

## Political Economy of Clean Energy Integration in West Africa

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**ABSTRACT** The appalling state of energy generation and distribution in virtually all African states has continued to plague the continent's economic growth. Most African countries have not utilized effectively the abundance energy source that provides room for relative clean energy, except South Africa. South Africa in fact for decades has focused fairly and narrowly on its uranium residue. The emerging scenario is that the global clamor for clean energy is once again leaving Africa behind. A regionally coordinated transition from carbon-based energy to clean energy has been canvassed as a remedy. With the use of a textual analysis, this paper examines the prospect of transition to clean energy integration in West Africa, using the functionalist and related models. It argues, among other points, that the existing constellation of forces portends a bleak future for clean energy industry in the sub-region.

### INTRODUCTION

Poor energy generation and distribution has continued to haunt African socio-economic growth. Privatization of the power sector, as canvassed in the 2005 Washington Consensus and the Sacks Report, has perpetuated the problem. The World Bank reported that two-thirds of the total West African population is without "modern energy" (World Bank 2007). While the problem has for a long time engaged the attention of scholars and administrators, the dominant theme in the existing narratives on the subject, ever since the global clamor for clean energy, tends to portray a scenario where Africa is once again being left behind. A regionally coordinated transition from carbon-based energy to clean energy has therefore been recommended as an adequate strategy that could free the continent from its current epileptic power generation, and could address the health hazards normally associated with fossil fuel.

The clean energy drive is only an issue in the global political economy background of neoliberalism and globalization, which shapes the power relations of environmental reform today (Curran 2015). In West Africa, neoliberal reforms have consistently determined the policy environment since their inauguration in the 1980s, but with fatal repercussions (Adesina 2004). Current discourses in development study tend to suggest that the Washington Consensus re-

forms have come and gone as decipherable from the frequent usage of the concept of 'post Washington Consensus' (Onis and Senses 2003). The hegemony of 'market forces' it imposed on the global economy has endured. While its total impact on the Third World economy is still being debated, it fundamentally impinged on their internal autonomy, leaving their governments and people weakened and severely disempowered. This work examines the prospect of transition to clean energy integration in West Africa, using the functionalist and related models. It takes as its point of departure the premise that West African states have no control over their economies, within the context of the prevailing neoliberal regime. The study is structured as follows: introduction, conceptual review, a review of the functionalist model, an appraisal of renewable energy in the world, motivation for renewable energy, the state of renewable energy in West Africa within the framework of the institution of ECREEE, African renewable industry in the regime of the transnational conglomerate, and the internal structure of West Africa political economy and prospects for integration of renewable energy, which leads to the conclusion.

### Objective

The objective of the paper is to examine the prospect of transition to clean energy integration in West Africa, using the functionalist and

related models. It takes as its point of departure the premise that West African states have no control over their economies, within the context of the prevailing neo-liberal regime.

### **Conceptual Clarification**

#### ***The Concept of Clean Energy***

Opinion is divergent on the definition of the concept of clean energy. But simply, it is electricity or nuclear power, which does not pollute the atmosphere when used, as opposed to coal and oil that do (Monga 2012). Often associated with the concept of clean energy is the concept of renewable energy, commonly appropriated as a synonym because its technologies contribute less to global warming, and are less inimical to the environment (Cleantechnica 2015). As a concept, renewable energy connotes an energy resource that is naturally regenerated over a short time scale and derived directly from the sun (such as thermal, photochemical, and photoelectric), indirectly from the sun (such as wind, hydropower, and photosynthetic energy stored in biomass), or from other natural movements and mechanisms of the environment (such as geothermal and tidal energy) (TREIA 2015). The researchers shall use the concepts of clean energy and renewable energy interchangeably in this work recognizing that the dichotomy is political or a matter of semantics (Fahey 2015).

#### ***The Functionalist Model***

The functionalist theory contends for a prioritization approach in resolving social, technical and humanitarian problems in a world of economic interdependence. Common economic interests arising from this interdependence would necessitate establishment of international institutions and rules (Mitrany 1966). Proponents of functionalism expect cooperation in economic and social fields to spill over into political fields (Rosamond 2000). Its central aim is to advance development from a collective approach through adequate management of the resource or adequate tackling of an existing problem such as energy, and broadening of the scope and depth of regional integration.

Applying this model to the West African clean energy industry raises a pertinent question of whether the collective management of

renewable energy is adequate in addressing the sub-regional energy crisis. The follow up question is whether this would eventually intensify the scope and depth of regional integration. Perhaps these questions are premature since ECREEE, the regional coordinating agency of renewable energy in West Africa is barely five years old. If excused from this perspective, one can at least, project into the prospect of the industry in the sub-region given the constellation of certain factors. As a convenient prelude to this, the researchers shall attempt a synopsis of renewable energy in the world, which constitutes the central analytical framework.

### **Literature Review**

#### ***Renewable Energy in the World***

The early renewable energy policy commitments of European Union members facilitated their global pioneering role in the industry (Hanni et al. 2011). It is, therefore, not a matter of accident that Denmark, Germany, Spain and Austria are front-runners in wind and solar energy solutions today (Moe and Midford 2015). From their bases in the metropolis, these European states, through state-controlled multinational enterprises, along with private transnational corporations (TNCs) seeking global investment opportunities in clean energy (Grimm et al. 2014) have spread their tentacles to developing economies such as West African states in what seems to be a new era of scramble, this time around, for solar resources. Some of these companies include Enel, the Goldman Sachs Group, and Desertec. The TNCs' outright monopolistic control over the industry through foreign direct investment (FDI) is often justified by their capacity to absorb huge research and development (R and D) costs, provide new investments, and generate revenue and energy supplies (Elzinga et al. 2011). Thus, public-private partnerships with them, as it is thought, could offer emerging and developing economies, and critical innovation linkages that help build the nation's technology base and facilitate global competitiveness in a liberalized environment.

South Africa leads the rest of Africa in this direction but has focused fairly and narrowly on the development and use of uranium as source of energy. This is largely due to the fact that in a period where it seemed that uranium deposits

were an attraction, and the product was a currency for major powerful states enmeshed in an international system dominated by the Cold War in the first half of the last century, attention turned to South Africa (Asuelime 2016). South Africa was the supplier of uranium products required to fuel the West's nuclear industry (Asuelime and Francis 2014; Asuelime and Adekoye 2016). This is because its uranium residue was a commodity needed for both peaceful and military purposes by the principal state actors (Asuelime 2013).

The UN trade arm (UNCTAD) has, therefore, developed faith in transnational corporations (TNCs) as a potential source of 'green' investments in a global low-carbon regime, in spite of their being major emitters (UNCTAD 2010). This venture is believed to hold much prospect in facilitating developing countries competitiveness in the global export market and accelerating their transition to a green economy through the low-carbon technologies of such TNCs (UN 2010). Unfortunately, as it will be demonstrated shortly, the same trends and structures that frustrated West African energy industry in the fossil fuel regime appear to have constellated already in the clean energy industry, determined to frustrate any potential success. For instance, UNCTAD's emphasis on export has ignored even local economies where there was a dire energy need, and therefore, tends to betray the entire clamor for global renewable energy from the very beginning.

### *Motivation for Renewable Energy*

At the base of the quest for renewable energy globally is its alleged potential for environmental protection through emission control, the fight against climate change and access to modern energy services. Others include domestic energy security, and its potential to create jobs and reducing dependence on fossil fuel imports (Crespo and Martín 2012; Watson and Pandey 2015). But astonishingly, in spite of the environmental security threat that confronts humanity, even the guiltiest of emitters and the most climate-vulnerable region have been quite reluctant to compromise on a global policy on energy security, preferring in the circumstances, policies that leaves their economies intact (Watson and Pandey 2015). Domestic interest in the context predetermines the attitude of nations in the

discourses of renewable energy. This consciousness, for instance, underlines the United States' recent appropriation, against conventional logic, of so-called "efficient natural gas" and "clean coal" into the category of clean energy (Fahey 2015).

Similarly, major global private conglomerate emitters such as Exxon/Mobil and BP PL, driven by the quest for profit are reluctant to invest in a transition to clean energy, as portrayed in the Volkswagen automobile emission scandal (Csomós 2014; Bloomberg 2015). Those TNCs rather than the altruistic motive of lighting up the world are swayed by the opportunity offered by the global environmental crisis for capitalism to begin a new cycle of accumulation after successive disappointments in financial speculation (Ramachandran 2008). The paradox, from the above discourse, as Jerry Harris (2010) rightly observed, is that the green capitalist regime merely appropriates the global ecological crisis as an instrument of growth without actually resolving it. Espen Moe (2015) has identified two classes of interest in the drive for renewable energy: those with unresolved energy problems and an abundance of renewable resources who normally pursue more ambitious policies, and vested interests in preserving the system including nations that have essentially fossil fuel-based economies.

Observably, West Africa does not seem to have a place in Moe's categorization. Unarguably, there is a chronic energy crisis in the sub-region. But as it appears, West Africa's renewable energy potentials are unnecessarily exaggerated (Monga 2012). Even if the natural potentials exist, the technology to harness it does not, and the hope for it is in abeyance with West African Universities that are supposed to lead research in this area in various stages of decay (Okecha 2008). For instance, with over seventy-five percent of the primary energy coming from its own renewable resources (Revolve Media 2015), Ghana appears to be one of the potential growth poles in a coordinated West African renewable energy policy. But in spite of this feat, half of Ghanaians had no access to modern energy as of 2010 (AEA 2010). From the Ghanaian experience, therefore, West Africa's renewable energy, in spite of the alleged richness in potentials, appears not to hold serious promise in efficiency as often glamorized in the narratives (Kappiah 2012; IRENA 2015).

## METHODOLOGY

A critical-descriptive methodology is employed to discuss and analyse evidences available and obtained in several texts. It proves relevance in these kinds of studies (Asuelime 2014). In other words, this study adopts the use of textual analysis simply “means analyzing the text for themes and patterns” (Bertram and Christiansen 2014: 97). This is effectively utilized from an interpretivist and constructivist research paradigm to make sense of preexisting data sets in order to make clearer a given situation or theme. As a general norm, the study of documents and secondary analysis “are often neglected” by some behavioral researchers (de Vos et al. 2006: 314). Unlike the behaviorist, the present research relies heavily on the broader context and environment of Africa in conducting this research. In doing the above, the researcher “sees for herself (or himself) the context and site of the research study” (Bertram and Christiansen 2014: 84).

## OBSERVATIONS AND DISCUSSION

### **The State of Renewable Energy in West Africa: The Institution of ECREEE**

Members of the Economic Community of West African States (ECOWAS) established the Centre for Renewable Energy and Energy Efficiency (ECREEE) in 2010 to coordinate and promote their renewable energy exploration through policy development, capacity building, awareness raising, technology transfer, pilot projects and the attraction of investment (Izquierdo 2012; Monga 2012). ECREEE has since recorded some palliative achievements (Izquierdo 2012; Kappiah 2012), but fundamentally, ECREEE as a United Nations Industrial Development Organization (UNIDO) initiative was a foreign idea. Its 2012 regional policy on renewable energy was adopted in an externally orchestrated policy environment. Inevitably, since its establishment, the center has largely depended on foreign capitalist national agencies for survival through partnership agreements (Monga 2012; Izquierdo 2012; Crespo and Martín 2012). The issue here is not its external origin, but the ugly experience of the past. Comparatively, part of the dilemma of ECOWAS, within which ECREEE operates, was that after its birth, it was subordinated to

the European Union through a series of Lome Conventions, and subsequently the Cotonou Agreement. ECOWAS, through these links, compromised its internal autonomy and tended to ridicule the ideology of regional integration founded on self-reliance. This nexus enhanced the capacity of imperialism to deploy the weapon of divide and rule, which vividly manifested in 2006, when Ghana and Cote d’Ivoire, undermined the ECOWAS-EU stalemated trade negotiations to enter into bilateral deals respectively (Izuagie 2011). In spite of this unpleasant experience and caution from anti FDI critics (Hanni 2011), West African renewable industry is pursued through partnership with foreign controlled TNCs.

### **West African Renewable Industry in the Regime of External Conglomerates and the Prospect of Integration**

The fate of the renewable energy quest in the sub-region is undermined in the era of TNCs. No responsible nation or region would rely on donors’ good will to establish, fund, and sustain a strategic industry such as energy, under the so-called ‘collaborative partnership’. In West Africa, the approach contradicts the logic of history. For instance, contrary to its proclaimed ideals about powering Africa, the Desertec foundation in Morocco and Tunisia is proposed to divert solar energy from the Sahara desert for *export* to Europe effective from 2018 (Hamouchene 2015). Local consumption is here subordinated to solar energy exploitation to sustain Western imperialism. The overall backlash of the partnership with the TNCs is its attack on national sovereignty, which often negates the required environment to take political and social decisions that would have constructively impacted on development. Fundamental decisions that affect the whole population had to be taken by a few technocrats without consultation (Hamouchene 2015). Ramachandran’s (2008) expectation that international investors and multilateral funding partners would bring with them safeguards to address the problem appears unrealistic. Similar thoughts perhaps informed the unfounded claim that partnership with TNCs in West African renewable industry is currently ‘being led by Africans and their institutions’ (Crespo and Martín 2012).

What control instrument does the West African nation possess in the equation, is it capital or entrepreneurial potency? Virtually all the parts used in the industry, apart from the natural resources, are usually brought in from outside by the foreign investors, a development which punctured even the argument for potential technological diffusion given the historical conservatism of the transnational and questions of intellectual property. Tragically, West Africa's future renewable development is mortgaged to transnational's goodwill. The presumption that African underdevelopment would be resolved through a partnership with the West is deeply flawed (Diop 1987). Because this partnership normally adopts a top-bottom approach to development while ignoring local exigencies, it often precipitates local resistance, which is usually brutally suppressed (Osaghae 1995; Nina 2014; Abott 2015). The West African clean energy industry dominated by TNCs tends to perpetuate the prevailing unequal international political economy in another style, where the TNCs moguls in fossil fuel exploitation, are simply being joined by renewable energy companies to plunder the sub-region's air and solar resources in addition to oil. The realization from the above discourse is that the role of the TNCs in the unregulated neoliberal regime is subversive. While these manifestations seem not to be obvious in the West Africa clean energy industry arising from its relative infancy, the TNCs' activities in the Niger Delta (Osaghae 1995) and elsewhere presents opportunity for reflection.

On the whole, the developed nations and their agencies had consistently demonstrated infidelity to assistance promises in previous partnerships with the Africa continent. The latest of such promises on a multilateral scale was the 2005 Gleneagles initiative on debt cancellation, which ended with most of the African beneficiaries in a more complicated debacle (Shah 2006; Doward 2013; Oxfam 2005). There is no evidence that the attitude is different today to warrant amateurish enthusiasm (Crespo and Martín 2012; Kappiah 2012) about the prospect of acquiring clean energy technology from them on mutual terms. Still, the pro-market character upon which the partnership is based is also weak. Neo-liberalism projects a perspective that good policies and good economic management were those that promote market forces (Sacks Report 2005). The phenomenon of the Asian "miracle",

invoked to support this argument, has since become anachronistic in the face of contradicting evidence (UNESCO 2004; Wade 1990).

### **Internal Structure of West Africa Political Economy and Prospects for Renewable Energy**

Beyond the foreign domination of the nascent West African renewable energy industry, the internal structure of the West African economies tends to complicate the situation informed by variations in access to energy across the sub-region. While some countries lack even basic infrastructure, or systems to acquire energy, some states export energy to their neighbors (The World Bank 2007). Nigeria and Ghana, for instance, have considerable fossil energy resources. Although they lack the technology to exploit it, economic realism would require them to embrace a fossil energy-based economy if one adopts the US illustration earlier cited in this work. This, coupled with disproportionate economic strength, presents a condition that may not be suitable for a common strategy for energy generation regionally, a situation that makes potential functional spillover unrealistic. The alternative in the emerging scenario therefore calls for deliberate decisive political action, in the form of the establishment of a central institutional organ vested with the capacity to take binding decisions in an arrangement of federal unity (Diop 1987). ECREEE could have played this role. Unfortunately, the presence of external actors in the renewable energy sector that operate more within the context of well-crafted WTO regulations than local conventions complicates the situation. Spain is the main technical and financial partner of the center, and a member of its executive board (López-Dóriga 2012). This comes with severe implications when situated within the context of imperialism. The ECREEE's foreign origin and control deprives it of the internal autonomy required to function (Kauffman 2010). Inadequate political will to take social and political decisions on the part of the West African ruling class, accentuates the problem.

Historically, no nation has developed without protecting its infant industries (Bairoch 1993; Chang 2008; Frey et al. 2009; Joint NGO Briefing Paper 2005; Shafaeddin 2006). Neoliberalism has foreclosed this pathway. The asymmetrical process of global interaction it encouraged undermines an adequate framework for the interaction

of economic agents and governments in the sub-region. Its perpetual forging of vertical integration with the global economy negates sub-regional horizontal linkages, economic convergence, and industrial growth (Adesina 2004).

### CONCLUSION

The call for transition to renewable energy in Africa, and assertions such as 'Africa is being left behind in the drive for global renewable energy', obviously, derived their inspiration from the deeply flawed, and defunct modernization theory that tended to insist 'Africa must do it the Western way'. The danger in this approach is its tendency to universalize prospects of clean energy in utter disregard of exclusive concrete economic, historical and social realities. To begin with, as it is today, Africa occupies the rear in the categorization of global development. Energy wise, the sub-region is in a state of darkness. In contradistinction, renewable energy to developed nations such as Japan, Germany, and USA is merely a potential future energy transformation, grounded in fossil fuels, nuclear and electric utility companies. Ab initio, the continent is not at par with the rest of the world allegedly leaving it behind in the race for renewable energy. To be left behind presumes a leveled playing ground between contestants, a fact, which makes the application of the concept here a misnomer.

Moreover, uncertainty currently confronts the global clean energy industry due to developed nations continued procrastination, and the fast vaporizing cost effect motivation of renewable energy in the face of the oil glut in the global market. Realistically, therefore, the fossil fuel regime in the world is not about to end very soon. In the existing scenario, the choice of energy source in the West African sub-region, and elsewhere on the continent, must be determined by accessibility. Admittedly, the fossil fuel regime did not keep West Africa out of darkness. But the paradox is that the existing constellation of forces in the sub-region portends a bleak future for the clean energy industry in the sub-region. The survival of the West African people, which the lack of access to energy, whether fossil or renewable, currently threatens, is vital to moralistic environmental concerns. Emphasis on energy security in this context becomes a misplaced priority. The major emitters have not

shown corresponding concerns power accessibility remains a criterion for measuring the success of renewable energy. Even if clean energy is a worthwhile venture, the cost of affording it includes, yet again, mortgaging the sub-region's future energy needs into the hands of a new monopoly syndicate. Rather than deepening regional integration, this can only sustain the marginalization of the sub-region with the strategy of subtle fragmentation. As it stands, the West African sub-region should approach energy integration from a dual perspective, the states with potential comparative advantage in fossil fuel potentials should be allowed to attain their full productive capacity. Availability of energy would create a sound environment for the integration of the two poles. Sustainable energy projects cannot be divorced from providing and catering for the needs of the local communities, which the contemporary neoliberal exports oriented clean energy industry, seems not to address.

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