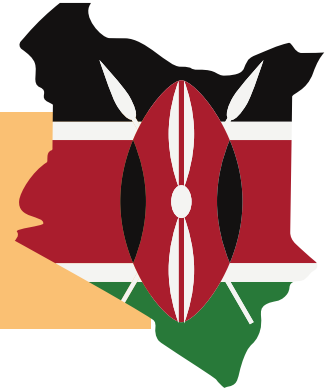


KENYA

Kenya has the highest renewable energy (RE) installed capacity within ESECA target countries, as well as the most diversified energy mix. The country has a good context for smart grids development, with public and private digitalization initiatives.



NATIONAL CONTEXT

Ease of doing business index		Global competitiveness index <i>(World rank)</i>	Population	53,771,300 inhabitants
World rank	Sub-Saharan rank		Human Development Index	0.601
56th	3rd	95th	GDP <i>(annualized average rate growth between 2010 and 2020)</i>	8.3%

ELECTRIFICATION RATE



91%

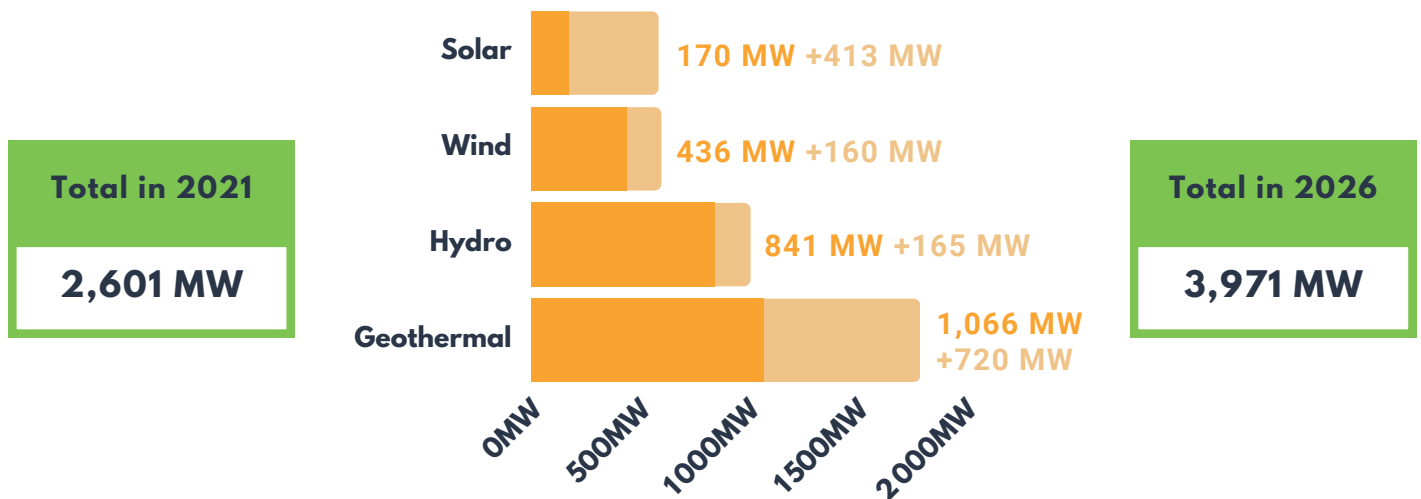


62%



70%

RENEWABLE ENERGY INSTALLED CAPACITY AND PROJECTIONS 2026



REGULATORY FRAMEWORK

- The energy sector is mainly structured around the Ministry of Energy and dominated by state-owned companies
- The **Kenya National Electrification Strategy** (2018) is the most relevant current document for the country's energy sector and market incentives in RE have been recently included

Data gathered with the support of Minsait. Full references available in the published report - June 2022

OPPORTUNITIES

Mini-Grids & Off-grids



Public initiatives as well as private companies are currently launching mini grids projects in Kenya, scattered throughout the country, with **more than 150 new solar powered mini-grids** expected to be developed in the medium term.

Energy Storage

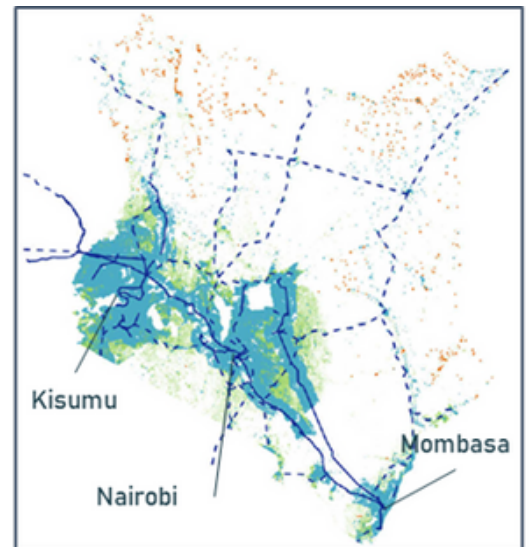


Within sub-Saharan Africa, Kenya has one of the **most developed Battery Energy Storage Systems markets**, and it is expected to be highly supported in the next decade.

+ 16,174,000 + 15%
(2015-2019)

People connected to solar mini and off-grid systems

- On-grid
- Mini-grids
- Off-grid systems
- Existing transmission lines (>69kV)
- Planned lines



Kenya planned electricity connections by 2030



Smart Grids

Kenya presents a good context for the development of smart grids, encouraging both public institutions and private companies' initiatives for **grid digitalization**. Automation and digital control systems are the most interesting technologies.



Electrical Equipment

Kenya is the country within the 5 analysed with the highest amount – in USD – of electrical equipment imports due to their **grid modernization and development plans**.

RESEARCH & DEVELOPMENT

- ▶ The number of R&D centres active in renewable energies is much higher in Kenya than in other African countries

KEY STAKEHOLDERS

- ▶ The most important stakeholders in renewable energies are in the public sector
- ▶ Universities and RE associations are numerous and active in RE, with **continuous collaboration with R&D private centres**