

African Nuclear Security Landscape and Non-Proliferation

Background:

Africa has developed a dense legal and institutional architecture for nuclear non-proliferation and nuclear security, centred on the Treaty of Pelindaba, the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), and emerging continental bodies such as the African Commission on Nuclear Energy (AFCONE). Despite this, implementation remains uneven, and long-term sustainability of nuclear security programs is threatened by capacity and funding constraints.[1-3]

Objectives:

To provide a narrative synthesis of: (1) the current African nuclear security and non-proliferation landscape, (2) key enablers and barriers to strengthening nuclear security, and (3) funding models capable of sustaining longterm nuclear security programs in Africa.

Methods:

A narrative review of policy reports, institutional statements, and analytical papers from international organizations (IAEA, AU/AFCONE), regional initiatives (AFRA, FNRBA), and specialized think tanks was undertaken, focusing on governance, capacity building, and financing of nuclear security in Africa. Sources were selected for relevance to African institutions, legal frameworks, and concrete programs or funding initiatives. [1,2,4]

Results:

Africa benefits from strong formal commitments to non-proliferation and disarmament through near-universal NPT membership and the African Nuclear-Weapon-Free Zone (Treaty of Pelindaba), which together prohibit nuclear weapons, mandate IAEA safeguards, and oblige implementation of the Amended Convention on the Physical Protection of Nuclear Material (A/CPPNM). Key enablers include a robust normative framework; the emergence of AFCONE, AFRA, and the Forum of Nuclear Regulatory Bodies in Africa (FNRBA); and growing regional capacity-building and regulatory-harmonization initiatives. Barriers include gaps in treaty adherence and domestic implementation, under-resourced regulators and continental bodies, and pressure from expanding nuclear energy ambitions and uranium production. Sustainable funding models point toward a mix of national budget lines, AU-anchored regional funds, predictable donor and IAEA support, and innovative initiatives such as the African Nuclear Energy Funding Initiative (ANEFI) that link back-end fuel-cycle revenues to governance and security. [1,2,4-10]

Conclusions:

Africa's nuclear security regime rests on comparatively advanced legal norms, but durable progress depends on strengthening implementation capacity and designing funding architectures that move from project-based assistance to African-owned, multi-decade financing arrangements. Leveraging Pelindaba, AFCONE, and emerging financing partnerships can position Africa as both a beneficiary and shaper of global nuclear security and non-proliferation norms. [3,11,12]

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Track Classification: Nuclear Safety, Security and Nuclear Energy