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## **AFRICA'S QUEST FOR ENERGY THROUGH SMALL MODULAR REACTORS**

Energy poverty in Africa is a significant challenge extending beyond the absence of electricity. It affects over 600 million people in sub-Saharan Africa alone and emphasises the discrepancy between the vast energy resources and the inadequate energy supply. Africa's energy sources are fossil fuels and renewables. This paper aims to address Africa's energy crisis by increasing nuclear energy that is more affordable. Small modular reactors (SMRs) in Africa will help alleviate energy access challenges, support industrial development, and lower carbon emissions. They also save on cost and construction time. Governments should engage in public awareness campaigns and capacity building and have adequate infrastructure and regulatory frameworks for the effective integration of SMRs. African countries will have to ensure security and adherence to non-proliferation agreements. Establishment of plans for the long-term management of radioactive waste is also essential. Political stability will enable the success of long-term energy projects. The International Atomic Energy Agency (IAEA) can provide support, guidance, and oversight during the planning and implementation stages. To promote nuclear energy in Africa, we need the support of suppliers, governments, and individuals with the right network to drive this endeavour forward.

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### **Confirm that the work is original and has not been published anywhere else**

YES

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