

**Effective Implementation of Renewable Energy Legal Regime in Nigeria and Ghana: A
Mitigator to Climate Change and Improvement of Power Supply**

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Certification

This thesis entitled “Effective Implementation of Renewable Legal Regime in Nigeria and Ghana: A Mitigator to Climate Change and Improvement of Power Supply” was carried out by Matilda Adedoyin CHUKWUEMEKA with Matric No. LCU/PG/001502 in the Department of Private and Business Law, Faculty of Law, Lead City University, Ibadan, Oyo State, Nigeria under my supervision

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Dedication

This research work is dedicated to my husband, Mr. Abel Nnamdi CHUKWUEMEKA who has supported me through this academic journey.

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Abstract

Energy is that which people cannot survive without in this modern era. Without energy, life can be so much difficult as it is significant for the survival of everything that is in the world around us in our contemporary lives. In Nigeria, fossil fuels have been the predominant sources of energy supply. Despite Nigeria being a major exporter of fossil fuels, Nigeria still suffers from poor energy supply. The utilization of these predominant energy sources have led to the emission of greenhouse gases and have adversely impacted the climate. There has been a rising demand worldwide for renewable sources of energy such as solar, hydro, wind, biomass, geothermal, wave and tidal energy to be included in the energy mix of nations which some consider being cheap and more environmentally friendly compared to the negative impacts of fossil fuels. Currently, Nigeria is yet to fully exploit the potentials of these renewable sources of energy. This research adopts the doctrinal and comparative methodology between Ghana and Nigeria Electricity Models. This research contends that the slow-moving development and utilization of renewable sources of energy into the Nigerian energy generation mix is a result of the unavailability of a legal framework on renewable energy sources in the current legislative system compared to Ghana. In conclusion, this research recommends strict implementation of a legal framework governing the development and utilization of renewable sources of energy, which will at the end of the day serve as improvement to energy supply and mitigation of climate change in Nigeria.

Keywords: Climate Change, Energy, Electricity, Fossil Fuels, Renewable Energy

Word Count: 260

Table of Cases

	Page cited
Ambah v Shell Petroleum Development Company [1996] 66 LRCN 390	28
Centre for Oil Pollution Watch v. Nigerian National Petroleum Corporation [2019] 5 NWLR pt. 1666 p.518	31
Chief Joel Anaro v Shell Petroleum Development Company [2002] FWLR 1654 17	27
Edamkue & Others v Shell Petroleum Development Company [2003] 11 NWLR pt. 832, 533	26
Farrah v Shell Petroleum Development Company [1995] 3 NWLR pt. 382, 148	27
Funke Adekoya, SAN v Victoria Garden City Management and Maintenance Co Ltd & Another, Order No: NERC/H/061	103
Isaiah v Shell Petroleum Development Company [2001] 11 NWLR pt. 723 168	28
Jonah Gbemre v Shell Petroleum Development Company of Nigeria Ltd & Others [2005] AHRLR 151 (NgHC2005)	26
Milieudefensie & Others v. Royal Dutch Shell Plc (Re Oil Pollution in Nigeria) (2008) ECLI:NL:RBDHA:2021:5337	29
Owena Mass Transportation Co. Ltd V. Okonogbo (2018) LPELR-45221(CA)	30
Petadis Enterprise v HFP Properties Ltd Case No NERC/ 10/0011/08	104
Rylands v Fletcher (1868) UKHL 1, LR 3 HL 330	27

Table of Statutes

International Instruments

African Charter on Human and Peoples Rights, 1981

International Convention for the Prevention of Pollution from Ships (MARPOL), 1983

International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990

Montreal Protocol on Substances that Deplete the Ozone Layer (with annex), 1987

United Nations Charter, 1945

United Nations Convention on the Law of the Sea, 1982

United Nations Framework Convention on Climate Change (UNFCCC), 1992

Vienna Convention for the Protection of the Ozone Layer, 1985

Nigeria

African Charter on Human and Peoples' Rights (Ratification and Enforcement) Act, 1983

Captive Energy Generation Regulations, 2008

Climate Change Act, 2021

Companies and Allied Matters Act, 2020

Constitution of the Federal Republic of Nigeria 1999 (as amended)

Electric Power Sector Reform Act, 2005

Environment Impact Assessment Act 1992

Evidence Act 2011

Ghana

Electricity Act, 1961

Electricity Commission Act, 1997

Electricity Corporation Decree of 1967

Electricity Regulation Act, 2006

Energy Commission Act 1997 (Act 514)

National Energy Regulator Act, 2004

Public Utilities Regulatory Commission Act 1997 (Act 538)

Renewable Energy (Amendment) Act, 2020 (Act 1045)

Renewable Energy Act, 2011 (Act 832)

List of Abbreviations

ADB	African Development Bank
AFD	Agence de Developpement
APL	All Power Labs
BEC	Biofuel Energy Commission
BPE	Bureau of Public Enterprises
BRA	Biofuel Research Agency
CCIAV	Climate Change Impacts, Adaptation and Vulnerability
CDM	Clean Development Mechanism
CEGR	Captive Energy Generation Regulations
CFCs	Chlorofluorocarbons
CH ₄	Methane
CIA	Central Intelligence Agency
CO ₂	Carbon Dioxide
COP26	United Nations Climate Change Conference
CRE	Committee on Rural Electrification
CTFs	Clean Technology Funds
DFID	Department for International Development
DMRE	Department of Mineral Resources and Energy
ECA	Energy Commission Act
ECG	Electricity Corporation of Ghana
ECN	Energy Commission of Nigeria
EE	Energy Efficiency
EEDC	Eko Electricity Distribution Company
EPA	Environmental Protection Agency Ghana

ESI	Environmental Sensitivity Index
ESKOM	Electricity Supply Commission
ESSDP	Energy Sector Strategy and Development Plan
ESPR	Electric Power Sector Reform Act
FDI	Foreign Direct Investment
FEC	Federal Executive Council
FIT	Feed-in-Tariffs
GDP	Gross Domestic Product
GEC	Ghana Energy Commission
GEF	Global Environment Facility
GHGs	Greenhouse Gases
GNESDR	Global Network for Environment and Economic Development Research
GW	Gigawatts
GWh	Gigawatt Hours
GWP	Global Warming Potential
HBF	Heinrich Böll Foundation
HCFCs	Hydrochlorofluorocarbons
HFCs	Hydrofluorocarbons
IPCC	Intergovernmental Panel on Climate Change
IRENA	International Renewable Energy Agency
IRP	Integrated Resource Plan
KG	Kilogram
KM	Kilometre
KWh	Kilowatt Hour
LGA	Local Government Area

LNG	Liquefied Natural Gas
MDGs	Millennium Development Goals
MES	Midori Environmental Solutions
MPS	Ministry of Power and Steel
MTOE	Million Ton of Oil Equivalent
MW	Megawatts
MYTO	Multi-Year Tariff Order
N ₂ O	Nitrous Oxide
NABP	Nigerian Automotive Biomass Program.
NASPA	National Adaptation Strategy and Plan of Action
NASPA-CCN	National Adaptation Strategy and Plan of Action on Climate Change for Nigeria
NBPI	Nigerian Biofuels Policy and Incentives
NCCP	National Climate Change Policy
NCP	National Council on Privatization
NEEAP	National Energy Efficiency Action Plan
NEEDS	National Economic and Development Study
NEP	National Energy Policy
NEP	National Energy Policy
NEPA	National Electric Power Authority
NERC	Nigerian Electricity Regulatory Commission
NERI	National Environmental Research Institute
NERSA	National Energy Regulator
NESAT	Nigerian Environmental Study Action Team
NESI	Nigerian Electricity Supply Industry
NF ₃	Nitrogen Trifluoride

NigeriaCAN	Nigeria Climate Action Network
NNPC	Nigerian National Petroleum Corporation
NREAP	National Renewable Energy Action Plan
NREEEP	Nigerian Renewable Energy and Energy Efficiency Policy
°C	Degree Celsius
PACJA	Pan African Climate Justice Alliance
PFCs	Perfluorocarbons
PHCN	Power Holding Company of Nigeria
PJ	Petajoule
PPPs	Public Private Partnerships
PURC	Public Utilities Regulatory Commission
PV	Photovoltaic
RED	Renewable Energy Division
REEE	Renewable Energy and Energy Efficiency
REIPPPP	Renewable Energy Independent Power Producer Procurement Programme
REMP	Renewable Energy Master Plan
REP	Rural Electrification Policy
REPG	Renewable Electricity Policy Guideline
RESIP	Rural Electrification Strategy and Implementation Plan
RETF	Renewable Electricity Trust Fund
RMIPPPP	Risk Mitigation Independent Power Producers Procurement Programme
SACAU	South African Confederation of Agriculture Union
SADC	South Africa and the Democratic Republic of Congo
SCCU	Special Climate Change Unit
SE4ALL	Sustainable Energy for All

SF ₆	Sulfur Hexafluoride
SNEP	Strategic National Energy Plan
SPDC	Shell Petroleum Development Company
TREIA	Texas Renewable Energy Industries Alliance
TSP	Transmission System Provider
TWH	Terawatt Hour
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNSCC	United Nations Summit on Climate Change
USEPA	United States Environmental Protection Agency
WCED	World Commission on Environment and Development

Table of Contents

Title page	
Certification	i
Dedication	ii
Acknowledgment	iii
Abstract	iv
Table of Cases	v
Table of Statutes	vii
List of Abbreviation	ix
Table of Contents	xiv
Chapter One: Introduction	
1.1 Background to the Study	1
1.2 Statement of the Problem	6
1.3 Aim & Objectives of the Study	10
1.4 Research Questions	11
1.5 Research Methodology	12
1.6 Scope of the Study	12
1.7 Significance of the Study	13
1.8 Limitations to the Study	14
1.9 Operational Definition of Terms	14
1.10 Chapterization	16
Chapter Two: Literature Review and Theoretical Framework	
2.1 Conceptual Review	18
2.1.1 Fossil Fuels as Evidence of Climate Change Impacts in Nigeria	23
2.1.1 Causes of Climate Change in Nigeria	25
2.1.2 Effects of Climate Change in Nigeria	28
2.1.2.1 Greenhouse Effect	34

2.1.2.2 Natural Greenhouse Gases from the Earth	35
2.1.2.3 Man-induced Greenhouse Gases	35
2.1.2.3.1 Mitigation	39
2.1.2.3.2 Adaptation	40
2.1.3 Demand and Supply of Energy in Nigeria	44
2.1.4 Renewable Energy and Climate Change in Nigeria	45
2.1.5 Renewable Energy Generation in Nigeria	52
2.1.5.1 Solar Energy	55
2.1.5.1.1 Advantages of Solar Energy	57
2.1.5.1.2 Disadvantages of Solar Energy	58
2.1.6 Wind Energy	60
2.1.6.1 Forms of Wind Energy	61
2.1.6.1.1 Offshore Wind Energy	61
2.1.6.1.2 Onshore Wind Energy	61
2.1.6.1.3 Advantages of Wind Energy	62
2.1.6.1.4 Disadvantages of Wind Energy	63
2.1.7 Hydro Energy	65
2.1.7.1 Advantages of Hydro Energy	67
2.1.7.2 Disadvantages of Hydro Energy	68
2.1.8 Biomass Energy	69
2.1.9 Geothermal Energy	70
2.1.10 Wave and Tidal Energy	71
2.2 Theoretical Framework of Renewable Energy in Nigeria	72
2.2.1 The Resource Curse Theory	72
2.2.1.1 The Economic Theory	77
2.2.1.2 The Political Theory	80
2.2.1.3 The Theory of Violent Conflict	81

2.2.2 The Theory of Sustainable Development	84
2.2.2.1 Environmental Sustainability	86
2.2.2.2 Economic Sustainability	87
2.2.2.3 Social Sustainability	88
Chapter Three: The State of Renewable Energy and Power/Electricity Supply in Nigeria	
3.1 Electricity Generation in Nigeria	90
3.1.1 On-Grid Electricity Generation License	91
3.1.2 Embedded Generation License	91
3.1.3 Off-Grid Generation License	91
3.2 Electricity Transmission in Nigeria	92
3.2.1 Transmission Service Provider	92
3.2.2 System Operations	92
3.2.3 Market Operations	92
3.2.4 Off-take Prospects in Nigeria	93
3.3 Small-Scale Renewable Energy in Nigeria	93
3.4 Commercial Mini-Grids in Nigeria	96
3.5 The Challenges to Renewable Energy Development in Nigeria	97
3.6 Ways to Achieve Renewable Energy in Nigeria's Energy Mix	101
Chapter Four: Legal and Regulatory Framework of Renewable Energy and Electricity in Nigeria	
4.1 Legal and Regulatory Framework Regulating Renewable Energy and Electricity in Nigeria	105
4.1.1 National Renewable Energy Policy 2003 & 2005	107
4.1.2 Electric Power Sector Reform Act (EPSRA) 2005	109
4.1.2.1 The Nigerian Electricity Regulatory Commission (NERC)	111
4.1.2.1.1 The Goals and Objectives of the Nigerian Electricity Regulatory Commission	112
4.1.2.1.2 NERC's Renewable Energy Sourced Electricity	115
4.1.2.1.3 The Rural Electrification Agency	116

4.1.2.1.4 NERC's Mini-Grids and Mini-Grid Regulation	117
4.1.2.1.5 Nigerian Electricity Structural Licensing	120
4.1.2.1.6 Electricity Tariff System in Nigeria	122
4.1.3 Renewable Energy Policy Guidelines (REPG) 2006	124
4.1.4 National Renewable Energy and Energy Efficiency Policy (NREEEP) 2015	125
4.1.5 The Rural Electrification Agency (REA) 2006	127
4.1.6 Ministry of Power and Steel	129
4.1.7 National Council on Privatization (NCP)	129
4.2 Comparative Analysis of the Legal Framework of Renewable Energy in	
Ghana and Nigeria****	130
4.2.1 The Jurisdiction of Ghana	131
4.2.2 Overview of Renewable Sources of Energy in Ghana	133
4.2.2.1 Ghana's Solar Photovoltaic (stand-alone and grid connected) and Solar Lanterns	134
4.2.2.2 Ghana's Wind Energy	135
4.2.2.3 Ghana's Hydro Energy	137
4.2.2.4 Ghana's Biomass and Waste-to-Energy	137
4.2.2.5 Ghana's Wave and Tidal Energy	138
4.3 Institutional Framework, Policies and Legal Framework of Electricity	
and Renewable Energy in Ghana	138
4.3.1 Institutional Framework	138
4.3.2 Ghana's Ministry of Energy	139
4.3.3 Public Utilities Regulatory Commission (PURC)	140
4.3.4 Energy Commission	142
4.3.5 Policies, Plans and Strategy Documents on Renewable Energy in Ghana	143
4.3.6 Renewable Energy Act, 2011 (Act 832)	148
4.3.6.1 Development of Licensing Manual for Renewable Energy Service Producers	149
4.3.6.2 Draft Guidelines for Renewable Energy Purchase Obligation	150

4.3.6.3 Development and Gazetting of Feed-in-Tariffs (FiTs)	151
4.3.6.4 Development of Net Metering Code	153
4.3.6.5 Renewable Energy Sub-Codes for Transmission and Distribution Systems	154
4.3.6.5 Development of Framework for the Renewable Energy Fund	155
4.3.6.6 Establishment of Renewable Energy Authority in Ghana	155
4.4 Challenges in Developing Renewable Energy Systems in Ghana	156
4.4.1 Renewable Energy Master Plan (REMP) 2019	158
4.5 Comparative Analysis of Ghana and Nigeria's Renewable Energy and Electricity/Power Supply Models	161
Chapter Five: Conclusion	
5.1 Summary	171
5.2 Conclusion	173
5.3 Recommendations	176
5.4 Contribution to Knowledge	177
5.5 Areas for Further Research	178
Bibliography	
Bio-Data	
University Compliance Certification	