

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**. Local governments in Africa have great interest and incentives to initiate climate action in their own constituency, but are often **constrained by a lack of institutional capacities and policy options** to exploit the full range of local action.

The EU Energy Initiative Partnership Dialogue Facility (EUEI PDF) through its Strategic Energy Advisory and Dialogue Services (SEADS) is actively contributing to shaping the global agenda and supporting the implementation of global goals. **Energy, climate change and cities are three key policy priorities**. Therefore, the EUEI PDF is developing 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 the energy-climate-cities nexus and provides a useful starting point for policy makers and city leaders in **identifying opportunities for action in the context of energy, climate and urban agendas**.

Objectives

The overall purpose of the study is to explore how energy and climate change issues can be addressed through Africa's urbanisation. Specifically the study aims to:

- ▶ **mitigate risk in strategic policy-making** by providing a long-term horizon 2050 in order to identify uncertain drivers for change and wildcards;
- ▶ help cities **establish a vision** and frame choices to mobilise action;
- ▶ **break down complexity** of urban planning (inter-sectorial inputs) by presenting four scenarios and concrete policy choices;
- ▶ **enhance effectiveness and design of plans, programmes and projects** at city level by complementing and informing city level energy scenarios modelling, carbon inventory and climate risk modelling work;
- ▶ inform the debate of how cities can support the **achievement of the Sustainable Development Goals**.

Activity	Thematic Study
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Term	May – November 2016



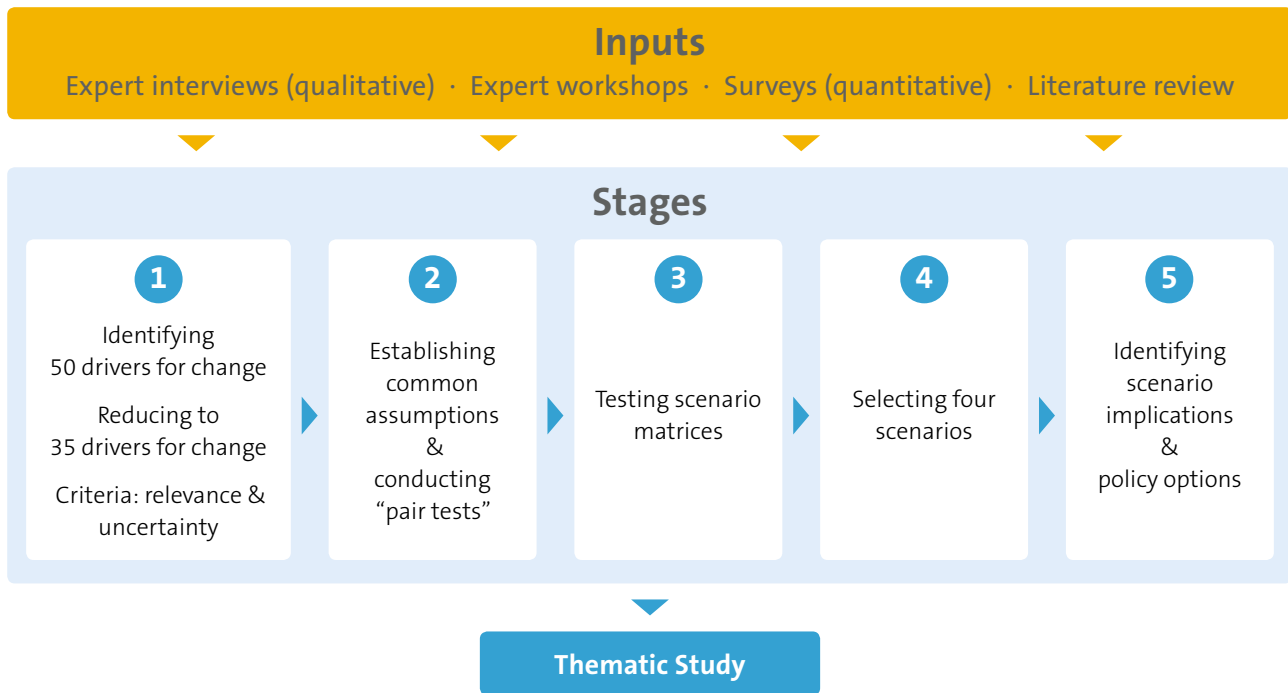
Activities

Along with **literature research** and a **scientific strategic foresight methodology**, the scenario building process used for the study included **expert validation through interviews, workshops and surveys** throughout all stages. This approach allowed for **qualitative and quantitative inputs** and informed the process from the perspective of stakeholders of the **public and private sector, civil society as well as academia from both Africa and Europe**. Throughout the process, consultation activities took place to seek validation and knowledge from various experts acquiring an interdisciplinary perspective through:

- ▶ ten interviews;
- ▶ fifteen survey respondents;
- ▶ three interactive focus group consultation workshops: European Development Days 2016 in Belgium; GIZ Energy and Cities Workshop in Germany and Cities Alliance Africa Strategy Workshop in Ghana;
- ▶ five peer reviews.



Thematic study approach



Results

The thematic study will be of use in informing how infrastructure and urban development in African cities can be shaped to maximise development outcomes and the relevant governance models to unlock delivery. It is relevant to a number of ongoing initiatives including the **Global Covenant of Mayors for Climate & Energy** and the **International Urban Co-operation for Sustainable Cities and Regions**.

The study will produce:

- ▶ four future scenarios for African cities and their trajectories until 2050;
- ▶ policy options (what) and action frameworks (how) for unlocking opportunities for climate responsive development in cities within each of the scenarios.

The final product is to be launched at **Habitat III** in October 2016 in Quito and the **COP 22** in November 2016 in Morocco.

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Austrian
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