Briefing

Energy; Policy and planning

Reflections on knowledge gained and key lessons learnt from IIED research and action

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Loughborough University
STEER – Centre for Sustainable Transitions: Energy, Environment and Resilience

Caritas

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Project overview

Title:
Accelerating local development through inclusive energy planning

Timeframe:
June 2021–August 2023

Summary:
This project used an inclusive, cross-sectoral approach to operationalise Kenya's national integrated energy planning framework in Meru county. This aligned energy planning with local development priorities, enhanced evidence-based and participatory planning, and delivered sustainable, energy-enabled development interventions.

Change in action

Counties in Kenya are required to develop county energy plans, but limited data, technical expertise and planning capacity often constrain their ability to align energy investments with development priorities. This project applied the Energy Delivery Models approach to strengthen county energy planning capacity, develop fully costed energy solutions, improve coordination across departments and integrate energy priorities into county development plans, informing both county-level and national energy planning.

Accelerating local development through inclusive energy planning: lessons from Meru county, Kenya

How inclusive, cross-sectoral energy planning can unlock local development and investment

Kenya's new framework for decentralised energy planning

Kenya's Energy Act (2019)[1] and Energy (Integrated National Energy Plan – INEP) Regulations (2025)[2] recognise the need for subnational energy planning. The country's 47 counties are mandated to produce ten-year county energy plans (CEPs) to inform an integrated national energy plan.

The INEP regulations outline the aims, process and content of CEPs: energy services should facilitate counties' economic, social and political development, deliver energy access for all sectors, and address cross-cutting issues such as climate change, gender and environmental sustainability; and CEPs should include public participation and adopt a cross-sectoral approach by involving senior technical officers from relevant ministries and non-state representatives on a county energy planning committee.

To date, counties have struggled to operationalise INEP. Challenges include a lack of reliable, disaggregated subnational data and limited capacity for data collection and analysis at the county level. This affects the availability of system and utility data for informing evidence-based electrification planning, for example. Counties may also lack experience and technical expertise in the energy sector and energy planning, and in mainstreaming climate change and gender equality, disability and social inclusion (GEDSI). The development of CEPs could be enhanced by providing more technical support, clearer national and subnational coordination mechanisms, and additional resourcing — for example to support data collection, needs assessments and staffing. This would result in more robust inputs into national energy planning.

Strengthening capacity for cross-sectoral, inclusive planning through the EDM approach

Under the European Union–Kenyan Ministry of Energy and Petroleum's Sustainable Energy Technical Assistance programme (2020–2024), the International Institute for Environment and Development (IIED) and Centre for Sustainable Transitions: Energy, Environment and Resilience (STEER) used the Energy Delivery Models (EDM) approach[3] to train counties on inclusive planning approaches. This included developing a model CEP in Meru county, finalised in 2023.

EDM conceptualises energy as an enabler of broader development outcomes. A systematic six-step process (see Figure 1) engages end-users and stakeholders to understand local realities and identify development needs and the barriers to meeting them. These can include non-energy factors, such as training, access to finance, and sociocultural and environmental issues. EDM then co-creates costed, locally appropriate solutions to meet the end users' needs.

The Meru CEP was ratified in January 2026 and the county government is now moving to implement it.

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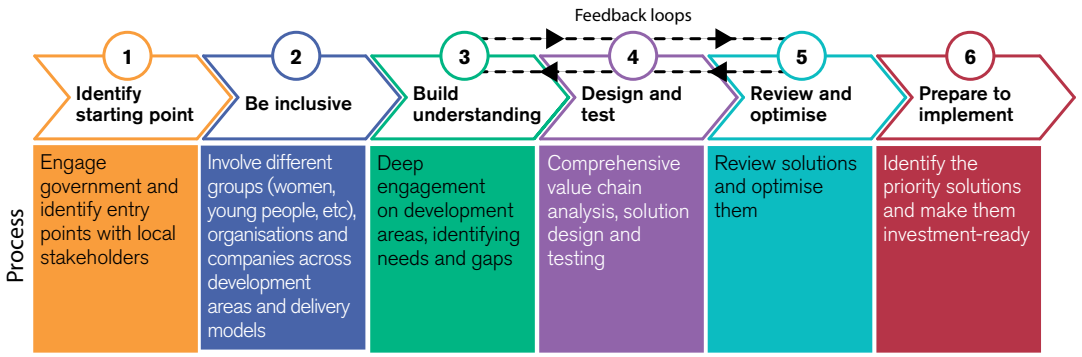
Figure 1. The six-step Energy Delivery Models approach



Critical insights from Meru county's energy planning process

The Meru CEP process generated important insights for those aiming to make local energy planning more inclusive and evidence-based, and deliver energy-enabled development interventions.

Deepening social inclusion and buy-in through needs-based planning: the Meru CEP involved extensive outreach to stakeholders. Primary and secondary research gave an initial insight into the county's needs. This was followed by in-depth assessments in six representative locations and covering key development areas, including household cooking, lighting, agriculture and livestock, water and health. Community and sectoral workshops then interrogated the baseline findings, generating further insights on gaps and possible solutions. Participants also prioritised the needs identified, helping to strengthen social cohesion. End users' needs were disaggregated by gender, age, income level and other key metrics, uncovering social and cultural norms shaping energy access and use, including experiences of marginalisation. This level of granularity is rarely captured in county-level planning. Findings from the workshops directly informed the design of tailored interventions that were responsive to different end users' needs.

The added value of cross-sectoral planning and coordination: despite the INEP, energy planning remains largely siloed in Kenya. There is typically weak institutional support for cross-sectoral collaboration. As a result, counties often struggle to identify strategic energy investments and unlock financing from sectors such as agriculture, health and water. Meru CEP therefore established a cross-departmental technical committee led jointly by the energy and economic planning directorates and including officials from key departments. This was complemented by bilateral meetings. This built shared understanding of the CEP process and enabled structured discussions on possible solutions, co-benefits, risks, delivery roles and investment priorities. It also improved information flows and strengthened cross-sectoral ownership of energy investments as enablers of development priorities, feeding into the county's integrated and annual development plans and budgets.

Designing sustainable and scalable solutions: following the needs assessment, fully costed solutions were developed for the targeted priority areas. An iterative process involved potential end users (such as crop farmers), sectoral stakeholders (such as county extension officers), delivery partners (such as equipment and technology suppliers) and finance providers (such as the Meru County Micro-finance Corporation). The delivery model was designed using the Delivery Model Canvas tool,[4] geospatial information services and least-cost electrification modelling tools.[5] The model considered financial, social and environmental sustainability, with particular focus on end users and sociocultural factors. The resulting business and financing models identified priority county investments for demonstration and initial implementation, and potential pathways to scale, providing a roadmap for a future investment and financing pipeline.

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Key lessons

- Primary and secondary data collection combined with in-depth participatory needs assessments identified the specific energy and non-energy needs of marginalised groups and guided the design of tailored sectoral solutions.
- A cross-ministerial technical committee helped ensure that priority energy investments were incorporated into development plans and budgets.
- The fully costed solutions serve as an investment prospectus, helping to attract co-financing for priority interventions.

Partner's view

"The ratification of the Meru County Energy Plan signals our political commitment to inclusive, evidence-based energy planning that serves every ward, every sector and every household."

David Baariu, Minister for Roads, Transport and Energy, and Acting County Secretary, Meru county

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Knowledge Products

Notes

[1] For more information, see: www.epra.go.ke/energy-act-2019 / [2] For more information, see: www.epra.go.ke/integrated-national-energy-plan-inep / [3] For more information, see: www.edm-hub.org / [4] This was created using the Delivery Model Canvas tool. For more information, see: Garside, B and Wykes, S (2017) Planning pro-poor energy services for maximum impact: the Energy Delivery Model Toolkit. CAFOD and IIED, London. www.iied.org/16638iied / [5] For example, see: www.onsset.org