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Zentrum für Europäische Integrationsforschung  
Center for European Integration Studies



Michael Amoah Awuah

# Energy Regionalism in ECOWAS and the EU

A Comparative and Polycentric Governance Study



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Center for European Integration Studies  
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Michael Amoah Awuah

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*To my wise and visionary mother, Joana Juliet Araba Tswinto Adoley Appiah. Your selflessness in nurturing me has made me the man I have become. I am eternally grateful.*

*To my late father, Joseph Oliver Baffour Awuah, who always encouraged me by saying – “never stop learning”.*



## Preface and Acknowledgements

The Faculty of Philosophy of the Rheinische-Friedrich-Wilhelms-Universität Bonn accepted this thesis as a dissertation in December 2020. It captures regional energy processes that are yet to be rolled out especially by 2021 onwards.

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Bonn, May 2021

*Michael Amoah Awuah*





## Table of Contents

List of Figures	15
List of Tables	17
List of Maps	19
List of Abbreviations	21
Chapter 1	27
Introduction	27
1.1 West Africa in the Context of Global Energy	30
1.2 Problem Definition and Justification	38
1.3 Energy Regionalism and Energy Governance	43
1.4 Methodology	50
1.5 Structure of the Dissertation	60
Chapter 2	63
Explicating the Frame: Energy, Political Economy of Energy and Institutions	63
2.1 Conceptualising Energy	63
2.1.1. Energy Infrastructure Systems Revisited	71
2.1.1.1 Infrastructure and Systems	71
2.1.1.2 Social – Ecological -Technical Systems (SETS)	73
2.1.1.3 The Energy System: Types, Resources and Sectors	75
2.1.2. The Energy Commons	77
2.1.3. Morphogenesis of Energy as a Policy Area	86
2.2 International Political Economy (IPE) of Energy: Shaping Energy Policy	91
2.2.1 National Energy Governance	93
2.2.2 Regional Energy Governance	100
2.2.3 Energy Spaces: Intersectionality of the State, Market and Commons	103

*Table of Contents*

2.3	Institutional Analysis of Energy	110
2.3.1	Purpose and Development of the Combined IAD-SES (CIS) Framework	116
2.3.2	Energy and the Combined IAD-SES (CIS) Framework	125
2.3.3	Polycentricity and Energy Governance	128
Chapter 3		140
Energy Regionalism in West Africa		140
3.1	Introduction	140
3.2	West African Energy History: Colonial Regime and Construction of National Systems	143
3.2.1	Anglophone West Africa	148
3.2.1.1	The Colonial Energy Regime	148
3.2.1.2	Constructing National Energy Systems	154
3.2.2	Lusophone West Africa	155
3.2.2.1	The Colonial Energy Regime	155
3.2.2.2	Constructing National Energy Systems	159
3.2.3	Francophone West Africa	164
3.2.3.1	The Colonial Energy Regime	164
3.2.3.2	Constructing National Energy Systems	167
3.3	Evolution of ECOWAS Regionalism	169
3.3.1	ECOWAS Regionalism History Reconsidered	170
3.3.1.1	First Wave: Post-Medieval Empire and Kingdom Building	171
3.3.1.2	Second Wave: Pan-West Africanism	174
3.3.1.3	Third Wave: Decolonisation	177
3.3.1.4	Fourth Wave: Founding of ECOWAS	187
3.3.2	Dual Nature of ECOWAS Regionalism: Collaborative and Consolidative	191
3.4	ECOWAS Energy Regionalism: Past, Present and Future	193
3.4.1	Past Milestones: Cooperation towards a Common West African Energy Region	194
3.4.1.1	Early Milestones towards ECOWAS Energy Cooperation (1960s)	195
3.4.1.2	Global Energy Crisis: Repercussions in West Africa in the 1970s – 1980s	198
3.4.1.3	Processes for Constructing Regional Energy Institutions in the 1990s – 2000s	202

3.4.2	Present Settings: Integration of the ECOWAS Energy Region	205
3.4.2.1	Integration through Regulation of Energy Spaces	206
3.4.2.2	Abundant, Secure and Sustainable Energy Access and Supply	208
3.4.2.3	Energy Security, Energy Justice and Clean Energy Transition Issues	211
3.4.3	Future Prospects: Governance of Cross-Border Energy Networks	214
3.4.3.1	Regional Power Pool	215
3.4.3.2	Regional Petroleum Production and Gas Pipelines	217
3.4.3.3	Regional Energy Governance Issues	218
3.5	Institutional Foundations of ECOWAS Energy Regionalism	223
3.5.1	The Legal Framework of ECOWAS Energy: ECOWAS Treaty and Energy Protocol	223
3.5.1.1	ECOWAS Revised Treaty	223
3.5.1.2	ECOWAS Energy Protocol	225
3.5.2	General Institutions	227
3.5.2.1	Authority of Heads of State and Government	227
3.5.2.2	Council of Ministers	229
3.5.2.3	ECOWAS Commission	230
3.5.2.4	Community Parliament	232
3.5.2.5	ECOWAS Court of Justice	234
3.5.3	Specialised Institutions	235
3.5.3.1	West Africa Power Pool (WAPP)	235
3.5.3.2	ECOWAS Regional Electricity Regulatory Authority (ERERA)	236
3.5.3.3	West African Gas Pipeline (WAGP)	238
3.5.3.4	ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE)	241
3.5.4	Other Actors and Initiatives	242
3.5.4.1	Sustainable Energy for All (SE4ALL)	243
3.5.4.2	West African Energy Leaders Group (W-AELG)	244
3.5.4.3	Energy Partnerships with the EU and US	245
3.6	Recapitulation	247

*Table of Contents*

Chapter 4	249
Energy Regionalism in the European Union	249
4.1 Introduction	249
4.2 The European Union's Energy Path Dependence and Path Creation	251
4.2.1 Northern Europe	255
4.2.2 Central and Eastern Europe	258
4.2.3 Western Europe	262
4.2.4 Southern Europe	266
4.3 Evolution of EU Regionalism	269
4.3.1 EU Regionalism History Retold	270
4.3.1.1 First Wave: Pre-Great War Years	271
4.3.1.2 Second Wave: Mid-War Years	275
4.3.1.3 Third Wave: Post-War Years	278
4.3.1.4 Fourth Wave: Founding of the EU	281
4.3.2 Dual Character of EU Regionalism: Distinctive and Cohesive	291
4.4 EU Energy Regionalism: Past, Present and Future	293
4.4.1 Past Milestones: Cooperation towards a Common European Energy Region	294
4.4.1.1 Early Milestones in EU Energy Cooperation	294
4.4.1.2 External Energy Crises: Middle Eastern Oil and Chernobyl Nuclear Crises in the 1970s – 1980s	298
4.4.1.3 Deregulation of the Energy Sector in the 1990s	300
4.4.2 Present Settings: Integration of the European Energy Region	301
4.4.2.1 Regulation: A Means of Integration for Energy Markets	302
4.4.2.2 Security of Energy Supplies	303
4.4.2.3 Cross-Border Energy Networks: Trans-European Networks for Energy (TEN-E)	305
4.4.2.4 Energy Security Issues	306
4.4.2.5 Energy Justice Issues	309
4.4.2.6 Environmental Sustainability Issues	310
4.4.3 Future Prospects: Governance of the Energy Union	311
4.4.3.1 Current Legal and Situational Context	315
4.4.3.2 Governance Issues	317
4.5 Institutional Foundations of EU Energy Regionalism	320
4.5.1 General Institutions	321
4.5.1.1 European Commission	321

4.5.1.2	The European Council and the Council of the European Union	324
4.5.1.3	European Parliament	327
4.5.1.4	Court of Justice of the European Union	328
4.5.2	Other Actors	332
4.5.2.1	Market and State Actors	332
4.5.2.2	Non-State and Non-Market Actors	336
4.6	Recapitulation	341
Chapter 5		343
Comparative Institutional Analysis of Energy Regimes in ECOWAS and EU: Applying the Combined IAD-SES (CIS) Framework		343
5.1	Introduction	343
5.2	Comparative Regionalism of the Energy Policy Space: Delineating the Network of Focal Action Situations in ECOWAS and EU	348
5.3	Examining the Contextual Setting	350
5.3.1	Physical Setting: Comprised of Resource Units (RU) and Resource Systems (RS)	351
5.3.1.1	ECOWAS	352
5.3.1.2	EU	357
5.3.2	Attributes of the Community: Primary Actors	364
5.3.2.1	ECOWAS	364
5.3.2.2	EU	367
5.3.3	Existing Institutional Setting: Governance System	374
5.3.3.1	ECOWAS	377
5.3.3.2	EU	383
5.4	CIS Framework in Motion: Explaining a Dynamic Process of Regional Energy Governance	387
5.4.1	Regionalisation efforts towards energy governance in pre-1970s period	388
5.4.2	Phase 1: 1970 –1990	395
5.4.3	Phase 2: 1990 – 2000	400
5.4.4	Phase 3: 2000 – 2020	403
5.5	Overview of Case Comparisons: Some Elements of Regional Energy Governance	408

*Table of Contents*

Chapter 6	412
West African Regional Energy Governance: Potential and Obstacles	412
6.1 Introduction	412
6.2 Polycentric Nature of Regional Energy in West Africa	414
6.3 Political Implications of Regional Energy Policy	424
6.4 Social Implications of Regional Energy Policy	429
6.5 Economic and Financing Implications of Regional Energy Policy	433
6.6 Legal, Regulatory and Policy Implications of Regional Energy Policy	438
6.7 Innovation and Technological Implications of Regional Energy Policy	443
6.8 Implications for Bi-Regional Partnerships on Regional Energy Policy	448
Chapter 7	459
Conclusion	459
7.1 Outlook for a Robust and Resilient ECOWAS Energy Governance Trajectory	466
Bibliography	477

## List of Figures

Figure 1. 1	Africa's Population by 2040	31
Figure 1. 2	A Major Shift towards a Modern and Efficient Energy Mix	32
Figure 1. 3	Africa's Natural Gas Turning Point	34
Figure 1. 4	Electricity Access Progress in Sub-Saharan Africa (SSA)	35
Figure 1. 5	Household Electricity Access in ECOWAS (available in percent)	36
Figure 2. 1	McKelvey Box: Principles of Energy Resource Classification, Illustrating the Definition of the Three Fundamental Concepts: Reserves, Resources, and Occurrences	67
Figure 2. 2	Design of Energy Spaces: Nexus of State, Market and Commons	109
Figure 2. 3	Basic Components of the IAD Framework	117
Figure 2. 4	Basic Components of the SES Framework	119
Figure 2. 5	(a) Generic Representation of Combined IAD-SES Framework, and (b) Basic Components of the Combined IAD – SES Framework	121
Figure 2. 6	Action Situations Adjacent to a Focal Action Situation	127
Figure 5. 1	ECOWAS Energy Regionalism, 1970–1990	396
Figure 5. 2	EU Energy Regionalism, 1970–1990	396
Figure 5. 3	ECOWAS Energy Regionalism, 1990–2000	402

*List of Figures*

Figure 5. 4	EU Energy Regionalism, 1990–2000	402
Figure 5. 5	ECOWAS Energy Regionalism, 2000–2020	407
Figure 5. 6	EU Energy Regionalism, 2000–2020	407



## List of Tables

Table 2. 1	Instances of Direct and Indirect Energy Services	70
Table 2. 2	Typology of Goods	82
Table 2. 3	Second and Third -Tier Variables for Diagnosing SESs	123
Table 5. 1	Examples of Relevant EU Energy Actors	368
Table 5. 2	Eleven Energy – Related EU Agencies	369
Table 5. 3	Rule-Making Organisations that Influence Regional Energy in ECOWAS	380
Table 5. 4	Rule-Making Organisations that Influence Regional Energy in EU	385
Table 5. 5	Contextual Factors and Focal Action Situations in ECOWAS and EU Energy Regionalism	390
Table 6. 1	Review of EU and EU Member States Investment Initiatives towards Sub-Saharan African (including West African) Electrification Programs	454



## List of Maps

Map 3. 1	Economic Community of West African States (ECOWAS)	143
Map 4. 1	European Union (2020)	251



## List of Abbreviations

ABN	<i>Autorité du Bassin du Niger</i>
ACER	<i>Agency for the Cooperation of Energy Regulators</i>
ACP	<i>Africa, the Caribbean, and Pacific countries</i>
ADR	<i>Arbitration and Dispute Resolutions</i>
AEA	<i>Association des Etudiants Africains</i>
AEEP	<i>Africa-EU Energy Partnership</i>
AfCFTA	<i>African Union's Continental Free Trade Area</i>
AGED	<i>Association Générale des Etudiants de Dakar</i>
AOF	<i>Afrique Occidentale Française</i>
ARE	<i>Agência de Regulação Económica</i>
ASEAN	<i>Association of Southeast Asian Nations</i>
AU	<i>African Union</i>
BDEW	<i>German Association of Energy and Water Industries</i>
BP	<i>British Petroleum</i>
BCM	<i>Billion Cubic Meters of Natural Gas</i>
CCJA	<i>Common Court of Justice and Arbitration</i>
CCUS	<i>Carbon Capture Utilization and Storage</i>
CEB	<i>Communauté Électricité du Benin</i>
CEE	<i>Central and Eastern Europe</i>
CEER	<i>Council of European Energy Regulators</i>
CEGB	<i>Central Electricity Generating Board</i>
CIE	<i>Cote d'Ivoire Energies</i>
CIS	<i>Combined IAD-SES</i>
CLSG	<i>Côte d'Ivoire-Liberia-Sierra Leone-Guinea</i>
COMELEC	<i>Comité Maghrébin de l'Electricité</i>
COP	<i>Conference of the Parties</i>
CPR	<i>Common Pool Resource</i>
DER	<i>Distributed Energy Resource</i>
EAGB	<i>Guinea-Bissau Electricity and Water Corporation</i>
EAPP	<i>East African Power Pool</i>
EBID	<i>ECOWAS Bank for Investment and Development</i>

*List of Abbreviations*

ECN	<i>Electricity Corporation of Nigeria</i>
ECOWAS	<i>Economic Community of West African States</i>
ECREEE	<i>ECOWAS Centre for Renewable Energy and Energy Efficiency</i>
ECSC	<i>European Coal and Steel Community</i>
EDC	<i>European Defence Community</i>
EDF	<i>Electricite de France</i>
EEC	<i>European Economic Community</i>
EEEP	<i>ECOWAS Energy Efficiency Policy</i>
EFSI	<i>European Fund for Strategic Investments</i>
EFTA	<i>European Free Trade Association</i>
EIB	<i>European Investment Bank</i>
EITI	<i>Extractive Industries Transparency Initiative</i>
ELECTRA	<i>Empresa de Electricidad e Agua</i>
ENACOL	<i>National Fuel Company of Cape Verde</i>
ENI	<i>Ente Nazionale Idrocarburi</i>
ENTSO	<i>European Network of Transmission System Operators</i>
ENTSO-E	<i>European Network of Transmission System Operators-Electricity</i>
ENTSO-G	<i>European Network of Transmission System Operators- Gas</i>
ERCA	<i>ECOWAS Regional Competition Authority</i>
EREP	<i>ECOWAS Regional Policy for Renewable Energy</i>
ERERA	<i>ECOWAS Regional Electricity Regulatory Authority</i>
ERGEG	<i>European Regulators' Group for Electricity and Gas</i>
EU	<i>European Union</i>
EU DSO	<i>European Union Distribution System Operators</i>
EURATOM	<i>European Atomic Energy Community</i>
FWA	<i>French West Africa</i>
FSRU	<i>Floating Storage Regasification Unit</i>
GAEC	<i>Ghana Atomic Energy Commission</i>
GATT	<i>General Agreement on Tariffs and Trade</i>
GDF	<i>Gaz de France</i>
GDP	<i>Gross domestic product</i>
GEA	<i>Global Energy Assessment</i>
GHG	<i>Greenhouse Gases</i>
GIE	<i>Gas Infrastructure Europe</i>
GW	<i>Gigawatts (one billion watts)</i>

*List of Abbreviations*

IAD	<i>Institutional Analysis and Development</i>
IAEA	<i>International Atomic Energy Agency</i>
ICA	<i>Infrastructure Consortium for Africa</i>
ICESP	<i>Integrated Community Energy System Provider</i>
ICES	<i>Integrated Community Energy System</i>
ICSID	<i>International Centre for the Settlement of Investment Disputes</i>
IEA	<i>International Energy Agency</i>
IIASA	<i>International Institute for Applied Systems Analysis</i>
IMF	<i>International Monetary Fund</i>
IOT	<i>internet of things</i>
IPCC	<i>Intergovernmental Panel on Climate Change</i>
IPE	<i>International Political Economy</i>
LNG	<i>Liquefied Natural Gas</i>
LPG	<i>Liquefied Petroleum Gas</i>
MAS	<i>Mission d'Aménagement du Senegal</i>
MEND	<i>Movement for the Emancipation of the Niger-Delta</i>
MOSOP	<i>Movement for the Survival of Ogoni People</i>
MW	<i>Megawatts (one million watts)</i>
MTPA	<i>Million Tonnes Per Annum of LNG</i>
MMSCFD	<i>Million Standard Cubic Feet per Day</i>
NAFTA	<i>North American Free Trade Agreement</i>
NCBWA	<i>National Congress of British West Africa</i>
NEDECO	<i>Netherlands Engineering Consultants</i>
NESCO	<i>Nigeria Electricity Supply Company</i>
NGC	<i>Nigeria Gas Company</i>
NIASES	<i>New Institutional Analysis of Social-Ecological Systems</i>
NIEO	<i>New International Economic Order</i>
NNPC	<i>Nigerian National Petroleum Corporation</i>
OECD	<i>Organisation for Economic Coordination and Development</i>
OEEC	<i>Organization for European Economic Cooperation</i>
OHADA	<i>Organization for the Harmonization of Business Law in African</i>
OLADE	<i>Organización Latinoamericana de Energía</i>
OMVG	<i>Organisation pour la mise en valeur du fleuve Gambie /Gambia River Basin Organization</i>
OMVS	<i>Organisation pour la mise en valeur du fleuve Sénégal/ Senegal River Basin Organization</i>

*List of Abbreviations*

<i>OPEC</i>	<i>Organization of the Petroleum Exporting Countries</i>
<i>PAIGC</i>	<i>African Party for the Independence of Guinea-Bissau and Cape Verde</i>
<i>PAICV</i>	<i>African Party for the Independence of Cape Verde</i>
<i>PAYG</i>	<i>Pay-as-you-go</i>
<i>PEAC</i>	<i>Pool Energétique d'Afrique Centrale</i>
<i>PV</i>	<i>Photovoltaic</i>
<i>PWD</i>	<i>Public Works Department</i>
<i>RWE</i>	<i>Rhenish-Westphalian Electric</i>
<i>SAPP</i>	<i>Southern African Power Pool</i>
<i>SES</i>	<i>Socio-Ecological Systems</i>
<i>SETS</i>	<i>Social-Ecological-Technical System</i>
<i>SOMAIR</i>	<i>Société des Mines de l'Air</i>
<i>SONICHAR</i>	<i>Société Nigérienne du Charbon Anou Araren</i>
<i>SSA</i>	<i>Sub-Saharan Africa</i>
<i>TAGP</i>	<i>Trans-ASEAN Gas Pipeline</i>
<i>TEN-E</i>	<i>Trans-European Networks for Energy</i>
<i>TFEU</i>	<i>Treaty on the Functioning of the European Union</i>
<i>TOR</i>	<i>Tema Oil Refinery</i>
<i>UCTE</i>	<i>Union for the Coordination of the Transmission of Electricity</i>
<i>UCPTE</i>	<i>Union for the Coordination of Production and Transmission of Electricity</i>
<i>UHEA</i>	<i>Union Hydro-Electrique Africaine</i>
<i>UN</i>	<i>United Nations</i>
<i>UNCITRAL</i>	<i>United Nations Commission of International Trade Law</i>
<i>UNDESA</i>	<i>United Nations Department for Economic and Social Affairs</i>
<i>UNECA/ECA</i>	<i>United Nations Economic Commission for Africa</i>
<i>UNFCCC</i>	<i>United Nations Framework Convention on Climate Change</i>
<i>USAID</i>	<i>United States Agency for International Development</i>
<i>USGS</i>	<i>US Geological Survey</i>
<i>VALCO</i>	<i>Volta Aluminium Company</i>
<i>VRA</i>	<i>Volta River Authority</i>
<i>W-AELG</i>	<i>West African Energy Leaders Group</i>
<i>WAGP</i>	<i>West African Gas Pipeline</i>
<i>WAGPA</i>	<i>West African Gas Pipeline Authority</i>
<i>WAGS</i>	<i>West African Grid System</i>
<i>WAINPG</i>	<i>West African Integrated Nuclear Power Group</i>



*List of Abbreviations*

WANS	<i>West African National Secretariat</i>
WAPP	<i>West African Power Pool</i>
WAPCo	<i>West African Gas Pipeline Company Limited</i>
WASU	<i>West African Students' Union</i>
WATM	<i>West African Transform Margin</i>
WERPO	<i>Wave Electricity Renewable Power Ocean</i>

