



ADVANCING CLEAN COOKING IN UGANDA

Clean cooking remains a critical area of development priority for Uganda's national energy agenda. While the Ministry of Energy and Mineral Development (MEMD) has made commendable progress with renewable energy access and generation through various projects and programs across the country, clean cooking adoption remains significantly low, with 90.5 % of the total energy consumption used for cooking being accounted for by biomass use as of 2023.

The continued dependence on traditional biomass cooking solutions among Ugandans and refugees contributes significantly to human respiratory illnesses, environmental degradation, deforestation, and climate change. With women and youth also being disproportionately affected due to their primary role in cooking and fuel collection, they are left as the biggest victims of indoor air pollution.

Clean cooking entails the use of improved or modern fuels and technologies for cooking that significantly reduce household air pollution, and improve energy efficiency⁴ offering a pathway to improved health outcomes, reduced pressure on natural resources, and inclusive socio-economic growth.

POLICY CONTEXT

Uganda's key policy instruments and strategies address household energy efficiency, renewable energy development, forestry conservation, and emissions reduction to acquire sustainable energy development while prioritizing affordable and clean energy access, gender equality, and climate action.

With these goals being prioritized, clean cooking has been increasingly positioned as a cross-cutting issue linked to all the aforementioned. These frameworks provide a foundation for scaling the clean cooking ecosystem in collaboration with multiple private

enterprises, civil society organisations, and development partners supporting market development, consumer financing, awareness campaigns, and pilot programmes. Some of the policy instruments and strategies include;

- **The Energy Policy (2023)⁵** supports Uganda's goals for achieving affordable, reliable, sustainable, and modern energy for all, in line with national development priorities and global commitments. The policy places strong emphasis on clean cooking transitions, recognising the environmental, health, and gender costs of continued reliance on traditional biomass. It promotes diversification of cooking energy sources, increased use of electricity and other clean alternatives, private sector participation, and behaviour change interventions to drive adoption.
- **Uganda Biogas and Electric Cooking Programme (UBEP)⁶** is a national flagship clean cooking initiative designed to accelerate Uganda's transition away from traditional biomass fuels toward modern, clean, and sustainable cooking solutions, with a particular focus on biogas and electric cooking (e-Cooking) technologies.
- **The Nationally Determined Contribution (NDC) (Updated 2022)⁷** commits the country to reducing greenhouse gas emissions and strengthening climate resilience across key sectors, including energy and forestry. Clean cooking is highlighted as a critical mitigation and adaptation measure due to its role in reducing biomass consumption, deforestation, household air pollution, and climate vulnerability.

[Energy Policy, 2023.](#)

[Modern Energy Cooking Services \(2022\) Uganda's cooking energy sector: A Review](#)

[Modern Energy Cooking Services \(MECS\) \(2024\) Gender Equality, Equity and Women's Empowerment Framework: A proposed framework to assess and monitor gender equality, equity and women's empowerment in modern energy cooking services \(MECS\)](#)

[Clean Cooking: A Path to a Healthier and Sustainable Uganda](#)

- **Biomass Energy Strategy (BEST) (2014)⁸** was developed to address Uganda’s heavy dependence on biomass for cooking and its associated environmental and health impacts. The strategy promotes efficiency improvements, fuel substitution, and sustainable biomass management, while recognising the social and cultural integration of cooking practices.
- **Electricity Access Scale-Up Project (EASP)⁹** focuses on particularly for households, institutions, and productive uses. While primarily supply-oriented, EASP creates a critical enabling environment for electric cooking adoption by improving grid connectivity, reliability, and service coverage.
- **Climate commitments under the Paris Agreement¹⁰**, where clean cooking contributes to emissions reduction and adaptation co-benefits. This was further consolidated at the Summit on Clean Cooking in Africa, 2024, in Paris, where the UK government awarded Uganda five million pounds to accelerate electric cooking in the country¹¹. The support was intended to establish a clean cooking unit at MEMD, develop electric cooking standards, pilot electric cooking in schools, promote e-cooking in urban informal areas and creation of e-cooking awareness.
- **Uganda clean cooking scale and support programme¹²** is a national initiative aimed at accelerating the adoption of clean, efficient, and affordable electric cooking solutions to reduce reliance on biomass fuels, improve public health, and cut greenhouse gas emissions. Embedded within Uganda’s broader energy transition and climate commitments, the programme supports the shift from traditional cooking fuels to modern electric cooking appliances. However, market growth remains uneven and heavily dependent on donor support, underscoring the need for stronger regional and domestic policy and fiscal incentives.



ANALYSIS

Uganda has registered steady increase in access to electricity over the past 20 years, increasing from around 5% in 2000 to 58% in 2024. However, over the same period, access to clean cooking has risen from less than 1% to around 15%¹³. Notwithstanding, Uganda’s household energy mix remains dominated by firewood and charcoal, particularly in rural and peri-urban areas. While biomass is often perceived as affordable and readily available, its widespread use masks significant social, environmental, and economic costs, like the high levels of indoor air pollution from inefficient stoves leading to respiratory and cardiovascular diseases, eye issues, accelerated deforestation and land degradation, greenhouse gas, and increased burden on women and girls who spend substantial time cooking and collecting fuel.



Additionally, although clean cooking technologies such as improved biomass stoves, LPG, biogas, ethanol, and electric cooking appliances are available in Uganda, adoption remains limited due to the high upfront costs of these clean cooking appliances and fuels¹⁴, limited access to consumer finance, and pay-as-you-go models.

The weak and urban-centred supply chains also restrict access to clean cooking appliances and fuels in peri-urban and rural areas, limiting consumer choice, exposure to advanced technologies, and market growth¹⁵.

Furthermore, the widespread availability of counterfeit and energy-inefficient appliances has led to poor user experiences, undermining trust in clean cooking technologies. This is reinforced by weak certification and labelling systems, which leave consumers unable to distinguish quality, efficient products from substandard alternatives¹⁶.

Additionally, the sector suffers from limited market intelligence, low consumer awareness, and a long and uncoordinated-time lag between awareness-raising and programme implementation¹⁷.

Extended gaps between sensitisation campaigns and actual technology acquisition lead to loss of recall and diminished community interest. As a result, when programmes re-engage these communities, awareness efforts must often restart from the beginning, increasing costs, reducing programme efficiency, and slowing adoption.

Clean cooking intersects multiple sectors, including energy, health, environment, gender, and local government. With the fragmented institutional responsibilities and limited coordination among the different ministries of the various sectors, there has been a constrained, coherent policy implementation and scale-up.

RECOMMENDATIONS

To accelerate the transition to clean cooking in Uganda, the following policy actions were recommended:

- Strengthen Policy Coherence and Ministerial Coordination** by establishing a national clean cooking coordination plan spearheaded by MEMD, bringing together the ministries in charge of energy, health, environment, gender, and local government institutions, programs, and projects, which will clarify the institutional mandates in terms of clean cooking, reduce duplication, and improve accountability during implementation of the clean cooking projects.
- Refining targeted fiscal incentives to improve affordability and access**, such as further reducing the subsidies on clean cooking appliances and fuels, and shifting the cooking tariff to follow the lifeline tariff with a 50% discount on units in the 15-30 range. Expand last-mile electricity access through both grid extension and off-grid solutions to enable households, institutions, and businesses adopt electric cooking. This will reduce reliance on traditional biomass fuels and ease pressure on Uganda's limited biomass resources.



- **Support Market Development and Innovation** by strengthening local manufacturing and assembly of clean cooking technologies to reduce costs and create jobs. Invest in supply chain infrastructure and last-mile distribution, particularly in hard-to-reach areas. Encourage innovation in sustainable biomass and alternative fuels like briquettes aligned with Uganda’s energy mix.
- **Promote Behavioural Change and Public Awareness** by implementing nationwide awareness campaigns highlighting the health, economic, and social benefits of clean cooking.
- Integrate clean cooking messages crafted in different local languages, conduct live cooking demonstrations using e-cooking appliances, and engage women’s groups and community leaders as champions of clean cooking adoption.
- **Leverage Climate and Carbon Finance** by optimising the climate finance Unit through the Ministry of Finance, Planning, and Economic Development to sustain and scale national clean cooking programmes.
- **Build institutional capacity to monitor**, evaluate, report, and verify emissions reductions from clean cooking interventions to be able to track progress.

This policy brief analyses the clean cooking landscape in Uganda as a follow-up from the discussions during the Renewable Energy Conference and Expo 2024.

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