

ETHICAL VALUE OF ENERGY AND ENERGY RESOURCES MANAGEMENT AND ITS IMPLICATION FOR GOOD GOVERNANCE IN NIGERIA

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Abstract

One of the most serious challenges that every nation faces is energy or power management. Without energy, it isn't easy to grow and develop the economy. Without energy, citizens will live in darkness and many human activities that need light will not take place. Every government must prioritize harnessing and providing power for its citizens or creating an enabling environment for energy or power generation. This paper argues that effective energy management is a human and environmental value. It is a value for energy is essential to human life and when not well managed it has economic implications and the environment is negatively affected. For every unit of energy wasted more energy has to be produced and this involves the use of more resources. When energy is well managed, it frees up financial resources that could be used for other development projects to enhance human life. Prudent use of resources is a vital value. Energy management is a core issue that every government should be concerned about. The development projects and the good life that the government should provide are incomplete and cannot be achieved without efficient energy management. Through critical hermeneutics and analysis, this paper an essential human value and indices for which to recognize a good government is efficient energy management. The paper finds that there is much waste of energy in Nigeria and other African countries. The paper concludes that the definition of good governance should never neglect the dimension of energy management.

Introduction

Managing energy for economic development and the people's welfare is an important value. It is something worthwhile, desirable, and most appropriate for the good of society. Governments in Africa and elsewhere have a duty/responsibility to ensure ethical and right management of energy and all energy resources. While to a certain degree, there is good management of energy resources in many Western countries, that cannot be said of many countries in the global South. In many countries especially in Africa, there is poor management or misuse of energy resources. Mayhew (2009) writes that: "Mature economies tend to be more energy efficient, perhaps because technology improves and the emphasis shifts to service industries" (p.156). With adequate and sustainable management of energy resources, there should be an adequate electricity supply, equitable distribution of income from energy resources, wise use of natural resources, and no room for waste in the use of energy resources.

The methods adopted in this research are critical hermeneutics and analysis. The basic concepts in the paper shall be interpreted and deciphered for better understanding. The issues in the paper shall be carefully analysed and dissected to unravel the issues in the paper. The paper shall proceed by making some conceptual clarifications, and this will be followed by an examination of the state of energy and energy resources management in Nigeria. The issue of energy and energy resource management as an ethical value will also be looked at. The implications of these issues for good governance in Nigeria will then be taken up before the paper concludes.

Conceptual Clarifications

The basic concepts that define this paper are ethical value, energy, management, and good governance. US Energy Information and Administration (USEIA) (2023) states that energy is the "ability to do work" and without energy, no human civilization can work, make bicycles, use cars, use boats in the water, cook their food, use home appliances, manufacture products, and carry out astronomical matters (p.1). The USEIA (2023) states that forms of energy include light, heat, motion, electrical, gravitational, and chemical; energy is also potential or stored energy that can be transformed into kinetic or working energy; and for energy sources, they are either renewable or non-renewable. Another definition of energy by Mayhew (2009) states that: "The physical capacity for doing work. Nearly all our energy derives from the sun, and technical progress has

reflected more and more sophisticated uses of energy, from wind and water, through fossil fuels, to nuclear power”(p. 156). This paper is not only concerned with energy but also the sources from which the energy is generated, called energy resources. Novakovic and Nasiri (2016) opine that: “Energy resources are all forms of fuels used in the modern world, either for heating, generation of electrical energy or for other forms of energy conversion processes. Energy resources can be roughly classified into three categories: renewable, fossil, and nuclear.” Whatever can be used to create or generate energy can be called an energy resource. These resources can either be renewable (can be replenished, reused, or even recycled), or non-renewable (cannot be renewed when depleted). Renewable resources are such things as wind, solar, and hydro; while non-renewable are fossil fuels, plutonium, uranium, etc. Non-renewable resources, such as fossil fuels, are exhaustible and cannot be replaced once they have been used up. They take millions of years to form again e.g. fossil fuels, uranium & plutonium, etc. Renewable resources, on the other hand, are replenishable and include sources like solar, wind, and hydro. Nelson (2015) defines energy and energy resources stating that the work capacity is what energy is, while energy resource is anything that produces heat, moves objects, powers life, and produces electricity.

What is management? IEduNote (2023) writes that management has to do with planning, organizing, making decisions, motivating, leading, and controlling human persons, finances, and resources such as information and physical infrastructures to achieve the goals of the organization or group. Lawal (2012) states that management is having things done to accomplish the goals of an organization, and it equally involves organizing, planning, leading, staffing, and controlling resources. Reciou (2019) states that energy management concerns planning and executing energy production, and consumption, and also attending to conservation issues, protecting the climate and ensuing cost savings. Kelley (2019) writes energy management is ensuring that there is a reduction in energy usage while saving costs, and meeting environmental requirements and conservation efforts. NTPC School of Business (2023) writes that: “Energy management is the process of monitoring, controlling, and optimizing energy use and consumption. The goal of energy management is to ensure that energy is used in an efficient, effective, and sustainable manner”(par. 2). Pedro-Egbe (2021) states that: “Energy management is defined as the process of optimizing the peak energy demand and energy consumption in a building”(par.2).

Energy management refers to processes and procedures of prospecting for energy and energy sources and seeing to their use in an organization, group, or country. This involves planning, deciding, organizing, and utilizing energy sources for society. Every group or country that is using energy has goals and objectives to be met. Energy is managed for the well-being and welfare of people, and the development of society taking into consideration also environmental health and good. The term energy management will be used in this paper in a broader sense. It is more than cost-saving in the use of energy in buildings, industries, and factories. It is inclusive of the use of energy sources and how energy is created and utilized. And so how the sun, water, wind, etc are harnessed to create energy is part of energy management. The reality is that the creation, production, and process of generating energy from the sun, water, wind, and fossil fuels involve the use of energy. You cannot tap solar energy from the sun and use it inside facilities without using energy. To use wind energy you have to have facilities to tap the wind. To dig, excavate, or drill for fossil fuels you have to make use of energy. This is why the talk about saving energy must move beyond cost-saving energy to its generation and creation in its natural environment. If a company or country were to insist on using coal to generate energy because it is less costly and cares nothing about environmental concerns, that would not be wise ethical energy management. Energy management should move beyond saving financial costs to saving the environment.

This paper names energy and energy resource management as an ethical value. What is an ethical value? Eneyo (2020) states that ethics is concerned with issues of bad, good, right, and wrong, what is praiseworthy or blameworthy in human conduct, and specifies how human beings ought to behave in society. Ikeke (2014) writes that: “Ethics is the critical study of right and wrong behaviours. It deals with the normative criteria of how to measure human morality. What is the basis of human customs, rules and regulations” (p.112). The principles arising from ethics called ethical principles can be applied to all areas of life and so you have personal ethics, social ethics, business ethics, political ethics, bioethics, family ethics, environmental ethics, medical ethics, etc. Gbadebo (2021) states that: “value can be defined ...as the principles judging the worth of things or actions and also standards of measuring the virtues or goodness thereof. Therefore value is the scale of calculating the goodness, desirability, and worthwhileness of things, actions, and situations” (p.87). Values are what human beings hold to be of high esteem, praise, and worthy of emulation. There are universal values but there are also values that are peculiar to some society.

To speak of ethical value is to say that a certain behaviour or thing held in high esteem and of praise is worth following as good or right. According to Chukwujekwu (2007) ethical values or moral values refer to things or actions regarded as morally good, worthy of possessing or performing for they are following the best of human nature. Examples of values are kindness, generosity, honesty, hard work, diligence, filial piety, good governance, environmental care, etc.

Good governance concerns the purpose for which government is established. The government exists for a purpose and it is to provide a good and optimal life for the people, secure their peace and wellbeing, and enable people to enjoy happiness and their human rights. Whatever helps to secure the purpose of government becomes the concern of government. Adeyeye and Fasakin (2015) cite the United Nations to say that governance comprises popular participation, consensus, rule of law, accountability, transparency, responsibility, equitability, inclusiveness, and effectiveness and efficiency in the organization of the state (p. 110). It is using public political power for the common good. Good governance truly acts to develop the people, efficiently use resources for their betterment, and promote environmental health and harmony. Good governance is the antithesis of bad governance, bad leadership, and corrupt inept leadership. In the modern world, it is difficult for a state or country to develop when there is no adequate and sustainable power supply or electric energy. Good governance in the modern world will require that those in governance facilitate efficient management of energy and energy resources for the good of society. This is why this paper is drawing the implication of energy and energy management for good governance. A government that cannot sustainably manage energy for the good of its citizens leaves much to be desired. Ojo (2018) writes that “good governance means the manner in which power is exercised by governments in the management and distribution of a country’s social and economic resources. The nature and manner of this distribution makes governance a bad or good one” (p.54) Government is here understood to mean the body of men and women assigned the task of organizing the political society or any group for that matter. The concern here is with political society. Part of the resources of the state that the government should manage are energy resources and also natural resources.

The State of Energy and Energy Resources Management in Nigeria

It can be argued that the state of energy management in Nigeria is either very poor or grossly undeveloped. Take the state of electricity energy supply in Nigeria. Nigeria is notable for its poor power supply. The state of the power supply is epileptic. Many Nigerian citizens have been in darkness for more than a year in the places they live. You wonder if the power stations function at all. Not enough electricity is generated. Even when it is generated its distribution is another thing. The Nigerian government has invested billions into the electricity industry but little has been achieved from it. Oyedepo (2012) notes that it is a big challenge in the African continent to have clean modern energy which is necessary for poverty eradication and socio-economic development, and in a country like Nigeria more than 60% of persons in the country have no access to electricity, Nigeria's energy and energy resources have not been adequately managed for the good of the people, social development and environmental sustainability. Without an adequate supply of electricity power, it is difficult for factories and industries to develop rapidly. Many small and medium-scale businesses cannot function for they require power. If they function at all, it is at a high cost for they have to generate power for themselves.

This is a serious issue that affects energy management. If the electricity companies and power stations cannot generate and supply adequate electricity to the people, a lot of developmental projects are affected. People cannot adequately run their factories that depend on electricity. There is poor management of the electricity companies and poor management of the public funds that have been invested in the sector. There is hardly any Nigerian annual budget in which money is not budgeted for electricity, yet not much is achieved. Take for instance, as Pedro-Egbe (2021) writes one of the highlights of the 2021 budget was the amount devoted to achieving an uninterrupted power supply. Today, not much can be shown regarding this. The Nigerian Electricity Regulatory Commission (NERC) was established to ensure that there is an effective power supply. However, one aspect of the electricity industry Nigeria is yet to explore fully and incorporate into its sustainable goals is energy management.

Another issue that concerns energy management in Nigeria is the refineries. Nigeria has three refineries in Ekpan near Warri, Kaduna, and Port Harcourt. Billions of naira have been pumped into the refineries but they are not producing, if there is any production at all it is grossly below

capacity. Nigeria produces crude oil and still imports refined petroleum products. This is very shameful for a nation that produces crude oil. Corruption is rife in the petroleum industry. How come with the billions pumped into the oil industry there is little or nothing to show for it? Once in a while, petrol is scarce and Nigerians are stranded in petrol stations. Because of poor management of the country's refineries and gross underdevelopment of the energy sector coupled with corruption that takes away vital income needed for development, there is unemployment, youth restiveness, and ethnic militancy in the land. Mismanagement of Nigeria's oil wealth had led to violence and conflicts. In 2024, the price of petroleum products has drastically risen to an astronomically high level. The price of transportation and to transport agricultural products has risen also. All these affect the lives of the people. Many Nigerians are groaning in pain.

Gas is a vital source of energy. Gas is used in cooking and to power various industrial equipment and facilities. In Today's Nigeria, gas is still flared in the process of oil production. Though many deadlines have been given by the government to end gas flaring, it is still taking place. Painfully enough the multinational oil companies prefer to flare gas and pay fines as it is easier for them. You go to many places in the Niger Delta such as Ekpan, Otu-Jeremi, and some Ukwuani towns, you see gas being flared. There is mismanagement of Nigerian gas resources. Ikeke (2017) cites Amnesty International to state that the practice of gas flaring has taken place in Nigeria for decades causing environmental degradation and wastage.

When it comes to energy management in Nigerian households this paper doubts if the story is a very good one. A trip through the roads of many Nigerian villages and rural places reveals there are piles of firewood that have been felled for cooking purposes. Then there is also illegal felling of trees to create timber for the wood industry. Okula (2021) writes that clean and efficient energy promotes economic growth and aids comfortable living, but it is painful to note that Nigeria is inefficient in generating and managing power and there is little concern for the environmental impact of energy generation. Nigeria's energy resources are not only oil and gas. Oyedepo (2012) writes the use of fuel wood has caused desertification and associated problems. By and large, Nigeria's energy and energy resources have not been well managed for the wellbeing of all Nigerians, the good of society, and environmental sustainability.

Energy and Energy Resources Management as an Ethical Value

An essential argument of this paper is that energy management is an ethical value. Ethics as known concerns issues of what is right and wrong in human society. Ethics calls on human beings to live and behave rightly and morally. Ethics shuns evils and anti-social acts. When energy, whether renewable or non-renewable is well and rightly managed for the good of society and environmental conservation, a sustainable society and human civilization are created. The right thing to do is to manage energy well. When energy is misused, abused, mismanaged, wasted, and degraded it harms human beings and the ecosystems. The use of energy raises environmental ethical questions. Kimmins (2001) writes that: “Environmental issues raise a whole set of fundamental questions about what we as human beings value, how we conceive a meaningful life, how we perceive our place in nature and the kind of world we wish to bequeath to our children”(p. iii).

The ethical principle of sustainable development should never be ignored in the management of energy resources. The United Nations (1972) is clear that human should use the resources of the earth being mindful of the ability of future generations to meet their needs also. Energy sustainability is a vital necessity today more than ever. Nigeria has crude oil as a major source of energy. This should be used taking into consideration that it is non-renewable and there are future generations of Nigerians. Wood is renewable. But are there enough efforts at re-afforestation in the country to ensure both sustainability and environmental protection?

Think of the many consequences of energy mismanagement, misuse, and wastage. Non-renewable energies are crucial for human survival and future generations. When they are wasted they cannot be brought back. This is why they need to be used sustainably. Managing non-renewable energy sources does not mean that human beings should continue to exploit them. Rather it implies that because of the disadvantages associated with them, human beings should move away from them to clean energy. Non-renewable energy cannot be replenished and many of them come from fossil fuels such as natural gas, petroleum, coal, etc. Morse (2023) rightly notes that the use of fossil fuels such as natural gas, coal, petroleum, etc pollute the environment, land, and marine resources and contribute to climate change.

About gas management in Nigeria, it is a serious ethical issue. It is an ethical issue for the adverse effects of gas flaring affects human beings and also the ecosystems. The World Bank

Group (2023) states that: “The flaring of gas contributes to climate change and impacts the environment through the emission of CO₂, black carbon and other pollutants. It also wastes a valuable energy resource that could be used to advance the sustainable development of producing countries”(p.1). The Catholic Secretariat of Nigeria (2006) states that: “Gas flaring is associated with atmospheric and thermal pollution, and the depletion/destruction of vegetation and wildlife. Damage to buildings, acid rain formation, depletion of the floral periodicity, discomfort to humans and danger of pulmonary disease epidemic are other environmental problems arising from gas flaring. The soil, rivers and creeks of Niger Delta, which used to be alkaline in nature 17-40 years ago have now become dangerously acidic” (p. 120). Human health is affected, ecosystems are destroyed and biodiversity is depleted. All these make the issue of management of gas resources an ethical issue. Gas flaring is unethical and immoral. Carrying out oil business activities and flaring gas which destroys people and kills organisms in the soil and atmosphere is unacceptable. It is not the right way for companies to behave. There is a need for it to stop. Ikeke (2017) states that: “Human beings have a moral responsibility to act and end it. This is imperative to contribute to ending climate change, and land degradation, and foster better security and health for humans and non-humans. When humans rise to this responsivity of ending gas flaring, it will help in creating a better and harmonious sustainable region in the Niger Delta.” (p.103).

Issues of energy use and management are vital questions in ethics. Ethics is concerned with how human beings ought to live their lives among themselves and concerning one another. The human use of energy affects human health and wellbeing. Your use of energy affects the lives of others. It is more than a matter of individual choice. If one were to say that because she has the money he can waste electricity, what about his obligation to humanity? If you own a company, your waste of energy depletes the resources that you can contribute to corporate social responsibility. Present human beings have obligations to future generations. If present humans were to deplete all the non-renewable energy resources then there would be none for future generations to use. Macmillan Encyclopedia of Energy (2019) states that:

Continuing dependence on fossil fuels raises several major ethical issues. Ethical questions concerning our responsibilities to future generations are raised by the fact that fossil fuels are a nonrenewable energy source so that every barrel of oil or ton of coal burned today is forever lost to future generations. Further, the by-products

of fossil fuel combustion pose hazards to both present and future generations (par 2).

Implications of Energy and Energy Resources Management for Good Governance in Nigeria

Government has a great role to play in the energy management in a country. Because of the importance of energy to human society and the ecosystems, a government that cannot efficiently manage its energy resources should not be considered a good government. It is the government that has the responsibility and power to make policies that govern the management of energy resources. In many African nations, due to weak environmental governance and bad leadership, many extractive industries mine energy resources without caring for the health of the people and the environmental well-being. Macmillan Encyclopedia of Energy (2019) states that: “Although important questions of individual morality can be involved with energy issues, the production and use of energy primarily raises questions of social ethics and public policy” (par 7). This is why it is a vital question for the government. The government for the common good must regulate some aspects of how energy is used and managed. If some companies were to buy up all the energy generated from the power stations and thus deprive individuals and others of energy, this would be unacceptable. Energy is a public good that the government ought to be concerned about.

One of the responsibilities of a good government should be to foster energy management effectively and efficiently. Within a nation or country, there are many organizations, institutions, industries, factories, and households that make use of energy in the form of electricity from power plants, and gas. To power many electronic and electrical equipment in households and industries electricity is needed. Factories need electricity to power their production equipment. Cars, buses, trains, boats, and other means of transportation need electricity to run. The government cannot just allow individuals or other organizations to create energy in any manner they like without caring for social welfare and environmental wellness. If individuals or groups were to just raise electric poles and dig along the streets to raise or lay wires to generate electricity the government should be concerned. Without clear guidelines from the government individuals and groups in the bid to generate electricity can constitute a public nuisance and health hazards. This is a vital reason why government should be interested.

As noted previously energy comes from various energy sources. The way the energy is generated from these energy sources should matter to the government. People can generate energy from coal to power households and factories. But coal also has many disadvantages and negative impacts on the environment. Will the government allow organizations to generate energy from coal without restraint? The government should care for the common good. People can generate energy from firewood. But this causes deforestation. A good government should care about the environment. The government is set up to enable people to experience the good life. Whatever threatens the good life should be of concern to the government. Deforestation, climate change, and other environmental problems such as flooding, droughts, and famine all inhibit the provision of the good life. One of the sustainable development goals of the United Nations has to do with mitigating climate change. Abuses and mismanagement of energy and energy sources create enormous environmental problems. More energy consumption in homes and industries means power companies have to generate more energy which requires using more resources from the earth. Energy efficiency and saving have a way of helping to conserve resources.

In today's world, one of the most crucial energy sources that almost all nations depend on is crude oil. The exploitation and exploration of crude oil have also caused a lot of environmental problems. Presently many nations are trying to move away from oil as a source of energy. Oil is a non-renewable energy source. In the meantime, the government should not just allow oil companies to pollute and destroy the environment in the name of prospecting for oil. There should be high standards that companies should follow to ensure minimum damage is done to the environment and human beings. This also is part of energy management. Abdullah (2006) writes that efficient management of the resources of a country (Nigeria) requires the proceeds from oil should be used to diversify the economy and the proceeds from oil should be judiciously used. The oil industry is filled with corruption. Take a country like Nigeria, with the enormous wealth accruing from oil the nation is still grossly underdeveloped. Managing the income from oil revenue should also be seen as part of energy management. This applies to all other sources of energy. The more there is underdevelopment the more there is exploitation of more natural resources, as the money needed for development projects is taken away by corruption.

The foregoing shows clearly that without energy no human person or society can function. Energy is what is needed to work and move human civilization forward. This energy must be not only

managed but the energy resources from which energy is derived. Without the energy resources, there is no energy. Because of the challenges associated with non-renewable energy resources in that they deplete and cannot be replaced and also their negative impact on the environment; it is vitally important that renewable energy sources are developed and invested upon. A government that fails to realize this need and gradual movement to non-renewable resources is doing a great disservice to its people. Efficient energy management should not only be the concern of the government but also energy resource management. This should also be the concern of individuals and other groups in society.

Governments in Nigeria and elsewhere must intervene in the energy economics and economy for the good of all and not just leave it to the realms of the market. The way forward for proper and ethical management of energy and energy resources in Nigeria should be guided by the following as proposed by Kimmins (2001). The proposals are accessibility and availability of energy to the people at an affordable price, development of renewable energy sources, observance of the precautionary principle to avoid irreparable damage from any changes adopted, fostering environmental responsibility in energy use and management, promotion of education and public information on these uses and fostering international collaboration in energy use.

The oil and gas sector in Nigeria is inundated by massive corruption. Olujobi (2022) notes that corruption negatively affects good governance, socio-economic rights, and the welfare of citizens. This is an issue that the government should not ignore. It is both an ethical and economic issue. There is massive oil theft in the oil industry. Some quantities of oil produced are unaccounted for and so the profit goes to unknown sources. The Federal Government of Nigeria (2021) has enacted the Petroleum Industry Act. It is the responsibility of the government to ensure that it is effectively implemented for effective management of the industry and sector.

Conclusion

This paper has examined energy, energy resources, and management in Nigeria in light of the need for good governance. The paper vividly shows that energy and energy management are necessary for the economic growth and development of any nation. The paper showed that the government has a responsibility to ensure that energy is available and accessible, and also to ensure that energy resources are well managed. Energy management is an important aspect of good government. The

paper also showed that you cannot speak of energy and energy management without environmental discourse for the way that energy is used and managed has implications for environmental sustainability. Energy should be used and managed in such a way that it does not cause deforestation, desertification, or health challenges. etc. If energy is well managed it will help to enhance the standard of human life and ecosystems in Nigeria.

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