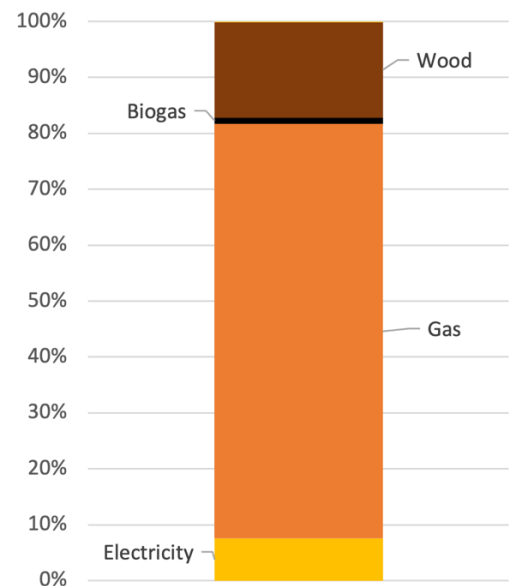
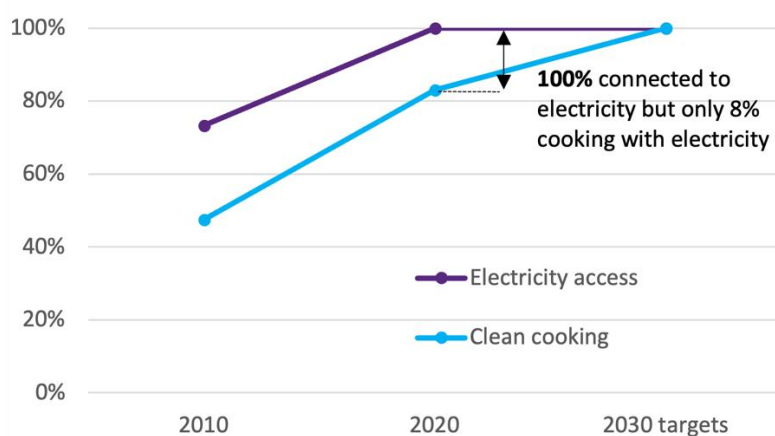


Current Situation: Electricity Access, Clean Cooking

- All the households in Bhutan have access to electricity, but only 8% use electricity as the primary fuel for cooking.
- While the clean cooking access gap is 17%, 74% cook with LPG which is expensive for households and government due to subsidies. 1% cook with domestic biogas, 17% with wood (harmful for health and environment) and 0.1% with kerosene.



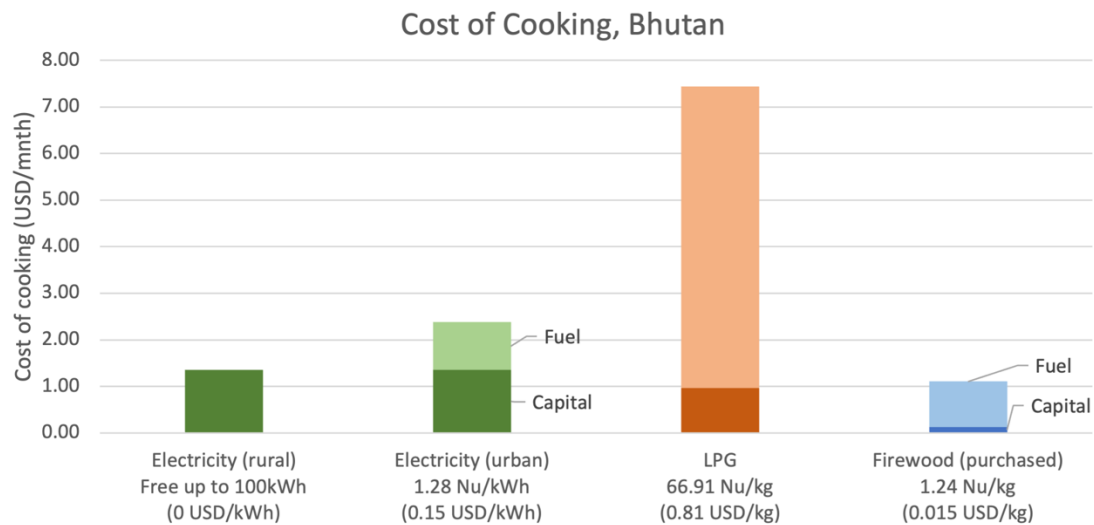
Above: Electricity and clean cooking access: WB World Development Indicators, and [Energy Transition Pathways for the 2030 ESCAP Agenda: SDG7 Roadmap for Bhutan, UNESCAP, 2022](#).

Right: Clean cooking: same UNESCAP source.

Potential for e-Cooking

- **90% of urban and 58% of rural population cook with LPG as the primary fuel, but cooking with electricity is much cheaper.** Given all electricity production is hydropower with exports to India and 2,660 MW scheduled by 2026, eCooking promotion should be targeted to LPG consumers.
- Rural households are waived up to 100 units electricity per month; this makes **eCooking comparable to cooking with firewood for rural households**, providing an enabling setting for electric cooking promotion across the board.
- The shift towards eCooking **could allow government to increase revenue** since LPG is subsidised and imported.
- Many Bhutanese dishes such as *Phaksha Paa* and *Emo Datshi* require long cooking times and are ideal for the adoption of eCooking. Cooking time for these dishes was shorter **by 20-30%¹ on an infra-red cooker than on an LPG stove** and could be shorter with **electric pressure cookers**.

¹ Analytical study on the piloting/upscaling of electric cooking in Bhutan, UNESCAP, MECS & Department of Energy, Bhutan, 2022.



Cost of cooking over a month, using [Bhutan Electricity Authority, Overview of clean cooking in Bhutan, The residential energy futures of Bhutan, Energy Transition Pathways for the 2030 ESCAP Agenda: SDG7 Roadmap for Bhutan, UNESCAP, 2022](#). Capital cost – electric appliance assumed to be induction stove.

MECS programme activity

- A MECS, UNESCAP and Sustainable Energy for All (SE4ALL) partnership is supporting the Government of Bhutan with the transition to eCooking. Currently biomass users are being targeted but MECS advise targeting the segment using LPG to transition to eCooking for large scale impact.
- MECS is advising on a report 'The Deployment Piloting of Electric Cookstoves' by the Department of Energy for the Government of Bhutan. This includes collaboration with UNCDF.

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