Project Brief
AfricaEnergyParks

PROJECT NAME: Improving energy access and climate resilience in Africa's fringe communities

CALL: HORIZON-CL5-2023-D3-02 **TIMELINE:** June 2024-June 2028 **BUDGET:** € 6 552 152, 50

PROJECT COORDINATOR: Aarhus University **CONTACT PERSON:** coba@ece.au.dk

OBJECTIVES	• Provide clean and reliable energy access in a rural off-grid community in Ghana • Promoting the productive use of energy • Use improved cookstoves • Building a system that can be scaled up to be commercially viable
TARGET AUDIENCE	• Fringe communities of the Mole National Park • Policymakers • Energy and environmental agencies • Industry in the energy and related sectors • Scientific communities in the energy and related sectors • Civil society groups • General Public
ACTIVITIES	• Implement solar photovoltaics (PV), battery energy storage systems (BESS), and biomass combined heat and power (BCHP) systems. • Monitor the health and environmental impacts of cookstoves in the community. • Create systems that allow the productive use of energy from waste generated by agriculture and food processing. • Apply life cycle approaches to evaluate the social, economic, and environmental impacts of the project's interventions. • Provide training and capacity-building programs to local workers for the operation and maintenance of the energy systems. • Share lessons learned, research findings, and best practices with other projects.
WORK PACKAGES	WP1-Stakeholder engagement, social conditions and system planning WP2 – Data collection, analyses and system modelling WP3 – Design, construction and commissioning of Microgrid WP4 – Design, construction and integration of PUE components WP5 – Integration of Improved Cookstoves WP6 – Testing, validation and certification of Microgrid, PUE and ICS components WP7 – Sustainability Analysis WP8 – Dissemination, Exploitation and Communication (DEC) WP9 – Project Management and Coordination
EXPECTED OUTCOMES	• Technologically reliable and economically viable renewable energy solutions by 2030. • Improved climate adaptation and mitigation. • Strengthening EU-AU climate change and sustainable energy collaboration. • Positive environmental, health, climate, social, and economic impacts. • Acceleration of African countries' targets under the Paris Agreement.
PARTNERS	AARHUS UNIVERSITET, AFRICA GREENTEC, MASH MAKES, MASIS ENTERPRISE, Forestry Commission, MINISTRY OF ENERGY, NTNU, DENG, DANISH TECHNOLOGICAL INSTITUTE, ENERGAFRICA Sustainability through Innovation, INOVA+, Papadev

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