

## ANALYSIS OF COUNTY ENERGY PLANNING IN KENYA

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Energy planning processes are increasingly gaining ground as governments across the globe race towards carbon neutral and negative emissions. Emergence of COVID-19 is redefining how energy planners integrate risks in the processes. Zeufack et al (2020) estimates that COVID-19 could push up to 43 million people into extreme poverty in Africa, erasing at least five years of progress in fighting poverty. Poor households are often limited to using unsustainable fuels for cooking since any little money they secure is directed towards essentials like food, shelter, and clothing. This threatens to exacerbate environmental conservation efforts since biomass remains the most accessible fuel source for such families. Besides, poor cook stove technologies used to combust the fuel feedstocks result in incomplete combustion that contributes to emission of high levels of carbon dioxide and carbon monoxide together with particulate matter 2.5 and 10 alongside other short-lived atmospheric pollutants. These emissions are critical health hazards. Global Burden of Diseases (2017) estimates that 1.6 million people died prematurely in 2017 due to indoor air pollution (IAP) contributing a share of 3 percent in the global deaths and 6 percent in low-income countries. The study noted that IAP fatalities reduce as countries become richer. Kenya is among countries striving to achieve 100 percent electrification by 2022 (KNES, 2018). Energy Act, 2019 has provided two levels of energy planning. An integrated national energy plan is developed by the national government while counties develop local context specific energy plans. In the past, energy planning was embedded within various instruments that included Medium Term Plans, Least Cost Power Development Plans, National electrification strategy, etc. of which the process used to be top-down, thanks to current legislation that prescribes a bottom-up approach. This policy brief has been developed based on deliberations from stakeholder forums and literature review and was subjected to a validation meeting on 21<sup>st</sup> December 2020 after undertaking a peer review process.

### Key findings:

- Energy planning should consider issues of energy access, reliability, and affordability
- Energy planning processes in counties should integrate cross-sectoral approaches
- Cross sectoral planning in energy prevents duplication and maximizes resources
- Effective knowledge management and institutional coordination are key drivers for successful County level energy planning
- Sensitizing local communities on energy aspects is key to inform their ability to influence decision making during public participation
- Capacity building of County Assembly committees and executives is essential to inform budgeting and decision making
- Ministry of Energy with support from European Union is championing an institutional capacity building to the energy sector programme whereby County Energy Planning will be boosted (2020-2023)



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Figure 1: Local electrical system set up for business support

# ENERGY STATUS OVERVIEW

Energy plays a critical role in enabling social, economic, and environmental sustainability. This role which falls under sustainable development goal 7 that targets universal access to modern energy is essential in achieving sustainable development goals in nexus sectors such as health, education, agriculture, industrialization and realization of Paris Agreement and other global commitments. Odarno (2020) affirms that the current decade which includes ambitious targets towards poverty reduction, health, education, gender equality, and other goals by 2030, presents opportunities for governments to explore practical pathways for linking energy access and development. For instance, a study on *Luz para Todos* project of electrification in Brazil by Paula et. al (2017) established that electrification projects are apparently more successful in regions with higher human development indices insinuating that electricity access is more effective when accompanied by, or in addition to, other development relevant policies and measures.

While we seek to unpack the energy planning space at the counties, it is important to keep in mind institutions that embrace inclusivity and coordination of critical global ambitions such as SDG 7 to ensure their domestication at local level in a transparent way while leveraging on related ongoing processes and available resources among stakeholders. Odarno (2020) emphasizes that local data and evidence for instance are essential in shaping action but this is only realized when strategic actors are approached to catalyze change using the data and analysis at hand, without hidden interests and agendas to bridge the traditional divides among key development sectors at all levels of governance.

As devolution continues to take root in Kenya, planning



Figure 2: Back-up PV system in a household set up

mechanisms from ward administrative units to sub-counties and county level present an opportunity to have in place energy plans and policies that are tailored to grassroots priorities, realities, and challenges.

# ENERGY STATUS OVERVIEW

Chapter 11 and the fourth schedule of the Constitution of Kenya, 2010 outlines the functions of the two levels of governance in the country. Article 5 and fifth schedule of the Energy Act, 2019 specifies the functions of counties as far as energy planning is considered. All county governments are required to develop and submit a county energy plan to the Cabinet Secretary in respect of their energy requirements. The Cabinet Secretary consequently is required to consolidate the submitted energy plans from counties into an integrated national energy plan to be reviewed every three years. In tandem with this, the National Energy Policy, 2018 requires the Cabinet Secretary under Article 6 to prepare and publish a report on the implementation of the integrated national plan within three months after the end of each financial year (MoE, 2018). Thus, legislative and policy instruments are clear in terms of timelines for executing energy planning functions. It is anticipated that the task force constituted at the Ministry of

Energy towards operationalization of the Energy Act, 2019 will speed up the transition in the first quarter of 2021 together with an inclusive planning framework. The current framework for county energy planning was launched during sensitization of the Sustainable Energy Access for All (SEforALL) Action Agenda and Investment Prospectus in 2017 through support from GIZ (MoE, 2017). However, not all counties have adopted the framework. The Ministry of Energy is making all ends meet to have an inclusive framework that aligns with provisions of the Energy Act, 2019.

Despite delays in the implementation of the Act, progress has been made in developing instruments to support the County planning processes. These include Bioenergy Strategy (2020-2027) and National Energy Efficiency and Conservation Strategy (2020-2025), both launched in 2020.

## County energy planning process

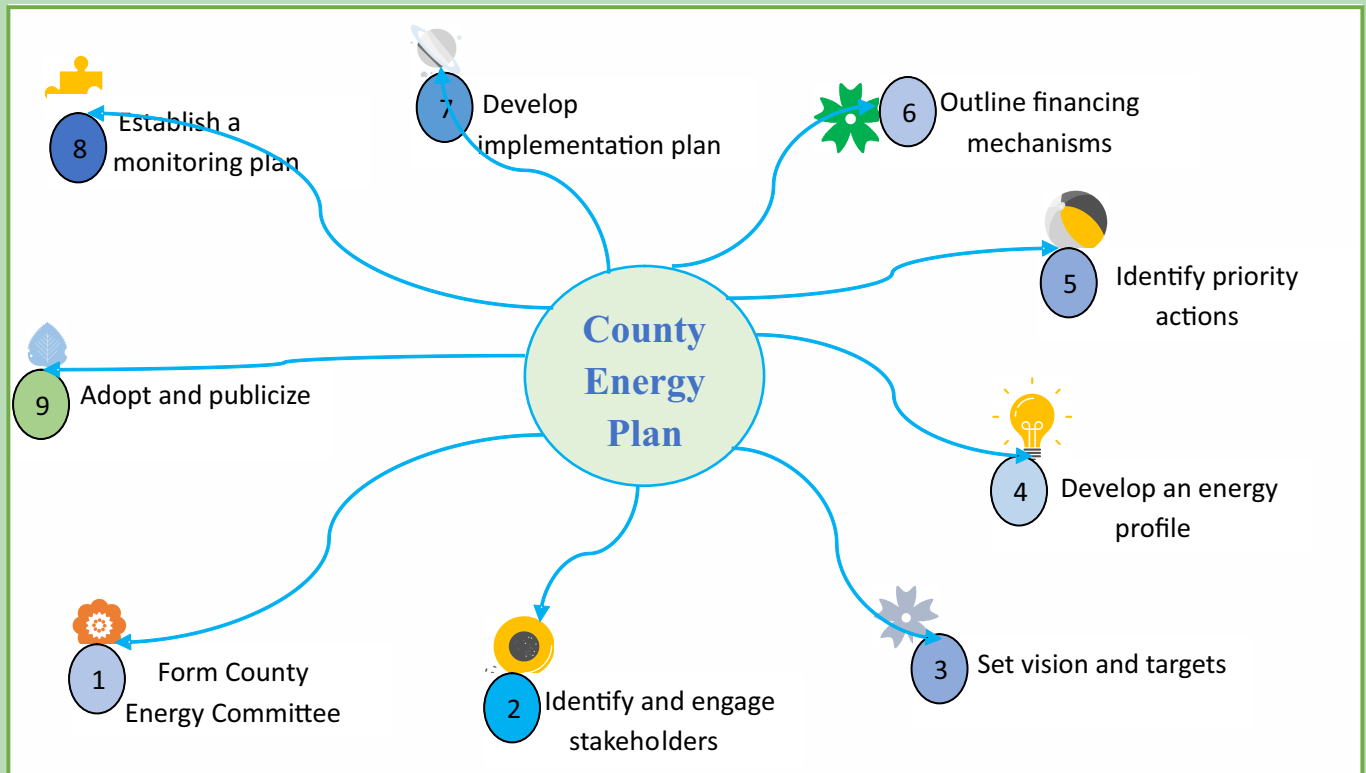


Figure 3: Summary of current county energy planning process

## Institutional Capacity Building to the Energy Sector in Kenya (2020-2023)

- One of the initiatives being championed by the Ministry of Energy towards enhancing county governments' capacity regarding energy planning is the 'Institutional capacity building to the energy sector programme'. The initiative is jointly supported by the government of Kenya and European Union, implemented between September 2020 to August 2023.
- It aims at reducing poverty and enhancing inclusive and accelerated economic development in energy sector towards achievement of Sustainable Energy for All (SEforALL) objectives. As such the programme seeks to provide technical assistance and capacity development to public and private stakeholders in the identification, planning and implementation of renewable energy, energy access and energy efficiency projects within the frameworks of SEforALL and the Energy Act, 2019.
- Initial steps shall encompass provision of basic training to all the 47 county governments building their understanding of the energy development dividend and the added value of inclusive and integrated planning approaches. The model comprises of technical assistance- by a team of local and international experts, on-the-job trainings, workshops, and seminars with production of documents that shall span studies, learning materials, toolkits, guidelines, procedures, communication, and visibility materials, among others.
- Energy Delivery Model (EDM) methodology is another significant component of the programme. EDM is expected to cement commitment of all stakeholders with elements of financing and budgeting, local sensitization towards end user buy-in. The model is anticipated to explore a range of non-energy activities targeting opportunities for productive energy use. This will be achieved through training on appropriate technologies and design for economic activities, business models and plans towards accessing credit. 18 selected counties based on geographical clusters will receive more hands-on support on tools and approaches required to review and optimize their county energy plans.

# Gaps and Recommendations

Gap identified	Proposed intervention/recommendation
Limited data to support development of county energy plans	<ul style="list-style-type: none"> <li>Counties should map out actors who can support research to have data in place for informed decision making and sensitization.</li> <li>National government has a wealth of tools and techniques which can be transferred to county staff if a coordinated programme through Council of Governors can be put in place</li> <li>Counties should prioritize collaboration with local and international Big-data and analytics institutions to leverage on human capital and existing gaps in data availability</li> </ul>
Weak inter-sectoral planning	<ul style="list-style-type: none"> <li>Encourage inter-sectoral planning in counties as this presents opportunity to wards resource utilization and recognition of early-stage technicalities of which failure to plan jointly will mean you react to technicalities one by one.</li> </ul>
Inadequate financial resources	<ul style="list-style-type: none"> <li>Counties should move with speed and domesticate provisions of the Energy Act, 2019 whereby County Energy Fund should be established to boost energy functions at the grassroots.</li> <li>Regular energy campaigns at the local level should be emphasized to outline the need to give more weighting towards energy planning and budgeting during county integrated development planning.</li> </ul>
Knowledge management - The current county energy planning framework requires potential investors to indicate how their interventions align with sector plans from <b>line energy agencies</b> .	<ul style="list-style-type: none"> <li>Formulate a platform through which stakeholders in a respective county through leadership of line-ministry can centrally access and share information as opposed to limiting the alignment to select government agencies</li> </ul>
Impediments of access to information	<ul style="list-style-type: none"> <li>Effective communication policies and standard operation procedures should be formulated with clear timelines for departmental and inter-departmental information exchange</li> <li>Similar high-level arrangements should be adopted outlining threshold duration for feedback between counties and national government</li> </ul>
Limited knowledge about energy concepts within the public domain	<ul style="list-style-type: none"> <li>Sensitization events through multi-stakeholder approach should be promoted from ward level since community knowledge is critical during prioritization and budgeting and informing county integrated development plans (CIDPs)</li> </ul>
Poor stakeholder coordination	<ul style="list-style-type: none"> <li>Establish a caucus of energy players at county level bringing together state and non-state actors</li> </ul>
Limited staff capacity	<ul style="list-style-type: none"> <li>Establish mechanisms towards regular or continuous training of staff to keep phase with growing energy sector</li> </ul>
Limited knowledge among county executives and legislators on essentials of energy as enabler to other sectors	<ul style="list-style-type: none"> <li>Regular trainings targeting governors, all county executive committee members, chief officers, and members of county assemblies (MCAs) especially those that constitute MCA committee where energy matters are handled.</li> </ul>

## Reference

- 1 Global Burden of Diseases. (2017). Risk Factor Collaborators. Global, regional, and national comparative risk assessment of behavioral, environmental, and occupational, and metabolic risks or clusters of risks for 195 countries and territories, 1990-2017: a systematic analysis for the Global Burden of Disease Study 2017. *The Lancet*. 8 Nov 2018; 392:1923-94. doi: [http://dx.doi.org/10.1016/S0140-6736\(18\)32225-6](http://dx.doi.org/10.1016/S0140-6736(18)32225-6).
- 2 GoK. (2019). *The Energy Act, 2019*. Government printer. Nairobi. Available at <https://www.epra.go.ke/download/the-energy-act-2019/>
- 3 KNES. (2018). *Kenya national electrification strategy: key highlights*. Ministry of Energy. Nairobi. Available at : <http://pubdocs.worldbank.org/en/413001554284496731/Kenya-National-Electrification-Strategy-KNES-Key-Highlights-2018.pdf>
- 4 MoE. (2017). *Country energy planning framework*. Nairobi.
- 5 MoE. (2018). *The national energy policy*. Ministry of Energy. Nairobi. Available at: [https://kplc.co.ke/img/full/BL4PdOqKtxFT\\_National%20Energy%20Policy%20October%20%202018.pdf](https://kplc.co.ke/img/full/BL4PdOqKtxFT_National%20Energy%20Policy%20October%20%202018.pdf)
- 6 Odarno, L. (2020). *Linking electricity access and development outcomes in Africa: A Framework for Action*. World Resources Institute. Washington, DC. Available online at: [www.wri.org/publication/linking-electricity-access-development](http://www.wri.org/publication/linking-electricity-access-development).
- 7 Paula B., Camila C., Aline R., André L., Joana P., Alexandre K., Alexandre S., & Roberto S. (2017). The power of light: socio-economic and environmental implications of a rural electrification program in Brazil. *Environ. Res. Lett Brazil*. Available at: <https://iopscience.iop.org/article/10.1088/1748-9326/aa7bdd/pdf>
- 8 Zeufack, A., Calderon, C., Kambou, G., Kubota, M., Cantu, C. & Korman, V. (2020). *An analysis of issues shaping Africa's economic future*. World Bank, Washington, DC. Available at: <https://openknowledge.worldbank.org/handle/10986/34587>