ALLIANCE FOR EMPOWERING RURAL COMMUNITIES
AERC-GH · www.aercghana.org

2026

Policy Brief · World Earth Day 2026

Powering Change: Insights on Energy Access and Clean Energy Adoption in Ghana

Evidence-based insights from a rapid survey on household and small business energy use, challenges, and readiness for clean energy transition across Ghana.

Opposite Grace Bioh, Mataheko-Afienya, Greater Accra
info@aercghana.net · www.aercghana.org

Energy Access · Ghana

• Executive Summary

As the world marks Earth Day 2026, conversations around climate action must move beyond awareness to practical solutions that improve everyday lives. In Ghana, many households and small businesses continue to face challenges with energy access, particularly in terms of cost and reliability.

This brief presents insights from a rapid survey on energy use and clean energy adoption. The findings show a strong reliance on the national grid, widespread concerns about electricity costs and reliability, and a clear willingness among respondents to adopt clean energy solutions such as solar.

Affordability and access to financing continue to limit adoption. These insights point to an urgent need for policies that make clean energy more accessible through flexible payment options, targeted support, and increased investment in decentralised solutions.

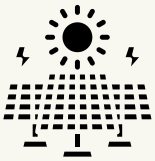
KEY NUMBERS AT A GLANCE (Survey Insights)

96%

rely on the national grid as their primary source

68%

Say high electricity costs are the biggest challenge



82%

Are willing to adopt solar or other clean energy solutions

71%

Cite upfront costs and limited financing as the main barrier

• BACKGROUND AND CONTEXT

Access to reliable and affordable energy remains central to economic growth, productivity, and quality of life in Ghana. While the country's overall electrification rate reached 89% in 2024 among the highest in sub-Saharan Africa, a stark urban-rural divide persists, with rural access still trailing at approximately 72% compared to 95% in urban areas. About 3.7 million Ghanaians, concentrated largely in northern rural communities, remain without electricity entirely (SE4All, 2024; Ecofin Agency, 2025).

Traditional energy sources such as charcoal and firewood remain a major public health concern. In Ghana, air pollution caused over 32,500 deaths in 2023, with household solid fuel use responsible for 71 percent of the impact, disproportionately affecting women and children (State of Global Air, 2025).

Only 23% of households use clean cooking fuels, dropping to just 7% in rural areas (GSS, 2022). Ghana's Energy Transition and Investment Plan (ETIP) targets net zero by 2060, with solar PV set to lead future power growth (SE4All, 2024).

Yet for many households and small businesses, the decision to switch is shaped not just by awareness, but by affordability and accessibility making targeted policy intervention essential.

• Key Findings and Insights

PRIMARY SOURCE
National Grid Dominant

TOP CHALLENGE
High Electricity Costs

CLEAN ENERGY INTEREST
Majority Willing to Adopt

Energy Access and Reliability

A strong dependence on the national grid remains evident, with most respondents indicating it as their primary source of electricity. However, this access does not necessarily translate into satisfaction since many described their supply as only somewhat reliable. This points to a growing concern where reliability, rather than access alone, is shaping how people evaluate energy systems.

Cost and Outages as Dual Burdens

Cost emerged as the most pressing issue across responses. A majority of participants identified high electricity expenses as their main challenge, while others pointed to frequent power outages. Together, these concerns highlight the dual burden of affordability and reliability, which continues to affect both households and small-scale economic activities.

> "Electricity is too expensive and sometimes not stable. It affects how we run things at home and work." — Survey participant

Strong Interest in Clean Energy Alternatives

Despite these challenges, there is a strong and encouraging interest in clean energy alternatives. A large proportion of respondents expressed willingness to adopt solutions such as solar power, while many others indicated openness to making the transition. This reflects a meaningful shift in mindset where clean energy is no longer seen as unfamiliar, but as a viable and desirable option.

> "If solar systems were easier to pay for, more people would go for it. The interest is there." — Survey participant

Access, Not Interest, Is the Barrier

What becomes clear is that the barrier is not a lack of interest, but the difficulty of access. Upfront costs, limited financing options, and lack of flexible payment systems continue to stand in the way of adoption. Demand for clean energy is present and growing, but without deliberate efforts to address affordability and accessibility, this demand will remain largely unmet.

• Policy Recommendations

Addressing these challenges requires a shift from general energy expansion to targeted and inclusive solutions. AERC-GH recommends the following priority actions:

1

Promote Flexible Financing Models

Pay-as-you-go systems and installment-based payment structures can significantly reduce the burden of upfront costs, making solar and other clean energy solutions more accessible to households and small businesses.

2

Provide Government Subsidies and Duty Waivers

Targeted subsidies for clean energy technologies, along with reduced import duties on renewable energy equipment, can lower costs substantially and help bridge the gap between interest and actual uptake.

3

Create an Enabling Environment for Private Investment

Incentives that encourage investment in decentralised renewable energy systems can help expand access more quickly and efficiently, particularly in underserved rural and peri-urban areas.

4

Prioritise Decentralised Energy Solutions

Investment in mini-grids and solar home systems should be fast-tracked. These systems offer practical alternatives to the national grid and can improve both access and reliability at the community level.

5

Strengthen Awareness and Consumer Education

While interest in clean energy is high, deeper engagement is needed to build trust, improve understanding, and support informed decision-making among households and small businesses across Ghana.

• CONCLUSION

As Alliance for Empowering Rural Communities joins the global community in marking Earth Day 2026, there is a clear opportunity to move from intention to action. The insights from this survey point to a simple but important reality: people are ready for clean energy.

By focusing on practical interventions that address cost and access, Ghana can accelerate its transition to a more sustainable energy future while improving the everyday lives of its people. AERC-GH stands ready to support this transition through evidence-based advocacy, community engagement, and partnerships with the public and private sectors.

What people need are solutions that are affordable, reliable, and within reach.

- **REFERENCES**

The following sources informed the background, context, and statistical claims presented in this policy brief. All sources are publicly accessible and readers are encouraged to consult them directly.

1. **Ecofin Agency (2025).** Ghana Reaches 89% Electrification, Aims for 99% by 2030.ecofinagency.com

2. **Ghana Statistical Service (2022).** Ghana Demographic and Health Survey 2022 (GDHS). Government of Ghana, Accra.statsghana.gov.gh

3. **Health Effects Institute / IHME (2025).** State of Global Air 2025 Report. Health Effects Institute, Boston, MA.stateofglobalair.org

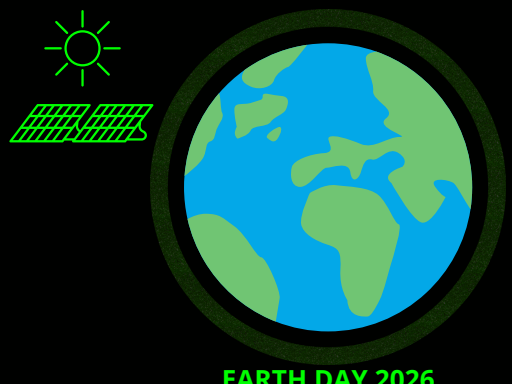
4. **Sustainable Energy for All — SE4All (2024).** Ghana Country Brief: Sustainable Cooling for All. SEforALL, Vienna.seforall.org

5. **AERC-GH (2026).** Survey on Energy Use and Clean Energy Adoption in Ghana. Alliance for Empowering Rural Communities, Accra. [Primary data — unpublished survey]

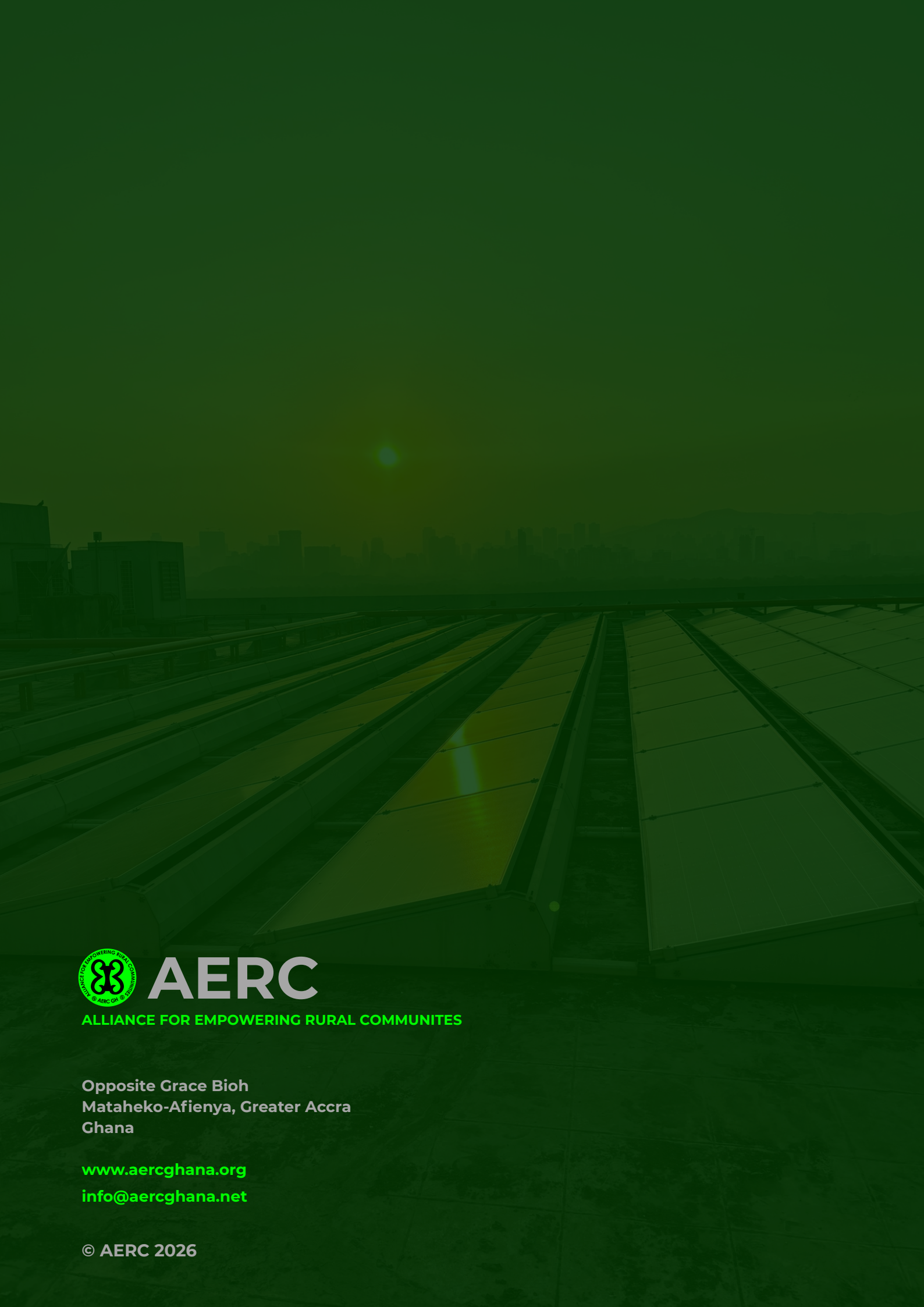
"OUR POWER, OUR PLANET"

Powering a Greener Ghana

This year's global theme calls on every individual, community, and government to accelerate the shift to clean, renewable energy. In Ghana, that power starts here.



EARTH DAY 2026



AERC

ALLIANCE FOR EMPOWERING RURAL COMMUNITES

Opposite Grace Bioh
Mataheko-Afienya, Greater Accra
Ghana

www.aercghana.org
info@aercghana.net