

Current Situation: Electricity Access, Clean Cooking

- 87% have access to electricity.
- 34% cook with charcoal, and a further 33% cook with wood, such that 90% cook with biomass fuels which are harmful to health and environmentally damaging. 24.5% cook with LPG.



Potential for eCooking

- 86% of people are connected to electricity and not using it as their primary cooking fuel urban centres can be easily targeted, having reliable, stable access to electricity.
- It is cheaper to cook with Electric Pressure Cookers: a *minimum* of 2-4 times cheaper to cook five Ghanaian staple dishes on an EPC compared to charcoal and LPG, in urban contexts (Ghana eCookbook).



Cost of cooking over a month, using international averages for cooking energy demand from ESMAP (2020)¹ and local electricity/fuel prices from price surveys in March 2023 and the Ghana eCookbook, and including cost of appliance levelized over stove lifetime. Electric appliance is one EPC.

¹ Energy Sector Management Assistance Program. 2020. Cooking with Electricity: A Cost Perspective. World Bank, Washington, DC. © World Bank. License: CC BY 3.0 IGO.









- Approximately 90% of the menu can be cooked on EPCs (Ghana eCookbook).
- Currently Ghana has excess of 1776 MW dependable grid capacity, which amounts to about 30% excluding transmission losses. Demand stimulation is a key government priority, not only to cover for underutilisation, but also to decrease some of the outstanding debts of the Electricity Company Ghana.
- Strong capacity and experience for appliance efficiency changes: in 2012 the Government of Ghana, UNDP and Global Environment Facility (GEF) undertook the 'rebate and turn in' project replacing inefficient cooling systems with new, efficient fridge models.
- The manufacturing company BURN has plans for a factory in Ghana including production of tier three Improved Cookstoves (ICS) as well as EPCs. BURN was awarded the affordability prize in the <u>2020 Global LEAP Awards</u> <u>Electric Pressure Cooker competition</u>, implemented by CLASP in partnership with the MECS programme.
- Ghana has authorised internationally transferred mitigation outcomes (ITMO) under the Paris Agreement's Article 6.2, bringing new opportunities for carbon finance of electric cooking.
- According to the nation's Renewable Energy Master Plan, renewable energy will account for 1364 MW of the nation's total power generation by 2030, up from 43 MW in 2015, increasing the proportion of RE in Ghana's energy mix.

MECS programme activity

- Strong links with the Ministry of Energy developing an MOU around eCooking on minigrids.
- <u>Ghana eCookbook</u> launched in 2022.
- The Clean Cooking Forum 2022, Accra included a live cooking demonstration by MECS hosted by the Government of Ghana and Clean Cooking Alliance.
- MECS has a strong relationship with the British High Commission and participated in a session on carbon credits at the end of March.
- Ongoing discussions between Ghana Alliance for Clean Cookstoves and Fuels (GHACCO) and MECS.
- PhD researcher Steyn Hoogakker resides in Accra and is in the final stages of his PhD, researching 'Just Energy (Cooking) Transitions in Urban Informal Settlements'.
- Ongoing eCooking Diary Study (light) and Journey Mapping study, following 20 poor urban households transitioning from charcoal to electricity as their primary cooking fuel, supported by the Swiss Embassy in Ghana, executed by <u>The Last Supper Project Foundation</u>.

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.





