



ENGAGING THE NATURAL LAW AND POSITIVIST SCHOOLS OF JURISPRUDENCE IN THE ERA OF SUSTAINABLE ENERGY TRANSITION

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Energy transition is a pressing issue that has received considerable attention at domestic and international levels. With the increase in the impact of climate change, the world is moving towards net zero to control the release of greenhouse gases in the atmosphere. There is the trend to promote sustainable energy through policies, laws, research and development and technological innovations. This article argues that two leading schools of jurisprudence, the natural law and positivist schools, can be called to aid in understanding how the law should be applied to put in place measures that support energy transition and actualising net zero. Based on doctrinal analysis, this article contends that natural law offers the ethical foundations for justifying the transition to a more environmentally friendly energy sources and mainstreaming of human rights in energy transition; while the positivist school offers a framework of affirmative formal laws backed by effective compliance mechanisms. It is therefore imperative for researchers, policy makers, legislators and the courts to employ these schools of jurisprudence to advance energy transition.

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1. INTRODUCTION

Climate change concerns have led to the employment of transition to challenge the traditional energy paradigms that have been largely based on fossil fuel.¹ Climate change is an important issue in public policy.² Also, at national and domestic levels, the push for energy transition continues to gain momentum. The world is therefore moving from fossil fuel sources such as petroleum and coal, to energy efficient and environmentally friendly renewable energy sources such as solar, hydropower, wind, biomass and geothermal energy.³ The global approach has received much impact through international law instruments and laws and regulations at domestic levels. Internationally, the world has been moving the objectives of achieving reduction in greenhouse gases and climate change through the international climate change regime.⁴ The path to an effective and just energy transition has been supported in various forum.⁵ This is because energy is considered as one of the major contributors to the challenges of environmental health.⁶ The world is seen to be better off if there is a transitioning to a low carbon energy pathway as business as usual will not

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¹ Frédéric Gilles Sourgens and Leonardo Sempertegui, *Principles of International Energy Transition Law: Law as an Instrument of Development in the 21st Century* (Oxford University Press, 2023) 8.

² JB Ruhl and David L Markell, 'An Empirical Assessment of Climate Change in the Courts: A New Jurisprudence or Business as Usual?' (2012) 64 Florida Law Review 15, 15.

³ See also PK Oniemola, 'Legal Response to Support Renewable Energy in China' (2014) Journal of Energy and Natural Resources Law 179-202; Katowice Committee on Impacts, *Implementation of Just Transition and Economic Diversification Strategies: A Compilation of Best Practices from Different Countries* (2022), available at <<https://unfccc.int/documents/624596>> accessed 18 April 2025.

⁴ Chiara Macchi, 'The Climate Change Dimension of Business and Human Rights: The Gradual Consolidation of a Concept of "Climate Due Diligence"' (2021) 6 Business and Human Rights Journal 93.

⁵ AM Eisenberg, 'Just Transitions' (2019) 92 Southern California Law Review 273, 273-330.

⁶ A Silverman, 'Energy Justice: The Intersection of Human Rights and Climate Justice' in S Duyck, S Jodoin and A Johl (eds), *Routledge Handbook of Human Rights and Climate Governance* (Routledge 2018) 251

auger well. Scholars have examined the role of the law and legal issues in connection with the move towards global energy transition.⁷

Energy law has an important role to play in the 21st century energy sector.⁸ Much have been written on the legal perspectives to energy transition and net zero.⁹ Cases have been made for advancement of scholarships and jurisprudence of energy law from varied perspectives.¹⁰

⁷ See Shelley Welton, 'The Bounds of Energy Law' (2021) 62 Boston College Law Review 2339, 2339–2403

⁸ Raphael J Heffron and Kim Talus, 'The Development of Energy Law in the 21st Century: A Paradigm Shift?' (2016) 9 Journal of World Energy Law and Business 189; Rowena Cantley-Smith, Anne Kallies and Diane Kraal, 'Decarbonising Australian Electricity Markets: Regulatory Roadblocks and Transformative Opportunities for Achieving Net Zero' (2023) 4(1–2) Global Energy Law and Sustainability 22–50.

⁹ See for example, M Hazrati and RJ Heffron, 'Conceptualising Restorative Justice in the Energy Transition: Changing the Perspectives of Fossil Fuels' (2021) 78 Energy Research and Social Science, 102115. Damilola S Olawuyi, 'The Search for Climate and Energy Justice in the Global South: Shifting from Global Aspirations to Local Realization' (2023) 14(2) The George Washington Journal of Energy and Environmental Law 98–106; Romain Mauger, 'Finding a Needle in a Haystack? Identifying Degrowth-Compatible Provisions in EU Energy Law for a Just Transition to Net-Zero by 2050' (2023) 41(2) Journal of Energy & Natural Resources Law 175–93; and Raphael J Heffron and Louis De Fontenelle, 'Implementing Energy Justice through a New Social Contract' (2023) 41(2) Journal of Energy & Natural Resources Law 141–55. Furthermore, the discourse has also received attention in a series of collection of book chapters. See Donald N Zillman, Catherine Redgwell, Yinka O Omorogbe, Lila Barrera-Hernández, Barry Barton (eds.), *Beyond the Carbon Economy: Energy Law in Transition* (Oxford University Press, 2008); Donald Zillman, Lee Godden, LeRoy Paddock, Martha Roggenkamp (eds), *Innovation in Energy Law and Technology: Dynamic Solutions for Energy Transitions* (Oxford University Press, 2018); Iñigo del Guayo, Lee Godden, Donald D Zillman, Milton Fernando Montoya, José Juan González (eds.) *Energy Justice and Energy Law* (Oxford University Press, 2020); Tade Oyewunmi, Penelope Crossley, Frédéric Gilles Sourgens and Kim Talus (eds), *Decarbonisation and the Energy Industry: Law, Policy and Regulation in Low-Carbon Energy Markets* (Hart Publishing, 2020); Victoria R Nalule (ed), *Energy Transitions and the Future of the African Energy Sector Law, Policy and Governance* (Palgrave Macmillan, 2021); Peter D Cameron, Xiaoyi Mu and Volker Roeben (eds), *The Global Energy Transition Law, Policy and Economics for Energy in the 21st Century* (Hart Publishing, 2022) and Victoria R Nalule, Raphael J Heffron, and Damilola S Olawuyi, *Renegotiating Contracts for the Energy Transition in the Extractives Industry* (Palgrave Macmillan, 2023).

¹⁰ Adrian Bradbrook, 'Energy Law as an Academic Discipline' (1996) 14(2) Journal of Energy & Natural Resources Law 193, 193–217; Raphael J Heffron and Kim Talus, 'The Evolution of Energy Law and Energy Jurisprudence: Insights for Energy Analysts and Researchers' (2016) 19 Energy Research & Social Science 1, 1–10; Alexandra Wawryk, 'International Energy Law: An Emerging Academic Discipline', in Paul Babie and Paul Leadbeter (eds),

However, much interrogation from a doctrinal analysis is required and the traditional schools of jurisprudence are still much relevant and can be applied to contemporary practices in energy law. This article advocates that the natural law school and positivist school of jurisprudence have relevance in the analysis of the role of the law in transitioning into a low carbon economy. Theoretical bases of the natural and positivist schools of jurisprudence can also be used to justify the need to transition to low carbon pathways either by scholars, parliaments, executive arm or the judiciary when confronted with the question of interpretation or adjudication of matters connecting to energy transition. Thus, the natural and positivist schools of thoughts offer unique perspectives that are crucial in the shaping of legal frameworks and policies for the deployment of energy transition. It argues that the natural law school focuses on the moral perspective and human rights perspective to energy transition, while the positivist calls for the formally laid down rules for energy transition that their non-compliance will be backed by sanction from the state. It argues that the integration of these legal theories will be helpful in holistic, equitable, and pragmatic approaches to achieve net zero emissions which is the critical goal that the international community seeks to achieve with the call for energy transition.

The article examines the two schools by synthesising legal thought through a comprehensive analysis of the foundation for understanding and addressing the various challenges inherent in the energy transition within the framework of the law. It gives an exploration of how each of the natural and positivist schools of law can contribute to and enhance the global race for a just and equitable energy transition. Part 1 sets the introductory context of energy transition, and states that the natural and positivist law schools are relevant to energy transition. Parts 2 and 3 respectively examines the natural and positivist schools' postulations and their relevance to the questions of energy transition. Part 4 concludes and

Law as Change: Engaging with the Life and Scholarship of Adrian Bradbrook (University of Adelaide Press, 2014) 223; Raphael J Heffron and Kim Talus, 'The Development of Energy Law in the 21st Century: A Paradigm Shift?' (2016) 9 *Journal of World Energy Law and Business* 189, 189–202; Raphael J Heffron, Anita Rønne, Joseph P Tomain, Adrian Bradbrook and Kim Talus, 'A Treatise for Energy Law' (2018) 11(1) *Journal of World Energy Law and Business* 34, 34–48; Kaisa Huhta, 'The Coming of Age of Energy Jurisprudence' (2021) 39(2) *Journal of Energy* 199, 199–212.

makes a case for the need for scholars, the legislators, policy makers and courts to continue to call into aid the natural and positivist schools in the advancement and shaping of energy transition.

2. SUSTAINABLE ENERGY TRANSITION IN CONTEXT

As noted above, there is a global shift for sustainable energy transition. This will entail shifting from reliance on fossil fuel to more sustainable energy sources such as renewables.¹¹ Within the UN system transitioning to sustainable energy sources has received much support.¹² The United Nations Sustainable Development Goals (SDGs) 7 is to 'Ensure access to affordable, reliable, sustainable and modern energy for all'.¹³ The SDGs largely recognised the important role to be played by energy transition to and its impact on the life of the people.¹⁴ The international climate change regime under the UNFCCC and the Paris Agreement¹⁵ have further increased the momentum, with nations committing to various net zero.¹⁶

Sustainable development is usually defined as 'development that meets the needs of the present generation without jeopardizing the ability of the future generation to meet their own needs'.¹⁷ Sustainable energy can therefore be viewed as the connexion of energy and sustainable development brought about by the need to exploit and use the world's

¹¹ Christophe McGlade and Paul Ekins, 'The Geographical Distribution of Fossil Fuels Unused When Limiting Global Warming to 2 °C' (2015) 517 *Nature* 187.

¹² Peter Kayode Oniemola and Adejumo J Akinbusoye, 'International Legal Framework for Sustainable Energy', in Ngozi Chinwa Ole, Eduardo G Pereira, Peter Kayode Oniemola, Gustavo Kaercher Loureiro, *Regulatory Support for Off-Grid Renewable Electricity* (Routledge, 2023) 19.

¹³ United Nations, *Transforming Our World: The 2030 Agenda for Sustainable Development*, <https://sdgs.un.org/2030agenda>

¹⁴ See Peter Oniemola, 'Business Enterprises in Renewable Energy Projects in Africa and the Human Rights Questions Arising from the Duty to Protect', in Damilola Olawuyi and Oyeniyi Abe (eds), *Business and Human Rights Law and Practice in Africa* (Edward Elgar Publishing, 2022) 191-194.

¹⁵ Paris Agreement to the United Nations Framework Convention on Climate Change (adopted 12 December 2015, entered into force 4 November 2016) FCCC/CP/2015/L.9

¹⁶ Vila Johansson, 'Just Transition as an Evolving Concept in International Climate Law' (2023) 35(2) *Journal of Environmental Law* 229-249.

¹⁷ World commission on Environment and Development, *Our Common Future* (Oxford University Press 1987); K Prandecki, 'Theoretical Aspects of Sustainable Energy' (2014) 2(4) *Energy and Environmental Engineering* 83-90

energy resources in a manner that will not put the environment at risk. It is seen as ‘a dynamic harmony between the equitable availability of energy intensive goods and services to all people and the preservation of the earth for future generation.’¹⁸ Sustainable energy development as a concept was borne out of the obvious inextricability of the concepts of sustainable energy and sustainable development. It has been defined as: ‘development that lasts and is supported by economically profitable, socially responsive and environmentally responsible energy sector with a global long-term vision,’¹⁹ which encompasses the social, economic and environmental variables considered holistically defining energy sustainability.²⁰

Several key factors have characterised sustainable energy development and these are quite central to any discourse on sustainable energy. They include: improved energy access, sustainability of energy supply, sustainability of energy consumption and energy security.²¹ Energy accessibility deals with the issue of energy poverty;²² a state of affairs where a great number of people within a country or a region have little or no access to modern/clean energy, either due to its relative cost (unaffordability) or the general insufficiency of available energy resources.²³ Sustainability of energy supply on the other hand, is directly linked to environmental protection. It involves the production and supply of energy via sources that will leave the least negative impacts on the environment, rather than conventional harmful sources. It also underscores the importance of keeping all processes involved in the energy production and supply chain, safe and environmentally friendly. Efforts

¹⁸ JW Tester, EM Drake, MJ Driscoll, MW Golay and WA Peters, *Sustainable Energy: Choosing Among Options* (2nd edn, MIT Press 2012).

¹⁹ B Davidsdottir, ‘Sustainable Energy Development: Role of Geothermal Power’ in A Sayigh (ed), *Comprehensive Renewable Energy* (Elsevier 2012) 273–297.

²⁰ I Gunnarsdottir, R Davidsdottir, E Worrell and S Sigrgeirsdottir, ‘Sustainable Energy Development: History of Concept and Emerging Themes’ (2021) 141 *Renewable and Sustainable Energy Reviews* 110770, <https://doi.org/10.1016/j.rser.2021.110770>.

²¹ *Ibid.*

²² Muiyiwa Adigun, ‘Legal Remedies for Energy Injustice in the ECOWAS Sub-Region: The Role of the ECOWAS Court’ (2024) 42(3) *Journal of Energy and Natural Resources Law* 363–380, 367.

²³ I Gunnarsdottir, R Davidsdottir, E Worrell and S Sigrgeirsdottir, ‘Sustainable Energy Development: History of Concept and Emerging Themes’ (2021) 141 *Renewable and Sustainable Energy Reviews* 110770, <https://doi.org/10.1016/j.rser.2021.110770>.

towards reduction in carbon footprints, increasing the share of renewable energy sources in a nation's energy mix, research and development initiatives and collaborations for the development of clean energy technologies, creation of market incentives for private sector investment in renewables, are targeted at ensuring sustainability of energy supply.²⁴

Sustainability of energy consumption is linked with energy efficiency and conservation. Energy efficiency entails utilising a significantly reduced quantity of energy in the performance of a task, through the use of modern, energy efficient technologies while energy conservation is the general reduction in energy demand attributed to a decrease in energy consuming activities and/or the use of less energy consuming technologies.²⁵ Energy efficiency and conservation is predicated on the presupposition that unsustainable consumption of energy end products lead to increase in energy demand and that increase in unsustainable energy production led to increase in negative environmental impact. It therefore follows that the safe and efficient production and consumption of energy, through the use of modern and efficient technologies will ensure environmental safety, increase in energy availability and overall increases in energy access, all of which bodes well for sustainable energy development. Measures such as information dissemination and public sensitization on unsustainable production/consumption patterns and availability/suitability of efficient end use technologies, government policies and programs that set targets and minimum thresholds for the utilisation of clean energy technologies, market deregulation and other incentives for increased private participation in the energy market, particularly with respect to research and development of modern and renewable energy technologies are indicative of energy efficiency and conservation measures.²⁶ Energy efficiency and conservation measures have economic, environmental and social ramifications.

²⁴ PK Oniemola, 'Integrating Renewable Energy into Nigeria's Energy Mix through the Law: Lessons from Germany' (2011) 1 *Renewable Energy Law and Policy Review* 29, 29-38.

²⁵ P Linares and X Labandeira, 'Energy Efficiency: Economics and Policy' (2010) 24(3) *Journal of Economic Surveys* 573-592.

²⁶ K Gillingham, R Newell and K Palmer, 'Energy Efficiency Policies: A Retrospective Examination' (2006) 31 *Annual Review of Environment and Resources* 161-192.

Energy security on its part presupposes the continuous availability of energy resources at affordable rates.²⁷ Due to the indispensability of energy to development and growth, efforts must be put in place to ensure that there is constant and uninterrupted energy supply within a nation. Energy security measures will therefore include exploitation of renewable energy sources and other efforts towards decreasing fossil fuel dependence and over reliance on other countries for energy end products.²⁸ As earlier noted, sustainable energy is the lifeblood of sustainable development. Overtime, nations and international organisations have worked to implement measures for the attainment of sustainability in the energy sector in order to foster development that will stand the test of time whilst leaving very little negative impact on the environment. One of the foremost efforts in this regard is the introduction of low carbon energy transition. Generally speaking, energy transition entails the move from unsustainable and environmentally unfriendly energy sources to more sustainable or renewable energy sources in order to cut back on the negative environmental impact of those sources. It is essentially the replacement of fossil fuels with renewable sources such as geothermal energy, hydro power, solar energy, etc., that have low emission rates.²⁹ Beyond mere substitution of non-renewable energy sources with renewable and more environmentally friendly ones, energy transition involves an overhaul of the entire energy system, cutting across: energy technologies and infrastructures, production and consumption patterns, market structure, investments and partnerships as well as regulatory measures.³⁰ The overall purpose of energy transition is the reduction in the carbon footprint of the energy sector by cutting down on greenhouse

²⁷ International Energy Agency, *Energy Security: Ensuring the Uninterrupted Availability of Energy Sources at an Affordable Price* <www.iea.org/areas-of-work/ensuring-energy-security> accessed 18 April 2025.

²⁸ O Ellabban, H Abu-Rub and F Blaabjerg, 'Renewable Energy Resources: Current Status, Future Prospects and Their Enabling Technology' (2014) 39 *Renewable and Sustainable Energy Reviews* 748-764.

²⁹ F Taghizadeh-Hesary and E Rasoulinezhad, 'Analyzing Energy Transition Patterns in Asia: Evidence from Countries with Different Income Levels' (2020) 8 *Frontiers in Energy Research* 162.

³⁰ B Fattouh, R Poudineh and R West, 'The Rise of Renewables and Energy Transition: What Adaptation Strategy Exists for Oil Companies and Oil-Exporting Countries?' (2019) 3(1) *Energy Transitions* 45-58.

gasses (GHG) emissions that cause climate change, global warming and ecosystem disruptions, in order to mitigate its effect.³¹ Energy transition is therefore central to the attainment of energy sustainability and ultimately sustainable development.³²

The adoption of various international instruments that set emissions targets such as the Kyoto Protocol and the Paris Agreement, the adoption of the Sustainable Development Goals, particularly SDG7 and other goals like SDG 13, are all part of global efforts towards sustainable energy. Another laudable effort in this regard is the establishment of the Sustainable Energy for All (SE4ALL) initiative by the United Nations. The SE4ALL is now an international institution, specially dedicated to the pursuit and attainment of the objective of SDG 7 which is to provide universal access to clean and affordable energy by 2030.³³ SE4ALL partners with member states on all energy transition measures to ensure that the world is on track to meeting their sustainable energy targets, within the estimated timeline. Countries have already begun keying into this by launching elaborate energy transition plans. Nigeria for example launched its energy transition plan which sets out a detailed pathway towards carbon neutrality by 2060.³⁴ Even though there are concerns regarding some of these renewable sources, in terms of reliability, affordability and their actual polluting capacities,³⁵ energy transition and other sustainable energy measures have come to stay and it will be fool hardy not to utilise every opportunity to develop measures to promote same given the state of the climate. Consequently, transitioning will need to take into account technological, economic, political and legal measures.

³¹ J Tian, L Yu, R Xue, S Zhuang and Y Shan, 'Global Low-Carbon Energy Transition in the Post-COVID-19 Era' (2022) 307 *Applied Energy* 118205 <https://doi.org/10.1016/j.apenergy.2021.118205>

³² GL Kyriakopoulos, D Streimikiene and T Baležentis, 'Addressing Challenges of Low-Carbon Energy Transition' (2022) 15(15) *Energies* 5718.

³³ Sustainable Energy for All, Who We Are <www.seforall.org/who-we-are> accessed 18 April 2025.

³⁴ Federal Government of Nigeria, *Nigeria Energy Transition Plan* (2022) <https://www.energytransition.gov.ng/> accessed 18 April 2025; Sustainable Energy for All, *Launch of Nigeria's Energy Transition Plan* <<https://www.seforall.org/events/launch-of-nigerias-energy-transition-plan>> accessed 18 April 2025.

³⁵ D Maradin, 'Advantages and Disadvantages of Renewable Energy Sources Utilization' (2021) 11(3) *International Journal of Energy Economics and Policy* 176, 176-183.

Appreciating the role of the law within these nuances can be done through the lenses of the traditional jurisprudential thought of the natural and the positivist schools of thought. The next two section, therefore, examines how natural law and positivist schools of thought can be conceived to contribute to energy transition.

3. APPLICATION OF THE NATURAL LAW SCHOOL IN THE CONTEXT OF ENERGY TRANSITION

Natural law has been viewed as set principles of nature. It is also referred to as divine law, higher law, eternal law etc.³⁶ Exponents of this theory see natural law as God given universal rules, which govern all human endeavours. Natural law is also considered to deal with issues of ethics, morality, reason and supernatural aspects.³⁷ Natural lawyers posit that there are universal principles governing every society irrespective of customs or cultures. It can be discerned from the spontaneous conducts of humans as embedded in consciences. This theory of law also proposed that, human beings are naturally endowed with rights which are conferred by God, nature or deductible by reason and not by an act of legislation.³⁸ Natural law theory began with the classical Greek and Roman scholars, with notable works of Aristotle, Plato, Grotius, Hobbes, Locke etc. Over time, some modern scholars have also advanced their ideas in the field of jurisprudence tilting their writings from the lens of natural law. Natural law has been applied by various regimes of the world since inception. For instance, during the monarchical centuries, monarchs relied on natural law as the basis for their commands or rules. Thus, their pronouncements were viewed as divine direction from God. The universality of natural law prompted the Scandinavian realist Alf Ross to conclude that 'like a harlot, natural is at the disposal of everyone.'³⁹ This article shall now consider the postulations of some natural law proponents from classical period to the modern era.

³⁶ John M Finnis, 'Natural Law Theory: Its Past and its Present' (2012) 57(1) *The American Journal of Jurisprudence* 81, 93

³⁷ SK Ali, 'An Analysis of the Kelsen's Theory of Law' (2013) 1-14, <https://ssrn.com/abstract=2208176>.

³⁸ Hans Kelsen, *General Theory of Law and State* (The Law Book Exchange 2007) 392.

³⁹ Alf Ross, *On Law and Justice* (University of California Press: 1958) 261.

Ancient Greek philosophy began with the works of Heraclitus who regarded nature as an order of things. His work was inspired by the rapid political and spiritual development in ancient Greece which prompted philosophers to consider the universality of laws.⁴⁰ Plato is believed to be one of the founding fathers of natural law.⁴¹ Although Plato did not expressly use the word natural law in his postulations, his concept of nature seems to align with the principles of natural law.⁴² He posited that, human beings live in an orderly universe. He further stated that, the foundations of this orderly universe are forms, (most importantly the forms of good) which he called “the brightest region of being” in his book, *The Republic*, written around 375 BC.⁴³ Forms of good according to Plato is the cause of all things which leads a person to act wisely when seen. Another Greek philosopher whose works also contain some semblance of natural law is Aristotle. In his book, *Nicomachean Ethics*,⁴⁴ Aristotle posited that there exist three kinds of justice, namely, political justice, natural justice and conventional justice. On natural justice, he asserted that it referred to as a variant of political justice that is either distributive or corrective that may be set up in a best political community and could be termed natural law if it were to be taken as a form of law. He also espoused in “the rhetoric” that apart from the laws established by each society to regulate its conduct, there exist a common law provided by nature.⁴⁵ However, some modern scholars have argued that the postulation of Aristotle on natural law are not clearly discernible. For instance, Sigmund argued that the writing of Aristotle is sometimes confusing, while Crowe,⁴⁶ opined that whenever there is ambiguity in the writings of Aristotle on natural law, commentators’ resort to finding what they wish

⁴⁰Theodore de Laguna, ‘The Importance of Heraclitus’ (1921) 30(3) *The Philosophical Review* 238, 244.

⁴¹Hans Kelsen, ‘Plato and the Doctrine of Natural Law’ (1960) 14(1) *Vanderbilt Law Review* 23, 23.

⁴²Wild John, *Plato’s Modern Enemies and the Theory of Natural Law* (University of Chicago Press 1953) 136.

⁴³Plato, *Plato’s The Republic* (Books Inc, 1943) 518.

⁴⁴Tony Burns, ‘Aristotle And Natural Law’ (1998) 19(2) *History of Political Thought* 142, 143.

⁴⁵*Ibid.*

⁴⁶Michael Crowe, ‘The Changing Profile of the Natural Law’ (Martinus Nijhof 1977) 22.

to find. It is however not doubtful that Aristotle contributed immensely to the evolution of natural law jurisprudence.

One of the most eminent proponents of natural law is St Thomas Aquinas, who espoused four types of laws to wit: divine, eternal, natural and man-made law. St Thomas posited that eternal law refers to God's immutable design for the entire universe and divine law is the provisions of the scriptures.⁴⁷ Natural law is the immutable law which applies to human behaviour whereas man-made laws are the laws fashioned by man which are in sync with natural law to govern the needs of man in every changing society. The Italian Philosopher also distinguished between theoretical and practical thinking just like his predecessor, Aristotle. He posited that human beings possessed the dual capacity to reason theoretically and practically. Theoretical reasoning according to Aquinas was the ability to discern certain facts like the truth of mathematics, while practical reasoning on the other hand represents the ability of man to apprehend certain principles governing the conduct of man which tells man how he ought to live, the things he should value and the goods he ought to seek. Generally, St Thomas Aquinas believed that the standard for everything in the universe has been set by God through natural law.⁴⁸ His writings were further developed in the Middle Ages as well as during the renaissance period by many scholars from different disciplines.⁴⁹

The natural law school raises series of perspectives that fits into the narratives of the need for nations to transform their energy sector for the promotion of relative friendly environment. The natural law as a discipline raises the question of human rights and this is a core issue in energy transition. More so, there is the trend globally that human rights should be an important consideration in business and consequently should be reflected through human rights due diligence.⁵⁰ Therefore, the need to

⁴⁷Samba John.Ngwo, *Fundamental Concepts of Jurisprudence* (Bookmakers, 2007) 48.

⁴⁸ Thom Broks, 'Between Natural Law and Legal Positivism: Dworking and Hegel on Legal Theory' (2006) 23(7) Georgia State University Law Review 513, 518.

⁴⁹ Muhammad M Rashid, 'St. Thomas Aquinas and the Development of Natural Law in Economic Thought' (2020) 1(1) Journal Economic and Social Thought 14, 14.

⁵⁰ Humberto Cantú Rivera, 'National Action Plans on Business and Human Rights: Progress or Mirage?' (2019) 4 Business and Human Rights Journal 213, 213–237; DJ Karp, 'Business

protect the environment and ensure that there is a friendly environment has connections with the right to life.⁵¹ It is not in doubt that protection of lives and property has been advocated as one of the reasons why countries should transit from fossil fuel. In a joint statement issued by five UN treaty bodies, on climate change and human rights, it was opined that ‘failure to take measures to prevent foreseeable human rights harm caused by climate change, or to regulate activities contributing to such harm, could constitute a violation of States’ human rights obligations’.⁵² The Human Rights Committee’s General Comment on the Right to Life has been quite emphatic on the likely implications of not curtailing the impact of climate change by observing among others that ‘climate change and unsustainable development constitute some of the most pressing and serious threats to the ability of present and future generations to enjoy the right to life’.⁵³ The consequences of emissions from fossil fuel are well documented and they can affect lives. Accordingly, the IPCC gives a bleak case for a liveable and sustainable future if steps are not taken to address the impact of climate change.⁵⁴

The courts have appreciated that and have come to the realisation of the need to promote healthy life as the bases for promotion of clean energy technologies or a healthy living. It will therefore be right and just that energy transition is pushed to support healthy living and advance the guarantee of life. In the case of *Free Legal Assistance Group and Others v.*

and Human Rights in a Changing World Order: Beyond the Ethics of Disembedded Liberalism’ (2023) 8(2) *Business and Human Rights Journal* 135, 135–150.

⁵¹ Muiyiwa Adigun, ‘A Human Rights Approach to Climate Litigation before the ECOWAS Court’ (2024) 26(1) *Environmental Law Review* 16–32, 19–20.

⁵² See Joint Statement by the Committee on the Elimination of Discrimination Against Women, the Committee on Economic, Social and Cultural Rights, the Committee on the Protection of the Rights of All Migrant Workers and Members of Their Families, the Committee on the Rights of the Child and the Committee on the Rights of Persons with Disabilities, ‘Statement on Human Rights and Climate Change’, HRI/2019/1 (14 May 2020), para 1.

⁵³ Human Rights Committee, ‘General Comment No. 36 on Article 6 of the International Covenant on Civil and Political Rights, on the Right to Life’, CCPR/C/GC/36 (3 September 2019), para 62

⁵⁴ See Hans-Otto Pörtner et al, ‘Summary for Policymakers’, in Hans-Otto Pörtner et al (eds), *Climate Change 2022: Impacts, Adaptation and Vulnerability – Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge: Cambridge University Press, 2022) 33.

Zaire,⁵⁵ which was brought before the African Commission, the Commission found that non provision of electricity among other social services was a violation of the rights provided for in Article 16 of the African Charter which is on violation of the right to enjoy the best state of physical and mental health.

The case of *Urgenda v Netherlands*⁵⁶ has been seen as one which held much promises on the need to promote a human rights-based approach to energy transition. In the case, the court recognised that it was imperative for Netherlands to mitigate climate change and take much policy target based on the European Convention on Human Rights, Dutch Constitution and Civil Code. The aftermath of the case saw the government introducing subsidies that are relevant for renewable energy deployment and home refits. In *Vereniging Milieudefensie and Others v Royal Dutch Shell (RDS) Plc*,⁵⁷ upon the coming into force of the Paris Agreement in 2016 with the target of reduction of global temperature to under 1.5 °C at 2050 companies in state parties began to evaluate how they would actualise the target put in place under the Paris Agreement. Shell, which is a producer of about 2.5% of global emissions, gave a statement to the effect that it would come up with a plan of reducing its carbon dioxide emissions by 30% by 2035, in comparison to 2016 levels, and 65% by 2050. However, to keep to the global limit, reduction will need to be by 45% in 2030. Milieudefensie (Dutch's Friends of the Earth) and others brought an action against Shell arguing that it was imperative for shell to change its business model so that it will be able to have a reduction in 45% emissions by 2030, as required by the Paris Agreement. Overall, the plaintiffs hinged their argument on failure of duty of care laid under the Dutch Civil Code (*Burgerlijk Wetboek*) and articles 2 and 8 of the European Convention on Human Rights (ECHR). The District Court in Hague ordered that not concrete enough to achieve emission reduction and it should take steps and targets directed at reducing its emissions by 45% by 2030 in comparison to the 2019 levels.

⁵⁵ Comm. No. 25/89, 47/90, 56/91, 100/93.

⁵⁶ *Urgenda Foundation v The Netherlands* [2015] HAZA C/09/00456689 (24 June 2015).

⁵⁷ [2021] Hague District Court C/09/571932 / HA ZA 19-379.

However, the Court of Appeal set aside the judgment imposing emission cuts on Shell but affirmed that protection against climate change is a fundamental right recognised by the Dutch Civil Code, ECHR and international soft laws such as the United Nations Guiding Principles on Business and Human Rights (UNGP) and the Organization for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises on Responsible Business.⁵⁸

This shows that climate change activities owing to the fossil fuel sector can impact on human rights and it becomes imperative that it should be addressed.⁵⁹ Energy transition is seen as solution to the increase in climate change. The court further attest to this assertion by reaching a conclusion that there is an obligation on the state to promote human rights. The implication is that on the basis of human rights, the legislature can make laws to compel companies to cut down their emission levels through energy transition. Transitioning to a friendlier energy sources and promotion of energy efficiency within their operations is what they are expected to do.

In *Re Greenpeace Southeast Asia and Others*,⁶⁰ a petition was brought against the carbon majors before the Philippines Commission on Human Rights, arguing that their activities have led to violation of series of rights guaranteed in the Philippines Constitution and various international human rights instruments. The Commission found that climate change could impact human rights and went further to identify these rights which the activities of the carbon majors may violate to include right to life and other rights guaranteed under international instruments and it was imperative for measures to be put in place to address climate change and energy transition.

⁵⁸ *Shell v Milieudefensie and Others*, ECLI:NL:GHDHA:2024:2100. See also B Johansen, LJ Kotzé and C Macchi, 'An Empty Victory? Shell v Milieudefensie et al 2024, the Legal Obligations of Carbon Majors, and the Prospects for Future Climate Litigation Action' (2025) 34 *Review of European, Comparative and International Environmental Law* 270–278.

⁵⁹ See PK Oniemola, 'A Proposal for Transnational Litigation against Climate Change Violations in Africa' (2021) 38(2) *Wisconsin International Law Journal* 301–330, 310–315

⁶⁰ Case No. CHR-NI-2016-0001, https://climatecasechart.com/wp-content/uploads/non-us-case-documents/2022/20220506_Case-No.-CHR-NI-2016-0001_judgment-1.pdf

From the perspective of energy transition, it can be argued that the natural law school can offer insights and framework for appreciating and putting in place policies and laws that will support the goals of energy transition. The natural law tends towards supporting the need for energy policies and laws to be grounded in universal moral principles of justice, equity, and according respect for the environment. Thus, the natural law school's thrust on the common good fits well into the narrative of pursuing sustainable energy for all as well as actualising the sustainable development goals and protection of the environment through environmentally friendly technologies and at the same time putting under control the exhaustive. The principles in which natural law is based supports the moral imperative to put in place mechanisms for controlling climate change and environmental degradation by seeing it as an intrinsic value of the natural world and in which all has duty to protect. The implication of this view is that it offers the guide towards the formulation of laws and policies that support decarbonisation through the deployment of renewable energy and low carbon energy sources that reduce the release of greenhouse gases in the atmosphere.

In the context of human rights, it can be argued that the crux of application of natural law to energy resources management will be on the need to mainstream human rights in the operation. The essence of mainstreaming human rights will be to ensure that the entire process of mitigation accommodates human rights considerations.⁶¹ Thus, accounting for human rights is essential, most especially if one considers the need for a clean and healthy environment and the promotion of right to energy access,⁶² as well as the need to ensure that individuals and communities are protected from the environmental impact of energy. It is the demand of the natural law principles that transition strategies should be inclusive. That is why today the concept of just energy transition has been tied as a burning issue in the move towards net zero.⁶³ In the same token,

⁶¹ DS Olawuyi, *The Human Rights Based Approach to Carbon Finance* (Cambridge University Press 2016) 145

⁶² See L Löfqvist, 'Is There a Universal Human Right to Electricity?' (2018) 24 *International Journal of Human Rights* 711

⁶³ See D McCauley and R Heffron, 'Just Transition: Integrating Climate, Energy and Environmental Justice' (2018) 119 *Energy Policy* 1.

sustainable energy for all entails ensuring that there is no marginalised and the vulnerable populations should be accounted for. These are questions that human rights seek to address by bridging inequality gaps.⁶⁴

The underlying principles of sustainable development which is the intergenerational equity- meets the need to design laws and policies to suit the current generations and also meet the needs of future generations. To sum it all the natural law school offers a strong ethical basis for government and non-state actors to support the deployment of mechanism for energy transition. The grounding the law for sustainable energy in universal moral principles as advocated by the Natural Law school will ensure that the shift towards sustainable energy systems that support climate change mitigation equitable, and respectful of both human rights and environmental integrity in energy production and utilisation.

4. APPLICATION OF THE POSITIVIST LAW SCHOOL IN THE CONTEXT OF ENERGY TRANSITION

The advocates of positivism believe that the only acceptable sources of laws are the written laws or regulation which have been enacted by a recognised body or authority.⁶⁵ The authority in issue here could be administrative, legislative, executive, or judicial bodies. To the positivists, all laws are simply the expression of the will of the enacting authority. Positivism is contrasted with natural law which is premised on metaphysical and transcendental principles. Unlike natural law, positivism seeks to distinguish law from morality by establishing that, man does not need to confuse the law in place to what he would like to have as laws. Foundation of positivism were historically laid by Jeremy Bentham (1748-1832) and John Austin (1790-1859) as they clearly argued on the specific conception of law and morality which has been diverged by contemporary positivists.⁶⁶ Contemporary positivists have differed on the notion that

⁶⁴ I Saiz and K Donald, 'Tackling Inequality Through the Sustainable Development Goals: Human Rights in Practice' (2017) 21 *International Journal of Human Rights* 1029

⁶⁵ Muiyiwa Adigun and others, 'Symbolic Legislation and the Regulation of Stroke Biobanking and Genomics Research in Sub-Saharan Africa' (2021) 9(3) *The Theory and Practice of Legislation* 404-424, 417.

⁶⁶ David Lyons, 'Founders and Foundations of Legal Positivism' (1984) 82(84) *Michigan Law Review* 722, 722.

law is a set of coercive commands earlier espoused by Bentham and Austin.⁶⁷

John Austin widely known for opposing the view that laws must be consistent with ethics, in his command theory, considered jurisprudence as the study of concepts and principles and that are common to almost all legal systems of the world. According to Austin, the sovereign is an individual or groups whose orders are consistently obeyed by majority of the society and who cannot obey the orders of any other person.⁶⁸ Austin distinguished law from morality by defining law as a command of the sovereign. Austin was concerned about the validity of the powers of the legal order. He wondered where laws usually derived their character. Austin was fascinated by the irony that there are some moral rules that are morality desirable but are not laws; whereas there are many rules which breach moral standards but are laws nevertheless.⁶⁹ In his work, *The Province of Jurisprudence Determined*, Austin posited that there are, 'laws properly so-called' and 'laws improperly so called,' distinguishable from rules of positive morality that are commands issued by superior or sovereign authorities to the subject. According to Austin, the whole nation would be governed by the commands promulgated by the sovereign who may be an individual or groups of people and that sanctions will be put up against recalcitrant or erring subjects.⁷⁰ Austin further stated that law and morals present two distinct kinds of rules for conduct regulation but they are not necessarily related. Austin therefore argued that, there is a need for a separation of laws from morals. This is antithetic to the naturalists' view that any law that deviates from moral tenets of a society does not deserve obedience and should be circumvented.

⁶⁷ Ibid.

⁶⁸ Jack P Ligon, *Legal Positivism, Natural Law and Normativity* (University of Vermont Honors College Senior Thesis, 2021) 11–47, 10

⁶⁹ Samuel E Stumpf, 'Austin's Theory of Separation of Law and Morals' (1960) 14(1) *Vanderbilt Law Review* 117, 117.

⁷⁰ Monarch Mittal, 'John Austin's Theory of Command Law: Its Practicality in Today's World' (2022) 2, <https://dx.doi.org/10.2139/ssrn.4157659>.

HLA Hart posited that law is a fusion of primary and secondary rules.⁷¹ Chiefly among the rules is the rule of recognition which provides what content a rule must possess to qualify as a law in a particular jurisdiction. He further argued in favour of positivism on the concept of recognition upon which the existence and elements of the rules of recognition in a particular legal system requires the judges and legal practitioners in that jurisdiction to recognise as laws rules that are validly made.⁷² By contrast, contemporary jurist, Ronald Dworkin, whose views on positivism seems to be constantly counteracting Hart's assertions thereby leading to what has been dubbed, 'the Hart-Dworkin debate' gives a contrasting opinion in his work, *Law's Empire*. According to Dworkin, the law of a particular jurisdiction is ultimately determined by what is morally accepted in that jurisdiction. He further submitted that, the moral tenets which eventually determine the overall justification for these practices do not derive their validity on the basis of contingent social facts but due to what law is as such.⁷³ On the argument of the relationship between law and morality, H.L.A. Hart posited that, 'there is no necessary connection between law and morals or law as it is and ought to be.'⁷⁴ Hart further argued that, it is not plausible to argue that law produces or fulfil certain demands of morality, and any necessary connection between the two concept is a moral issue.

Hans Kelsen, on the other hand, was an Austrian jurist whose work, *The Pure Theory of Law*, in the 20th century was determined to expunge morals, ideals and ethics from law by establishing a pure science of law without any moral, political and sociological connections.⁷⁵ Kelsen's work, though analogous to Austin's analytical jurisprudence in the 19th century, however, dissented with Austin's command theory for being subjective in

⁷¹ Sonali Barnerjee, 'The Relevance of the Hart & Fuller Debate Relating to Law and Morality – A Critical Analysis' (2017) 4(2) International Journal of Law and Legal Jurisprudence Studies 122, 124.

⁷² Peter Mirfield, 'In Defence of Modern Legal Positivism' (1989) 16(4) 985, 988.

⁷³ David Plunkett and Daniel Wodak, 'Legal Positivism and the Real Definition of Law' (2022) 13(3) Jurisprudence 317, 318

⁷⁴ HLA Hart, 'Positivism and the Separation of Law and Morals' (1958) 71 Harvard Law Review 593, 601.

⁷⁵ Kendra Frew, Hans Kelsen's Theory and the Key to his Normativist Dimension (2013) The Western Australian Jurist 285, 285-293.

nature.⁷⁶ Generally, Kelsen's pure theory of law though contains the approach of positivism, it sought to discard all forms of impurities and extra-legal or non-legal contents from positive law which changes from time-to-time from different places. He posited that the pure theory of law must be distinguished from philosophy of justice. To Kelsen, whereas the pure theory of law is a science, justice is an irrational ideal and a judgement of value that is based on emotional metrics which makes it subjective in character.⁷⁷ Kelsen's work, which is also called the *Interpretation Theory*, emerged in response to the vicious ideology which had corrupted the jurisprudence of the totalitarian states.⁷⁸ Kelsen's writings assume positivity in that he conceived law as that which is created and abrogated by man and not by any divine or supernatural deity and not from any moral or normative order. He also gave his thoughts on the concept of a norm. According to him, a norm is a rule which establishes a specific behaviour or conduct. He went further to distinguish between a legal norm and a moral norm. A moral norm according to Kelsen is that which sets or prescribes what a person ought to do or not to do without more. Conversely, a legal norm (a positive norm) in addition to prescribing a norm, goes further to include the penalty for disobedience of the norm. For instance, the norm prohibiting murder alone is superfluous except the norm is backed by positive sanctions for violation of the norm prohibiting murder.⁷⁹ Kelsen's postulations however have been criticised by subsequent scholars for only providing hypothetical analysis without any practical solutions to ideological disparities at that time and even now.⁸⁰

There exist two antagonising authors of positive law and natural law respectively in modern jurisprudence who have posited contrasting views in relation to the morality of laws. The counteracting views of these eminent authors have gained a wide traction that it has been labelled the Hart-Fuller debate in jurisprudence. This debate was precipitated by the

⁷⁶ Christoph Kletzer, *The Idea of a Pure Theory of Law: An Interpretation and Defence* (Bloomsbury 2018) 108.

⁷⁷ Henry Cohen, 'The Pure Theory of Law and Analytical Jurisprudence' (1981) 26(2) *Catholic Lawyer* 147, 148.

⁷⁸ Henry Janzen, 'Kelsen's Theory of Law' (1937) 31(2) *American Political Science Review* 205, 205.

⁷⁹ Henry Cohen, 'Kelsen's Pure Theory of Law' (1981) 26(2) *The Catholic Lawyer* 147, 149.

⁸⁰ *Ibid.*, 155.

crimes committed by Germany during the World War II under the National-Socialist administration (1933-1945) that was dictatorial. Though Hart was not in support of such atrocities, he did insist that laws are laws and must be obeyed. To Hart, the inability of a law to include moral contents of the society does not make it susceptible to disobedience. Though he acknowledges the close relationship between law and morality, he did not believe they are interdependent on each other.⁸¹ According to Hart, though there is a causal link between law and morality, as there is need to distinguish the former from the latter when they intersect. He enjoined legal interpreters to focus on what the law says rather than focusing on what it ought to state.⁸²

Fuller on the other hand posited that, law is a particular way of attaining social order through the use of guiding principles or rules. According to Fuller, legal systems are founded on norms of justice which contain moral contents.⁸³ He further asserted that, moral consideration is central to the determination of legitimate rules in every legal system. According to him, only laws that have passed the moral consideration test are laws in a true sense.⁸⁴ Fuller condemned profusely the evils that were perpetrated by the German Nazi-government using draconian laws during the war.

The Hart-Fuller debate began in 1958 following Hart's publication of *Positivism and the Separation of Laws and Morals* in the Harvard Law Review.⁸⁵ This publication emerged after the extermination of the Jews by the German Nazi regime which is widely known as the Holocaust. Fuller, on the other hand, published *Positivism and Fidelity to Law* in the Harvard Law Review in response to Hart's Publication.⁸⁶ Both authors

⁸¹ Sonali Barnerjee, 'The Relevance of the Hart & Fuller Debate Relating to Law and Morality – A Critical Analysis' (2017) 4(2) International Journal of Law and Legal Jurisprudence Studies 122, 123.

⁸² HLA Hart, *The Concept of Laws* (Revised edn, Oxford University Press 2002) 185–200

⁸³ Sonali Barnerjee, 'The Relevance of the Hart & Fuller Debate Relating to Law and Morality – A Critical Analysis' (2017) 4(2) International Journal of Law and Legal Jurisprudence Studies 122, 125.

⁸⁴ Lon L Fuller, *The Law in Quest of Itself* (Foundation Press, 1940) 4.

⁸⁵ HLA Hart, 'Positivism and the Separation of Law and Morals' (1958) 71(4) Harvard Law Review 593, 593–629.

⁸⁶ Lon L Fuller, 'Positivism and Fidelity to Law: A Reply to Professor Hart' (1958) 71(4) Harvard Law Review 630–72.

subsequently continued to engage in counter-publications hence the emergence of the appellation Hart-Fuller debate.⁸⁷

The law has an important role to play in transitioning low carbon energy use.⁸⁸ Positivist school tends to support legal framework in place for the promotion of energy transition. The formal approach which the positivist school canvasses can be the basis for initiating legal regime for energy transition within the dictates of the objectives of the state. Thus, through the law the movement towards a fair and just transition can be attained.⁸⁹ Considering the application of the positivist law school to energy transition portends the role played by written laws and regulations in putting in place clear and enforceable legal frameworks that should be applied in managing the complex process of transitioning to sustainable energy in the economy. The crux of positivism is to focus on the formal aspects of law making and ensuring that compliance mechanisms are put in place for the enforcement of prescriptions on energy transition made in the law. Thus, the need for the creation of a formal and stable legal regime that promotes energy transition fits well into the discourse of the use of positivist ideology for creating the framework for enabling environment for energy transition. For example, the renewable energy purchase obligations or the renewable energy portfolio standards requires utilities to produce or utilise specific percentage of renewable energy, failing which they become liable to pay fine.⁹⁰

The natural law school is essentially based on reason and can be said to offer the justification for embracing the positivist approach. For example,

⁸⁷ See Guilherme de Almeida, Noel Struchiner and Ivar Hannikainen, 'The Experimental Jurisprudence of the Concept of Rule: Implications for the Hart-Fuller Debate' in Karolina Prochownik and Stefan Magen (eds) *Advances in Experimental Philosophy of Law* (Bloomsbury 2023); Allan Hutchinson, *Hart, Fuller, and Everything After: The Politics of Legal Theory* (Bloomsbury 2023) 80.

⁸⁸ See YO Omorogbe, 'Promoting Sustainable Development through the use of Renewable Energy: The Role of Law', in D.N. Zillman et al (eds), *Beyond the Carbon Economy: Energy Law in Transition* (Oxford University Press, 2008)

⁸⁹ E. Aba, 'A Fast and Fair Energy Transition: How Community Legal Action and New Legislation are Shaping the Global Shift to Renewable Energy' (2023) 8(2) *Business and Human Rights Journal* 252, 252.

⁹⁰ See Lincoln L. Davies, *Power Forward: The Argument for a National RPS*, (2010) 42 *Connecticut Law Review* 1339, 1339-1403.

the goals of environmental protection can constitute why it is imperative for translation of such environmental goals into action through the integration of energy law into environmental law.⁹¹ The creation of detailed legal frameworks for renewable energy development, carbon emissions, energy efficiency standards, and other aspects of sustainability in the energy sector will be a hallmark of energy transition in current realities of moving towards net zero.⁹² Therefore, by safeguarding the development of laws that clearly articulate and codify sustainable energy measures will be a contribution of positivism to achieving legal certainty on the role of the government agencies and various stakeholders which may include private businesses and consumers. This will be specifications on duties and expectations of all stakeholders in transitioning to low carbon intensive energy. The establishment of regulatory agencies to manage the process of energy transition is also a virtue of the positivist proposition, as it advocates for the creation of robust regulatory bodies and mechanisms to enforce energy laws and regulation.⁹³ Looking at the positivist postulations, making a law on energy transition by the appropriate authority may not be sufficient without the law being backed by sufficient enforcement mechanisms that guarantees compliance, which may be through the imposition of penalties that can take the form of fines, imprisonment or cancelation of licences or permits in the energy sector.

The penalisation of conducts that tend to promote climate increase in climate change will find support in the positivist school. Even within the realms of consumer protection law, it can be argued that climate change litigation can be made to make corporations to be criminally liable for

⁹¹ Amy J Wildermuth, 'The Next Step: The Integration of Energy Law and Environmental Law' (2011) 31(2) *Utah Environmental Law Review* 369, 386.

⁹² See A McHarg, 'Regulating for Sustainable Electricity Market Outcomes in Britain: Asking the Law Question' (2013) 30 *Environmental and Planning Law Journal* 289.

⁹³ Typically, in the oil and gas sector, regulators for example, would play the role of curtailing environmental impacts in the sector. See Tara K. Righetti, Hannah J Wiseman and James W Coleman, 'The New Oil and Gas Governance' (2020) 130 *The Yale Law Journal Forum* 51, 53–54.

misinformation.⁹⁴ For example, where consumers are misled into using products that they thought were environmentally friendly whereas they are not. Climate change has also been viewed to be responsible for deaths and the perpetrators of activities inducing climate change should amount to criminal homicide.⁹⁵ This argument can translate into measures for regulation of climate change which will be through the use of affirmative laws that penalise climate change defaulters in such a way that transitional sources are supported instead of fossil fuel.

The cut of fossil fuel through the use of enforcement mechanisms and sanctions comes within the contemplation of the positivist school. For example, the UK Greenhouse Gas Emissions Trading Scheme Order 2020 sets caps and allowances under the emission trading scheme.⁹⁶ It is provided that the regulator upon observing that there is contravention, it is required to issue an enforcement notice for compliance.⁹⁷ Failure to comply with the notice attracts civil penalties. Thus, it is provided in the Order that the civil penalty for failure to comply or not comply on time is £ 20,000; and a penalty of £1,000 for each day failure to comply starting from the day of issuance of the initial notice, up to a maximum amount of £45,000.⁹⁸ Under the Climate Change Act in Kenya, the National Environmental Management Authority is responsible for regulation, enforcement and monitoring of compliance on levels of greenhouse gas emissions as set by the National Climate Change Council.⁹⁹ The Act provides further in Section 17(3) that:

A person commits an offence if the person—
 (a) fails to give or refuses to give access to the
 Authority or its authorised staff who has requested
 access to any land;

⁹⁴ Jessica Wentz and Benjamin Franta, 'Liability for Public Deception: Linking Fossil Fuel Disinformation to Climate Damages' (2022) 52 *Environmental Law Reporter* 10995, 10995-11020.

⁹⁵ J Dehm, 'Beyond Climate Due Diligence: Fossil Fuels, 'Red Lines' and Reparations' (2023) 8(2) *Business and Human Rights Journal* 151, 151–179.

⁹⁶ Sections 18-23

⁹⁷ Section 44.

⁹⁸ Section 65(1) & (2).

⁹⁹ Section 17(1)(c).

- (b) hinders the execution by the Authority of the duties under this Act or any other law;
- (c) fails or refuses to give information that the person may lawfully be required to give to the Authority;
- or (d) gives false or misleading information to the Authority.

It continues that ‘A person who commits an offence under subsection (3) is liable, on conviction, to a fine not exceeding one million shillings or to imprisonment for a period not exceeding five years, or to both’.¹⁰⁰

It can be gleaned from the above examples that rules have been put in place (i.e. laws in favour of energy transition) and they are backed by enforcement through appropriate authorities with sanctions in the form of fines and punishment to compel compliance with energy transition measures.

Another point to note is that there is the tendency that firms will invest more in climes that have lax laws and may even do that through subsidiaries and in turn attempt to escape liability relying on corporate personality doctrine.¹⁰¹ If measures are put in place through sanctions, there will be no avenue to escape liabilities by going to regions with the primary aim of not securing cost which could have been imposed by sanctions promoting energy transition policies. Consequently, where there are liabilities there will be incentive to reduce greenhouse gases.¹⁰² More so, the major contributors to the problem of climate change are the fossil fuel corporations.¹⁰³

¹⁰⁰ Section 17(4).

¹⁰¹ See B Choudhury ‘Corporate Law’s Threat to Human Rights: Why Human Rights Due Diligence Might Not Be Enough’ (2023) 8(2) *Business and Human Rights Journal* 180, 180-196.

¹⁰² Mark Latham, Victor E. Schwartz and Christopher E. Appel, ‘The Intersection of Tort and Environmental Law: Where the Twains Should Meet and Depart’ (2011).80 *Fordham Law Review* 737, 739.

¹⁰³ Sophie Marjanac and Lindene Patton, ‘Extreme Weather Event Attribution Science and Climate Litigation: An Essential Step in the Causal Chain’ (2018) 36 (3) *Journal of Energy and Natural Resources Law* 265; Peter C Frumhoff, Richard Heede and Naomi Oreskes ‘The Climate Responsibilities of Industrial Carbon Producers’ (2015) 132 *Climatic Change* 157.

The idea of the positivist school is focusing on the authority of written law having far reaching implications for international cooperation in transitioning to a low carbon economy in the energy sector. Thus, international treaties and agreements relevant to energy transition are formally ratified by nations having established norms and therefore support the domestication and implementation of these laws at domestic level. For example, the UNFCCC and Paris Agreement are explicit international cooperation treaties on climate change which automatically operates in some countries as laws (monist states) or implemented in others through domestication by the appropriate authorities of the state (dualist states).¹⁰⁴ In any event, even if it is argued that international law may lack the requisite enforcement at international levels as posited by the positivists, states that choose to implement these norms may do that through the instrumentalities of the states.¹⁰⁵ This development has continued to be a means for championing climate change mitigation through countries putting in place measures that support decarbonisation in the energy sector. For example, in response to the international climate change regime, countries have passed climate change legislations. Examples include United Kingdom,¹⁰⁶ Kenya,¹⁰⁷ Germany¹⁰⁸ and Nigeria.¹⁰⁹

The contribution of the positivist law school to energy transition will be significant as it is now seen that written laws and regulations with strict enforcement are fundamental part of the legal regime that will support the upscaling of energy transition. Thus, this positivist perspective sets the need for legal certainty and stability of regime and effective implementation that will enhance transition to a sustainable energy future.

¹⁰⁴ Thus, in monist states, a treaty becomes part of domestic law upon its conclusion by the state, while in a dualist state, the treaty does not become enforceable until a legislation is passed to make it binding. See Anthony Aust, *Modern Treaty Law and Practice* (Cambridge University Press 2007) 183 and 187.

¹⁰⁵ For insights into positivism and international law, see Devika Hovell, 'The Elements of International Legal Positivism' (2022) 75 *Current Legal Problems* 71, 71–109

¹⁰⁶ Climate Change Act 2008.

¹⁰⁷ Climate Change Act 2016.

¹⁰⁸ Federal Climate Protection Act 2019 (Bundes-Klimaschutzgesetz); Philipp Semmelmayr, 'Climate Change and the German Law of Torts' (2021) 22 *German Law Journal* 1569, 1572.

¹⁰⁹ Climate Change Act 2021.

5. CONCLUSION

Energy transition is now considered as important, the quest for net zero will need to be designed and activated within a legal framework that is expected to address series of challenges that militate against transitioning and actualization of net zero emissions. The road towards energy transition and achievement of net zero emissions, requires not just a deployment of innovative technologies, creation of financing mechanisms and putting in place legal frameworks and political will but also a deep rethinking of the legal frameworks. This article has offered an argument that the integration of traditional legal theories such as natural law and positivism will be a worthwhile consideration for scholarship, policymakers, legislators and the courts.

The natural and positivist schools of law offer robust approaches to the theoretical and practical application of laws to energy transition. Thus, the synthesis is not a mere theoretical exercise but a practical necessity for crafting laws, regulations, policy and guidelines for energy transition. Therefore, the natural law school offers the insights of employment of legal, ethical and moral principles to push for energy transition, and particularly, a just and equitable manner. It also calls for the need to mainstream human rights into energy transition. On the other hand, the positivist law school calls for the need to put in place clear and affirmative formal laws and regulations with robust mechanisms for the enforcement of energy transition measures. More so, given the complexities involved in the process of energy transition framework, measures in place will need to be well defined with legal duties allocated and enforced accordingly. Calling the natural and positivist schools into use offers a comprehensive justification and use of legal mechanisms to deploy the needed measures and technologies to meet the dire need of energy transition.