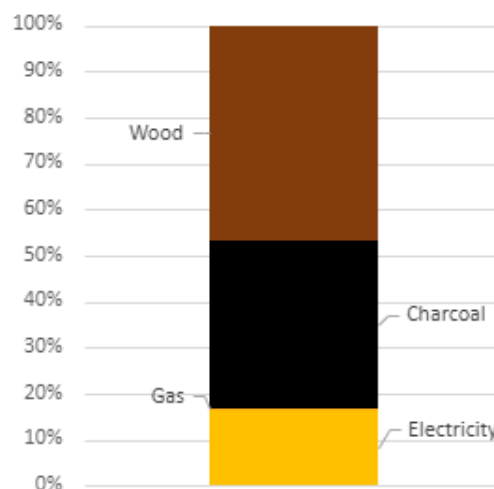
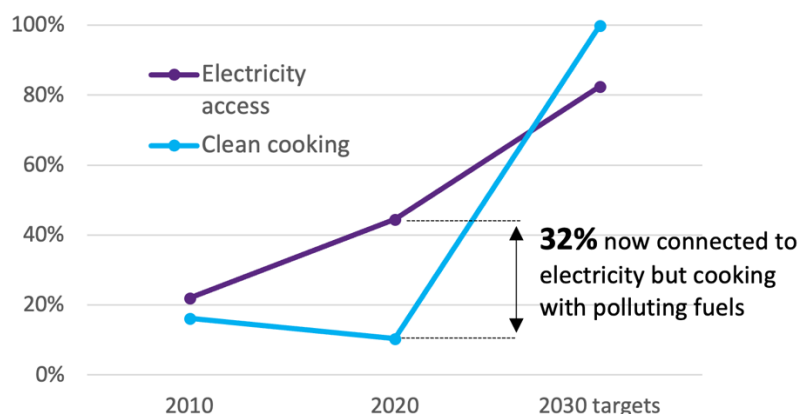


Current Situation: Electricity Access, Clean Cooking

- 42% have access to electricity (of which 4.7% use off-grid solutions).
- 26% cook with commercialized polluting cooking fuels (charcoal); and 90% cook with polluting cooking fuels.
- Access to clean cooking fuels has declined in recent years.



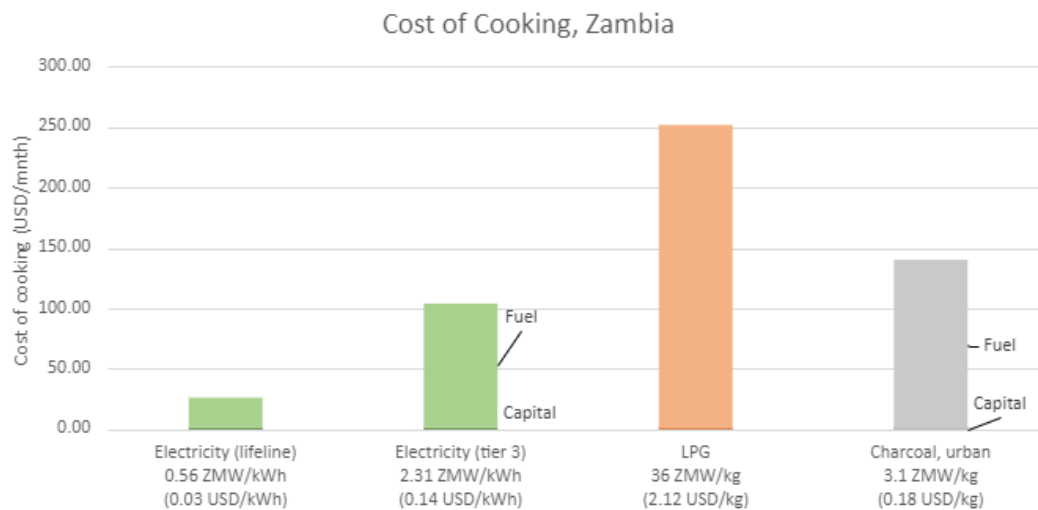
Above: Electricity and clean cooking access, World Bank WDI and SDG7 Energy Compact of Zambia
 Right: Primary cooking fuel use, ZAMBIA Energy Access Diagnostic Report Based on the Multi-Tier Framework

Potential for eCooking

- **49% of urban households connected to the electricity grid do not cook with it** – urban centres can be easily targeted¹.
- **It is cheaper to cook with Electric Pressure Cookers:** 95% cheaper to cook beans on an EPC compared to charcoal, 98% cheaper compared to LPG².
- Studies comparing the cost of cooking with different fuels show that **electricity is cheapest**².
- Even under proposed **tariff increases**, energy efficient electric cooking at 2027 prices will be cheaper than cooking with LPG (at today's prices).

¹ Alternatives To Charcoal (A2C) Baseline Report (2022)

² <https://mecs.org.uk/wp-content/uploads/2022/11/Zambia-Rising-Fuel-Prices-1.pdf>



Cost of cooking over a month, using international averages for cooking energy demand from ESMAP (2020)³ and local electricity/fuel prices from price surveys conducted in 2022, and including cost of appliance levelized over stove lifetime. (Capital cost for electrical device is one EPC).

- 95% of the menu can be cooked on EPCs⁴.
- Of current available generating capacity (2,800 MW), over 80% is hydro.
- There is an ongoing programme of investment in electricity generation – 2,660 MW scheduled to come online by 2026, all of which is hydro, representing a doubling of current capacity. This additional capacity is needed to eliminate load shedding in drought years, but should otherwise create a generation surplus.
- The plan to reduce electric cooking and increase the use of LPG⁵ is outdated, given Indeni refinery is out of action and the volatility of global LPG prices.

MECS programme activity

- Working with CEEZ since 2018 to do the feasibility research for eCook, finding eCooking is affordable, convenient, compatible with the menu.
- Working with USAID Alternatives to Charcoal programme as technical lead for electric cooking on the National Clean Cooking Strategy & Action Plan.
- Supporting Zambian companies to develop supply chains and market presence (Challenge Funds).
- Collaboration with Climate Compatible Growth (CCG) programme (e.g. research into impacts of electric cooking on the network)

This material has been funded by UKAid from the UK government; however the views expressed do not necessarily reflect the UK government's official policies

³ Energy Sector Management Assistance Programme 2020. [Cooking with Electricity: A Cost Perspective](#) World Bank, Washington, DC @ World Bank License CC BY 3.0 IGO

⁴<https://mecs.org.uk/wp-content/uploads/2022/03/Zambias-modern-energy-cookbook-the-future-of-Zambian-cooking.pdf>

⁵ The Republic of Zambia Ministry of Energy. (2019). Zambia SEforAll Action Agenda: Sustainable Energy for All Initiative.