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Decentralization of Clean Energy in Kenya: The Legal and Institutional Opportunities and Challenges — Gathii Irungu

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Decentralization of Clean Energy in Kenya: The Legal and Institutional Opportunities and Challenges

By: ***Gathii Irungu****

Abstract

This paper analyzes the legal and institutional frameworks governing the energy sector in Kenya, including the Constitution of Kenya 2010, Climate Change Act 2016 and the Energy Act 2019, among others with an aim of pointing out the gaps in the law that contribute to the challenges of implementing the clean energy policies at the sub-national level. Through a comprehensive analysis of the legal and institutional frameworks, the paper highlights gaps such as conflict in legal and policy framework between the national and county governments, inadequate access to financial resources and insufficient coordination between national and county governments. It also examines the capacity and effectiveness of regulatory bodies responsible for implementing clean energy policies at the sub-national level. By identifying these gaps and challenges, the study aims to provide insights for policymakers and stakeholders to address the limitations in the legal and institutional frameworks. This can help facilitate the effective implementation of clean energy policies, enhance collaboration between national and county governments and enable the transition towards sustainable and low-carbon energy systems in Kenya.

1.0 Introduction

In a move to avert the worst impacts of climate change that are caused by emission of greenhouse gases, the UN adopted The United Nations Framework Convention on Climate Change signed at the United Nations Conference on Environment and Development held in Rio de Janeiro, Brazil, in 1992.[1] The treaty was established to address the issue of global

****(PHD candidate (U.O.N);LLM(U.O.N); LLB (U.O.N) Dip. In Law (KSL); Certified Professional Mediator(CIArb & MTI); Associate Arbitrator***

warming by reducing greenhouse gas emissions and promoting sustainable development.[2] The UNFCCC established a framework for the annual Conference of the Parties, which brings together all countries that have ratified the treaty to review progress in addressing climate change and to negotiate and adopt new measures to address the issue.[3] The most notable outcome of the UNFCCC was the adoption of the Paris Agreement in 2015.

The Paris Agreement on Climate Change that was signed by 196 UN member states with its main objective being to hold the global average temperature below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels.[4] In order to achieve this goal, it ushers in a call toward a world with net-zero emissions by 2050. Net zero simply put as, "net zero target" is a strategy that involves the cutting of greenhouse gas emissions to as close to zero as possible with any leftover emissions being reabsorbed from the atmosphere, for example, by oceans and forests.[5]

While the Paris Agreement sets a global objective, action to achieve that objective is driven at the national levels. Since its establishment, over 90 countries including Kenya have committed themselves to the "net-zero

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(CIArb); ICPS(K) ; SMC &SLDP (KSG); Member (ICJ) ;CPA(ICPS));CA & SL(ESAMI);CDLC(STRATHMORE);CG & L(KCA-SINGAPORE) & Advocate of the High Court of Kenya.

[1] United Nations Framework Convention on Climate Change <*https://unfccc.int/resource/docs/convkp/conveng.pdf*>Accessed 11/5/2023

[2] Ibid

[3] Ibid

[4] Paris Agreement on Climate Change 2015 *https://unfccc.int/process-and-meetings/the-paris-agreement* Accessed on 10/5/2022

[5] Ibid

targets." [6] Important to note is that even world's largest emitters including China, the United States and India have committed themselves to this goal.[7] On top of that, hundreds more regions, cities and companies have also set targets of their own with an aim of reaching the net zero target.[8] In order to ensure this targets are made, the convention adopted what is referred to us "Nationally Determined Contribution" which requires each country that is a signatory to the convention to submit an NDC report, which outlines its individual efforts towards reducing greenhouse gas emissions and adapting to the impacts of climate change.[9]

In 2015 Kenya submitted its NDC report.[10] The key components of the report included reducing its greenhouse gas emissions by 30% below the business-as-usual scenario by 2030. It also aims to achieve 100% clean cooking solutions by 2030, increase forest cover to 10% of the land area by 2030, and achieve 100% access to electricity by 2022.[11] The Kenyan government has also has taken steps in achieving the net zero target through development of legislation and policy framework. At the center of the legal and policy framework seats The Constitution of Kenya 2010 Energy Act 2019 and the Climate Change Act 2016.

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[6] Bodle, Ralph, et al. "The Paris Agreement: Analysis, Assessment and Outlook." Carbon & Climate Law Review, vol. 10, no. 1, 2016, pp. 5–22. JSTOR, *http://www.jstor.org/stable/43860128.* Accessed 23 May 2023.

[7] Ibid

[8] Ibid

[9] Ibid

[10] Kenya's Updated Nationally Determined Contribution <*https://unfccc.int/sites/default/files/NDC/2022-06/Kenya*>*Accessed* on 11/5/2022

[11] Ibid

1.1 Legal Framework for decentralization of clean energy in Kenya

1.1.1 Constitution of Kenya 2010

Although the Constitution of Kenya 2010 does not explicitly mention climate change action and renewable energy development, it serves as the fundamental basis for the institutional and legal framework related to these topics. It accomplishes this by allocating responsibilities and powers between the central government and the counties in a relatively balanced manner.[12] The Constitution under its articles recognizes and establishes two levels of governments that is the national government and the county governments.[13] Article 1(4) of the Constitution for example provides that the people of Kenya can exercise their sovereign power at the national and the county level.[14] Article 6(1) divides the territory of Kenya into the counties specified in the First Schedule. Further Article 10 of the constitution sets out national values and principles of governance, such as sustainable development, devolution of government, and public participation, that are mandatory when making or implementing any law or public policy decisions, including climate change.

The functions of devolved governments in Kenya are further expounded under section 5 of The County Governments Act 2012.[15] These responsibilities include safeguarding the environment and natural resources to promote sustainable development, ensuring water protection and the safety of dams, formulating energy policies including electricity and gas distribution, regulating the energy sector

[12] Constitution of Kenya 2010, Chapter 4
[13] Constitution of Kenya 2010, Article 1(4)
[14] Constitution of Kenya 2010, Article 6(1)
[15] Count Governments Act, Section 5

and overseeing public investments in the energy sector.[16] Part 2 of the Fourth Schedule states that County Governments in Kenya have the responsibility for county planning and development, which includes tasks related to electricity and gas distribution, as well as energy regulation.[17]

The Constitution under Article 42 provides for the right to a clean and healthy environment for every Kenyan, which includes the right to have the environment protected for the benefit of present and future generations. The article further obligates the government to come up with legislative and other measures in protecting this right. While the Constitution does not explicitly mention climate change or set specific net-zero targets, it does establish a system where both levels of government can work together to address environmental issues, including climate change. The national government can formulate and implement policies and legislation to tackle climate change, set national targets and engage in international climate change agreements and conventions.

However, the Constitution has limited clarity and specificity regarding the allocation of responsibilities and powers between the National and County Governments in the energy sector. While the Constitution assigns certain responsibilities to the National Government, such as formulating energy policies and regulating the energy sector, it does not provide explicit guidelines on how these functions are to be coordinated with the County Governments. This paper seeks to look into these gaps with an aim of coming up with a recommendation on how the same can be addressed.

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[16] Ibid
[17] Ibid

1.1.2 Energy Act 2019

In March 2019, Kenya enacted The Energy Act (2019), which establishes regulations concerning the generation, transmission, distribution, and commercialization of energy.[18] This legislation delineates the duties of different government entities and regulatory bodies while governing the utilization of renewable energy sources, petroleum and coal. The Energy Act was enacted to consolidate the existing laws concerning energy in Kenya.[19] It addresses the roles and responsibilities of both the National and County Governments in relation to energy matters.[20] The Act also establishes and defines the powers and functions of various entities within the energy sector.[21] It promotes the development and use of renewable energy sources, as well as the exploration, extraction, and commercial utilization of geothermal energy. Additionally, it regulates activities related to the midstream and downstream sectors of petroleum and coal, and governs the production, supply, and use of electricity and other forms of energy.[22]

Rural Electrification Authority (REA) was dissolved and replaced by the Rural Electrification and Renewable Energy Corporation (REREC) under the Energy Act 2019.[23] The REREC is entrusted with the responsibility of leading Kenya's efforts in promoting green energy and executing rural electrification initiatives. Additionally, the Renewable Energy Resources Advisory Committee (RERAC) was established to oversee the development and regulation of renewable

[18] Energy Act 2019
[19] Ibid
[20] Ibid
[21] Ibid
[22] Ibid Part 6
[23] Ibid

energy policies. Under the Act REREC has a wider responsibility compared to those of the REA which only addressed rural electrification problems in the past.[24] The REREC is also a key entity in the development of policies, conducting research and development efforts, promoting international cooperation, and encouraging renewable energy in all of Kenya.[25]

Section 74 of the Energy Act requires the Ministry of Energy & Petroleum in Kenya to create a comprehensive "inventory and resource map" of renewable energy resources.[26] This inventory and map aim to facilitate foreign investment in the renewable energy sector by providing interested investors with readily available information, eliminating the need for individual resource exploration and assessment. By providing this resource map, the Ministry aims to streamline the process, saving time and costs associated with independent resource exploration efforts.[27]

1.1.3 Climate Change Act 2016

The Climate Change Act establishes a regulatory framework aimed at improving the response to climate change.[28] It outlines mechanisms and measures to achieve low carbon climate development, along with other related objectives.[29] According to the Act the county governments are required to incorporate and prioritize climate change actions into its functions, interventions and responsibilities as outlined in this Act. Additionally, it must integrate

[24] Ibid
[25] REREC Strategic Plan 2018- 2023
[26] Ibid Section 74
[27] Ibid
[28] Climate Change Act, Preamble
[29] Ibid

the County National Climate Change Action Plan across different sectors.[30]

In accordance with the Act and the Constitution, a county government has the authority to pass laws that provide more specific guidelines for fulfilling its obligations under the Act, as well as other climate change functions that are relevant to the county or serve similar purposes.[31] Among its obligation is the adoption of policies such as the use of clean energy as a way of combating climate change. At the conclusion of each fiscal year, the county government is required to submit a progress report on the implementation of climate change actions to the County Assembly for evaluation and discussion.[32]The report will be presented by the designated County Executive Committee Member, and a copy of the report will be shared with the Directorate for informational purposes.[33]

1.2 Role of County Assemblies in adopting clean energy

County assemblies in Kenya play a significant role in adopting clean energy and promoting sustainable development within their respective jurisdictions.[34]Most of these roles are scattered in the above discussed legislations. Firstly, it is in the Legislation and Policy Making. County assemblies have the power to enact by-laws, regulations, and policies related to clean energy and sustainability.[35]They can develop and implement local legislation

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[30] Climate Change Act 2016, Section 19
[31] Ibid
[32] Ibid
[33] Ibid Section 19 (5)
[34] Victoria Chengo, "*Energy Development plans in the Kenyan Counties: Highlights from the Transforming Energy Access workshop*" *CIS Journal*
[35] Constitution of Kenya, Article 185

that promotes the use of renewable energy sources, energy efficiency measures, and sustainable practices within their counties.[36]

Secondly, the Counties play a role in County Energy Planning: County assemblies are responsible for the development of County Integrated Development Plans (CIDPs), which outline the long-term development goals and strategies for each county.[37] Section 4(3) of the Energy Act provides that Each County Government shall develop and submit a county energy plan to the Cabinet Secretary in respect of its energy requirements. [38] In executing these mandates the Counties can incorporate clean energy targets, plans for renewable energy projects, and energy efficiency measures into the CIDPs to guide sustainable energy development within the county. The County Assemblies equally play a significant role in the Promotion of Renewable Energy Projects. [39] County assemblies can actively promote and support the development of renewable energy projects within their jurisdictions.[40] They can facilitate the establishment of wind farms, solar power plants, small hydropower projects, and other clean energy initiatives by collaborating with investors, private sector entities, and relevant government agencies.[41]

County assemblies can also engage in partnerships and collaborations with various stakeholders, including the national government, development agencies, private sector entities, and local

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[36] Energy Act 2019

[37] Ibid n 30

[38] Energy Act Section 2019 4(3)

[39] Ibid

[40] Ibid

[41] Ibid

communities.[42] Through these collaborations, they can access technical expertise, funding, and resources to implement clean energy projects and initiatives effectively.[43] Public Awareness and Education is another role that the counties can play in adoption of clean energy. County assemblies have the responsibility to raise public awareness about the benefits of clean energy and sustainable practices.[44] They can organize campaigns, workshops, and educational programs to inform and educate the public on the importance of transitioning to clean energy sources and adopting energy-efficient technologies.[45]

Further the counties play a role in monitoring and compliance. County assemblies have oversight functions to monitor the implementation and compliance of clean energy policies and regulations within their counties.[46] They can ensure that renewable energy projects adhere to environmental standards, monitor energy efficiency initiatives, and take appropriate action against non-compliance. Lastly, is Budget Allocation. The Energy Act mandates the County Assemblies to establish a fund for promotion of the efficient use of energy.[47] in so doing the Counties are expected to prioritize funding for renewable energy initiatives, energy-efficient infrastructure and capacity building activities to support the transition to clean energy within their counties. By actively engaging in these roles, county assemblies in Kenya can contribute to the

[42] Muthoni, J., 'Renewable Energy Policies in Kenya' (2022) 8(2) Journal of Sustainable Energy [145-158] <*https://www.examplejournal.com/article123.*>Accessed 0n 23/5/2023

[43] Ibid

[44] Ibid n 34 Section 193(d)

[45] Ibid

[46] Ibid section 195

[47] Ibid Section 194

adoption of clean energy, promote sustainable development, and help the country achieve its renewable energy targets at the local level.[48]

1.3 Challenges facing County Assemblies in adopting clean energy at the subnational levels

Despite having the mandate to deliver on the promotion of clean energy at the County level, County Assemblies in Kenya face a myriad of challenges in promoting the use of clean energy at the sub-national level.[49] Particularly in coordination and collaboration with the National Assembly. Some of these challenges include;

1.3.1 Conflict in Policy and regulatory framework

The national government holds the authority to formulate and enforce policies and regulations related to the energy sector, including clean energy.[50] On the other hand County governments have also the mandate to develop their own comprehensive energy policies, as they are required to align their initiatives with the national energy policy framework.[51] This has restricted their ability to implement specific clean energy measures tailored to their local contexts. According to a research done by the World Bank Group in Kiambu County, inadequate strategies and structures to domesticate

[48] Ibid
[49] Rogers Kipkoech, Paul Kwame Essandoh, "A comprehensive review of energy scenario and sustainable energy in Kenya" (2021) *Fuel Communication Journal Volume 7*
[50] Ibid
[51] Sydney Oluoch and others, "Assessment of public awareness, acceptance and attitudes towards renewable energy in Kenya" (2020) Vol. 9 *Scientific African Journal*, p. 3.

the national policies to fit the county context is among the many challenges facing the policy framework on clean energy in Kiambu.[52] Boniface O. and Martin M. in their article titled "Barriers to Uptake of Clean and Renewable Energy: Case of Bomet and Homa-Bay County" observe that access to sustainable energy is still a challenge, especially in rural areas where availability of renewable energy (RE) services is limited.[53] They further observe that access to renewable energy is constrained by several interlinked social, economic, cultural, institutional, and policy related barriers. These included low awareness on RE services; lack of a clear policy framework and resources to develop the RE sub-sector; limited availability or supply of some RE sources such as briquettes; and poverty which negatively affected ability and willingness to pay for available RE services. Establishment of appropriate RE policy and legal framework in the two counties was constrained by limited technical capacity.[54]

1.3.2 Limited Funds

The national government controls the allocation of financial resources, including funds for clean energy projects.[55] County governments heavily rely on financial support from the national government for the implementation of clean energy initiatives.[56]

[52] World Bank Group," Kenya County Climate Risk Profile: Kiambu County" (2020) <*https://cgspace.cgiar.org/bitstream/handle/10568/115065/KIAMBU%20COUNTY%20FINAL.pdf?*>Avccessed 17/5/2023

[53] Boniface O. and Martin M. in their article titled "*Barriers to Uptake of Clean and Renewable Energy: Case of Bomet and Homa-Bay County" (2018) CUTS International Journal*

[54] Ibid

[55] Peter O. and Hillary K., "*The Landscape of Climate Finance in Kenya On the road to implementing Kenya's NDC"*(2022) Climate Policy Initiative

[56] Ibid

According Nairobi County Integrated Development plan 2018-2022, Financing of County operations on clean are a huge challenge. Local revenue collection persistently fell short of target, and National Government transfers occasionally delayed. These cash flow challenges greatly affect the timeliness of implementation of programmes.[57]

In a different study conducted by the World Bank Group in Kiambu County, limited funds to carry out climate change adaptation initiatives is among the top challenges facing Kiambu County.[58] According to a research conducted by Catherine W. & David M. titled "Determinants of Project Sustainability in Kiambu County, Kenya" the authors observe that the devolved system of governance in Kenya has enabled County Governments to initiate various developmental-oriented projects in the counties.[59] However most of these projects do fairly well at the end of the funding period while others fail because most of the funds provided for projects by the County Government are short-term. Limited financial resources can therefore hinder the efforts of county governments to invest in clean energy infrastructure, research and capacity-building.[60]

[57] Nairobi County Integrated Development plan 2018-2022

[58] Ibid

[59] Catherine W. & David M "Determinants of Project Sustainability in Kiambu County, Kenya" International Journal of Current Aspects, Volume 5, Issue 1, 2021, PP 66-84, <*https://doi.org/10.35942/ijcab.v5i1.160*> Accessed 30/4/ 2023

[60] Amadou Sy, A. C. "*Closing the financing gap for African energy infrastructure: trends, challenges, and opportunities" (2017).* Washington DC, USA: African Growth Initiative: Brookings Institution.

1.3.3 Limited authority over licensing and permitting

The national government retains the authority to grant licenses and permits for energy projects, including those related to clean energy.[61] County governments have limited control over the licensing process, which can result in delays and complications in the implementation of clean energy projects.[62] An example of a county in Kenya facing limited authority over licensing and permitting for energy projects, including clean energy, is Nairobi County.[63] As the capital city and one of the 47 counties in Kenya, Nairobi County experiences challenges in exercising control over the licensing process for energy projects within its jurisdiction.[64]

While Nairobi County may have its own priorities and specific clean energy goals, the authority to grant licenses and permits for energy projects ultimately lies with the national government, specifically the relevant regulatory bodies such as the Energy and Petroleum Regulatory Authority (EPRA) or the National Environment Management Authority (NEMA).[65] This centralized control can lead to delays and complications in the implementation of clean energy projects in Nairobi County, as the county government has limited influence over the licensing and permitting processes.[66] As a result, Nairobi County is facing difficulties in swiftly approving and executing clean energy initiatives tailored to its local context. This limitation can impact the county's ability to attract clean energy investments, hinder the timely deployment of renewable energy

[61] Nairobi County Integrated Development plan 2018-2022

[62] Ibid

[63] Ibid

[64] Ibid

[65] Ibid

[66] Ibid

projects, and impede the county's efforts to transition to a sustainable and low-carbon energy system.[67]

1.4 Strategies of combating the limitations faced by Counties in adopting clean energy at the subnational levels

1.4.1 Flexible policy framework

In his book titled "Renewable Energy Policy and Politics: A handbook for decision-making" Karl Mallon studied numerous failed renewable energy policies across different countries and devised a list consisting of "Ten Features of Successful Renewable Markets" among the recommendation Karl makes is to have a flexible policy framework.[68] He argues that A well-defined and consistent policy framework that provides long-term stability and incentives for renewable energy development is key for the achievement of this goal. In line with this recommendation, The Kenyan government should consider providing more flexibility within the policy and regulatory framework. This can allow county governments to develop and implement their own tailored clean energy policies that address local needs and opportunities. Allowing for experimentation and innovation can lead to more effective clean energy strategies at the county level.

1.4.2 Enhanced collaboration and coordination:

Improved collaboration between national and county governments is crucial. This can be achieved through regular dialogue, consultations, and joint planning processes to align clean energy goals and

[67] Ibid

[68] Karl Mallon, "Renewable Energy Policy and Politics: A handbook for decision-making" 1st Edition, Kindle Edition

strategies.[69] Clear communication channels and mechanisms for sharing information and resources should be established to foster effective collaboration.[70] Joint planning processes are essential to align the objectives and actions of national and county governments in the renewable energy sector. This can involve the development of shared frameworks, guidelines, and targets that reflect the specific characteristics and opportunities of each county.[71] Through joint planning, national and county governments can coordinate their efforts, avoid duplication of initiatives, and optimize the use of resources.[72]

1.4. 3 Increased funding and financial support

The national government should allocate sufficient financial resources to county governments for clean energy initiatives. This can be done through dedicated funding mechanisms or increased budgetary allocations. Access to financing, grants, and incentives for clean energy projects should also be facilitated to attract private investment and stimulate local economic development.

1.4. 4 Strengthened infrastructure development

The national government should prioritize the expansion and improvement of energy infrastructure, particularly in rural and underserved areas. This includes investing in renewable energy mini-grids and off-grid solutions to provide reliable clean energy access to communities. County governments can advocate for their energy infrastructure needs and work collaboratively with relevant stakeholders to improve grid connectivity and access. it is crucial for

[69] Ibid
[70] Ibid
[71] Ibid
[72] Ibid

the national government to prioritize the expansion and improvement of energy infrastructure, especially in rural and underserved areas. This involves investing in renewable energy mini-grids and off-grid solutions to ensure reliable access to clean energy for communities that are currently lacking electricity or heavily reliant on fossil fuels.

Renewable energy mini-grids play a vital role in providing decentralized power generation and distribution systems to communities that are geographically dispersed or located far from the national grid.[73] These mini-grids can be powered by solar panels, small wind turbines, or micro-hydro systems, and can supply electricity to homes, businesses, schools, and healthcare facilities. They offer a sustainable and cost-effective solution to electrify rural areas and reduce reliance on fossil fuels.[74]

1.4.5 Public awareness and engagement

Promoting public awareness and engagement is crucial for the successful adoption of clean energy.[75] County governments can implement public outreach campaigns, educational programs, and community engagement initiatives to raise awareness about the benefits of clean energy and encourage public participation in clean energy projects.

1.5 Conclusion

Decentralization of clean energy in Kenya presents both opportunities and challenges for county governments. While there are limitations imposed by the national government, such as policy

[73] Ibid
[74] Ibid
[75] Ibid

constraints, resource allocation, infrastructure barriers, technical capacity gaps, and limited authority over licensing, these challenges can be addressed through collaborative approaches. By fostering closer collaboration between national and county governments, empowering local officials with capacity-building initiatives, ensuring a flexible policy framework, allocating adequate funding, improving energy infrastructure, streamlining licensing processes and promoting public awareness and engagement, these limitations can be overcome. Through concerted efforts, county governments can effectively adopt and implement clean energy initiatives, contributing to a sustainable and low-carbon future for Kenya.

Bibliography

Constitution of Kenya 2010

Statutes

Climate Change Act 2016

Energy Act 2019

Count Governments Act

Conventions

United Nations Framework Convention on Climate Change

Paris Agreement

Kyoto Protocal

Books

Karl Mallon, "Renewable Energy Policy and Politics: A handbook for decision-making" 1st Edition, Kindle Edition

Journals

Amadou Sy, A. C. "Closing the financing gap for African energy infrastructure: trends, challenges, and opportunities" (2017). *Washington DC, USA: African Growth Initiative: Brookings Institution.*

Jones, Sarah, 'The Impact of Climate Change Policies' (2021) 10 Environmental Law Review 123

Heidtman, Joanna, et al. "Positivism and types of theories in sociology." Sociological focus, vol. 33, no. 1, 2000, pp. 1–26.

Sydney Oluoch and others, "Assessment of public awareness, acceptance and attitudes towards renewable energy in Kenya" (2020) Vol. 9 *Scientific African Journal*, p. 3.

Catherine W. & David M "Determinants of Project Sustainability in Kiambu County, Kenya" International Journal of Current Aspects, Volume 5, Issue 1, 2021, PP 66-84

Boniface O. and Martin M. in their article titled "*Barriers to Uptake of Clean and Renewable Energy: Case of Bomet and Homa-Bay County" (2018) CUTS International Journal*

Rogers Kipkoech, Paul Kwame Essandoh, "A comprehensive review of energy scenario and sustainable energy in Kenya" (2021) Fuel Communication Journal Volume 7

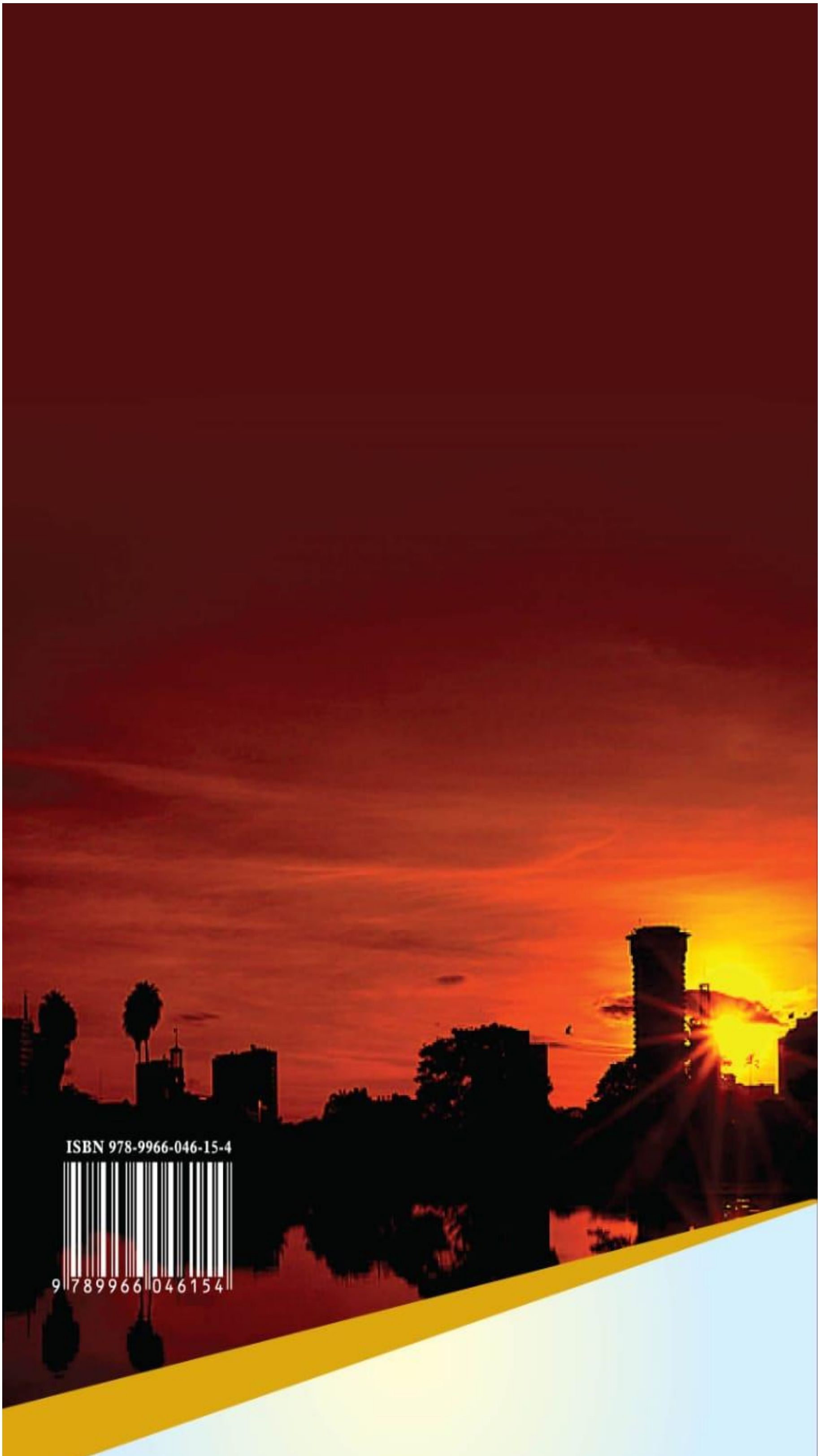
Victoria Chengo, "Energy Development plans in the Kenyan Counties: Highlights from the Transforming Energy Access workshop" CIS Journal

Websites

<*https://unfccc.int/process-and-meetings/the-paris-agreement*>Accessed 10/5/2022

<*https://unfccc.int/sites/default/files/NDC/2022-06/Kenya*>*Accessed11/5/2022*

<https://unfccc.int/resource/docs/convkp/conveng.pdf>Accessed 11/5/2023



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