

**SUSTAINABILITY AND THE RENEWABLE ENERGY ALTERNATIVE IN  
NIGER DELTA NOVELS**

**BY**

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**Abstract**

Ecological degradation and petroleum have, for more than a decade now, sustained many of the Niger Delta novels. These novels reveal evidences of the realities of despoliation of the setting, as the consequence of exploitation of petroleum energy. However, the want of similar artistic representations of sustainable alternatives to petroleum creates a serious gap in the Nigerian literature that needs to be urgently filled. Adopting the methods of ecocriticism and energy humanism, this paper examines renewable energy alternatives in two Niger Delta novels. It is discovered, among others, that renewable energy alternatives, though lacking in the novels, may be represented as subject, theme, and even character.

**Key ideas:** Sustainability, Niger Delta Novels, Petroleum, Renewable Energy

**Introduction**

Recent comment by the physicist and Professor, Stephen Hawking that “our rush to understand and improve life through science and technology could be humanity’s undoing”, captures succinctly current global energy and environmental concerns and to some extent, the concern of this paper. But humanity’s undoing is her disregard of the adverse effects of the science and technological cultures. We are too slow to acknowledge and mitigate the inherent negative consequences of the science and technological inventions and cultures. This probably accounts for the near absence of some of these in our literary creations and criticisms. Energy demands to power science and technology, locally and internationally, continue to increase as the demands for science and technological goods increase. And everywhere, there is concern over sustainability in energy production, distribution and consumption. Available science and energy literatures reveal the drive towards enthronement of the new renewable energy culture. But the same cannot be said of literary works, in spite of the incessant outcry in Niger Delta literature, particularly the novels, against the harmful ecological consequences of crude oil exploitation in the area.

“Ecological Degradation in Selected Niger Delta Novels”, is an ecocritical analysis of a number of novels set in Nigeria’s Niger Delta area (ND). That research addressed primarily the problem of despoliation of the physical ND environment occasioned by the activities of petroleum energy exploiters. Indeed, petroleum, as theme, has sustained several other genres from this region, with poverty, prostitution, corruption, kidnapping and armed aggression as subthemes. Isidore Okpewho’s *Tides* and Helon Habila’s *Oil on Water* are two examples. Secondary texts equally support the earlier research. For instance, Prof. Dara G.G. opens his 2008 keynote address titled “Revolutionary

Pressures in Niger Delta Literature, with the assertion that: “the radicalisation of the Niger Delta political space has had its effect on the themes and rhetoric of works by the region’s writers [and] activist thinkers”. The outcry against degradation of the place, notwithstanding, there remains a significant gap that needs to be filled, if the novels would transcend propaganda. This gap is the lack of intentional representation of sustainability and renewable energy alternatives as subjects or themes in Niger Delta literature, the novel in particular; and this is the major problem this current research addresses.

This paper is essentially a reexamination of the issue of petroleum exploitation in Okpewho’s *Tides* and Habila’s *Oil on Water* as representatives of Niger Delta literature, the novel in particular, and of the imaginative genre generally. The paper examines as well evidences of representations of renewable energy alternatives, as theme or subject, in the novels. It seeks, moreover, to discover literary artistic methods of representation of renewable energy alternatives to petroleum. It seeks to contribute to the growing ecocritical and energy humanities’ discourses on global energy and environmental sustainability.

The interdisciplinary methods of ecocriticism and energy humanities are employed in the analysis of the textual and contextual issues of energy and environmental sustainability in the novels, as primary data sources. These are supported by a number secondary, but related data.

Ecocriticism’s primary concern, according to Cheryll Glotfelty, is with “the relationship between literature and the environment” (xix). And from the perspective of energy humanities, Boyer and Szeman assert that the method “highlights the essential contribution that the insights and methods of the human sciences can make to areas of study and analysis that were once thought best left to the natural sciences”. In its ecological centeredness, ecocriticism differs significantly from energy humanities’ anthropocentric stance, a concern for what becomes of humanity. However, ecocriticism’s consideration of the environment as home for all makes it all-embracing; bringing together, according to William Rueckert, the “old pair of antagonists, science and [Arts] ... to lie down together and be generative after all” (107) in the current global quest for answers to energy environmental issues.

Writing in the late 1990s, on “the Humanities in National Development”, Abiodun Adetugbo posits that “man’s humanity overrides” advancements in science, technology and other spheres of human endeavour. He insists that “all developments, humane, technological and scientific, are measured as advances only in terms of their amelioration of the human condition” (103). From ecocritical perspective, argument may, in addition, be advanced for the amelioration of the condition of the natural environment, the *oikos*, home for all – humans and the flora and fauna, and without which humanity become cold insensitive machines.

## **Sustainable Energy in the Novels**

In Okpewho's *Tides*, the minister of petroleum clearly reminds everyone that "the Federal Government was committed to petroleum as the mainstay of the nation's economy, its chief source of wealth (126). In a non-fictional representation of this reality, Oyedepo asserts that "Energy plays a double role in Nigeria's economy: as an input into all economic activities and as the mainstay of Nigeria's foreign exchange earnings through the export of crude oil and, more recently, from increasing natural gas exports". The implication of this is the irrevocable nature of the Nigerian and global energy need.

Energy, as theme, is directly not mentioned either in *Tides* or *Oil on Water*. However, both of them present the reader with energy as an underlining issue. *Tides*, for example, opens with two energy sources, crude oil and water, with the technological methods of their exploitation as subject and the genesis of the crises in the setting:

You know very well how the traditional economy of the Delta communities has been faring as a result of two modern industrial projects which purport to enhance the economy of this country. First there is the Kwarafa Dam, which has severely reduced the volume of water flowing down the Niger and so curtailed the fishing activity in the Delta – and our people are nothing if not fishermen. Secondly, the spillage of crude petroleum from the oil rigs down there ... has proved an absolute menace to agricultural life, for many farms are practically buried in thick layers of crude, which kills off many fishes and other forms of life (2).

Although the narrator here attaches damming of the Niger River as an issue, the major problem, which attracts local and international attention in the novels, is that of oil and its method of exploitation. All through the plot, only the militant and apparently well-informed character, Bickerbug, is aware of damming as a danger to the people's traditional fishing economy. The energy sourcing – Oil exploitation and water damming – is the key, underlying issue in the novel; and Okpewho exquisitely employs character, eloquent narrative and vivid power of description of scenes and entities to expose the technicalities of petroleum oil exploitation and its consequences on the environment. "The oil exploration is the biggest problem of our people down in the Delta, so how can you understand the problem if you don't study it?" (143) Bickerbug asks, as a prelude to his exposition of the issue, and goes ahead to describe the complex oil drilling process as the source of pollution of the area:

There are many kinds of oil rigs, but every one of them is fabricated on-shore, or assembled from component parts, as here in Nigeria, and transported to the offshore drilling site on a barge. There are two main parts to the rig. First, there's the

substructure which provides the stable base for the drilling operation, and then there's the deck on which the entire exploration tackle is mounted. The substructure itself is of two kinds – the steel template kind and the gravity kind. The steel template structure rests on some four or eight legs lowered to the sea-floor and secured to the sea-bed by pipe piles driven some two to three hundred feet below the sea-floor. The gravity structure is used in places where the sea-floor is too hard to be bored by pipe piles, as in icy Alaska, or where there is some rock in the area that may prove to be an obstacle. So the gravity structure consists of heavy concrete cylinders – metal cylinders have also been used, even here in Nigerian off-shore rigs. These are lowered to the sea-floor, sixteen of them or so, holding in place the three or four other cylinders on which the operations deck is going to rest. It just sits on the sea-floor. The deck itself must be sufficiently high above the water not to be buffeted by waves. Then the well-head, from which the borehole is going to be sunk, is fitted on a cellar-deck about fifteen feet below the main or operations deck. You must understand that all this rigging is a massive structure – what you see rising from the waters like one huge Christmas tree or mast is a mighty bulk ... A standard operations deck is some two million pounds in weight, while the substructure – because it has to withstand the various environmental forces or loadings like wind, current, waves, even seismic action – is usually twice that weight. In fact, the gravity structure may be as much as ten or twenty times the weight of the steel template, and can therefore carry a correspondingly heavier operations deck (143 – 144).

The exploitation efforts made here underscores oil as essential to sustainability in energy production, besides the economic gains. This lengthy passage also reveals the extent the modern writer and critic could go in creatively exposing a crucial issue. Undoubtedly, this descriptive passage is a product of research and creativity, combined, as it were also, to bring insight to the interdisciplinary nature of the twenty-first century enquiry. This same techno-scientific approach to literature could well be employed in the treatment of possibilities of exploitation of renewable energy – solar, wind, hydro – borrowing of course from available science and technological methods of their exploitation. This way, attention would gradually shift from petroleum, already proven to be non-renewable and fraught with harmful ecological impacts. Exposed below are some of these harmful ecological consequences, unintended though it may be:

Then comes the drilling itself ... and the resultant pollution which has made life virtually unlivable for our people down in the Delta ... Now let's look at the various sources of pollution. First, the wellhead is fitted with what's known as blowout preventer ... But the preventer is never able to stop a blowout ... The only effort made so far is to reduce the volume of oil blown out, from some one or two thousand tonnes

to about six hundred tonnes per rig.’

‘So there is always an overspill’

‘There’s always an overspill ... And when I talk about a blowout, its’ really a *blowout*, an explosion. The rig can take it, because it’s got the weight to absorb the shock. But what about the villages in the environs? For them it’s another tremor, and this goes on constantly even before the oil drifts to their fishing enclaves and their farms.’

‘... Overspills occur from various other sources. The pipes ... may spring a leak or get fractured ... and of course the oil escapes into the water. Or the barges and bunkers carrying the oil may lose some of it for various reasons – leakages, overloading, blown gaskets, even corrosion from prolonged chemical action of brine and other things – and again all that oil is emptied into the water ...

‘Every once in a while the oil tankers are washed – and that’s another source of pollution ... the ballast and oil are thrown out into the surrounding water ... and as the volume of exploration from the various oil companies increases the volume of oil pollution increases also’

‘... the fishes die because the floating oil blocks the oxygen from the water or because their respiratory membranes are clogged by the oil. Even the birds that dip in the water to catch fish and other foods suffer – their wings are matted by the oil and they cannot fly so they sink and drown or die on dry land by asphyxiation, having taken in so much grease. The farms, too, are ruined – the crops won’t grow because the oil floating on the irrigation chokes the soil. Even the drinking water is affected ... (144 – 146).

Every other issue – despoliation of the environment, poverty, disease, illiteracy, corruption, militancy or violence, is attributable to the one problem – petroleum crude exploitation. This issue is rendered a global one with the involvement of the oil companies, all foreign, with their engineers and their host country’s government and allies. This representation of an assemblage of stakeholders in the impasse is a testimony of this fact:

...the Minister called on the representatives of the oil companies ... to state their case and declare the plans their companies had in respect of the objectives stated by the government. Frank Segal was the first to raise his hand ... He spoke for a rather long time about Freland’s International [oil company] reputation, both as a long-established company with the most sophisticated exploration and refining technology in the world, and as a committed partner in progress of every community that they had worked in across the globe: from Alaska and Texas to Nigeria and Gabon, and all the way to Southeast Asia... (127).

A gathering like this, ostensibly to find solution to pollutions in the area, only end up in more violence as the likes of Zuokumor, a corrupt community leader, would often receive outrageous sums from the oil companies and mobilize support of many of the largely uninformed locals, for the oil exploiters. Buttressing further petro-crisis in the area is this scene from *Oil on Water*:

It turned out to be the excuse the oil companies and the politicians who worked for them needed to make their next move. One day the patrol [local militants] came upon two oil workers piling soil samples into a speedboat. There was a brief skirmish ... one of the oil workers escaped with a swollen jaw, the other with a broken arm ... the next day the soldiers came. Chief Malabo was arrested, his hands tied behind his back as if he were a petty criminal, on charges of supporting the militants and plotting against the federal government and threatening to kidnap foreign oil workers (40)

While Chief Malabo chooses the people's traditional way of earning a living and strongly opposes exploration and exploitation of oil in the area, to the point of organizing local patrol over his territory, there are others like Okpewho's Zuokumor referred to in the following words: "other villages that had taken the oil money ... Their rivers were already polluted and useless for fishing, and the land grew only gas flares and pipelines (39 – 40). So, recriminations, counter-recriminations and violence ebb and tide endlessly in the novels, with no solution to the problem.

*Oil on Water*, though centred on the kidnapped British woman, wife of a British petroleum engineer and the two journalists, who are paid to find her and negotiate her release, the themes of petroleum oil exploration and the attendant evil consequences of its exploitation sustain the tale to its end, but with no hint of an alternative energy source.

In the end, the British woman, wife of the oil engineer is found. But many lives of the local people are lost. Oil exploration and exploitation continues and so do pollution and violence in the area, making the crisis seem a retribution for ecological crimes.

Outside fiction, Emily Buckley asserts: "There is no longer any denying that we need to reassess how we generate our energy ... the diminishing levels of fossil fuels will eventually cause an energy crisis ... Added to that [is] the enormous damage the burning of those fossil fuels is doing to our planet and it is clear that we need to find alternative means of producing enough energy to power the globe". Yet, the nearest hint to the presence of the sun, a natural element and an alternative source of energy in *Oil on Water* is this clipped reportage: "the sun is bright. I am talking to Zaq in the hut. It is one of those days when he looks spry and full of energy" (176). The Sun thus possesses healing and

energizing powers. But there is no specific reference or insight to the benefits of the Sun to the environment and to the overall energy needs of humanity. This reference to the brightness of the Sun could have been more advantageously employed, emphasized as a means of harnessing energy, for sustainability and for ecological benefits, rather than decrying or bemoaning the crisis.

The narrator, assumes an omniscient status, enters the mind of the British woman, the object of the search and instrument for exposing the oil evils in the area:

I looked outside at the forest and the abandoned boats on the water, the few thatched huts and I thought, what could fate possibly want with her [the British woman] on these oil-polluted waters? The forsaken villages, the gas flares, the stumps of pipes from exhausted wells with their heads capped and left jutting out of the oil-scorched earth, and the ever-present pipelines crisscrossing the landscape, sometimes like tree roots surfacing far away from the parent tree, sometimes like diseased veins on the back of an old shriveled hand, and sometimes in squiggles like ominous writing on the wall. Maybe fate wanted to show her firsthand the carcasses of the fish and crabs and waterbirds that floated on the deserted beaches of these tiny towns and villages and islands every morning, killed by the oil her husband was helping to produce.

Oil, from the narrator's perspective above, is obviously of no benefit; it portends only evil. But it is not so from the perspective of the oil exploiters and its intermediate beneficiaries represented by Okpewho's "Minister for Petroleum and Power" (125). Further disadvantages of oil as an energy source is revealed in *Tides* as follows:

Now, the dangers of all this oil pollution to the environment are sufficiently known ... The fishes die because the floating oil blocks oxygen from the water or because their respiratory membranes are clogged by oil. Even the birds that dip in the water to catch fish and other foods suffer – their wings are matted by the oil and they cannot fly so they sink and drown or die on dry land from asphyxiation ... the farms, too, are ruined – the crops won't grow because the oil floating on the irrigation chokes the soil (146).

The novels are indeed is replete with graphic pictures of the evils association with generation of crude oil, making imperative a counter literary artistic representations of alternative, renewable energy sources, with their prospects of sustainability. There is thus need for as much knowledge about these other energy sources as have been revealed, in the novels, of petroleum, its exploitation process and negative impacts on the ecosystem. This is the gap in the story that needs to be filled.

“Quite unintentionally”, says Lynn White Jr., “changes in human ways often affect nonhuman nature” (4). As such, even as scientists, technologists, energy experts and environmentalists become committed to finding solutions to the problems of oil and other nonrenewable energy sources, literary artists: poets, prose writers and dramatists, must play their parts, employ their methods to sensitize their audience towards better ethical technological cultures. Is it possible to represent renewable energy sources and sustainability in the same, or even better, manner than petroleum, a non-renewable energy source and its degrading consequences are represented in these and other Niger Delta novels? Only intentional efforts would provide the answer.

Recognising that over time, nature has variously been annihilated and then redeemed, Lawrence Buell’s “Nature’s Personhood” is a critical examination of the place of natural elements and organism in an anthropocentric social milieu, and even in modern ecocentricism. Referring to nature, he says: “high modernism announced its death; modern ecologism has brought it back” providing all the “motive for personifying nature” (180 – 181). Citing sources, secular and sacred, Buell exposes how all attempts, past and present, to accord nature personhood status become exercises in futility, since the right things are still not done. Buell thus proposes an “ethics of care”, which he says: “promises to quicken the sense of caring for nature and to help humans compensate for the legacy of mind-nature dualism while at the same time respecting nature’s otherness” (218). But then Nature probably already cares for herself and does not need human beings to care for her. Ecological and other disasters, which humanity experience globally may just be nature’s way of taking back her own.

Wind and solar energy sources clearly feature as subject or theme, but apparently only in non-fiction science literature. Emily Buckley expressed the view that: “The methods by which we harness solar power are constantly being improved and, although efficiency and cost are not ideal right now, the future looks like it might be bright, sunny and solar powered.” This was in 2010. Most recent findings by Oyedepo and others reveal more rapid improvement. The question, from the humanist artistic point of view, is: what contributions have the Nigerian literary art and criticism made towards our local and global energy and environmental needs?

Renewable energy sources have equally become major themes in energy ecological discourses that aim at repositioning them as sources for sustainability in energy generation, ecological balance and purity. This passage from “An Analysis of the Potential Impact of Wind Turbine” is an additional instance of the commitment of science and energy experts to a more viable energy ecological future:

In addressing wind power as a source of renewable energy a great many questions have been raised and concerns have surfaced ... addressing wind turbines, the sound produced and health effects associated with them. Publications, journal articles, books and various studies have been reviewed and summarized to give an impression of



wind as a part of the renewable energy sector in comparison with traditional electricity production (see “Sierra Club Canada”).

Reading the well over twenty-page article, it is all about the Wind; what it can do; how it can help; its place or acceptability in the modern world, etc. etc. The possibilities, benefits and methods of generation, distribution and consumption of energy, from the renewable sources become the hub of every segment of the discourse. But such representations are very much lacking as the subject or theme of a popular folk literature, the novel particularly.

### **Representing Renewable Energy Alternatives**

Literature, from its earliest beginnings, has remained a reinvention of reality, accurately or otherwise, depending on the perspective of the inventor. Arguments abound, moreover, for the representation of nature in literature; in fact, it is the canon upon which ecological or green literature is founded. The question then is: can the same be said of renewable energy sources? May be not so. But much can be borrowed in this regard from available works on nature and literature. This is particularly as modern literary inventions cannot, but represent the realities of local and global energy environmental needs. Buell contending that personification of the natural elements, has been endorsed as a way of recognizing their importance, appeals to the bible: “Psalm 148 calls on the sun, moon, stars, waters, fire and hail, mountains ... to praise the name of the Lord” (183). But are not represented as the subject or theme in the way that petroleum or crude oil is represented in Niger Delta novels.

As more information about the benefits of energy from the sun, water and the wind become popular, literary artists would do well to take up these themes in works of literature, the novel especially. As the subjects of any narrative, the positive effects of exploitation and consumption of these equally natural but environmentally friendlier elements would recommend them to energy users and de-emphasise fossil fuel.

Mane’s recommendation of “a viable environmental ethics [to] confront “the silence of nature” – the fact that ... only humans have status as speaking subjects” (26), might be construed as an admonition on the anthropocentric West; and as an approbation of the animist cultures for whom the natural world is inspirited (15). However, it has clearly been proven that nature speaks, has always spoken and has, in recent times, spoken very loudly, through natural or ecological disasters. There is thus no better time to take practical steps to represent in folk and popular literature, the more subtle language of hope encapsulated in the renewable energy alternatives proposed and propagated in energy ecological discourses. Such representations would help to raise an ecologically and culturally literate generation, to sustain modern global science and technological gains, in energy and other productions, as well as combat global ecological degradation and imbalance.

What, after all is wrong with a character (instructor) being portrayed in a class room to educate scholars on the latest invention of solar or wind energy? The students upon graduation get integrated into the various sectors of the society – in government, politics, industries, etc. – propagating the values of renewable energy sources through their own products. Employing the various literary elements, renewable energy sources may be projected in works of literature.

### **Conclusion**

There is no better way of repositioning researches in Arts and the Social Sciences than to turn our searchlights on the twin issues of energy generation and the environment in this age, when the world yearns for greater energy supplies to sustain the ever-changing faces of her science and technological cultures. It is ironical that as the demand for energy increases, so does global outcry against methods and sources of energy generation and consumption, as the causes of present global ecological woes. In the words of Jonathan Bate, “as political and moral visions change, so literary criticism will change too” (168). To this end, the twin concepts of ecocriticism and energy humanities become imperative approaches to the study of sustainability and renewable energy sources as concepts in ecological novels; and for advancing the possibility of the novel and popular literature as tool for mitigating human and environmental degradation. These methods would entail, in creativity, representations of renewable energy sources and analyzing same within the context of their impacts on humanity and the flora and fauna in any setting.

In both novels, there is an inconclusive end to the tales. In *Tides*, for instance, following the final outbreak of violence, and the consequent chaos, these broken and unfinished words of one of the characters ends the tale: “Please take my advice. Find somewhere [to] hide. Until this thing settles. Must stop at once. I can hear sombo[dy]” (200).

This simply is an indication that there is no solution yet to the problem of the place and of fossil fuel exploitation. It is also an indication of the need for imaginative representations of sustainable alternative to petroleum.

## WORKS CITED

- Adetugbo, Abiodun. "The Humanities in National Development" in *Communicative English and Study Skills*. Lagos: University of Lagos Press, 1997.
- Bate, Jonathan. "From 'Red' to 'Green'" *The Green Studies Reader*. Coupe, Laurence, ed. New York: Routledge, 2000.
- Boyer and Szeman. "The rise of energy humanities: Breaking the impasse". 12 February 2014: n. pag. *Universityaffairs*. Web. 27 Nov. 2015.
- Buell, Lawrence. *The Environmental Imagination: Thoreau, Nature and Writing, and the Formation of American Culture*. Boston: Harvard University Press, 1995.
- Buckley, Emily. "Solar Power – Advantages and Disadvantages". 10 March 2013: n. pag. *Sustainable Development Information*. Web. 25 January 2016.
- Dara, G.G. "Revolutionary Pressures in Niger Delta Literatures". 28 June 2009: n. pag. *The Guardian*. Web. 16 May 2011.
- Okpewho, Isidore. *Tides*. Nigeria: Longman Plc, 2003.
- Oyedepo, Sunday Olayinka. "Energy in Perspective of Sustainable Development in Nigeria." *Sustainable Energy: Science and Education Publishing* (2013): 14-25. Web. 27 Jan. 2016.
- Manes, Christopher. "Nature and silence." *The Ecocriticism Reader*. Eds. Cheryl Glotfelty and Harold Fromm. Georgia: University of Georgia Press, 1996. 15 – 29.
- "More Bad News for Humanity." YahooNews. 2016. Web. 19 January 2016.
- Rueckert, William. "Literature and Ecology: An Experiment in Ecocriticism", in *The Ecocriticism Reader: Landmarks in Literary Ecology*, eds. Cheryl Glotfelty and Harold Fromm. Georgia: The University of Georgia Press, 1996. 105 – 123.
- Sierra Club Canada: "An Analysis of the Potential Impact of Wind Turbine" 2011. Web. 29 Jan. 2016.
- Ugwu, Chinonye. "Ecological Degradation in Selected Niger Delta Novels". Diss. University of Nigeria, Nsukka, 2014. Print.
- White, Lynn Jr. "Historical Roots of Our Ecological Crisis" *The Ecocriticism Reader: Landmarks in Ecocriticism*, Eds. Cheryl Glotfelty and Harold Fromm. Georgia: The University of Georgia Press, 1996. 3 – 14.