

Policy coherence for a just energy transition in Kenya's electricity sector

SEI brief
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Key messages

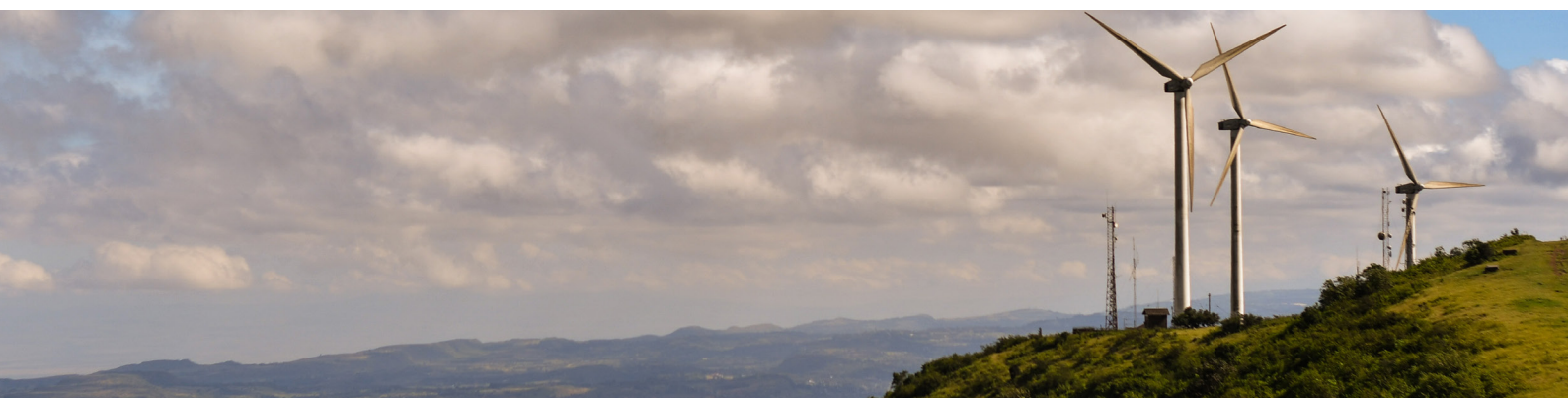
- Prioritizing investments in renewable energy in Kenya has the highest synergetic potential and contributes to economic growth, energy access, and reductions in poverty, inequality and greenhouse gas emissions.
 - Equity goals related to industrialization and job creation conflict with greenhouse gas emission reduction in the country's industry and transport sectors.
 - Despite the current transition towards increased renewable electricity generation in Kenya, conflicts remain between deployment of renewable energy and affordability of electricity. Thus, this transition has not necessarily led to equitable outcomes.
 - Kenya should remove the institutional barriers that drive policy incoherence and hinder progress on economic growth, poverty and inequality reduction, and subsequently on reducing greenhouse gas emissions.
 - Policy should mitigate the interests and power dynamics in the electricity market that further influence the affordability of electricity and exacerbate inequality and that are drivers of incoherence.
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1. Introduction

 This brief is based on an SEI report (Muhoza et al., 2025) that explored in depth the many ways in which policy coherence impacts the Kenyan government's efforts to achieve a just energy transition in Kenya. Based on an analysis of the policy landscape and interactions between key policy objectives, as well as a set of interviews, we examined the drivers and outcomes of policy coherence.

The growth of Kenya's energy sector is expected to help the country achieve middle-income status by 2030, while transitioning to a renewable energy system that provides electricity in a just and equitable fashion. Policymakers will have to balance decisions on energy, economic growth, climate mitigation, and poverty and inequality reduction.

Image: Wind turbines, Kenya
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Scaling up renewable energy will be key to achieving Kenya's climate mitigation targets. However, the promotion of coal for electricity generation in the Energy Policy 2018 and Energy Act 2019 contradicts the government's ambitions to reduce greenhouse gas emissions and meet its nationally determined contributions under the Paris Agreement. It also adversely impacts human health due to polluting emissions.

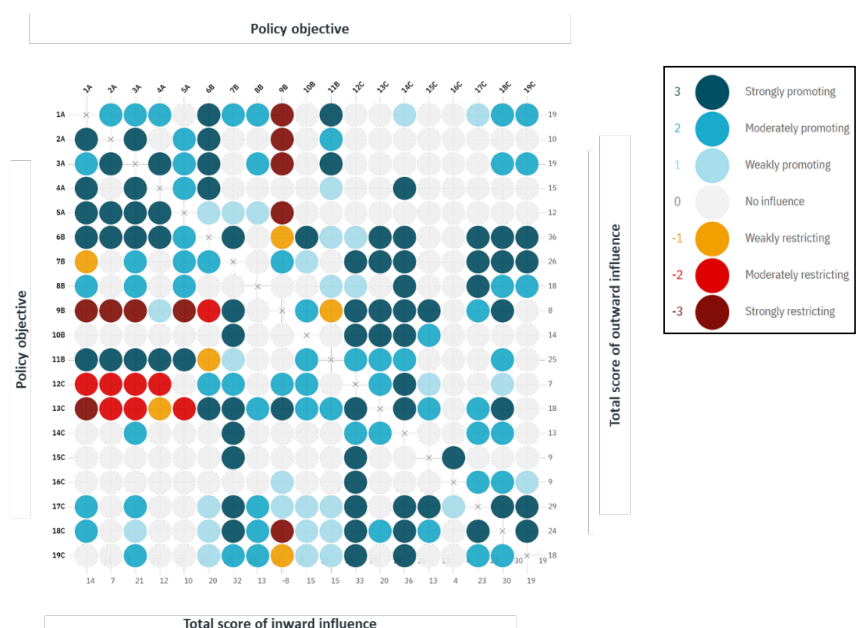
2. Policy formulation and content

Based on our analysis of synergies and trade-offs, using SEI's SDG Synergies approach, we can provide the following insights on those that are most relevant synergies and trade-offs.

The policy objective with the highest synergetic potential is prioritizing investments in grid and off-grid renewable power generation. Further investments in battery storage and upgrading ageing electricity transmission and distribution infrastructure also would be necessary. Outcomes would be to reduce emissions in multiple sectors, accelerate industrialization, create jobs, reduce economic and social inequalities in marginalized areas and among vulnerable groups (i.e. women, elderly, people with disabilities, children, youth), and increase energy access and reliability of supply (McCollum et al., 2018).

Reducing economic and social inequalities in energy projects also has a high synergetic potential, with possible benefits for local communities by promoting affordable and accessible modern energy for vulnerable groups. It could also reduce

Figure 1: A cross-impact matrix of interactions across 19 policy goals pertaining to the just energy transition in Kenya.



Note: The cross-impact matrix shows interactions across 19 policy objectives pertaining to the just energy transition in Kenya. Overall influence that one policy objective has on the others is shown as sum of the rows (outward influence). The sum of the columns shows the degree to which all others influence one policy objective (inward influence). For example, progress on policy objective 6B (Increasing share of renewable energy in the electricity generation mix) is scored as having a strong influence (+3) on policy objective 3A (reducing greenhouse gas emissions in the energy sector).

greenhouse gas emissions in the residential sector through adoption of clean cooking with electricity (Government of Kenya, 2022).

The goal to increase coal power generation (see Figure 1) strongly conflicts with reducing greenhouse gas emissions in the energy and manufacturing sectors (Kehbila et al., 2021). However, coal generation would increase electricity capacity, access and reliability, while also supporting economic growth, job creation and reduced poverty and inequality, especially in coal mining regions.

Industrialization and job creation for youth – two of Kenya’s equity goals – could conflict with climate mitigation goals, given increased economic growth, per capita GDP growth and associated increased motorized transport that drive fossil fuel consumption. For manufacturing and transport, the sectors most affected, Kenya should implement measures to reduce greenhouse gas emissions.

3. Policy implementation and outcomes

We observed several interesting interactions in implementation of policies on energy, economic growth, climate mitigation targets and inequality reduction.

A shift to renewable energy has reduced emissions in the electricity generation sector. However, a key trade-off linked to the deployment of renewable energy is the high cost of the electricity for consumers, which restricts progress on equity and climate mitigation goals on the energy demand side. Government actors in the electricity sector indicated that the high tariff was driven by substantial investments in renewable electricity generation and the need for thermal backup generation and battery storage for grid stability.

Low income and vulnerable groups in informal urban settlements and rural areas still rely on kerosene and traditional biomass for lighting and cooking. One proposal to improve this situation is to redirect fossil fuel subsidies towards the provision of pro-poor electricity subsidies (Sokona et al., 2023).

Reducing the high cost of electricity for the manufacturing sector could free up finance for investments and growth in highly productive and energy-intensive sectors, decreasing the cost of production of locally manufactured products and increasing the country’s competitiveness. Additionally, large industrial and commercial users now generate their own power using their own facilities run from on fossil fuels, renewable energy sources and bioenergy, because of its low cost and reliability compared to grid electricity, removing themselves from the grid, with implications for overall demand and grid reliability.

The Kenyan government’s Vision 2030 flagship programs are intended to stimulate socio-economic growth (e.g. creating special economic zones and formal employment, and electrification of the transport sector), but these are lagging. Consequently, increase electricity demand and renewable energy expansion is lagging, subsequently limiting the reduction of greenhouse gas emissions in energy intensive sectors.

Although reducing economic and social inequalities in energy projects contributes to economic development and local employment, in practice, lack of careful consideration of trade-offs and impacts of energy projects on local communities, including negotiations on benefits sharing, can be a source of conflict and potentially cancel out the intended economic benefits of such investments by further worsening local socio-economic inequalities.

4. Enablers and barriers to a just energy transition

Kenya's ambition to scale up renewable energy to achieve its climate goals is in tension with the "right to development" via fossil fuel expansion.

The national government's ambition to exploit coal resources to drive industrialization and economic growth was promoted from 2013 to 2019. As a lower middle-income country with limited resources, abundant fossil fuel resources were seen as an avenue to help Kenya achieve its development goals. In 2019, the focus shifted towards achieving 100% renewable electricity generation by 2030, a commitment reaffirmed at the COP26 meeting in Glasgow in 2021.

However, a lack of resources for policy implementation is a key driver of policy incoherence, attributable to the national government's limited resources coupled with an increasing public debt. Resource constraints and competing demands for national government revenues lead to unequal distribution of resources among ministries and agencies, based on government priorities and institutional mandates.

Insufficient funding from the government goes to key issues such as social equity and gender mainstreaming, adoption of clean cooking technologies, stakeholder capacity building for climate change, and SDGs coordination. This lack worsens another key barrier to the adoption of renewable energy technologies: limited awareness and capacity among vulnerable and marginalized groups to participate in decision-making.

Limited funds, and delays in releasing funds that have been allocated for planned and ongoing flagship development projects, also delay project completion, and therefore progress towards goals. Additionally, high levels of corruption across important sectors and levels of government are a significant barrier to coherent policy implementation, as are misuse and misappropriation of allocated resources.

International interests have impacted national policies and decisions. For example, the shift away from coal in Kenya was influenced by the global decline in coal financing and the withdrawal of financial support for the Lamu Coal project by financial institutions such as the Africa Development Bank and the Industrial and Commercial Bank of China (ICBC), following local contestation. At the same time, investments in renewable energy projects were enabled by increasing international financial and technical support for clean energy deployment and climate action.

Representation in decision-making in the energy sector is highly skewed towards those who have access to information, resources and engagement platforms, leading to further marginalization and exclusion of vulnerable groups. Furthermore, the impact of the energy transition on job losses in fossil fuel industries and associated sectors and in the biomass sector has received little attention in decision-making, neglecting how affected workers (e.g. kerosene and charcoal vendors, petrol station attendants) can be integrated into the low-carbon climate-resilient development transition.

See the full report for further reading on these interacting components and concerns (Muhoza et al., 2025). Below are key recommendations for policy and implementation measures.

- Ensure modern energy services are accessible, reliable and affordable to achieve an equitable and sustainable energy transition. The National Treasury, in close collaboration and coordination with relevant ministries (energy, environment, social protection, industrialization), civil society and industrial stakeholders should provide adequate electricity subsidies and incentives to reduce the costs of electricity and spur innovation in energy storage technologies, transmission and distribution for integrating intermittent renewables into the national electricity grid.
- Reduce inefficiency in the electricity distribution monopoly. Policymakers and regulators in the energy sector must work closely with other relevant agencies, industrial stakeholders and civil society, to devise options for increasing competition while ensuring that vulnerable communities benefit.
- Accelerate the implementation of poverty and inequality reduction measures by prioritizing public investments in the Vision 3030 flagship programs for industrial development and decent job creation and social protection programs, especially in marginalized areas, to empower citizens to transition to modern energy services.
- Reduce inequality of participation in decision-making by increasing public awareness about the benefits of renewable energy technologies and the capacity of local communities. Kenya should seek increased support from international partners, to increase resource allocation for stakeholder capacity building.
- Enhance collaboration between policymakers, educational and training institutions, labour representatives, affected communities and industrial stakeholders, to formulate policy measures to cushion and protect the most vulnerable groups, including workers in the fossil fuel and biomass sectors, from negative impacts of an energy transition. Involve affected workers in decision-making, awareness creation and reskilling through green jobs integration in education and training programs.
- Reduce corruption through effective enforcement of existing anti-corruption laws. This would significantly enhance coherent policy implementation. Enhance transparency and accountability in national and county government procurement processes and strengthen monitoring and evaluation of government programs.

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