

Future Energy Scenarios for African Cities – Unlocking Opportunities for Climate Responsive Development

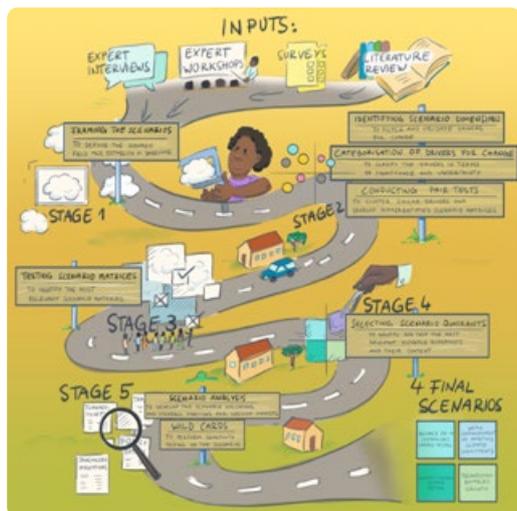
Background

Cities globally consume up to 80% of total global energy production and release about 75% of the global CO₂ emissions. In the case of Africa, urban population is projected to rise from 400 million to 1.26 billion between 2010 and 2050. The EU Energy Initiative Partnership Dialogue Facility (EUEI PDF) through its Strategic Energy Advisory and Dialogue Services (SEADS) has developed a study that explores energy scenarios for cities in sub-Saharan Africa until 2050. Intended as a thought leadership product, the study applies a scenario analysis approach to explore the interplay between energy, climate and urbanisation and identify opportunities for action in the context of energy, climate and urban agendas.

Objectives

The study aims to:

- ▶ identify the megatrends that will shape the future of African cities;
- ▶ classify uncertain drivers for change and wildcards in order to improve risk management in strategic policy-making;
- ▶ break down the complexity of urban infrastructure planning by presenting four scenarios and strategic policy choices, which are integrated across sectors; and
- ▶ analyse short, medium and long-term opportunities and challenges of urbanisation in African cities to avoid lock-in to unsustainable patterns of growth.

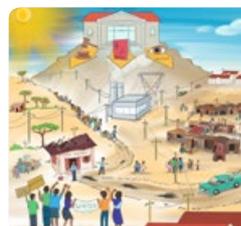


Country/Region	Sub-Saharan Africa
Project Partner	Atkins, ICLEI Local Governments for Sustainability, Sustainable Energy Africa
Term	March 2016–March 2017

Scenarios

A scenario-based strategic foresight methodology was used to develop four scenarios to support medium to long-term strategic visioning and planning. They reflect the range of views of consulted experts regarding the fundamental factors influencing the future of African cities.

The boxes below outline the core dimensions of the four scenarios:



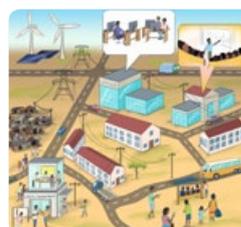
Reliance on a centralised energy model:

- ▶ Weak government implementation capacity
- ▶ Centralised energy supply



Weak enforcement of ambitious climate commitments:

- ▶ Strong climate policy commitment
- ▶ High informality



Growth-driven climate action:

- ▶ Increased installed renewable energy capacity
- ▶ Emerging middle class



Technology-enabled growth:

- ▶ Technological innovation
- ▶ Increased decentralised energy supply

Key Strategic Recommendations for Stakeholders

Based on the four scenarios, key recommendations illustrate a range of actions that can support and promote opportunities for climate responsive development. They have been clustered according to stakeholder groups:

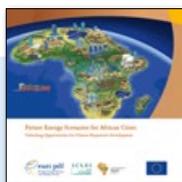
For sub-national governments:

- ▶ Undertake a diagnostic analysis to assess the cities' current position and address gaps and opportunities for development.
- ▶ Develop a clear view of priorities, for example through an energy and climate change strategy development process which outlines a coherent approach to project identification, development and delivery. This process should be based on the diagnostic assessment.
- ▶ Lead the way in setting city-level ambitions, commitments and targets on climate change which can contribute to national and international objectives.



For national governments:

- ▶ Integrate energy action planning into national urbanisation strategies.
- ▶ Put in place a regulatory framework to allow cities to meet their energy needs autonomously, including liberalisation of energy markets to allow local and community power utilities or power producers.
- ▶ Hold cities partially accountable for the implementation and achievement of national and international climate and energy objectives and commitments.
- ▶ Support the decentralisation of finance and enable more finance from international funds to cities.



The study can be downloaded for free from the EUEI PDF website:
www.euei-pdf.org

For the private sector:

- ▶ Engage with local government and local city partnerships to provide technical expertise and advice in decision-making.
- ▶ Seek guidance on how the private and public sector can work together to enable climate action locally.
- ▶ Enter into dialogue with national and local government to shape policies and regulation to de-risk private investment.
- ▶ For private and public utilities, explore opportunities for decentralised networks and align investment in distribution networks with urban and transport development plans.



For civil society:

- ▶ Engage with and ensure representation of marginalised groups which public bodies may find hard to reach.
- ▶ Bring technical and scientific capacity to assist in analysing local needs, and provide training to municipalities.
- ▶ Work with informal communities to support livelihoods through solutions such as decentralised energy.



For the international donor community:

- ▶ Support municipalities in developing capacities, notably with senior leadership teams, as a critical step to strengthen city action. Particularly secondary cities might require additional support to enable action.
- ▶ Target action towards a wide range of stakeholders of urban development, such as: public sector land holders; housing finance institutions and infrastructure; real estate developers; and civil society organisations.
- ▶ Strengthen municipal finances for energy and climate action and create project preparation facilities to support the creation of bankable projects at sub-national governmental level.
- ▶ Assist in enhancing the enabling environment and market readiness for city-focused energy and climate solutions.



Illustrations by The curve vfx GmbH

The Partnership Dialogue Facility (EUEI PDF) currently receives contributions from the European Commission, Austria, Finland, Germany, Italy, the Netherlands and Sweden.



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April 2017

