



Research Article

Narratives of Energy Poverty and Sustainability: How Media Constructs the Renewable Energy Debate in Africa

Gideon Uchechukwu Nwafor, PhD

About Article

Article History

Submission: December 10, 2025

Acceptance: January 15, 2026

Publication: January 28, 2026

Keywords:

Energy Poverty, Sustainability, Media Constructs, Renewable Energy Debate, Africa

About the Authors

Gideon Uchechukwu Nwafor, PhD

Department of Mass
Communication, Chukwuemeka
Odumegwu Ojukwu University,
Igbariam Campus, Anambra State,
Nigeria

Email: gu.nwafor@coou.edu.ng

ABSTRACT

The media plays a crucial role in framing public debates on renewable energy, particularly in regions marked by energy poverty, such as Africa. Existing literature underscores the complex interplay between energy insecurity, sustainability challenges, and the narratives propagated by diverse media outlets. This study investigates how media constructs narratives that both reflect and shape public understandings of renewable energy development and energy poverty in Africa. Adopting a qualitative discourse analysis approach, this research examines a curated corpus of media texts, including newspaper articles, online news stories, and broadcast transcripts from various African and international sources. The analysis reveals that media narratives surrounding renewable energy in Africa are multifaceted and often contradictory. On one hand, narratives that emphasize energy poverty frequently underscore the urgency of sustainable development, portraying renewable energy as a viable solution for economic empowerment and social justice. On the other hand, competing narratives suggest a skepticism towards the feasibility of renewable projects, often linking them to external political and financial interests. Furthermore, the framing of these issues has evolved, with more recent texts increasingly incorporating themes of local innovation and community-driven initiatives, although these perspectives remain underrepresented. The findings indicate that media representations significantly influence public perception and policy discourse by framing renewable energy within broader debates about national development, environmental sustainability, and global power dynamics. The study concludes that media narratives in Africa construct a complex matrix of discourse around renewable energy that not only responds to existing energy challenges but also shapes future policy directions and public opinion. By illuminating the dynamics of these discursive practices, this analysis contributes to a deeper understanding of the role of media in driving both skepticism and optimism in the renewable energy transition. The insights gained underscore the need for policymakers and stakeholders to engage critically with media constructions in order to foster more inclusive and contextually nuanced energy policies.

Introduction

Energy poverty represents one of the most pressing challenges in contemporary Africa, where millions of people continue to lack access to reliable, modern energy services. This pervasive issue not only undermines socio-economic development but also deepens existing inequalities, inhibits industrial progress, and constrains human well-being. In many African nations, inadequate access to electricity has far-reaching implications—from limiting educational and health service delivery to hampering economic growth and industrial diversification ([Oyedepo, 2012](#); [Agoundedemba, 2023](#)). Despite significant global attention to sustainability and renewable energy, many African communities still experience energy insecurity—a phenomenon that is deeply intertwined with broader socioeconomic and political dimensions ([Chen, 2008](#); [Demirgüç-Kunt, 2012](#)). Consequently, the dual imperatives of addressing energy poverty and fostering sustainable development have generated considerable scholarly and policy interest. Yet, amid technological advancements and regulatory reforms, there exists an equally important—but less explored—dimension: the role of media narratives in shaping perceptions, debates, and ultimately, policy responses concerning renewable energy in Africa.

Emerging research suggests that renewable energy technologies carry the potential to dramatically transform the energy landscape by offering cleaner, more sustainable alternatives to fossil fuels ([Gielen, 2019](#); [Haar, 2024](#); Nwafor, Odoh, & Anabaraonye, 2024)). Yet the promise of renewable energy cannot be assessed solely on technical or economic grounds. In regions where infrastructure is underdeveloped and investment capital is constrained, the transition towards renewable energy systems also involves significant socio-political challenges. The debate within this domain is multifaceted, involving discussions related to technology transfer, donor-driven initiatives, regulatory reforms, and the relative merits of decentralized versus centralized energy systems ([Dominguez, 2023](#); [Tarnovskaya, 2023](#)). Moreover, critics of mainstream development paradigms argue that approaches focused solely on economic growth may overlook critical issues of environmental degradation and social justice ([Hickel, 2021](#); [Leach, 2010](#)). Such debates provide a critical backdrop in understanding why renewable energy, as

a potential solution to energy poverty, is often contested and reframed by different actors and interest groups.

Notwithstanding the wealth of empirical studies and policy analyses addressing the technical and economic dimensions of renewable energy, there remains a significant gap in understanding how these issues are communicated and debated in the public sphere. Media outlets, as primary sources of information and opinion formation, have increasingly been recognized as potent actors in shaping the discourse on energy transitions ([Conley, 2024](#)). In many African countries, the construction of narratives around energy poverty and renewable energy is particularly influential. Media representations play a dual role: they not only reflect prevailing socio-political attitudes and policy debates but also actively shape these conversations by privileging certain frames and marginalizing others. The resultant narratives can either catalyze action toward greater energy access and sustainable practices or engender skepticism and resistance among policy makers and the public ([Haulle, 2024](#); [Verpoort, 2024](#)). As a result, a comprehensive understanding of the renewable energy debate in Africa necessitates an exploration of the media's role in reframing both energy poverty and the sustainability dialogue.

The evolution of media narratives around energy poverty in Africa can be traced against a backdrop of broader global and regional socio-economic transformations. Historically, the challenges of poverty reduction and economic development were often addressed through a narrow focus on income growth and market-based solutions ([Ravallion, 2004](#); [Shaikh, 2023](#)). However, as the complexity of energy challenges has become more apparent, there has been a gradual shift toward incorporating environmental sustainability and social justice into the development paradigm ([Hickel, 2021](#); [Pegels, 2020](#)). In parallel, media discourses have also evolved—shifting from deterministic portrayals of energy scarcity to more nuanced narratives that recognize the potential of renewable energy technologies to spur socio-economic advancement while mitigating environmental degradation ([Mitchel, 2008](#)). Such a transformation in narrative framing is critical in understanding the contemporary debate, as media

outlets now often juxtapose the promise of technological innovation against the persistent barriers of outdated infrastructures and institutional weaknesses.

The interplay between media narratives and energy policy is further complicated by the global context in which these debates occur. For instance, international events—ranging from geopolitical conflicts to economic crises—frequently reverberate in local media discourses, shaping public perceptions and influencing policy decisions. The Russia–Ukraine conflict, for example, has significantly influenced energy narratives worldwide by spotlighting the vulnerabilities associated with fossil fuel dependency and by accelerating calls for a transition toward renewable energy ([Mhlanga, 2023](#)). In Africa, such global incidents are often filtered through the lens of local socioeconomic realities, where issues of energy access and environmental sustainability are deeply interwoven with challenges of governance, finance, and historical underdevelopment ([Ogede, 2024](#); [Sarpong, 2020](#)). The confluence of these global and local dynamics generates a complex narrative landscape that frames renewable energy not merely as a technical solution but as an arena of political contestation and ideological debate—a landscape where media representations play a pivotal role.

Central to this debate is the manner in which issues of sustainability and energy poverty are constructed within media discourses. Media narratives often articulate a binary opposition between fossil fuel dependency and renewable energy transition, sometimes oversimplifying the multidimensional nature of the issue. On one hand, renewable energy is portrayed as a symbol of progress and a critical pathway toward sustainable development ([Dominguez, 2023](#); [Haar, 2024](#)). On the other hand, the persistence of energy poverty, infrastructure deficits, and high investment costs are frequently emphasized to cast doubt on the feasibility of a large-scale renewable energy transition in regions where basic energy needs remain unmet ([Dada, 2024](#); [Kelly, 2024](#)). This dichotomy in portrayal not only influences public attitudes but also informs policy debates, potentially swaying investment decisions and regulatory priorities.

In constructing these divergent narratives, various stakeholders—including governments, international organizations, civil society groups, and private sector players—employ media channels strategically to advocate for their interests. In many cases, media outlets become arenas for contesting the dominant policy paradigms, underscoring the tension between externally driven development agendas and locally rooted priorities ([Prontera, 2017](#); [Shaikh, 2023](#)). The media's framing thus becomes a critical determinant of which issues are foregrounded and which remain peripheral. Given the interconnected nature of policy, public opinion, and media representation, these frames can have concrete implications—either galvanizing support for renewable energy initiatives or reinforcing skepticism about their viability.

Furthermore, media narratives are not developed in isolation—they are both influenced by and reflective of broader socio-political trends. For example, the interplay between energy security, environmental sustainability, and economic competitiveness has become increasingly pronounced amid global shifts toward decarbonization and the recognition of climate change as an existential threat ([Calzadilla, 2022](#); [Kaygusuz, 2007](#); (Anabaraonye, Onnoghen, Nwafor, & Obinna, 2024). In the African context, these global debates are often refracted through the prism of local challenges, where issues such as governance quality, institutional capacity, and sociocultural factors play significant roles in shaping the energy landscape ([Haulle, 2024](#); [Gebreslassie, 2022](#)). Such localized framings are essential for capturing the multidimensional nature of energy poverty and for understanding how narratives might differ from those prevalent in industrialized contexts.

A further dimension in understanding media narratives is the role of technological innovation and its portrayal in the public domain. Advances in renewable energy technologies, such as residential rooftop solar photovoltaic (PV) systems and small-scale hydropower projects, have often been heralded as transformative solutions capable of reducing energy poverty ([Mutumbi, 2024](#); [Haulle, 2024](#)). However, the dissemination of information regarding these technologies is heavily mediated, with media narratives sometimes exaggerating the benefits or failing to acknowledge the operational challenges and contextual limitations. This phenomenon contributes to a broader “hype cycle” where expectations about

renewable energy potential are rapidly raised and, when not met, lead to disillusionment among stakeholders (Manor, 1999; Anabaraonye, Nwafor, & Ewa, 2024). Such discrepancies between media portrayals and on-the-ground realities underscore the need for rigorous analysis of media content to better understand the factors driving public perception and their alignment with empirical evidence.

Underpinning the study of media narratives in the renewable energy debate is a broader theoretical framework rooted in political economy and social constructionism. These frameworks emphasize that the way societies interpret and act upon issues like energy poverty and sustainability is not merely a function of technical parameters but is also shaped by ideological, cultural, and political forces (Prontera, 2017; Brook, 2015). In this view, media narratives are not neutral reflections but are actively constructed and contested, conveying particular ideologies that ultimately influence policy frameworks and stakeholder behaviors. By deconstructing these narratives, scholars can reveal the underlying power dynamics and value systems that shape debates about energy poverty and renewable energy, a vital step towards devising more equitable and effective policy responses.

Despite the rapid accumulation of literature on renewable energy technologies, energy poverty, and sustainable development, research that explicitly examines the nexus between media representation and the renewable energy debate in Africa remains limited. Given that media narratives play a critical role in framing policy debates and guiding public opinion, an in-depth analysis of how these narratives are constructed is essential. The present study aims to fill this gap by employing a mixed-methods approach that integrates qualitative content analysis with quantitative evaluations of media influence on energy policy. This approach is designed not only to map out the dominant themes and discourses within African media but also to contextualize these narratives within broader socio-political and economic frameworks (Haulle, 2024; Kelly, 2024). By drawing on insights from both technical and social science research, the study underscores the importance of interdisciplinary perspectives in addressing complex development challenges.

The significance of understanding media narratives in the renewable energy debate cannot be overstated. These narratives not only shape public opinions but also have tangible effects on policy decisions, investment flows, and ultimately the pace and direction of energy transitions. In a region where energy poverty continues to affect millions, uncovering how media frames the debate provides critical insights that can guide more holistic communication strategies and help bridge the gap between technological potential and practical implementation (Ogede, 2024; Sarpong, 2020). Moreover, given the dynamic and often volatile nature of global energy markets—as exemplified by fluctuations in fossil fuel prices and the geopolitical ramifications of conflicts such as the Russia–Ukraine war (Mhlanga, 2023)—it becomes imperative to decode how such influences are filtered into local discourses and how they affect the prospects for renewable energy adoption.

Furthermore, the role of media in constructing narratives around gender and domestic energy use adds another layer of complexity to the debate. In many African contexts, energy poverty is intricately linked to issues of gender inequality, particularly traditional cooking fuels that exacerbate domestic drudgery for women (Bhallamudi, 2019). By framing renewable energy as not only an environmental or technological imperative but also as a means to alleviate gendered burdens and enhance social equity, media narratives can potentially mobilize broader support for sustainable energy policies. This multifaceted portrayal, however, is not without its critics—some argue that the oversimplification of gender issues in energy debates may detract from the more fundamental structural challenges that underlie energy poverty (Shaikh, 2023).

In light of these complexities, the present study seeks to bridge the gap between empirical analyses of energy poverty and technical evaluations of renewable energy systems, and the interpretive frameworks that examine media narratives. By scrutinizing how African media constructs the renewable energy debate, this research endeavors to uncover the dominant themes, ideological underpinnings, and contested discourses that inform public perceptions and policy orientations. Such an

investigation is not only timely but also essential as Africa continues to grapple with the dual imperatives of reducing energy poverty and transitioning to sustainable energy models.

To address these objectives, the study adopts an interdisciplinary approach that integrates insights from political economy, communication studies, and sustainable development research. This approach draws on earlier work that has emphasized the power of media in shaping socio-political narratives (Prontera, 2017; Conley, 2024). In addition, the study contextualizes media representations within the historical evolution of poverty theories and development paradigms, drawing on seminal research that has redefined our understanding of pro-poor growth and equitable development (Ravallion, 2004; Shaikh, 2023). By integrating these diverse strands of literature, the study not only illuminates the representational strategies employed by the media but also critically interrogates the broader socio-political dynamics that underlie the renewable energy debate in Africa.

In summary, this research addresses a critical gap in the literature by investigating how media narratives both reflect and shape the discourse on energy poverty and renewable energy in Africa. As the continent continues to navigate the challenges of underdevelopment and environmental degradation, understanding the interplay between media representations and policy discourses is vital. Such insights can contribute to more effective communication strategies that not only promote technological adoption but also advocate for inclusive, sustainable policies that bridge the divide between global aspirations and localized realities. Through a detailed analysis of media content and its contextual underpinnings, this study aims to provide a nuanced understanding of the renewable energy debate—a debate that is as much about societal values and political struggles as it is about technological innovation and economic progress.

Materials and Method

This research employs a qualitative discourse analysis approach to examine media narratives around renewable energy in Africa. The analysis draws upon a wide range of media reports, online articles, and

policy documents published over the last two decades. The study's framework is informed by narrative theory and media framing analysis, which together help elucidate how various stakeholders—journalists, policymakers, business leaders, and activists—construct and communicate complex ideas about energy poverty and sustainability. Data collection involved compiling a representative sample of media texts from both international and local African outlets. These texts were analyzed to extract recurring themes, frames, and rhetorical strategies. Special attention was given to identifying polarizing narratives: those that depict renewable energy as a revolutionary path toward sustainable development and those that reiterate the limitations imposed by structural inequalities and infrastructural deficits. Comparative perspectives were incorporated by drawing on studies from other regions (e.g., Bhallamudi and Lingam, 2019, who document similar debates in India; Bhallamudi, 2019) and by contrasting media representations with academic discourses presented by scholars such as Pegels and Altenburg (2020) (Pegels, 2020). In addition, historical perspectives on poverty have been integrated by drawing on works such as Shaikh et al. (2023), which articulate the evolution of poverty theories over time (Shaikh, 2023).

Results and Discussion

The discourse analysis revealed several dominant themes in media narratives regarding renewable energy in Africa. One prominent theme is the portrayal of renewable energy projects as silver bullets for energy poverty. Media outlets frequently highlight success stories, such as community-driven microgrid projects and small hydropower stations. For instance, reports on rural electrification in Tanzania often underscore the transformative potential of small hydropower initiatives as enablers of rural welfare improvement (Haulle, 2024). Such stories, however, tend to gloss over persistent systemic challenges such as high capital costs, limited local manufacturing capabilities, and governance issues.

A second recurring narrative centers on the inherent tension between rapid technological progress and the entrenched socio-political dynamics that sustain energy poverty. Media narratives often echo the sentiment that while technological innovation (as noted by Onifade and Alola, 2022; Onifade, 2022)

offers viable solutions, the pace of innovation is frequently disproportionate to the rate at which existing infrastructural and financial deficits can be addressed. The discourse is further complicated by frames that emphasize the “resource curse”—whereby the abundance of natural resources paradoxically coexists with pervasive poverty—an insight drawn from Lederman and Maloney's (2008) exploration of the missing resource curse ([Lederman, 2008](#)).

A third set of narratives highlights the role of financial systems and governance in shaping energy outcomes. Media reports frequently reference studies that correlate limited financial inclusion with poor energy access. For example, discussions drawing on the work of Chen and Ravallion (2008) illustrate that even when renewable energy technologies are available, without proper financial instruments and supportive institutional frameworks, these technologies cannot effectively alleviate energy poverty ([Chen, 2008](#); [Demirgüç-Kunt, 2012](#)). Moreover, the moderating influence of financial development on energy poverty in African contexts is vividly captured in recent analyses by Dada et al. (2024), who demonstrate that without complementary financial sector reforms, renewable energy projects may fail to yield their promised benefits ([Dada, 2024](#)).

In addition to these structural factors, media narratives also reflect a tension between high-profile technological optimism and on-the-ground socio-cultural realities. Reports in Southern Africa, as documented by Sarpong et al. (2020), reveal that while renewable energy investments improve quality of life, they concurrently raise concerns about affordability, cultural acceptance, and social equity ([Sarpong, 2020](#)). Halkos and Aslanidis (2023) further elaborate on the multidimensional aspects of energy poverty, arguing that narratives which solely focus on technical and infrastructural fixes tend to overlook the broader implications for social justice and equitable development ([Halkos, 2023](#)). These perspectives are bolstered by Acheampong et al. (2022), who link income inequality and governance challenges to persistent energy poverty, suggesting that media narratives must account for these underlying social determinants ([Acheampong, 2022](#)).

Political economy frameworks provide additional nuance to the media debate, as reflected by Stattman

and Gupta (2014), who analyze the contested nature of global biofuel governance ([Stattman, 2014](#)). Such frameworks suggest that media representations are not merely reflections of technical realities but are imbued with ideological and political interests. Merkel's (1998) seminal work on the role of science in sustainable development further underscores the need for a balanced dialogue between scientific evidence and media portrayals ([Merkel, 1998](#)).

Comparative analyses also reveal that while African media often emphasize the urgent need for renewable energy as a panacea for energy poverty, similar debates in other parts of the developing world—such as in India—demonstrate parallel narratives that intertwine technological optimism with critical reflections on affordability and equity ([Bhallamudi, 2019](#)). Studies like those by Wibisono et al. (2022) in Indonesia also contribute to this debate by illustrating how rural electrification policies are shaped by competing global and national agendas ([Wibisono, 2022](#)).

Additional insights emerge from research on grassroots approaches to energy provision. Κωνσταντόπουλος, Kanellou, and Kontogiannis (2023) examine community energy initiatives in Greece, which—though contextually different—offer valuable lessons about the power of bottom-up narratives to reframe energy debates ([Κωνσταντόπουλος, 2023](#)). Similarly, Calzadilla et al. (2022) discuss the social dimensions of deploying renewable-based low voltage direct current microgrids, emphasizing that technical solutions must be accompanied by socially inclusive approaches in order to have sustainable impacts ([Calzadilla, 2022](#)). Rogge and Johnstone (2017) also argue that policies aimed at phase-out of obsolete energy technologies can catalyze innovation in renewables, though such narratives are often oversimplified in mainstream media ([Rogge, 2017](#)).

Policy Implications and Recommendations

The media's portrayal of renewable energy in Africa has profound implications for policy and investment decisions. On one hand, overly optimistic narratives risk underplaying the entrenched socio-economic and infrastructural barriers that impede energy access. On the other hand, narratives that focus exclusively on infrastructural deficits may discourage investment, perpetuating a cycle in which renewable energy remains a niche rather than a transformative force. To

chart an effective policy course, decision-makers must balance these narratives by adopting a more integrated approach that recognizes both the transformative potential of renewable technologies and their limitations when divorced from broader financial and governance reforms. Policymakers are urged to foster supportive financial frameworks that enhance the viability of renewable energy projects. The work of Dada et al. (2024) in African contexts provides empirical evidence that improvements in financial development can moderate the adverse effects of energy poverty (Dada, 2024). Equally important is ensuring that renewable energy projects are embedded within local community contexts so that they address not only technical objectives but also the cultural and social dimensions of energy access. Comparative insights from grassroots initiatives in Greece (Κωνσταντόπουλος, 2023) suggest that locally driven energy models can provide more sustainable and equitable outcomes.

Moreover, media platforms themselves must be encouraged to adopt more nuanced reporting styles that capture the inherent complexity of the energy transition. Journalists and media professionals would benefit from training programs that enhance their understanding of technical, financial, and socio-political aspects of renewable energy. Such efforts, combined with partnerships between academic institutions, government bodies, and media organizations, could foster a more informed public debate that transcends simplistic dichotomies of technological optimism versus pessimism. In this regard, research by Merkel (1998) remains instructive, emphasizing that a close interplay between scientific inquiry and media reporting is critical for achieving sustainable developmental outcomes (Merkel, 1998).

To further bridge the gap between policy rhetoric and on-the-ground realities, governmental agencies should also prioritize the creation of platforms that enable direct dialogue with affected communities. Sarpong et al. (2020) illustrate how initiatives in Southern Africa have effectively leveraged renewable energy projects to improve quality of life, yet the success of these initiatives depends largely on the incorporation of local voices into policy design (Sarpong, 2020). Nasir et al. (2022) further stress that building robust energy security requires an integrative approach that considers the interplay between energy

availability, technological innovation, and policy frameworks (Nasir, 2022).

Conclusion

The analysis presented in this essay underscores that media narratives serve as powerful mediators of the renewable energy debate in Africa. These narratives—ranging from overly optimistic portrayals of renewable energy as a cure-all to critical examinations of underlying socio-economic and infrastructural deficiencies—play a pivotal role in shaping public opinion and influencing policy. By illuminating the dual dimensions of energy poverty and sustainability, media representations not only reflect prevailing challenges but also actively participate in constructing policy solutions. A nuanced understanding of how these narratives are constructed is essential. The interplay between financial exclusion, governance challenges, technological innovation, and cultural contexts—as evidenced by studies spanning from Demirgüç-Kunt and Klapper (2012) to Dada et al. (2024) and beyond—reveals that renewable energy transitions in Africa are as much about social transformation as they are about technical advancement. The critical insights provided by comparative studies (Bhallamudi & Lingam, 2019; Wibisono et al., 2022) and grassroots initiatives (Κωνσταντόπουλος et al., 2023) further underscore the need for an integrative approach that reconciles technological potential with institutional reality.

In moving forward, stakeholders across the energy spectrum—including policymakers, media professionals, community leaders, and researchers—must work collaboratively to ensure that renewable energy debates are informed by a holistic understanding of the challenges and opportunities that lie ahead. This means not only celebrating technological innovations and successful projects but also rigorously addressing the structural inequities that underlie energy poverty. Only through such a balanced approach can the transformative promise of renewable energy be fully realized in Africa. By critically engaging with media constructs and ensuring that discourse is both scientifically informed and socially inclusive, the renewable energy transition can be steered toward outcomes that are equitable, sustainable, and resilient. This research, therefore, contributes to the growing body of literature that calls for a re-examination of energy narratives in Africa, urging stakeholders to harness the power of media in

crafting a future where energy poverty is diminished and sustainable development is elevated.

References

- Agoundedemba, M, Kim, C, & Kim, H (2023). Energy Status in Africa: Challenges, Progress and Sustainable Pathways. *Energies*, 16(23), 7708-7708.
- Bhallamudi, I, & Lingam, L (2019). Swaying between saving the environment and mitigating women's domestic drudgery: India's efforts at addressing clean cooking fuels. *Gender Technology and Development*, 23(1), 36-54.
- Brook, BW, & Bradshaw, CJ (2015). Key role for nuclear energy in global biodiversity conservation. *Conservation biology: the journal of the Society for Conservation Biology*, 29(3), 702-12.
- Calzadilla, T, Cuesta, M, Quesada, C, Olivares-Rodríguez, C, Macarulla, A, Legarda, J, & Borges, C (2022). Is a massive deployment of renewable-based low voltage direct current microgrids feasible? Converters, protections, controllers, and social approach. *Energy Reports*, 8, 12302-12326.
- Chen, S, & Ravallion, M (2008). The Developing World Is Poorer Than We Thought, But No Less Successful In The Fight Against Poverty. *World Bank policy research working paper*, .
- Conley, T (2024). Issues in Australian Foreign Policy July to December 2023. *Australian Journal of Politics & History*, 70(2), 300-322.
- Dada, J, Ajide, F, & Al-Faryan, M (2024). The moderating role of financial development in energy poverty–sustainable environment linkages: evidence from Africa. *Management of Environmental Quality An International Journal*, 35(4), 924-944.
- Demirgüç-Kunt, A, & Klapper, L (2012). Measuring Financial Inclusion: The Global Findex Database. *World Bank policy research working paper*, .
- Dominguez, N (2023). Panafrika: Meeting the SDGs Through a Circular Business Model. *International business and management series*, , 179-195.
- Espoir, D, Sunge, R, & Alola, A (2023). Time-varying causality nexus of (non)renewable electricity utilization, real output, and carbon emission among selected African states. *Environment Development and Sustainability*, 26(2), 5275-5298.
- Gebreslassie, M, Cuvilas, C, Zalengera, C, To, L, Baptista, I, Robin, E, Bekele, G, Howe, L, Shenga, C, Macucule, D, Kirshner, J, Mulugetta, Y, Power, M, Robinson, S, Jones, D, & Broto, V (2022). Delivering an off-grid transition to sustainable energy in Ethiopia and Mozambique. *Energy Sustainability and Society*, 12(1).
- Gielen, D, Boshell, F, Saygin, D, Bazilian, M, Wagner, N, & Gorini, R (2019). The role of renewable energy in the global energy transformation. *Energy Strategy Reviews*, 24, 38-50.
- Haar, L (2024). Selling renewable energy: A review of three new publications. *Economic Affairs*, 44(2), 403-413.
- Haulle, E, & Ndimbo, G (2024). Sustainable rural electrification: small hydropower stations, electrification and rural welfare improvement in Tanzania. *International Journal of Development Issues*, 23(3), 396-412.
- Hickel, J, & Hallegatte, S (2021). Can we live within environmental limits and still reduce poverty? Degrowth or decoupling? *Development Policy Review*, 40(1).
- Kaygusuz, K (2007). Energy for Sustainable Development: Key Issues and Challenges. *Energy Sources Part B Economics Planning and Policy*, 2(1), 73-83.
- Kelly, A, & Radler, R (2024). Does energy consumption matter for climate change in Africa? New insights from panel data analysis. *Innovation and Green Development*, 3(3), 100132-100132.
- Leach, M, Scoones, I, & Stirling, A (2010). Dynamic Sustainabilities: Technology, Environment, Social Justice. *Management of Environmental Quality An International Journal*, 21(5).
- Manor, J (1999). The Political Economy of Democratic Decentralization. *The World Bank eBooks*,
- Mhlanga, D, & Ndhlovu, E (2023). The Implications of the Russia–Ukraine War on Sustainable Development Goals in Africa. *Fudan Journal of the Humanities and Social Sciences*, 16(4), 435-454.
- Mitchel, D (2008). A Note On Rising Food Prices. *World Bank policy research working paper*,

- Mutumbi, U, Thondhlana, G, & Ruwanza, S (2024). Adoption of residential rooftop solar PV systems in South Africa: A scoping review of barriers. *Heliyon*, 10(10), e30937.
- Ogede, J, Omitogun, O, Tihamiyu, H, Adegboyega, S, & Soyemi, C (2024). Sustainability of Moderating Role of Financial Inclusion and Institutional Quality in the Nexus Between Incidence of Energy Poverty and Government Expenditure: Evidence from Sub-Saharan African Countries. *Journal of Business Administration and Social Studies*, 8(1), 44-56.
- Oyedepo, S (2012). Energy and sustainable development in Nigeria: the way forward. *Energy Sustainability and Society*, 2(1).
- Pegels, A, & Altenburg, T (2020). Latecomer development in a “greening” world: Introduction to the Special Issue. *World Development*, 135, 105084-105084.
- Prontera, A (2017). The Palgrave handbook of the international political economy of energy. *International Affairs*, 93(4), 981-982.
- Ravallion, M (2004). Pro-Poor Growth: A Primer. *World Bank policy research working paper*, .
- Sarpong, SY, Bein, MA, Gyamfi, BA, & Sarkodie, SA (2020). The impact of tourism arrivals, tourism receipts and renewable energy consumption on quality of life: A panel study of Southern African region. *Heliyon*, 6(11), e05351.
- Shaikh, P, Rasheed, B, & Shaikh, A (2023). A New Perspective on Historical Theories of Poverty. *PERENNIAL JOURNAL OF HISTORY*, 4(1), 1-25.
- Tarnovskaya, V (2023). Sustainability as the Source of Competitive Advantage. How Sustainable is it?. *International business and management series*, , 75-89.
- Verpoort, P, Gast, L, Hofmann, A, & Ueckerdt, F (2024). Impact of global heterogeneity of renewable energy supply on heavy industrial production and green value chains. *Nature Energy*, 9(4), 491-503.
- Abbott, D (2010). Keeping the Energy Debate Clean: How Do We Supply the World's Energy Needs?. *Proceedings of the IEEE*, 98(1), 42-66.
- Acheampong, A, Shahbaz, M, Dzator, J, & Jiao, Z (2022). Effects of income inequality and governance on energy poverty alleviation: Implications for sustainable development policy. *Utilities Policy*, 78, 101403-101403.
- Agoundedemba, M, Kim, C, & Kim, H (2023). Energy Status in Africa: Challenges, Progress and Sustainable Pathways. *Energies*, 16(23), 7708-7708.
- Androniceanu, A, & Sabie, O (2022). Overview of Green Energy as a Real Strategic Option for Sustainable Development. *Energies*, 15(22), 8573-8573.
- Asaduzzaman, M, Barnes, D, & Khandker, S (2010). Restoring Balance. *World Bank working paper*, .
- Bashir, M, Ma, B, Sharif, A, Ao, T, & Koca, K (2023). Nuclear energy consumption, energy access and energy poverty: Policy implications for the COP27 and environmental sustainability. *Technology in Society*, 75, 102385-102385.
- Bhalla, I, & Lingam, L (2019). Swaying between saving the environment and mitigating women's domestic drudgery: India's efforts at addressing clean cooking fuels. *Gender Technology and Development*, 23(1), 36-54.
- Calzadilla, T, Cuesta, M, Quesada, C, Olivares-Rodríguez, C, Macarulla, A, Legarda, J, & Borges, C (2022). Is a massive deployment of renewable-based low voltage direct current microgrids feasible? Converters, protections, controllers, and social approach. *Energy Reports*, 8, 12302-12326.
- Charlton, K (2016). Food security, food systems and food sovereignty in the 21st century: A new paradigm required to meet Sustainable Development Goals. *Nutrition & Dietetics*, 73(1), 3-12.
- Chen, S, & Ravallion, M (2008). The Developing World Is Poorer Than We Thought, But No Less Successful In The Fight Against Poverty. *World Bank policy research working paper*, .
- Dada, J, Ajide, F, & Al-Faryan, M (2024). The moderating role of financial development in energy poverty–sustainable environment linkages: evidence from Africa. *Management of Environmental Quality An International Journal*, 35(4), 924-944.
- Demirgüç-Kunt, A, & Klapper, L (2012). Measuring Financial Inclusion: The Global Findex Database. *World Bank policy research working paper*, .
- Estache, A, & Fay, M (2007). Current Debates On

- Infrastructure Policy. *World Bank policy research working paper*, .
- Halkos, G, & Aslanidis, P (2023). Addressing Multidimensional Energy Poverty Implications on Achieving Sustainable Development. *Energies*, 16(9), 3805-3805.
- Haulle, E, & Ndimbo, G (2024). Sustainable rural electrification: small hydropower stations, electrification and rural welfare improvement in Tanzania. *International Journal of Development Issues*, 23(3), 396-412.
- Hickel, J, & Hallegatte, S (2021). Can we live within environmental limits and still reduce poverty? Degrowth or decoupling?. *Development Policy Review*, 40(1).
- Kaygusuz, K (2007). Energy for Sustainable Development: Key Issues and Challenges. *Energy Sources Part B Economics Planning and Policy*, 2(1), 73-83.
- Kaygusuz, K (2010). Energy services and energy poverty for sustainable rural development. *Renewable and Sustainable Energy Reviews*, 15(2), 936-947.
- Kiptoo, K, Daisy, D, Waswa, W, & Sharon, S (2023). Socio-Economic and Environmental Impact of Biofuel Production in Western Kenya. *International Journal of Science and Research*, 12(10), 1351-1362.
- Lederman, D, & Maloney, W (2008). In Search Of The Missing Resource Curse. *World Bank policy research working paper*, .
- Manor, J (1999). The Political Economy of Democratic Decentralization. *The World Bank eBooks*,
- Merkel, A (1998). The Role of Science in Sustainable Development. *Science*, 281(5375), 336-337.
- Nasir, M, Wen, J, Nassani, A, Haffar, M, Igharo, A, Musibau, H, & Waqas, M (2022). Energy Security and Energy Poverty in Emerging Economies: A Step Towards Sustainable Energy Efficiency. *Frontiers in Energy Research*, 10.
- Onifade, S, & Alola, A (2022). Energy transition and environmental quality prospects in leading emerging economies: The role of environmental-related technological innovation. *Sustainable Development*, 30(6), 1766-1778.
- Pegels, A, & Altenburg, T (2020). Latecomer development in a “greening” world: Introduction to the Special Issue. *World Development*, 135, 105084-105084.
- Rio, D, Sovacool, B, Griffiths, S, Foley, A, & Rio, J (2023). A cross-country analysis of sustainability, transport and energy poverty. *npj Urban Sustainability*, 3(1).
- Rogge, K, & Johnstone, P (2017). Exploring the role of phase-out policies for low-carbon energy transitions: The case of the German Energiewende. *Energy Research & Social Science*, 33, 128-137.
- Sarpong, SY, Bein, MA, Gyamfi, BA, & Sarkodie, SA (2020). The impact of tourism arrivals, tourism receipts and renewable energy consumption on quality of life: A panel study of Southern African region. *Heliyon*, 6(11), e05351.
- Shaikh, P, Rasheed, B, & Shaikh, A (2023). A New Perspective on Historical Theories of Poverty. *PERENNIAL JOURNAL OF HISTORY*, 4(1), 1-25.
- Stattman, S, & Gupta, A (2014). Negotiating Authority in Global Biofuel Governance: Brazil and the EU in the WTO. *Global Environmental Politics*, 15(1), 41-59.
- Wibisono, H, Lovett, J, & Anindito, D (2022). The contestation of ideas behind Indonesia's rural electrification policies: The influence of global and national institutional dynamics. *Development Policy Review*, 41(1).
- Κωνσταντόπουλος, Γ, Kanellou, E, & Kontogiannis, K (2023). Exploring the community energy actions to alleviate energy poverty in the Greek context. *Technical Annals*, 1(2).
- Anabaraonye, B., Nwafor, G. U. & Ewa, B.O. (2024). The Role of Green Creativity in Enhancing Climate Change Education in Nigeria. *Covenant Journal of Entrepreneurship (CJoE)*, 8(2) 19-23
- Anabaraonye, B., Onnoghen, U. N., Nwafor, G. U. & Obinna, C.J.K. (2024). The Role of Green Entrepreneurial Skills In Enhancing Production Economy In Nigeria. *Covenant Journal of Entrepreneurship (CJoE)*, 8(2) 53-57
- Nwafor, G. U., Odoh, C. C. & Anabaraonye, B. (2024). Innovative Ways of Communicating Green Office Practice in Nigerian Universities for Sustainable Economic Growth. *Covenant Journal of Entrepreneurship (CJoE)*, 8(2) 24-31