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Is Energy Law sufficiently an Academic Discipline? A Review of selected Documents

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Abstract

The paper is informed by the in-depth analysis of three articles namely: (i) Critical Reflection on Regulation by Julia Black; (ii) Energy Law as an Academic Discipline by Adrian J Bradbrook and (iii) International Energy Law: An Emerging Academic Discipline by Alexandra S Wawryk. It was further buttressed by 3 reports from various global institutions namely: World Energy Assessment Report [2000]; United Nations World Commission on Environment and Development Report 1987 [Brundtland Report] as well as a Compendium of Sustainable Energy Laws. Based on the interaction with these resources, the presentation foundation is built on six thematic areas. First, the definition of the various operational words. Second, the energy resources. Third, the regulations. Fourth, the conceptualization of energy law as discipline as well the prevailing or the anticipated regulatory framework for Energy Law. Fifth, the conclusion. The paper establishes that Energy Law is indeed an academic discipline, and the decentered regulation format is the most appropriate.

1.0 The Preamble

Energy[1] Law is a set of rules, norms, principles, and practices that allocate the rights and duties surrounding the exploitation and utilization of energy resources between individuals and governments[2], between government and

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[1] Section 2 of Energy Act 2019: Energy" means any source of electrical, mechanical, hydraulic, pneumatic, chemical, nuclear, or thermal power for any use; and includes electricity, petroleum, coal, geothermal, biomass and all its derivatives, municipal waste, solar, wind and tidal wave power; while energy conservation is " means the efficient, economic and cost-effective production and use of energy.

[2] Petroleum Act, 2019 especially ss.57,58 and Part IV of the Act: relationship between the contractor and government, between national government and county government as well as local community in sharing the petroleum resource revenues.

between states.[3] Energy resources include both primary and secondary resources.[4] Electricity is the most important secondary source of energy as it is a derivative of the primary sources.[5] The different players in the energy sector make up the subgroups of the power industry.[6] It regulates 'the allocation of rights and duties concerning the exploitation of all energy resources between individuals, between individuals and the government, between governments and between states.[7] Talking of regulation, this analysis adopts the cybernetic[8] definition provided by Julia Black because of its essentialist aspects. Globally, there is an increasing recognition of the international law dimension of energy law among the scholars, legal practitioners and those working in any role within energy markets resulting in the emergence and development of international energy law.[9] At national level the pattern appears to be the same with the emergence of the role of the community in the wider society of regulation of energy as evidenced by the constitution for instance in land tenure systems and generally chapter five on environment and land.[10] This has resulted in the concept of the notion called 'regulatory society' in which we recognise that regulation is not 'centred' on the state, but instead is 'decentred', diffused throughout society. 'Decentred' regulation does not resonate with the globalisation debate, but also its existence and relevance go down to the subnational level.[11]

[3] Adrian J Bradbrook, (1996) Energy Law as an Academic Discipline, Journal of Energy & Natural Resources Law.
[4] Ibid
[5] Ibid.
[6] Ibid
[7] Ibid n.3.
[8] 'Regulation is the sustained and focused attempt to alter the behaviour of others according to defined standards or purposes with the intention of producing a broadly identified outcome or outcomes, which may involve mechanisms of standard-setting, information-gathering and behaviour modification.'.
[9] Alexandra S Wawryk: International Energy Law: An Emerging Academic Discipline. Adelaide Law School Research Paper No. 2014-16.
[10] Constitution of Kenya 2010 article 63 which provides community land while Petroleum Act 2019 provides for local community share in revenue.
[11] Julia Black, (2002). Critical Reflection on Regulation.

2.0 The Resources in Energy Law

Resources means and refers to both renewable and non-renewable sources.[12] Renewable sources are also called the non-finite while non-renewable ones are also referred to as finite.[13] The finite energy sources include mineral based energy resources such as natural gas, petroleum oil, coal, geothermal, and uranium.[14] Solar, wind, tidal, and OTEC (Ocean Thermal Energy Conversion) are examples of non-finite.[15] The sources of energy which falls in either of those broad categories are:

i. Solar energy[16]: This simply means the transformation of radiation from the sun into electricity. Kenya had high insolation powers with an average of 5-7 peak sunshine hours. In 2013 the government had introduced tax over solar products but this was withdrawn after the motion to cut cost of renewable energy products. Kenya has one of the most active commercial PV systems in the world. Household solar system can be used for water pumping, power supply, telecommunication etc.[17]

ii. Hydro power[18]: This turns water in motion energy into electricity. The Kenya drainage system consists of 5 major basins for hydropower. That is Lake Victoria, Tana River, Athi and coastal area, Rift Valley and Ewaso Ngiro North River basin. It is the largest generation source of grid electricity in Kenya.[19]

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[12] Ibid n.10 article 260 provides for definition of natural resources and mentions energy while n.3 defines energy resources.
[13] Ibid.
[14] Ibid.
[15] Ibid.
[16] *https://kenyacradle.com/solar-energy-in-kenya/* accessed on 20.10.2022.
[17] *https://en.unesco.org/courier/2019-3/solar-energy-changing-rural-lives*-kenya accessed on 20.10.2022.
[18] SMALL HYDROPOWER DEVELOPMENT IN KENYA – Ministry of Energy. Accessed on 20.10.2022.
[19] *https://www.fao.org/3/X6611E/x6611e02a.htm#:~:text=The%20Rift%20Valley%20itself%20forms%20an%20internal%20drainage,surplus%20water%20resources%3A%20Lake%20Victoria%20and%20Tana%20River.* Accessed on 20.10.2022.

iii. Fossil fuels[20]: This is a general term for buried combustible geologic deposits of organic materials, formed from decayed organic matter that have been converted to crude oil, coal, natural gas, or heavy oils by exposure to heat and pressure in the earth's crust over millions of years. There are three major forms of Fossil Fuels; Coal, Oil and Natural Gas which are basically the same thing but in different forms with coal being solid, oil in liquid state and Natural Gas, as the name suggests, being gaseous. Fossil fuels are predominantly used in commercial and industrial sector either as petroleum to drive motor powered engines, gas for both domestic and commercial use and also to generate electricity e.g., diesel (Independent Power Producers use generators powered by diesel to generate electricity, for domestic or industrial use in case power blackouts). Fossil fuel usage in Kenya comprises of 1/5th of all total use, with petroleum accounting for 27% of the total energy consumption in Kenya.

iv. Biomass[21]: These are biological materials derived from living, or recently living organisms. In the context of biomass for energy, this is often used to mean plant-based material though biomass can equally apply to animal waste or both. Biomass is energy derived from organic matter. It includes mostly firewood and charcoal but can also include municipal waste or biofuels for example sugarcane to produce ethanol. Close to ⅔ of energy consumption in Kenya is by biomass, mostly firewood and charcoal which is entirely for domestic use.

[20] 15 Important Fossil Fuels Pros And Cons You Need To Know - Green Coast accessed on 20.10.2022.

[21] A Fege, "Energy From Biomass" in J Kreider and F Kreith, Solar Energy Handbook (1979), ch 25; N Smith, Wood: An Ancient Fuel with a New Future, Worldwatch Paper 42 (1981); California Energy Commission, Methanol as a Motor Fuel, Report PS00-89-002 (1989); D Hall, G Barnard and P Moss, Biomass for Energy in the Developing
Countries (1982); D Hall, F Rosillo-Calle, R Williams and J Woods, "Biomass for Energy: Supply Prospects", in T Johansson, H Kelly et al (eds), Renewable Energy (1993); World Energy Council, New Renewable Energy Resources (1994), ch 5; W Patterson, Power from Plants (1994).

v. Energy Conservation[22]: This is more of secondary energy resource. This is because it is able to ensure that the society always has energy in store for abundant use. If the use of one resource like coal can be managed and solar is used instead then this leads to efficient planning. Energy conservation could be undertaken through least-cost planning or integrated resource planning. Exploitation of energy resources and turning them into something different that will benefit the society should be handled separately with different laws governing each because it varies in use and consumption. Certain resources when exploited in public places could be endangering and even cause health hazards. It is for such reasons that the state has to put up instruments that manage and supervise the use of individual resources.

vi. Geothermal resources[23]: This entails the 5 types namely volcanic or magmatic reserves, vapour-dominated systems, geopressured systems, hot groundwater and hot dry rocks (HDR). In Kenya, Olkaria Geothermal plant comes to mind as an example.

vii. OTEC[24]: It involves the exploitation of the temperature differential between the warm water at the ocean surface at tropical latitudes and the cold water of the deep ocean.

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[22] For a discussion of the possible types of application of energy conservation techniques and the associated legal issues, see G Thompson, Building to Save Energy: Legal and Regulatory Approaches (1980); A Brad brook, "Regulating for Fuel Efficiency in the Transport Sector" (1994) I Australasian J Na[ural Resources Law and Policy 1; A Bradbrook, Energy Conservation Legislation in Building Design and Construction (1991); California Energy Commission, California's Appliance Standards: An Historical Review, Analysis, and Recommendations (1983); S Ferrey, "Cold Power: Energy and Public Housing" (1986) 23 Harvard J Legislation 33; J-D Delley and L Mader, L'e'tatface au deft energetique (1986).

[23] S Sato and T Crocker, "Property Rights to Geothermal Resources" (1977) 6 Ecology L Q 250; D Hansen, "Water Conflicts from the Viewpoint of a Regulator" (1977) 13 Land and Water L Rev 151; K Bjorge, "The Development of Geothermal Resources and the 1970 Geothermal Steam Act- Law in Search of Definition" (1974) 46 U Colorado L Rev I.

[24] For a discussion of OTEC and the legal issues associated with it, see S Joseph, "Legal Issues Confronting the Exploitation of Renewable Sources of Energy from the Oceans" (1981) II California Western International L J 387; K Keith, "Laws Affecting the Development of Ocean Thermal Energy Conversion in the United States" (1981-2) 43 U Pittsburg L Rev I; R Krueger and G Yarema, "New Institutions

viii. Wind power[25]: Wind energy is the use of airflow to turn wind turbines thus generating electricity for supply to national grid. It currently accounts for about 2% of energy produced in Kenya.

Where there are portions of energy resources that are characterized by certainty concerning the ability to extract or utilize that resource in the future [26] it is called a reserve. The main difference between reserves, resources, and occurrences is usually the ratio of market price to cost of production. Feasibility studies are usually conducted to ascertain the existence of the resources before any decision can be made. The extraction costs are so high but with increasing technology, these costs are coming down thus making it easy to exploit existing resources while also bringing other forms into the resource circle. This is reflected in the resolution of UNECE in 1992 where it introduced a different dimension in the definition of resources to include the level of actual feasibility of extraction based on geological engineering assessment.[27] This document is an updated version of the "United Nations International Framework Classification for Reserves/Resources - Solid Fuels and Mineral Commodities", which was adopted by the United Nations Economic and Social Council in 1997 [4] and recommended for worldwide application (ECOSOC Decision 226/1997).[28] According to UNFC[29] Petroleum is defined as a naturally occurring mixture consisting of hydrocarbons in the gaseous, liquid or solid phase, it may be in both oil and natural gas forms. The resources in place of naturally occurring energy and mineral resources are described in terms of produced quantity',

for New Energy Technology: The Case of Ocean Thermal Energy Conversion" (1980-1) 54 Southern California L Rev 767; M Reisman, "Key International Legal Issues with regard to Ocean Thermal Energy Conversion Systems" (1981) II California Western International L J 425.

[25] *https://www.kengen.co.ke/index.php/business/power-generation/wind.html*> access 2:23 p.m 10th December 2021

[26] <*https://www.lawinsider.com/dictionary/proved-producing-reserves*> access 12:11 on 02 Dec 2021.

[27] <*https://unece.org/fileadmin/DAM/ie/se/pdfs/UNFC/UNFCemr.pdf*>accessed 1:50pm on 02 Dec 2021.

[28] Ibid.

[29]*https://unece.org/sustainable-energy/unfc-and-sustainable-resource-management*.

'remaining recoverable quantities, and additional quantities remaining in place. Produced quantities are the sum of sales quantities and non-sales quantities as determined at their respective reference points between a specified initial time up to a given date and time.[30] Non-sales quantities are considered to have intrinsic economic value.

Remaining recoverable quantities are the sum of sales quantities and non-sales quantities estimated to be produced at the respective reference points from a given date and time forward.[31] Additional quantities remaining in-place are quantities estimated to be in-place at the initial time, less the sum of the produced quantities and the estimated remaining recoverable quantities. Additional quantities remaining in-place are described in non-economic terms only. Their recoverability and, as a result, their economic viability, has not been assessed.[32] Therefore, from the examination of the definition of energy resources, it is evident that just as varied as the intricacies of the sources of energy are, the regulatory framework of energy law is similarly and adaptively manifested. Thus, has acquired specialization.

3.0 Energy Regulation

As observed by Bradbrook, each energy resource involves a different interface with the law in terms of its exploitation.[33] It is therefore, important that the regulatory framework of energy law is reflective of the context and the nature of the resource. The common thread must run through the framework from the superior norm to the least superior norm. The law has to reflect the national, regional and the international integration that is embedded in its practice, customs and usages. Thus, the centrality of decentred[34] regulation as averred by Julia Black is the corner stone of the energy regulation in recognizing command and control in the emerging human right anchored discharge of service in energy sector. It is on this basis that the paper proceeds to examine regulatory framework as follows:

[30] Ibid.
[31] Ibid at page 7.
[32] Ibid at page 8.
[33] Ibid n.3.
[34] Ibid.

3.1 International Framework

3.1.1 United Nations Conference on Environment and Development: Framework Convention on Climate Change.[35]

It provides its objective in Article 2 as is to achieve in accordance with the relevant provisions of the Convention, stabilization of the greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.

3.1.2 Kyoto Protocol to the United Nations Framework Convention on Climate Change[36]

The Parties included in Annex I shall, individually or jointly, ensure that their aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases listed in Annex A do not exceed their assigned amounts, calculated pursuant to their quantified emission limitation and reduction commitments inscribed in Annex B and in accordance with the provisions of this Article, with a view to reducing their overall emissions of such gases by at least 5 per cent below1990 levels in the commitment period 2008 to 2012.

3.1.3 Convention on the Organisation for Economic Co-operation and Development[37]

The aims of the Organisation for Economic Cooperation and Development (hereinafter called the "Organisation") shall be to promote policies designed to achieve the **highest sustainable economic growth and employment** and a rising standard of living in Member countries, while maintaining financial stability, and thus to contribute to the development of the world economy; to contribute to sound economic expansion in Member as well as non-member countries in the process of economic development and to contribute to the

[35] *https://unfccc.int/process-and-meetings/what-is-the-united-nations-framework-convention-on-climate-change* accessed on 25.10.2022.
[36] https://unfccc.int/documents/2409 accessed on 25.10.2022.
[37] *https://english.dipublico.org/1217/convention-on-the-organisation-for-economic-co-operation-and-development/* accessed on 25.10.2022.

expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

3.1.4 The Decision of the Council Establishing an International Energy Agency of the Organisation

It was adopted by the Council at its 373rd Meeting on 15th November 1974. The key aim was to carry out an International Energy Program for cooperation in the field of energy, with the aims of development of a common level of emergency self-sufficiency in oil supplies; establishment of common demand restraint measures in an emergency; establishment and implementation of measures for the allocation of available oil in time of emergency; development of a system of information on the international oil market and a framework for consultation with international oil companies; development and implementation of a long-term co-operation programme to reduce dependence on imported oil, including: conservation of energy, development of alternative sources of energy, energy research and development, and supply of natural and enriched uranium; and promotion of co-operative relations with oil producing countries and with other oil consuming countries, particularly those of the developing world. There is explicit use of the word "energy".

3.1.5 Universal Declaration of Human Rights of 10th December 1963.[38]

It provides for eradication of poverty. Article 11 to 12 stipulates thus:
'…We will spare no effort to free our fellow men, women and children from the abject and dehumanizing conditions of extreme poverty, to which more than a billion of them are currently subjected. We are committed to making the right to development a reality for everyone and to freeing the entire human race from want. *We resolve therefore to create an environment –at the national and global levels alike – which is conducive to development and to the elimination of poverty.'*

[38] *https://www.un.org/en/about-us/universal-declaration-of-human-rights* accessed on 25.10.2022.

It is important to note that this is a persuasive authority that has given rise to several binding agreements. Eradication of poverty can not be achieved without energy hence implicitly supported.

3.1.6 Stockholm Declaration of the United Nations Conference on the Human Environment[39]

Under Principle 3 and Principle 5. Principle 3 commits to ensure the capacity of the earth to produce vital renewable resources must be maintained and, wherever practicable, restored or improved. Principle 5 requires that the *non-renewable resources of the earth must be employed in such a way as to guard against the danger of their future exhaustion and to ensure that benefits from such employment are shared by all mankind.* General observation is that the word "resource(s)" is the backbone of the treaty.

3.1.7 Declaration on the Right to Development[40]

Article 1 enunciates that the right to development is an inalienable human right by virtue of which every human person and all peoples are entitled to participate in, contribute to, and enjoy economic, social, cultural, and political development, in which all human rights and fundamental freedoms can be fully realized. Energy is part and parcel of enjoyment of this right to development.

3.1.8 World Charter for Nature of October 1982.[41]

The 24-articled document provides in article 10 that *natural resources* shall not be *wasted* but *used with a restraint appropriate* to the principles set forth in the present Charter, in accordance with the following rules: Non-renewable resources which are consumed as they are used shall be exploited with restraint, taking into account their abundance, their rational possibilities of converting them for consumption, and the compatibility of their exploitation with the functioning of natural systems. It is also important to note that the phrase "natural resource"; and the word "resources"; has been

[39] *https://www.clearias.com/stockholm-declaration/ accessed on 25.10.2022.*
[40] *https://www.ohchr.org/en/instruments-mechanisms/instruments/declaration-right-development accessed on* 25.10.2022.
[41] *https://www.refworld.org/docid/3b00f22a10.html* accessed on 25.10.2022.

repeated. Second, the word energy has been mentioned by the General Assembly in the first introductory paragraph.

3.1.9 Rio Declaration on Environment and Development of June 1992.[42]

This 27-principles document under Principle 8 provides to achieve *sustainable development* and a *higher quality of life* for all people, States should reduce and eliminate unsustainable patterns of production and consumption and promote appropriate demographic policies. Principle 2 provides for responsible exploitation of resources. Almost all the principles refer to sustainable development. It is common knowledge that energy is an essential ingredient for achievement of sustainable development and higher quality of life.

3.1.10 The Earth Charter[43]

It provides under part II for ecological integrity. It has repeatedly used the phrase "sustainable ways" and the word "development". Hence, implication of energy.

3.1.11 Plan of Implementation for the United Nations World Summit on Sustainable Development[44]

Article 8 provides for the commitment to take joint actions and improve efforts *to work together at all levels* to *improve access to reliable and affordable energy services for sustainable development* sufficient to facilitate the *achievement of the millennium development goals, including the goal of halving the proportion of people in poverty by 2015, and as a means to generate other important services that mitigate poverty, bearing in mind that access to energy facilitates the eradication of poverty. Energy is expressly provided.*

[42] *https://www.cbd.int/doc/ref/rio-declaration.shtml accessed on 25.10.2022.*
[43] *https://charterforcompassion.org/earth-charter accessed on 25.10.2022.*
[44] *https://www.un.org/en/conferences/environment/johannesburg2002* acced on 25.10.2022.

3.1.12 Decision of the Commission on Sustainable Development Ninth Session (CSD-9)[45]

The session provided for myriad aspects of energy for sustainable development namely:

[a] General Considerations: Some of the key principles here include an effective energy-mix that gives a greater share to renewable energies, energy efficiency and advances in technology including fossil fuels. The approach looks at economic and social development and responsible management of environmental resources. In view of the different contributions to global environmental degradations, States have common but differentiated responsibilities. The choice and implementation of policies to improve the ways to achieve energy for sustainable development basically rest with Governments.

[b] Issues and Options: Some of the issues and options raised is eradication of poverty as a priority for developing countries. Energy policies should align to this overriding priority. The recommendation is for governments to bear primary responsibility for developing and applying polices that ensure sustainable development considering options such as increasing use of renewable energy, encouraging energy efficiency, integrating energy considerations in socio economic programmes especially sectors like public transport, agriculture, industry, urban planning and construction. Another aspect is support of increased use of renewable both in grid connected and decentralized systems

[c] Key Issues: article 11 cites key issues of energy identified at the first session of the Ad Hoc Open-ended Intergovernmental Group of Experts on Energy and Sustainable Development, the Commission recommends the options and strategies set out. These includes accessibility of energy; energy efficiency; renewable energy; advanced fossil fuel technologies; nuclear energy technologies; rural energy; and energy and transport.

[45] *https://sustainabledevelopment.un.org/intergovernmental/csd9* accessed on 25.10.2022.

[d] Overarching Issues: research and development; capacity-building; technology transfer; information-sharing and dissemination; mobilization of financial resources; and making markets work effectively for Sustainable Development as well as multi-stakeholder approach and public participation.

[e] Regional Cooperation: The Commission notes with appreciation the efforts made at the regional level and by interest groups to discuss the key issues and formulate regional positions and programmes of action to promote energy for sustainable development.

[f] International Cooperation: In particular, international cooperation can be very effective in capacity-building, education, technology transfer, information-sharing, research and development, and the mobilization of resources, including financial resources, taking into account the above-mentioned key issues and energy sources.

3.2 Regional Framework

3.2.1 The Treaty for the Establishment of the East African Community[46]

This treaty creates a base for the regulation of energy within the East African Community. Article 101 states "The Partner States shall adopt policies and mechanisms to promote the efficient exploitation, development, joint research and utilisation of various energy resources available within the region." [47] Article 101 (2) states "The least cost development and transmission of electric power, efficient exploration and exploitation of fossil fuels and utilisation of new and renewable energy sources;" [48] this thus means that it provides for the most efficient methods of utilization of resources within the East African Community through regulation.

[46] *https://www.eala.org/documents/view/the-treaty-for-the-establishment-of-the-east-africa-community-1999-2006* accessed on 25.10.2022.
[47] The Treaty for the Establishment of the East African Community, Article 101 (1).
[48] The Treaty for the Establishment of the East African Community, Article 101 (2).

3.2.2 Southern African Power Pool (SAAP)[49]

The SAPP was created in August 1995 at the SADC summit held in Kempton Park, South Africa, when member governments of SADC (excluding Mauritius) signed an Inter-Governmental Memorandum of Understanding for the formation of an electricity power pool in the region under the name of the Southern African Power Pool. The ministers responsible for energy in the SADC region signed the Revised Inter-Governmental Memorandum of Understanding on 23 February 2006. [50] SAAP was formed so as to regulate the coordination and planning of the electricity power system in Southern African countries. It currently has twelve-member countries. SAAP also provides a solution to the challenges facing the regulation of the electric power pool in Southern Africa.

3.2.3 European Union Energy Policies[51]

These policies have been put in place in order to regulate the consumption of energy in the member states of the European Union. "The Energy Efficiency Directive (2012/27/EU), which entered into force in December 2012, required Member States to set indicative national energy efficiency targets in order to ensure that the EU reached its headline target of reducing energy consumption by 20% by 2020." [52] The policies seek to promote energy efficiency and they aim to achieve this directive through energy regulation.

3.3 National Regulation

3.3.1 The Constitution of Kenya 2010

The preamble of the constitution provides the commitment of the people to be respectful for the environment and appreciates principle of sustainability

[49] *https://www.sapp.co.zw/* accessed on 25.10.2022.

[50] 'About SAPP | Southern African Power Pool' (Sapp.co.zw, 2021) http://www.sapp.co.zw/about-sapp accessed 2 December 2021.

[51] *https://www.sciencedirect.com/topics/engineering/european-union-energy-policy* accessed on 25.10.2022.

[52] 'Energy Efficiency | Fact Sheets on The European Union | European Parliament' (Europarl.europa.eu, 2021) *https://www.europarl.europa.eu/factsheets/en/sheet/69/energy-efficiency* accessed 2 December 2021.

for posterity benefits. It also provided the sovereign power to the people and declare its supremacy and acknowledged the general rules of international law and ratified treaty or ratified convention.[53] Thus, the three introductory articles confirm the place of Energy Law in our Constitution. The paper agrees with the averments of Mussa, Lalji, Mungai, Omollo, & LLP, [2020][54] that that the Constitution accords responsibility to the government to regulate and administer natural resources on behalf of the people as per the Fourth Schedule to the Constitution.

Indeed, Article 42 provides for environmental rights, Article 66 mandates the state to regulate land use and property, Article 69 provides for state obligation in respect of environment and Article 70 stipulates enforcement of the rights while Article 71 enunciates agreement relating to natural resource. Under article 260, the constitution has expressly recognized energy resources. Given the proposition that our Constitution is heavily inspired by American and South African Constitution, it goes without mention that energy law constitutional framework is greatly common law based. This is also confirmed by the implicit reference that is accorded to the energy law by the constitution with exception of the Fourth Schedule that has directly mentioned energy policy[55]and regulation.[56]

3.3.2 Legislation.

Bradbrook opined that the allocation of rights and duties poses interesting considerations in other energy contexts. For instance, in the US, the congress enacted Public Utility Regulatory Policies Act (PURPA) in 1978[57] that provided inter alia for congenators[58] and individuals and companies which

[53] Article 2, Constitution of Kenya.

[54] Electricity regulation in Kenya: overview. Thomson Reuters Practical Law. Retrieved from *https://uk.practicallaw.thomsonreuters.com/w-028-058?transitionType=Default&contextData=(sc.Default)&firstPage=true#co_pageContainer.*

[55] Paragraph 22 (d) of Part 1 of Fourth Schedule of the Constitution of Kenya 2010.

[56] Paragraph 8(e) of Part 2 of the Fourth Schedule of the Constitution of Kenya 2010.

[57] 16 USC ss79J-796; 824-825; 2601-2645. Germany also has similar legislation: Federal Law Gazette, vol I, 14 December 1990, at 2633.

[58] Cogeneration is the simultaneous production of electrical or mechanical energy and thermal energy. Cogeneration is sometimes referred to as "combined heat and

produces energy surplus to their own requirements the right of interconnection to the electricity grid and the right to sell excess electricity on guaranteed terms to the local power company. This act was aimed at energy conservation. The structure of electricity industry also varies from one jurisdiction to another for example in France where Electricite de France has a country-wide monopoly[59] just as it happens in Canada[60] and Australia[61] while states of the US, the electricity industry operates as a private enterprise. In Kenya, the Energy Act 2019[62] regulates the energy sector which is largely public enterprise. Some energy resources such as petroleum has been given prominence in Kenya through Petroleum Development Fund Act 1991[63] and

power" or "total energy plant". For a discussion of cogeneration technology, see California Energy Commission, Cogeneration Handbook (1982) Report PS00-82-054; F Cross, "Cogeneration: Its Potential and Incentives for Development" (1979) 3 Harvard Environmental L Rev 236; A Bradbrook, "Legal Aspects of Promoting Energy Cogeneration" (1989) 6 Environmental and Planning L J 332.

[59] See C Stoffaes, Entre monopole et concurrence (1994), ch4.

[60] In Alberta, the electricity industry is privatised and controlled by the Alberta Public Utilities Board: Public Utility Board Act, RSA 1980, c P-37. Nova Scotia Power was privatised in 1992. For other Provinces, see, eg, Public Utilities Act, RSO 1980, c 423; The Manitoba Hydro Act, RSM 1970, c Hl90 (as amended). See also L Leonoff, "Canada: Privatisation in the Electricity Sector", Paper presented at the IBA 25th Biennial Conference, Melbourne 1994.

[61] See Electricity Commission Act 1950 (NSW); Electricity Industry Act 1993 (Vic); Electricity Act 1994 (Qld); Electricity Corporation Act 1994 (WA); Electricity Corporations Act 1994 (SA) (not yet proclaimed); Hydro-Electricity Act 1944 (Tas); Electricity Act 1978 (NT). Note that the Government of the State of Victoria has recently begun to privatise the electricity industry.

[62] Preamble of the Act: Consolidate the laws relating to energy, to provide for National and County Government functions in relation to energy, to provide for the establishment, powers and functions of the energy sector entities; promotion of renewable energy; exploration, recovery and commercial utilization of geothermal energy; regulation of midstream and downstream petroleum and coal activities; regulation, production, supply and use of electricity and other energy forms; and for connected purposes.

[63] An Act of Parliament to provide for the establishment of a Petroleum Development Fund and the imposition of a petroleum development levy and for connected purposes.

Petroleum Act 2019[64] and other national laws.[65] Briefly, energy aspects are extremely diverse and require special and independent attention.

3.3.3 Policies

These includes *Feed-in-Tariffs (FiT)*[66] Policy 2012 amended in 2021[67], National Energy policy[68], Kenya Vision 2030[69] among others touching on land and environment. This is because energy law is intricately and intrinsically intertwined with land and environment.

3.3.4 Institutions

The enforcement of energy law is assigned to institution such as Ministry of Energy and Petroleum; Energy Petroleum Regulation Authority (EPRA)[70]; Energy and Petroleum Tribunal (EPT)[71]; Rural Electrification and Renewable Energy Corporation (REREC)[72]; Nuclear Power and Energy Agency (NPEA)[73]; Renewable Energy Resource Advisory Committee

[64] Preamble of the Act: AN ACT of Parliament to provide a framework for the contracting, exploration, development and production of petroleum; cessation of upstream petroleum operations; to give effect to relevant articles of the Constitution in so far as they apply to upstream petroleum operations, regulation of midstream and downstream petroleum operations, and for connected purposes

[65] Competition Act 2010; Land Act 2012; Public Finance Management Act 2012; National Construction Authority Act 2011; Environmental Management and Co-ordination Act 1999; Income Tax Act (Cap. 470 Laws of Kenya); National Transmission Grid Code; and National Distribution Grid Code among others.

[66] S.91 of Energy Act 2019.

[67] The Policy promotes the generation of electricity from renewable energy sources by enabling power producers to sell electricity generated at a pre-determined tariff for a given period. Tariffs are available for energy generated from wind power, biomass, small-hydro, geothermal, biogas, and solar resources.

[68] S.4 of Energy Act 2019.

[69] Kenya Vision 2030 | Kenya Vision 2030 accessed on 25.10.2022. The Kenya Vision 2030 aims to transform Kenya into a newly industrializing, middle-income country providing a high quality of life to all its citizens by 2030 in a clean and secure environment.

[70] S.9 of the Energy Act 2019.

[71] Wako, J., & Ngumo, J. (2020). CMS Law. Renewable Energy Law and Regulation in Kenya. Retrieved from *https://cms.law/en/int/expert-guides/cms-expert-guide-to-renewable-energy/kenya*. Also s.25 of the Energy Act 2019.

[72] s.43 of Energy Act 2019.

[73] s.54 of Energy Act 2019.

(RERAC)[74]; National Environmental Management Authority (NEMA)[75]; Kenya Electricity Generating Company Limited (KenGen)[76]; and Kenya Power and Lighting Company Ltd (KPLC).[77] These are national government institutions. The county government[78] and the Ministry of Energy & Petroleum Mining[79] also fall under institutions that play part in regulation of energy.[80]

3.3.5 Caselaw

3.3.5.1 *Friends of Lake Turkana Trust v Attorney General & 2 others* [2014] eKLR

The issue in this case was whether the Court had jurisdiction to intervene and address issues arising from any agreement entered into between the Kenyan Government and Ethiopian Government for the purchase of electricity from Ethiopia? The power was to be generated from Gibe Dam which was being built in Omo River in Ethiopia. The Omo River feeds Lake Turkana with nearly 90% of its water and hence the petitioners alleged that it was potentially devastating to the existence of Lake Turkana and sue the Government. The Attorney General used the defence of sovereignty of Ethiopia. The court found that in order to enforce a constitutional right such as the environment one, it has jurisdiction as long as the parties fall within the territorial jurisdiction of the court.

[74] s.76 of Energy Act 2019
[75] S.7 of Environmental Management & Coordination Act 1999 (EMCA).
[76] *https://kenyanwallstreet.com/kenya-electricity-generating-company-kengen-analysis/* accessed on 27.10.2022.
[77] *https://kenyacradle.com/kenya-power-and-lighting-company-ltd/* accessed on 27.10.2022.
[78] Chapter 11 of the Constitution of Kenya 2010 and part 2 of the fourth Schedule to the Constitution 2010.
[79] *https://www.petroleumandmining.go.ke/* accessed on 27.10.2022.
[80] Fourth Schedule to the Constitution 2010 provides for the functions to be undertaken.

P. Nyamweya, J posited thus:

> *'…The facts that the subject matter of the petition is an agreement entered by the Kenyan Government with the Ethiopian State, and that the alleged violations of the rights of the Petitioner arises in a transboundary context, and may have originated from transactions that were undertaken in Ethiopia do not on their own operate to limit access to this Court, or this Court's jurisdiction. This is for the reason that this Court is obliged to consider any issue raised as to whether the actions of the Respondents in this regard has resulted in a violation of the Petitioner's rights, and whether the Respondents are subject to any constitutional and statutory duties and responsibilities under Kenyan law when entering into such an agreement. Going forward, and for the avoidance of doubt, this court's jurisdiction to hear the present petition is therefore with respect to the alleged violation of the Petitioner's constitutional rights by the Respondents and the Respondents' obligations if any in this regard, and the remedies if any, that the Petitioner is entitled to.'*

Earlier on the honourable Justice had observed as follows:

> *'…in the present Petition, there is no foreign state or foreign and/or intergovernmental entity that is a party that would make this court incompetent to hear and determine this petition. The Petitioner and the Respondents are all Kenyan entities and are resident within the Kenyan territory. In addition, the subject matter of the petition before the court concerns the Petitioner's fundamental rights and freedoms, and alleged violations of the same by the Respondents. The Petitioner also bases its claim on the Kenyan Constitution including its Bill of Rights which is applicable within the Kenyan territory. This court can therefore apply the Constitution to the parties herein and has jurisdiction to this extent pursuant to Articles 22, 23, 70 and 165(3)(b) of the Constitution.'*

This case also considered the question of whether the fundamental rights and freedoms of the Petitioner have been violated and the Respondents' Obligations?

The learned Judge concluded, and we replicate it here:

'…Specifically in relation to the right to and access to environmental information, Article 69 (1) (d) of the Constitution places *an obligation on the State to encourage public participation* in *the management, protection and conservation of the environment.* This court in exercising its jurisdiction under the Environment and Land Court Act section 18 is also obliged to take into account the principle of sustainable development including the principle of public participation in the development of policies, plans and processes for the management of the environment and land…It was stressed in Chapter 8 of Agenda 21 that all stakeholders in the environment should have access to the relevant environmental information relating to products or activities that have an environmental impact. Principle 10 of the Rio Declaration on Environment and Development, 1992, also provides as follows:

> *"Environmental issues are best handled with participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision – making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided."*

The Stated thus:

> *'…In the present petition the Respondents and Interested Party admit that there are intentions of importation of electric power from Ethiopia. The Petitioner has shown that the harnessing of such electricity in Ethiopia is likely to affect its right to life and a livelihood and its cultural and environmental heritage as detailed out in the foregoing. I find that this risk imposes a positive duty upon the Respondents and Interested Party to provide the Petitioner with the all-relevant information in relation to importation and/or purchase and transmission of electric power from Ethiopia…It is thus the finding of this court that the Respondents and Interested Party as trustees of the environment and natural resources owe*

a duty and obligation to the Petitioner to ensure that the resources of Lake Turkana are sustainably managed utilized and conserved, and to exercise the necessary precautions in preventing environmental harm that may arise from the agreements and projects entered into with the Government of Ethiopia in this regard.'

3.3.5.1 Mui Coal Basin Local Community & 15 others v Permanent Secretary Ministry of Energy & 17 others [2015] eKLR

Among other issues for determination, the court was invited to pronounce itself on the question of:

a. Whether lack of the involvement of the County Government rendered the Coal Mining Project legally infirmed?

On the first issue, the court observed thus at paragraph 101-102:

'…One question we are yet to answer but whose answer is suggested by our approach above is whether it is fatal that the Kitui County Government was not involved at all in the Coal Mining Project. What is the proper role of the county government in this process" …? With the dispensation of the new Constitution, we now have a devolved government in Kenya. At the national level Public participation is enshrined under Article 10 of the Constitution as part of our national values. At the county level, Article 174 (c) provides that the objects of the devolution of government are to give powers of self-governance to the people and enhance the participation of the people in the exercise of the powers of the State and in making decisions affecting them. It is, therefore, the Constitutional expectation that counties will be the forums where public participation is perfected on some of the most pressing issues. Yet, in this case, there was no conscious or even feigned attempt to involve the Kitui County Government in the Coal Mining Project.'

At paragraph 104-106, the learned bench concluded:

'…We are disappointed that the Kitui County Government chose not to participate in the legal proceedings even after we issued several express invitations to it to be represented as a party or amicus in the suit. All our efforts to engage, *in view of the polycentricity of the issues,* to get the most wholesome analysis were rebuffed by the County so we did not have the benefits of their arguments. We are, however, persuaded by the

> two-track position taken by Mr. Imende on the issue. *An issue involving prospecting and concessioning of minerals that potentially could affect hundreds of thousands of people in a county must be done in consultation with the County Government – even if the primary activity is assigned to the National Government in our scheme of devolution. We believe that this is the logical consequence of the cooperative and collaborative two-tier overnance system imposed by our Constitution. This is the future prescribed by the Constitution. Hence, we hope that the National Government will involve the County Governments, as repositories of local priorities and preferences, in public decisions that would affect many of the county citizens. We believe that is the Constitutional imprimatur…we fully expect, as expressed above, that the National Government must, as a consequence of the requirement of public participation, involve County Governments when it comes to negotiations for all contracts or partnerships to exploit natural resources.'*

The jurisprudence emerging from the above two Kenyan Cases is a testimony to the demonstration by Bradbrock[81] in using the Australian Case of *New South Wales v CommonWealth [1976] 135 CLR 337.* In this case, the issue was on whether the federal law of Seas and Seabed Land Act 1973 which was vesting control of energy reserves to the federal government was constitutional since the constitution was reserves residual on energy issue to the state and enumerated powers on federal government. The High Court in this case upheld the legislation insisting that the federal government has the control over territorial sea and internal waters of Australia hence control over territorial sea and continental shelf. By a majority decision, the court also held that the jurisdiction of the states ends at the ordinary low watermark. Thus, all offshore petroleum and gas fell within the federal control. It is also important to note that the federal government attracts jurisdiction to itself over the industry trade and commerce pursuant to ss.50[1] and 50[20] of the Constitution in regard to cooperation power. In our Kenyan context, residual powers have been expressly reserved for the National level. These aspects are cardinal in energy law.

[81] Ibid n.3.

4.0 Conceptual Analysis

4.1 Is Energy Law sufficiently an Academic Discipline or Not?

It is therefore a foregone conclusion that energy law is an academic discipline due to the following traits:

a. First, energy law is wide in scope and extent. This is what Bradbrook has categorized as social and jurisprudential considerations. It is only through its independent teaching and research that would provide substantive comprehension. Under social consideration, energy law is a multi-disciplinary subject encompassing engineers, scientists, architects, and behavioural scientists thus a classic panacea for the drift towards academic and professional isolationism. It also offers a potential new avenue of the study in law and technology field just as it has manifested in the medical and computer technology. Security factors such as the willingness of the US to intervene militarily in 1991 to oust the Iraqi forces from their occupation of Kuwait under the pretext of democracy is suspected to be attributable to the concerns of the United States to ensure orderly flow of Petroleum product from the Gulf region. Other security concerns in regard to resources include South China Sea issue[82]; the Falkland (Malvinas Island issue)[83] and recently Kenya-Somalia issue[84]. Currently, the Ukraine-Russian War also appears to have resulted on energy resource-based impact undertones.[85] The 1973 Arab Oil Embargo through the Organization of Petroleum Exporting Countries (OPEC) also is considered a security concern. Further, nuclear proliferation through the production

[82] https://thediplomat.com/2021/07/the-global-south-china-sea-issue/ accessed on 27.10.2022.

[83] *https://en.mercopress.com/2022/10/21/falkland-islands-lawmakers-committed-to-enable-oil-production* accessed on 27.10.2022. Confirming the allegation, the conflicts between UK and Argentina has been energy related.

[84] *https://www.theafricareport.com/16164/kenya-and-somalias-maritime-border-spat-risks-degenerating/* accessed on 27.10.2022.

[85] *https://quointelligence.eu/2022/10/global-energy-crisis-impact-of-the-war-in-ukraine/#:~:text=The%20war%20in%20Ukraine%2C%20together%20with%20the%20Western,of%20the%20war%20for%20the%20European%20energy%20sector.* Accessed on 27.10.2022 after 9 months of conflict existence.

and usage of nuclear energy has serious security concerns resulting in the 1968 Nuclear Non-Proliferation Treaty. It is in light of this, that US and North Korea are engaged in a diplomatic spat. Plutonium is a dangerous by-product of nuclear energy processing. Under the above treaty, the International Atomic Energy Agency (IAEA) is mandated to check for the nuclear plants for plutonium stockpiling. This is done as a deterrence mechanism. Other social considerations include moral and ethical dimension where energy production and use generate intriguing dilemmas for instance inter-generational equity and precautionary principles; the role of government in the question of hard energy pathways versus soft energy pathways in relation to nuclear energy as advanced by Lovins[86]; and behavioural dimensions which creates the question of gender role in energy sector. Energy law is, of overwhelming social importance.

Within the boundaries of jurisprudential considerations, first energy transcends the traditional legal boundaries and hence demonstrates how practical problems in the society are resolved by a combination of legal subjects. Second, energy transcends national and international law, thus rapid internationalization of energy law representing a unique and fascinating study of changing interface of national and international law. Third, it is a mixed of applied and pure law hence the paper agrees with Bradbrook that energy law is a discipline that has the propensity of breaking down the prejudices against the teaching of applied law while simultaneously applying aspects of pure law as opposed to the traditional doctrinal approach. It is on the basis of this attribute that energy issues and disputes have been responsible for the creation of significant body of pure law for instance joint ventures legal recognition at common law in regard to resource development.[87] It is also responsible for legal recognition of solar

[86] A Lovins, Soft Energy Paths (1977), passim.

[87] On the use of joint ventures in oil and gas development, see J Merralls, "Mining and Petroleum Joint Ventures in Australia: Some Basic Legal Concepts" (1988) 62 Australian L 1 907; M Sharwood, "Joint Venture Agreements: Transition from Informality to Formality" (1988) Australian Mining and Petroleum Law Association

easement negotiated between two neighbouring landowners to give legal protection to the right of solar access to certain parts or parts of the dominant tenement.[88]

Fourth, energy law is inherently laced with legal dynamism as it constitutes a useful illustration of the dynamic nature of the law. It represents an aspect of society which has historically been under-represented in the sense of legal development. It takes on board both common law and statutory law.

Fifth, it provides a classic example of studying the law reform process. This is because the development of new energy resource has led to the necessity of developing new laws into areas which previously had no law existed. Thus, energy law always provides law reformers with a new challenge in the energy context between domestic and international law.

Sixth, the interface of law and economics. Energy law is embedded in both regulatory and stimulatory measures which have been traditionally augmented by education. Thus, the traditional method of introducing changes into the society being regulation, simulation and education or a combination of two or more of these measures.

Seventh, environmental law and energy law are intricately linked. Energy law can be considered an aspect of environmental law. The relationship between the duo is so interesting to explore academically because of the fact that energy issues sometimes divide the environmental movement for instance the hydro-electricity debate; wind -energy debate; climate change debate due to contribution of fossil fuels resulting in favour of nuclear energy proponents. This is

Yearbook I; P O'Regan and T Taylor, "Joint Ventures and Operating Agreements" (1984) 14 Victoria U of Wellington L Rev 85.

[88] See J Gergacz, "Legal Aspects of Solar Energy: Easements for Sunlight and Individual Solar Energy Use" (1980) 18 American Business L 1 414; A Bradbrook, "The Development of an Easement of Solar Access" (1982) 5 University of New South Wales L 1 229; A Bradbrook, Solar Energy and the Law (1984), chs 3-4.

because nuclear energy produces no carbon dioxide. Therefore, the law must weigh contradictory environmental points and issues when devising the new laws in respect of different energy industries. Energy law focuses on the causes of environmental problems as opposed to effects. Thus, challenging the traditional way that environmental law has developed. Consideration of environmental factors forces the government and legal profession to come to term with the developmental and economic issues associated with the energy industries and therefore energy law raises an acute fashion, the tension between environment and development from the global perspective as observed by Bradbrook.

b. By 1996, several universities had started offering energy law as an academic discipline and that number has risen over the years. Bradbrook for instance points out that in 1996, out of the 26 university in Australia, two were offering Energy law namely University of Adelaide and the University of Wollongong. In Canada, it was offered by the University of Calgary while in New Zealand there was none. A cursory online search of the universities offering energy law in the same countries in 2022 indicates that all the countries have energy law being offered in their jurisdiction. Australia has at least 6 universities out of 43 (Australian National University, The University of Melbourne, The University of Western Australia and the University of Sydney in addition to the previous two); Canada has a minimum of 7 (University of Toronto, University of Alberta, University of British Columbia, Carleton University, University of York and University of Canberra in addition) while New Zealand has a minimum of two (University of Wakaito and University of Canterbury). Of course, we must remind ourselves that the University of Nairobi offers Energy law as an elective unit. Hence a clear testimony that energy law is here to stay as an academic discipline.

c. Energy law has contributed to other legal disciplines such as environment law, law and technology, international law as well as climate change law among others for instance the International Convention for the Prevention of Pollution by Ships (MARPOL) in 1973 and United Nation Convention on the Law of the Sea (UNCLOs) in 1982 came as a result of transportation of Energy resource

(Petroleum oil) which got spilled into sea when the ship was in the High Seas as a result of a spectacular and environmentally catastrophic wreckage of the oil tankers. UNCLOs 1982 redefined the legal relationship between the coastal and the port state on one hand and the flag state on the other hand. Essentially, this increased significantly the enforcement powers of the coastal and port state as well increasing the obligations of the flag state towards protection of the sea.[89] Second, the Bradbrook notes that the recent recognition of ozone depletion and climate change have led to further international conventions and declarations[90] and, in the latter case, to an ongoing search for suitable and appropriate new approaches to international law to try to resolve the world problem. While there are many contributing causes to the problems of ozone depletion and climate

[89] See, eg, A Boyle, "Marine Pollution Under the Law of the Sea Convention" (1985) 79 American Journal of International Law 347; PAll ott, "Power Sharing in Law of the Sea" (1983) 77 American Journal of International Law 1; P Bernhardt, "A Schematic Analysis of Vessel- Source Pollution: Prescriptive and Enforcement Regimes in the Law of the Sea Conference" (1979) 20 Virginia Journal of International Law 265.

[90] In the case of ozone depletion, see Vienna Convention for the Protection of the Ozone Layer (in force 22 September 1988), 26 ILM 1529; Montreal Protocol on Substances that Deplete the Ozone Layer (in force I January 1989), 26/LM 1541; Adjustment and Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer (London), 30 ILM 537 (1991); Adjustments and Amendment of the Montreal Protocol on 1992 Substances that Deplete the Ozone Layer (Copenhagen), 32/LM 874 (1993). This area of international law is discussed in P Birnie and A Boyle, International Law and the Environment (1992), at 404-411; Brunee, Acid Rain and Ozone Layer Depletion (1988), at 225-254; A Enders and A Porges, "Successful Conventions and Conventional Success: Saving the Ozone-Layer" in K Anderson and R Blackhurse (eds), The Greening of World Trade Issues (1992), at 131; D Ogden, "The Montreal Protocol: Confronting the Threat to the Earth's Ozone Layer" (1988) 63 Washington L Rev 997; D Doolittle, "Understanding Ozone depletion: The Meandering Road to the Montreal Protocol and Beyond" (1989) 16 Ecology L Q 408. In the case of climate change, see Framework Convention on Climate Change, 31 ILM 849 (1992); Rio Declaration on Environment and Development, 31 /LM 874 (1992). The climate change issue is discussed in D Bodansky, "Managing Climate Change" (1992) 3 Yearbook of International Environmental Law 60; A Kiss and D Shelton, International Environmental Law (1994 Supplement), at 128ff; S Geiser, "The 1992 Earth Summit: A Harbinger of the Urgent Need for the Clinton/Gore Administration to Act on Electric Energy Policy" (1994) 17 Suffolk Transnational L Rev 408.

change, energy production and use plays a significant role. Indeed, the figures in 1996 showed that the energy sector was responsible for 57 per cent of all greenhouse gas emissions.[91] This has now risen to 73.2% in 2020.[92] Including contributions of agriculture, forestry and land use makes the level of emission even grimmer because it becomes 91.6% according to the same source. This has forced international community to come up with imaginative way of solving the environmental issues for example the Framework Convention on Climate Change, signed at the United Nations Conference on Environment and Development (UNCED) at Rio de Janeiro in June 1992. This Convention divided the countries into two separate groups and imposed separate and more onerous legal responsibilities on developed, as opposed to developing countries.[93] Thirdly, establishment of energy reserves has also become an environmental issue in as per as ownership is concerned. The case of Australian-Indonesian Zone of Cooperation involving joint control of an area of the Timor Sea between the former Portuguese colony of East Timor and Australia."[94]is an example. It is also noteworthy that nuclear accidents incidents of The Three Mile Island in United States and Chernobyl in Soviet Union of Russia led to the recognition that there

[91] See R Fowler, "International Policy Responses to the Greenhouse Effect and their Implication for Energy Policy in Australia", in D Swaine (ed), Greenhouse and Energy (1990), at 462. The figure of 57 per cent was calculated by the US Environment Protection Agency and applies to the United States. The actual figure may vary from country to country depending on its energy mix.

[92] Climate Watch, The World Resource Institute [2020]

[93] For example, Treaty between the German Democratic Republic and Poland concerning the Delimitation of the Sea Areas in the Oder Bight, 22 May 1989 (TDMZ Treaty No 4.39); Agreement between France and the United Kingdom Relating to the Delimitation of the Territorial Sea in the Straits of Dover, 2 November 1988 (TDMZ Treaty No 3.8); Agreement between the United Kingdom and Ireland Concerning the Delimitation of Areas of the Continental Shelf between the Two Countries, 7 November 1988 (TDMZ Treaty No 3.5).

[94] Treaty between Australia and Indonesia on the Zone of Cooperation in an Area between the Indonesian Province of East Timor and Northern Australia, II December 1989 (TDMZ Treaty No 10.4): see G Moloney, "Australian- Indonesian Timor Gap Zone of Cooperation Treaty: A New Offshore Petroleum Regime" (1990) 8 JERL 128; H Burmeister, "The Timor Gap Treaty" (1990) Australian Minerals and Petroleum Law Association Yearbook 233.

is necessity for new international legal controls relating to the use of nuclear Energy.[95] Energy production and use has led to global environmental awareness concerns. This has been witnessed in atmospheric pollution having no respects for state boundaries for example the expression of concerns in 1970s in regards to acid rain arising from heavy use of coal with increase sulphur content.[96]Thus, the law on the safety of international oil transportation as well as nuclear production was enhanced.

d. Energy law is central to the necessity of energy by the society for its existence and therefore it has overwhelming social vitality. The other law that as such significance is the family law. As we are all aware, family law is an academic unit and therefore, it will be a monumental misnomer to not bequeath the energy law equivalent status at the least.

e. Energy law has the attributes of juxtaposition between the counterposing goals of stimulating national development while simultaneously safeguarding the environment makes the sector peculiar and hence worthy of a separate study. The great divide between environmentalist movement is a classic demonstrator for instance the hydro-debate; wind-energy debate; and fossil use versus nuclear energy use debate. Recently in Kenya, sharing of revenue arising from energy debate[97] between the two levels of government as well as the local community. This is unique to energy and hence must weigh contradictory environmental points and issues when devising the new laws in respect of different energy industries.

Having provided the supportive view in this discourse, the paper is also providing the opposing position. It is the contrary view that energy law has

[95] International law relating to nuclear energy is discussed in P Birnie and A Boyle, International Law and the Environment (1992), ch9; P Cameron et al (ed), Nuclear Energy Law After Chernobyl (1988); P Sands, Chernobyl: Law and Communication (1988).

[96] See generally US Congress, Office of Technology Assessment, Acid Rain and Transported Air Pollutants: Implications for Public Policy (1984); UK House of Commons, 4th Report of the Environment: Acid Rain (1984); UNECE, Air Pollution Studies, Nos 1-6 (1984-89).

[97] *https://ugandaoiljournal.com/2019/08/28/kenyas-first-oil-ignites-revenue-sharing-debate/* accessed on 27.10.2022.

not achieved the status of being an academic discipline for the following reservations. First, the schools teaching energy law are geographically located in areas endowed with vibrant energy sector within the local business community. [98] Compare this with the teaching of family law which is in almost every school and even in the religious books of major religions in the world. Second, energy law is a subset of other legal academic disciplines such as environment; international law; mining and petroleum law. Based on this, it will be uneconomical and waste of resource and time to repeat the same principles as an independent discipline. Third, energy law is characterised by insufficient legal framework in comparison to other established disciplines for example international law which has numerous. Finally, energy law burrows from other disciplines. It burrows from Natural resources as well as from mining and petroleum. Conclusively, there are more demonstratable grounds in support of established energy law as academic discipline than being not.

4.2 Which Regulatory Framework is or has Energy Law Adopted or ought to Adopt?

On Critical Reflections on Regulation, Julia Black[99] invites us to reconsider the notion of regulation by exploring a concept known as decentred regulation. She argues for a thinking that interrogates the way regulation is diffused within society in what she terms as the notion of 'regulatory society'. She further delves into what conception of regulation is required by, and for, a decentred analysis of regulation to be developed, and explores the implications of such an analysis for our understanding of the relationship between law and regulation.

Regulation is commonly understood from the Command and Control (CAC) concept. Rules are made and sanctions are clearly prescribed. This is a perfect interpretation of the positivists school as advanced by legal philosophers such as John Austin who see law as the command of the sovereign backed by sanction. This model has been criticized for being poster child of all that is wrong with regulation. This includes rigidity,

[98] Ibid n.33.
[99] Ibid n.11.

ossification, under or over regulation and unintended consequences. It also assumes that it is state 'centred' in that it assumes that the state has to the capacity to command and control, to be the only commander and controller, and to be potentially effective in commanding and controlling.

This approach she argues has the following failures:

1. Instrument failure: Laws backed by sanction are inappropriate
2. Information and knowledge failure: The government does not have enough information to craft suitable solutions to the problems
3. Implementation failure: that implementation of the regulation is inadequate
4. Motivation failure and capture theory: Lack of sufficient compliance from those regulated and those regulating do not do so in the interest of the public

With this backdrop, we can critique regulation in the energy using a decentred approach which revolves around five central notions: complexity, fragmentation, interdependencies, ungovernability, and the rejection of a clear distinction between public and private. Complexity in this context refers to the fact that societal problems are caused by various factors which cannot be precisely understood. These factors change over time and there is constant interaction between actors and systems. Actors are diverse in their goals, intentions, purposes, norms and powers. Fragmentation is seen as fragmentation of knowledge, power and control. No single actor can understand the totality of an industry. It deviated from the all-knowing government and an industry in need of solutions. Societal problems are too complex for one single actor to prescribe solutions. Fragmentation of control and power considers that power and control is not centred in government but exists in various areas and institutions and actors. This is equally consistent with the realist theory of law.

Independencies and interactions between actors and actors and governments are core to decentred regulation. Regulation is more than a two-way process in the sense that it does not follow that societies have problems which governments have solutions to. Problems and solutions exist within both

society and governments and the two are mutually dependent on each other. This perspective should be sent not just at national level but at international level as well. The other aspect of decentred approach is the collapse of public/private distinct in regulation. This view moves away from formal government authority and looks at interactions between government and non-government actors who share authority in making and enforcing binding decisions.

Based on the analysis in terms of the diversity of players in the sector, the vastness and difference in energy resources and the history of the available energy law, the supportive view which this paper adopts is that a de-centered regulatory framework is the most convenient. First, we agree that energy law is wide in scope and broad in extent thus requires hybrid, multi-faceted and indirect approaches as averred by Julia Black[100]. This normally calls for the employment of a utilitarian approach and realist way of interpretation. As such, the knowledge of social foundation of law dictates that utilitarianism theory and realist legal theory prevails and hence de-centered regulatory framework.

Second, de-centered regulatory framework augers well with the principle of sustainable development which is a dominant theme in the energy sector as evidenced by the legal instruments. In all the legal instruments provided in the articles, the principle is either explicit, implicit or both. Out of the 3 regional instruments, all implied the principle while out of the 11international legal instruments, 6 had expressively provided the principle while the other 5 were implicit. The paper analyzed the introductory articles. This is further buttressed by the Brundtland report which explicitly enunciates the concept and the national constitution of Kenya 2010 caps the principle under article 10. A demonstrable example is the citation from the United Kingdom on matters electricity. The UK government had to repeal its Electricity Act of 1957 using the Electricity Act of 1987.[101] The former had a centred regulatory framework in the sense that it was under state monopoly while the later has de-centered regulatory framework strong in

[100] Ibid n.11.
[101] Ibid n.33.

electricity privatization. For sustainable development to be achieved all the players at all levels of the society need to be appreciated.

Third, de-centered regulatory framework upholds the human-right based approach for instance the question of role of gender and indigenous communities are suitably taken care of. The soft law as exercised by institutions such as World Bank and IMF advocate for human rights-based approach in their funded projects. This approach avoids the dictatorial tendencies of centered regulatory framework which more often than not provides carte blanche to whatever and whomever it thinks as evidenced in the example of Tasmanian Hydro-Electric Commission Act 1944 which gives the state electric utility extensive statutory powers under ss.15, 36, 40-45, 47 and 54-58.

Fourth, the decentered regulatory framework appreciates the different systems of governance which is a constitutional imperative. Take the example of all federal jurisdiction such as US [102] and Australia, [103] the legislative powers over energy issues tend to be divided between different levels of government. In Australia and US, the constitution reserves the residual powers to the states and gives only enumerated powers to federal government. Therefore, in both nations, energy issues fall within the residual powers of states hence the primary responsibility for energy laws. However, the federal government can attract jurisdiction based on the constitutional dictates as demonstrated by the *New South Wales v CommonWealth [supra]* where High Court of Australia applied the constitution principles provided under s. 51(1) and 51(20) of the Constitution[104]. In our Kenyan situation, the residual powers lie with the National Government while the enumerated powers are with both levels of Government as per Fourth Schedule.[105]

[102] *https://constitution.congress.gov/constitution/amendment-10/* accessed on 3.11.2022.
[103] *file:///C:/Users/eliml/Downloads/2020_Australian_Constitution.pdf* accessed on 3.11.2022.
[104] Ibid.
[105] Constitution of Kenya 2010.

Fifth, de-centered regulatory framework appreciates the broad context of the role of individual member countries in the energy sector in various large groupings. The European Union (EU) and the North America Free Trade Agreement (NAFTA) are the classical examples. EU created an internal energy market and a corresponding harmonization of the energy laws of the member nations while NAFTA imposes restrictions on the sovereign rights of the individuals to enact energy laws that are inconsistent with the freedom to trade cross borders in energy field.

However, the proponents of centered regulation who formed the contrary opinion outline the following aspects that make decentered regulation in their view inappropriate for energy law. First, they argue that energy production and use is prone to catastrophic accidents and environmental pollution. The incidents of nuclear accidents in the Three Mile Island [106] and the Chernobyl[107] are the reference points. Such sources of energy require in their perspective centred regulation. They also cite the oil spills.

Second, the security concerns for instance issue of terrorism in relation to plutonium stockpiles. The Government in their counterargument is the only competent authority to handle such complex matters and hence involving many players compromises the situation for instance when it comes to intelligence gathering. The unfolding scenario between US and North Korea comes to their minds for justification thus they argue that de-centered regulatory framework is prone to breeding diplomatic spat.

Thirdly, the economic relevance in terms of application of decentered regulations is cumbersome. How convenient will taxation and revenue collection in general would be? How about the question of claims to establishment of energy reserves in the international waters? World interpretational innovativeness that is inherent in energy law suffice? In their postulation, the decentered regulations cannot answer those questions convincingly. The answer in their view lies in centred regulatory framework.

[106] Ibid n.33.
[107] Ibid.

All in all, the supportive view which this paper holds is that those concerns are adequately taken care of by the government being one of the players in the decentered regulatory framework. In facts, the other players also have a role to play in all of those counter arguments. The decentered regulation is the future in energy law in light of the sovereignty of the people doctrine-an inherent human right.

5. Conclusion

Energy law is and should be considered an academic discipline with decentralisation of regulatory framework forming the backbone of its peculiarity. However, the paper agrees with Bradbrook that the energy law has indeed given rise to some cardinal issues. First, the question of the role in legal education of applied law as opposed to pure law? Second, to what extent should law curricula be influenced by the importance of social as opposed to doctrinal issues. Third, what is the continued relevance of the common law in modern society bearing in mind that energy law is bulk in statutes and regulation? Considering these, the paper takes judicial notice of the fact as follows: (1) that on the first issue, there is existence of realism as an influence on the application of law. This coupled with the theory of utilitarianism addresses the first issue to a greater extent; (2) On the second issue, the provisions of s.3[c] of the Judicature Act[108] provides for the hierarchy of laws in which statutes are rank higher than common law; and (3) on the third issue, energy law being inherently characterised by constant evolution is inherent and legally dynamic and hence addressing the question of applied versus pure law. These three are contributing to addressing the emerging issue though not concretively.

[108] CAP 8, Laws of Kenya.

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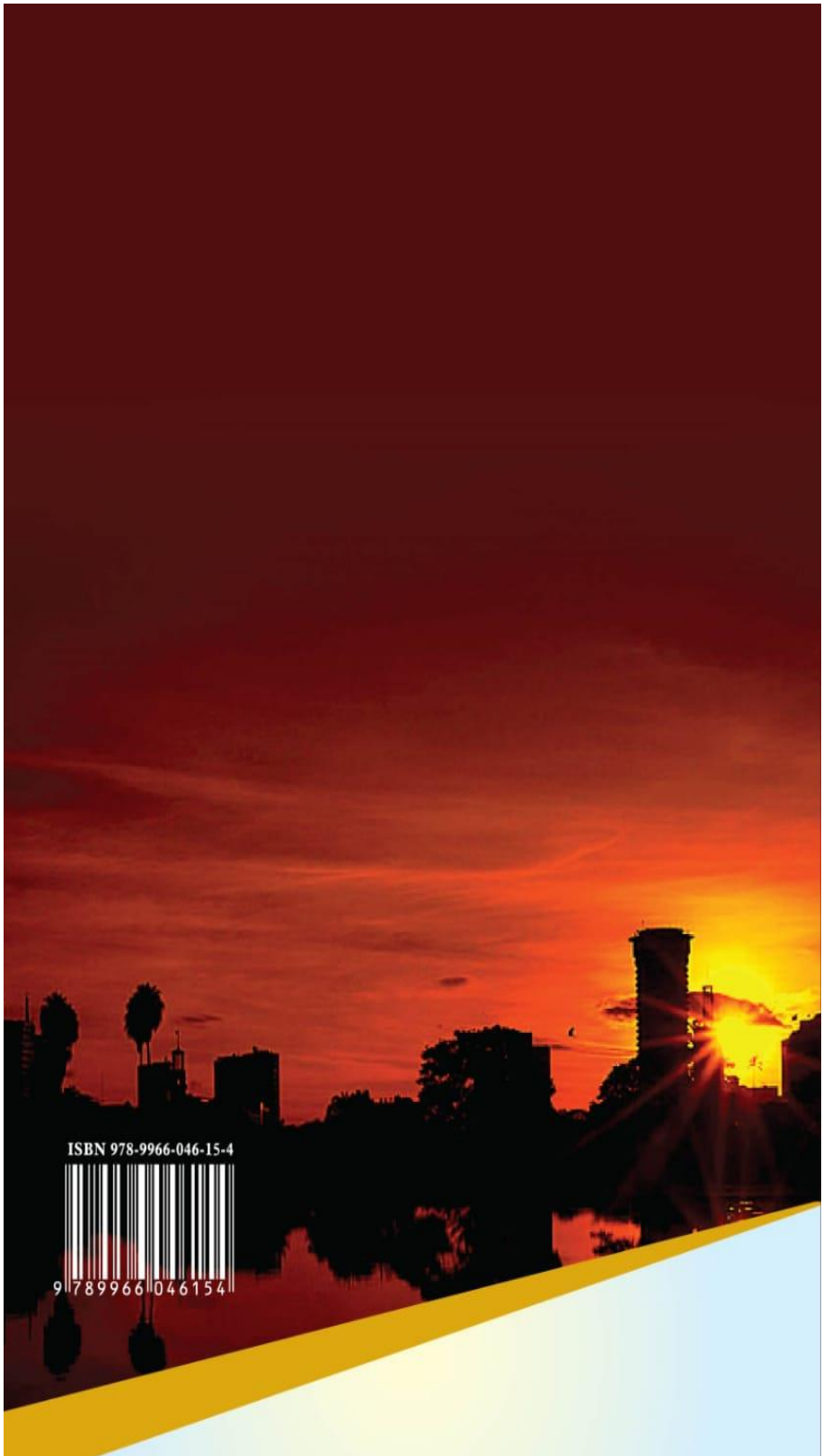

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