down provided proceeds are reinvested in other forms. This notion of substitutability forms the basis of objection that is, objections to the assumption and substitutability of capital stocks.

Scholars that support weak sustainability hold this as acceptable, where a minimum level of depletion of energy resources is maintained and there is willingness to pay for harm or loss sustained to the environment. Such scholars take much for granted in their belief that natural capital stocks like fossil fuels can be depleted and substituted by other capital stocks. They fail to appreciate, the depletable nature of fossil fuels and take for granted the process involved in form energy resources for example like coal oil and gas. Once depleted these energy resources are replenished only after thousands of years.⁹¹

Notwithstanding conceptual variances, theorists generally agree sustainable development as a concept has moved from the weak approach. The weak sustainability approach runs contrary to the concept of sustainable development which is defined in generational terms, where concerns for future generations and their ability to enjoy the earth's

⁸⁹ United Nations Development Programme, United Nations Department of Economic and Social Affairs and the World Energy Council, 'World Energy Assessment: Energy and the Challenge of Sustainability' UN 2000, at 31; available online at;

<http://www.undp.org/content/dam/undp/library/Environment%20and%20Energy/Sustainable%20Energy/wea%202000/Overview.pdf> . (Accessed March 2016)

⁹⁰ Pearce, D. and Atkinson, G. 'Capital Theory and the Measurement of Development: An Indicator of 'Weak' Sustainability'. *Ecological Economics* Volume 8, Issue 2, (1993), 103-108.

⁹¹ Attempts to price the environment through economic frameworks and fiscal control measures was common for scholars who aligned with the concept of weak sustainability. For example theorists such as Pearce and Atkinson contend economic pricing of the environment is the best way to protect the natural environment. Central to this idea is that the economic value of the environment is determined essentially by how much people are prepared to pay.

resources in an environment sustained and protected by the present are paramount.⁹² Furthermore, sustainable development highlights unsustainable practices and aspects of development which sacrifice the environment for economic growth. For example, the overuse and exploitation of fossil fuels (coal, oil and gas), the risk of depletion and need to balance their use with renewable energy to ensure their availability for future generations. Weak sustainability goes against the grain of sustainable development; it is a paradox to suggest that some forms of capital can be substituted.⁹³ On that basis this notion of substitutability is wholly rejected.

That sustainable development is a process of change in which the exploitation of resources, the direction of investments, orientation of technological development and institutional change are all in harmony and enhance both current and future potentials to meet human needs and aspirations is most apt for the formulation of a legal framework for renewable energy. RE is in tune with the notion of sustainable development which strives to meet the needs of the present without compromising the ability of future generations to meet their own needs. The Brundtland definition best encapsulates concerns for social development, climate change mitigation and renewable energy governance in Nigeria.

1.4 Toward Good Energy Governance

This paper advocates commitment to principles of good governance to formulate a legal framework for RE in Nigeria. It opines afresh approach to how RE legislation is put together to transform Nigeria's energy abundance into overall national development. A fresh approach based on principles of good governance is designed to examine processes and methods to formulate a legal framework for renewable energy governance in Nigeria.⁹⁴ It encourages a systematic and methodical approach to formulating renewable energy legislation. It posits that renewable energy governance can succeed with the application of good governance principles, the establishment of strong institutions and decision making processes that include all renewable energy stakeholders.

Principles of good governance rest on pillars of equity, inclusive decision-making and accountability.⁹⁵ This paper contends, Nigeria's inability to successfully transform energy governance, is explained by poor governance and weak geopolitical considerations. Pillars of good governance are crucial to the successful formulation of coherent laws and policies for RE; where principles of good governance such as, accountability inclusive decision-making transparency equity and responsiveness to stakeholders are practiced.

⁹²A cultural legacy of intergenerational thinking has existed among different cultures across the world for generations. However, contemporary development of intergenerational equity in environmental context emerged through the principles of the Stockholm Declaration and were perfected by Edith Brown Weiss in her book, 'In Fairness to Future Generations: International Law, Common Patrimony, and Intergenerational Equity', (1989).

⁹³*Ibid.* at 5.

⁹⁴See, Esty, D., 'Good Governance at the Supranational Scale: Globalising Administrative Law', 115 Yale L.J. 1490 (2006) at pp1537.

⁹⁵*Supra* at note 6.

The role of energy stakeholders is central to the practice of good governance.⁹⁶ Stakeholders are those with an interest in Nigeria's renewable energy framework; they include both public and private participants and range from generation companies, government regulators to public consumers.⁹⁷ The inclusiveness of stakeholder interests and participation must be robust and innovative for Nigeria's energy legal-making process.⁹⁸ Any success for RE framework must rest on this approach.

The paper accepts achieving good energy governance will be no easy task as Nigeria is a state with divergent cultures traditions and political preferences which could hamper decision-making processes. However, this paper postulates, the success of energy governance, in Nigeria per se is determined by engagement of the principles herein mentioned. Thus, where these principles underpin and drive formulation of a legal framework for RE, Nigeria will secure greater socio-economic prosperity and achieve capacity for climate change mitigation.

This fresh approach is critical for the country's ability to boost socio-economic development and address environmental concerns particularly in the area of climate change. Resource curse and critical race theories signal warnings about how not to formulate legislative framework for RE. Rather, these theories prompt suggestions about how to steer formulation of a legal framework for renewable energy tailored to meet expectations and demands of Nigerian stakeholders. They are useful in that regard and assist in the adoption of a fresh approach to formulating RE legislation.

Commitment to principles of good governance to formulate RE laws and policies present an opportunity for Nigeria to, chart a positive path for strong energy governance and shake-off its reputation for poor energy governance. Greatest concern for the success of this approach is Nigeria's track record for energy governance.⁹⁹ Nigeria's prominent role as a major oil producer over several decades has failed to bring socio-economic success.¹⁰⁰ Rather, management of the nation's energy resources has brought about civil strife environmental degradation and community conflict. It has created a complex web of failure across the economy. Poor energy governance has led to formation of militant groups which threaten stability in oil producing areas and have proved a reckoning force for organized government troops; it also forms the basis for political discord among tribal

⁹⁶ *Id.* at 1535.

⁹⁷ The Nigerian Electricity Regulatory Commission, Electric Power Sector Reform Act, CAP E7, Laws of the Federal Republic of Nigeria 2005, Part III sections 31-61 is responsible for the regulation of electric power matters in Nigeria.

⁹⁸ The Electric Power Sector Reform Act attempted to embrace stakeholder interests with provisions for rural development and consumer protection and assistance. Part VI, section 80 (c) provides for special needs customers such as the blind or disabled, elderly or severely ill.

⁹⁹ Ajibade, A., 'Heritage of the Magna Carta: A Sub-Saharan Perspective', being a Paper delivered at the University of Oxford UK, Conference on Law and Religion 23-25 June 2015.

¹⁰⁰ Nigeria produces between 1.6 and 2 million barrels of oil per day, it is a foremost member of the Oil Petroleum Exporting Companies (OPEC); other members in Africa include Angola and Libya. Algeria is the second largest producer of oil on the continent. Apart from those already mentioned, a substantial number of countries in Africa produce oil, they include, Equatorial Guinea, Republic of the Congo, Gabon, the Republic of South Africa and Chad. See the International Energy Agency, Oil Market Report retrieved March 2012, available at www.iea.org.

groups¹⁰¹ and is a major cause of civil war and socio-economic retardation.¹⁰² Unless this improves it is unlikely much will change. RE will struggle to form part of Nigeria's energy framework and lack relevance.

1.5 Conclusion

Over time, environment and sustainability have surpassed concerns about the impact of energy activities on the environment. It is well recognized that electricity generated from fossil fuels are a major contributor to environmental degradation and climate change. No longer are the potential economic benefits of energy alone of paramount importance. Today energy analysis from sustainability and environmental perspectives create a compelling case for RE frameworks that promote use and development of RE for electricity use. RE has a role to play in Nigeria's electricity sector but it is vital that the framework for this is sound and coherent.

RE presents an opportunity for Nigeria to boost energy performance in a manner that is sustainable and dynamic, and preserves energy resources for future generations. Need for this is clearly stated in multiple national energy documents, alongside government intention. Nigeria has an opportunity to create a coherent lucid framework for renewable energy that is workable and transparent and achieved through the adoption of good governance principles. Principles which are inclusive-based and steer toward a legislative framework designed to be sustainable and long lasting. Energy governance anchored on principles of transparency, responsiveness inclusiveness and equity is more likely to succeed than one of government domination and isolation.

Furthermore, Nigeria has an opportunity to supplant its track record of poor energy governance. Decades of failure and poor governance in the Niger delta which brought about anti-government forces, militant groups and factions with anti-government sentiment can be turned around with this shift of focus. Focus which recognises community stakeholders and their interests. Nigeria has opportunity to formulate a framework that is tailored for stakeholders within; to reach out to all consumers and stakeholders across the public and private sectors, from consumer to investor companies.

This fresh approach will also enhance Nigeria's energy capacity and mix. Without doubt this will present challenges particularly given the divergent stakeholder preferences, diversified nature of Nigeria's population, not to mention cultural and political differences. However, this fresh approach stands to bring stakeholders together making them part of the decision making process unlike the past when government failed to engage stakeholders in the decision-making processes, and lacked transparency, among other things. A fresh approach will achieve improved stakeholder understanding and appreciation for the management and control of energy resources.

¹⁰¹ Princewell, T., 'Facing up to an incompetent political class' 22 June 2016, Vanguard Newspaper, available online at: <http://www.vanguardngr.com/2016/06/facing-incompetent-political-class/>. Accessed October 2016.

¹⁰² Eghweree, C., 'Oil Politics and Development in Nigeria', Journal of Energy Technology and Policy, Vol.4, No. 12, (2014).

Renewable energy governance continues to face barriers because it is a complex and intricate network that requires multiple role players. Despite this, the government must plod along to resolve and overcome. It must keep in view long term goals and the vision for the country set out in multiple energy documents. It must keep in focus the end result which will achieve a framework for RE designed to meet the needs of many, without compromising the few. The path to a coherent legal framework must be underpinned and driven by a theoretical framework set down in this paper. Resource curse, critical race and post-colonial and sustainable development are theories and concepts designed to assist and guide Nigeria's legal framework building for RE. Ultimately, these theories speak to the need for Nigeria to innovate and create an energy sector which is sustainable and long lasting for generations of today and tomorrow.

Benefits of a RE framework anchored on good governance will stimulate hope for Nigeria's overall development which in turn will strengthen its capacity to mitigate climate change and drive socio-economic development. It will assist Nigeria's efforts under the UNFCCC article 2 and its responsibility towards its Intended Nationally Determined Contributions. Moreover the paper finds such a framework will aid preservation of Nigeria's energy resources securing them for future generations in tune with principles of sustainability. Through this theoretical framework, the Nigerian government can move one step closer to achieving a sound RE framework by embarking on a road that ensures the success of RE development. With government will, commitment and design Nigeria's RE development and overall legislative architecture for RE will be strong and secure.