



Clean Energy Transitions in the greater Horn of Africa 2022

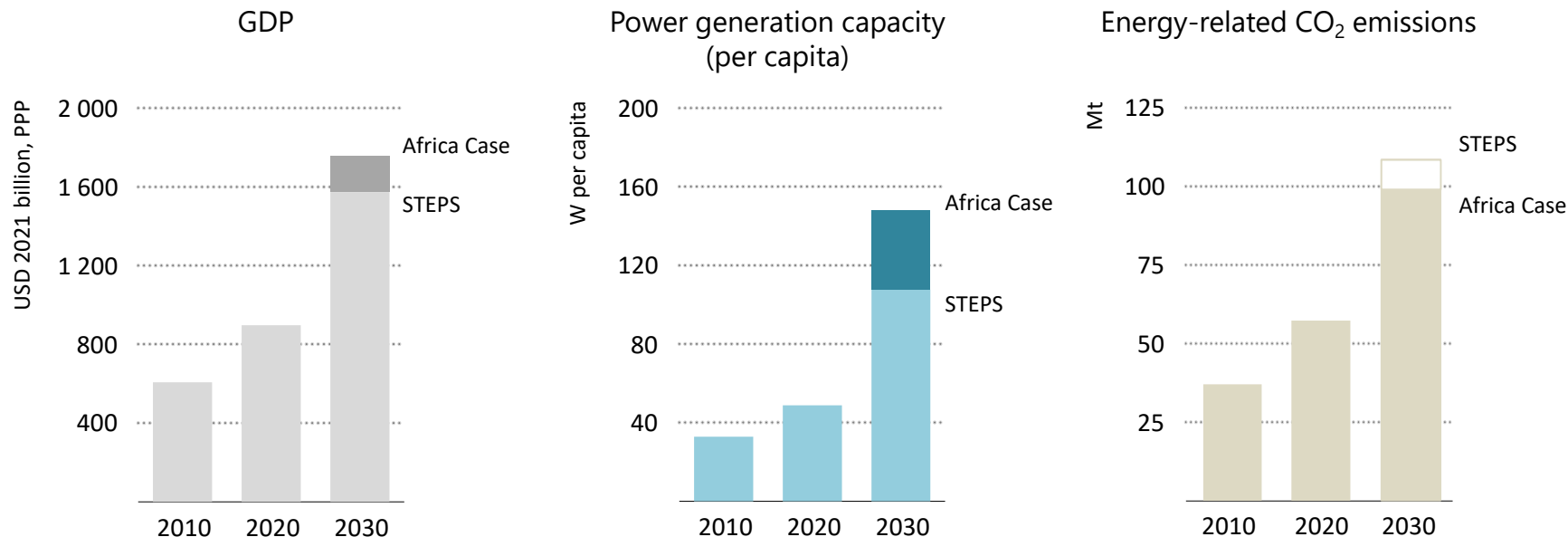
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Launch event and regional dialogue - 7 October 2022, Kampala

Clean energy transitions can boost the greater Horn development

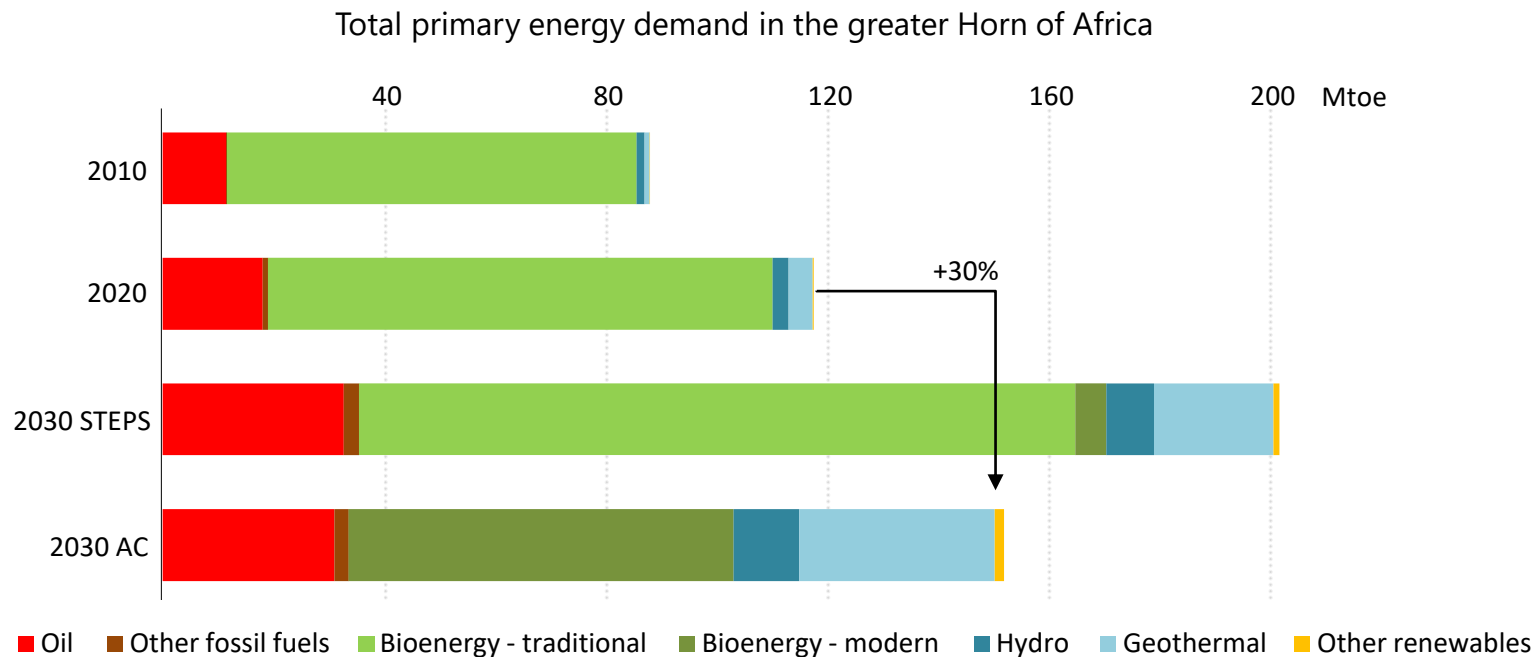
- The greater Horn of Africa is home to diverse countries with unique economic, cultural, and energy circumstances. Yet, deficit in access to modern energy, vulnerabilities to climate change and situations of conflict act as a brake to socio-economic development.
- As economic growth, increasing population and urbanisation are driving energy demand, countries in the greater Horn of Africa have opportunities to increase modern energy use, reduce imports, reinforce infrastructure and create jobs for a young and dynamic population.
- By placing the **Sustainable Development Goals** at the heart of policies by 2030, the region could:
 - Achieve universal access to electricity and clean cooking
 - Increase the share of modern renewables to almost 25%, and 95% in the power sector
 - Use just 30% more energy to fuel a two-times larger economy
- But there are **challenges to achieving this pathway**, including financing, the current global energy crisis and growing climate risks.
- The new [IEA report](#) provides a roadmap to address these challenges, and meet all energy-related Sustainable Development Goals, lowering emissions growth and avoiding lock-in.

Full access, economic and infrastructure growth with limited emissions



The *Africa Case* targets growth and achieves key SDGs including universal access to energy by 2030. This reinforces economic growth over the STEPS and helps further limit emissions growth.

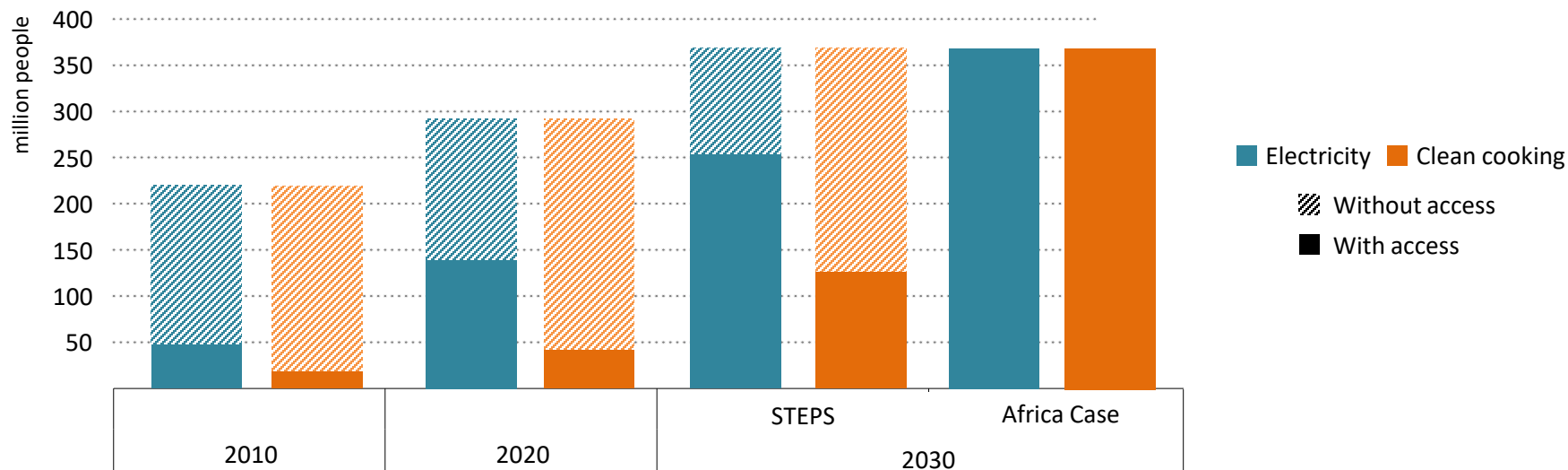
A dynamic but energy-diverse region, with potential for a bright future



The energy system is expected to expand, and the *Africa Case* envisions a rapid shift to a modern mix. Renewables out-compete all other forms of energy, thanks to hydro, geothermal and modern biomass.

SDG 7.1: Universal access is central to African energy development

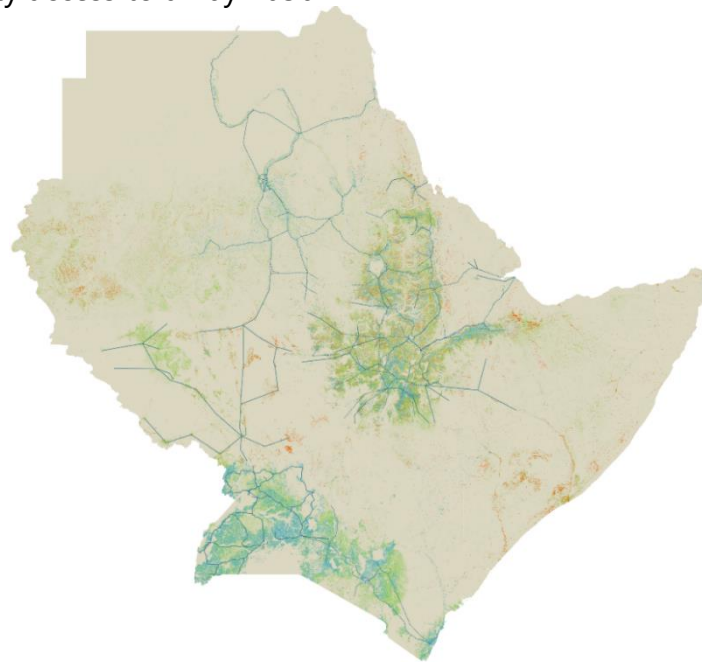
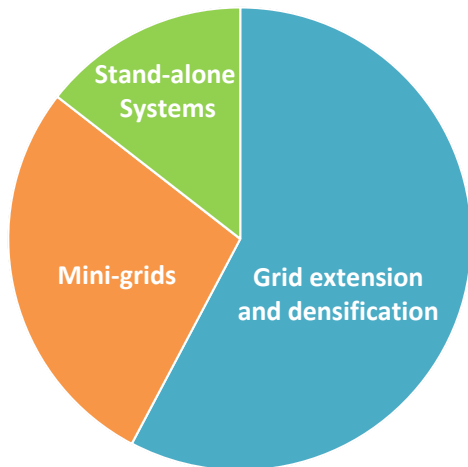
Energy access in the greater Horn of Africa



Half of the population has access to electricity, and less than 15 % to clean cooking fuels and equipments.
Reaching universal access by 2030 requires an acceleration over current policies.

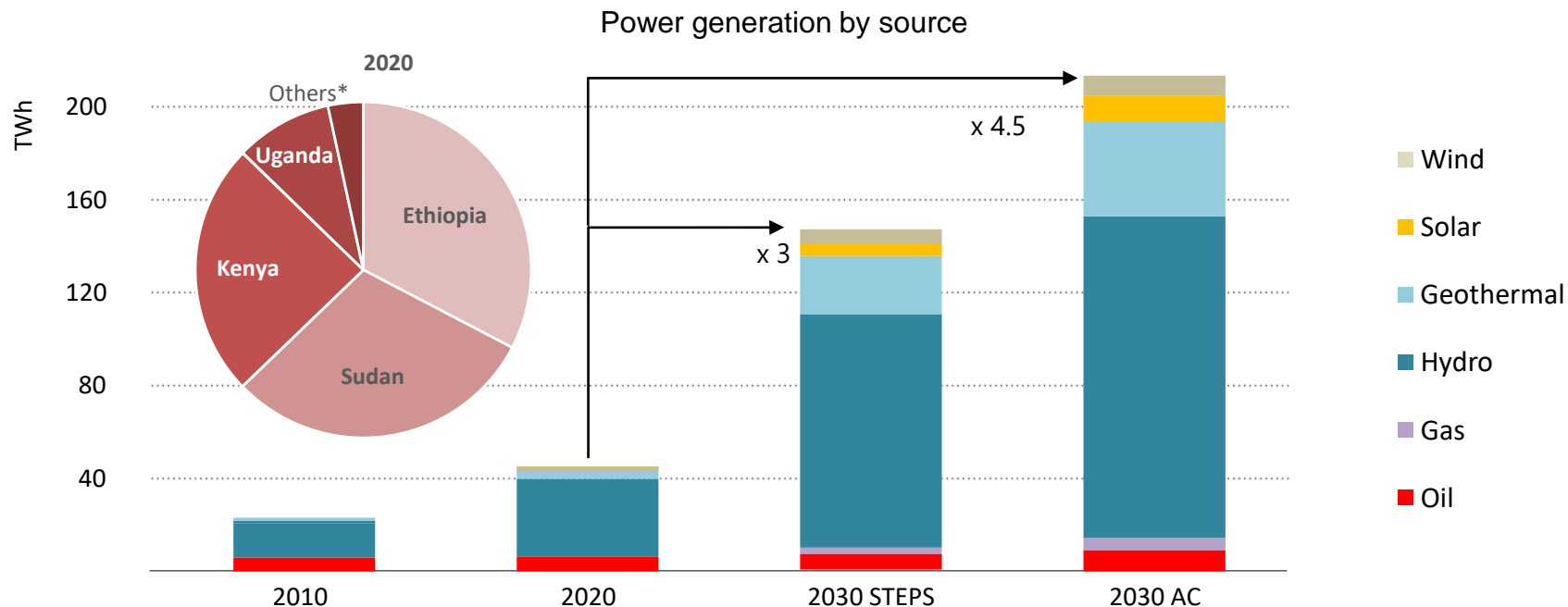
SDG 7.1: Universal access is central to African energy development

Least cost solutions to provide electricity access to all by 2030



Over 50% of those without access rely on grid extensions to provide them electricity by 2030. Off-grid solutions also play a key role, building on the success of the Horn's off-grid market.

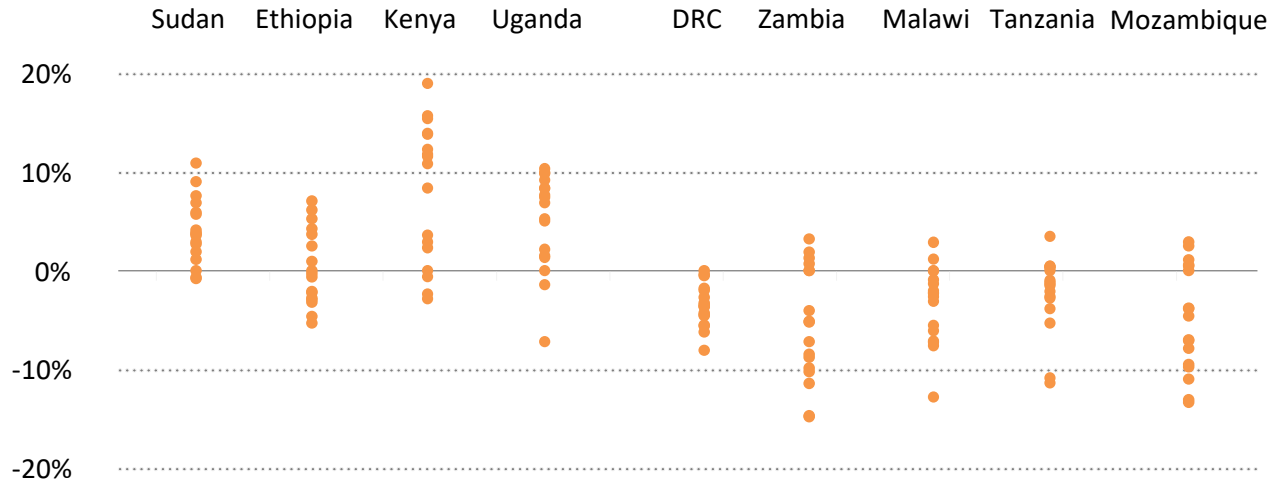
SDG 7.2: All renewables sources can expand further



To support its development, the region could generate three to four times more electricity than today. Hydropower generation increases four-fold, geothermal eight-fold in the Africa Case.

SDG 7.2: All renewables sources can expand further

Variability of annual hydropower capacity factors for selected African countries, 2020-2099

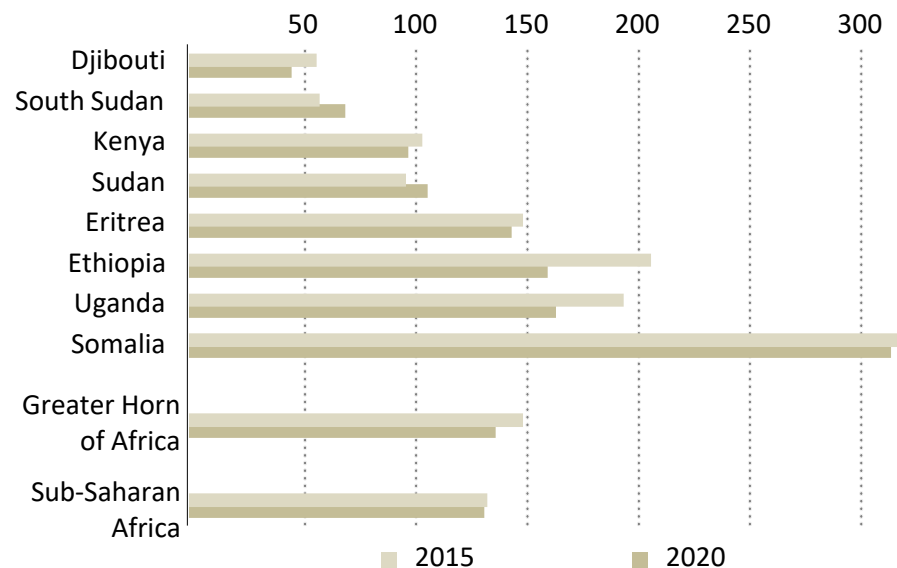


Although hydropower will continue to be the backbone of the region's power system, the impacts of climate change may limit this technology from achieving its full potential. Regional integration can mitigate it.

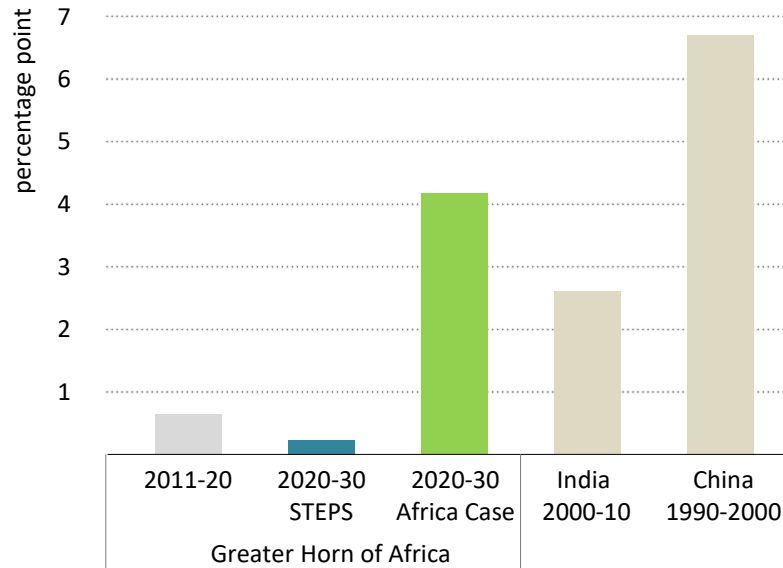
SDG 7.3: Energy efficiency policies can offset demand growth

Evolution of energy intensity

toe per USD million

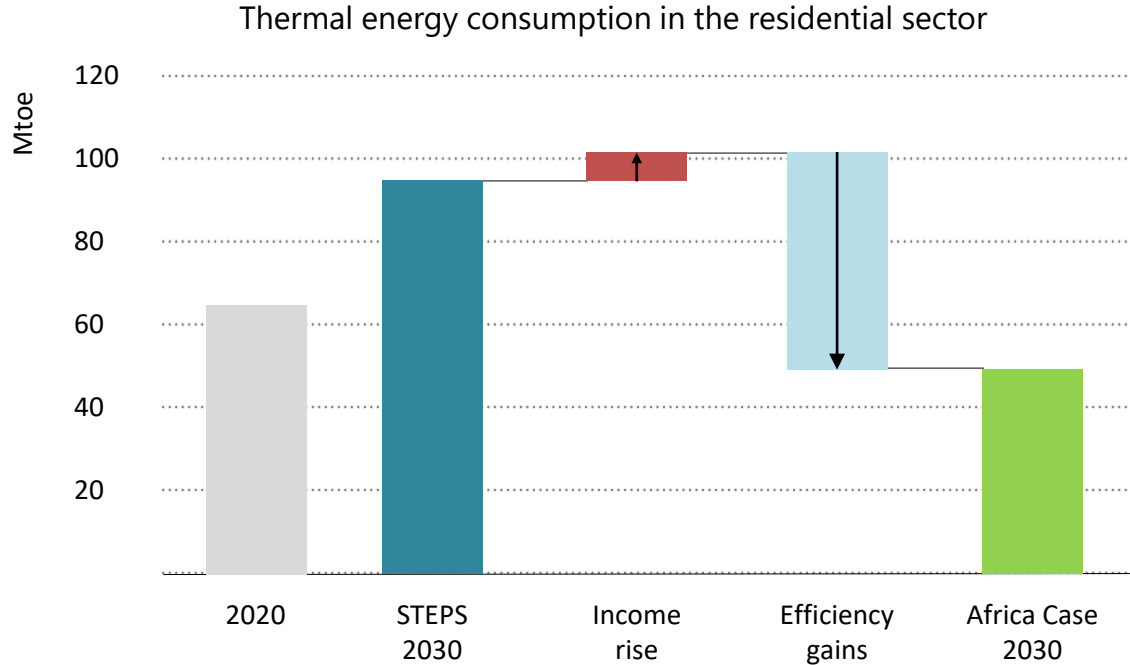


Average annual energy intensity improvements



Efficiency reduces fuel imports and shields customers for high energy prices. The *Africa Case* envisions energy intensity improvement on par with other past success stories.

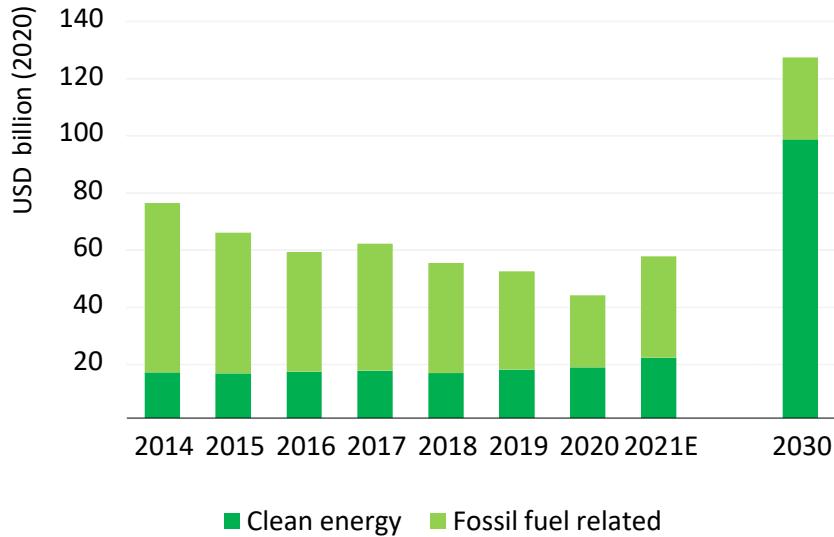
SDG 7.3: Energy efficiency policies can offset demand growth



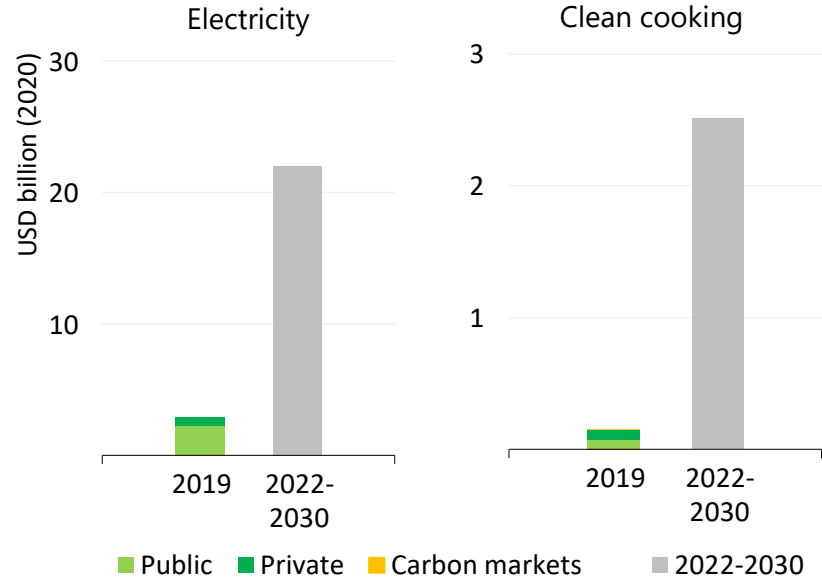
Clean and modern cooking devices and fuels can halve thermal residential demand.
Efficiency gains occur in all end-use sectors, notably by limiting inefficient vehicle and appliances imports.

Clean energy investment must accelerate

Annual energy investment, sub-Saharan Africa



Investment for universal access, sub-Saharan Africa



Reaching all African NDCs and universal access by 2030 requires reversing recent trends of falling energy investment on the continent– nearly doubling by the end of the decade.

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