FUTURE OF ENERGY CONFERENCE 2025 INNOVATION CHALLENGE OUTLINE

A. BACKGROUND

Africa stands at the epicentre of a global energy paradox: it is the continent with the richest endowment of renewable resources—solar, wind, hydro, and geothermal—yet it harbours over 600 million people without access to electricity, representing nearly 80% of the world's energy-poor population[1]. At current rates, the continent will not achieve universal access to energy by 2030, undermining progress toward SDG 7 and broader development goals. This energy access gap is a developmental issue and a structural barrier to industrialisation, economic transformation, and climate resilience.

Meanwhile, the global energy landscape is shifting rapidly. The International Renewable Energy Agency (IRENA) reports that over 85% of new power capacity additions worldwide in 2023 were renewable[2], a clear signal that fossil-fuel dependency is economically and technologically obsolete. Yet, Africa accounts for less than 2% of global investments in renewable energy[3], despite being home to nearly one-third of the world's youth by 2050[4]. The implication is clear: if Africa does not assert itself as a driver of innovation, it risks locking itself into the periphery of the global energy economy, perpetually importing technologies, knowledge, and solutions designed elsewhere.

The energy transition is no longer aspirational; it is inevitable. But for Africa, it must also be transformational. The continent must move beyond passive adaptation to active innovation. A McKinsey analysis highlights that leveraging local innovation ecosystems could generate **up to** $120 billion in new energy-related value chains across Africa by 2030, if adequately supported[5]. This reinforces the idea that innovation is not only necessary for climate and energy security, but it is also a high-growth economic opportunity.

Against this backdrop, the Future of Energy Conference (FEC) 2025, organised by the Africa Centre for Energy Policy (ACEP), features the Innovation Challenge to catalyse the next generation of African energy pioneers. Designed to tap into the continent's vast youth potential, the challenge seeks to identify bold, scalable solutions from early-stage startups and innovators working on the frontlines of energy disruption.

---

[1] International Energy Agency (IEA). (2022). *Africa Energy Outlook 2022*. Retrieved from https://www.iea.org/reports/africa-energy-outlook-2022

[2] International Renewable Energy Agency (IRENA). (2023). Renewable Capacity Statistics 2023. Retrieved from https://www.irena.org/publications/2023/Apr/Renewable-Capacity-Statistics-2023

[3] IRENA & AfDB. (2023). Renewable Energy Market Analysis: Africa and Its Regions. Retrieved from https://www.irena.org/publications/2023/Jan/Africa-Energy-Market-Analysis

[4] United Nations. (2023). World Population Prospects 2022. Retrieved from https://population.un.org/wpp/

[5] McKinsey & Company. (2023). *Africa's Green Energy Revolution: Opportunities and Pathways*. Retrieved from https://www.mckinsey.com/featured-insights/middle-east-and-africa/africas-green-energy-revolution

B. TARGET AUDIENCE

The Innovation Challenge targets young African innovators and startups developing early-stage, disruptive ideas to deliver sustainable energy access across the continent. The focus is on projects still at the ideation or prototyping stage, but with a compelling concept map, prototype, or demonstrable framework to showcase feasibility.

Eligibility Criteria:

1. **Innovation Stage**:
    - Ideas must be in the **ideation** phase **with a prototype**.
    - Replication of mature technologies is highly discouraged (unless there is a demonstrable niche to improve efficiency, reduce cost or tailor to the African user experience).
    - Applicants must provide a **mind map, model, or early-stage prototype** demonstrating how the idea works or could be scaled.

2. **Age Requirement**:
    - Applicants must hold a passport of an **African country** and be between the ages of **15 and 35**.

3. **Team Participation**:
    - Team entries are allowed; however, **only one team representative** will be **sponsored to Accra** to pitch at FEC 2025 in August.

4. **Geographic Scope**:
    - Open to all eligible African nationals across the continent and in the diaspora, provided the innovation addresses **energy challenges in Africa**.

C. MODE OF APPLICATION

Interested applicants are invited to submit their entries here.

Application Requirements

Requirement	Details
Personal/Team Information	Full name, age, nationality, institution or organisation (if applicable), and contact details.
Project Summary	A clear overview (max 500 words) of the energy problem, proposed innovation, technical feasibility, implementation context, sustainability and potential impact. **(Mandatory)**
Visual Representation	Prototype, design mockup, or mind map of the innovation model (**Mandatory**).
Pitch Video	A short video (max 2 minutes) further explaining the idea and its expected outcomes. **(Optional).**

Deadline: All entries must be submitted by **June 30, 2025**

Apply here or visit https://acep.africa/application-fec-2025-innovation-challenge/