NUCLEAR POWER & ENERGY AGENCY

NEXT STEPS & OPPORTUNITIES IN NUCLEAR ENERGY IN KENYA

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Introduction



SITING PROGRESS

REACTOR ASSESSMENT & INDUSTRIAL INVOLVEMENT

APPLICATION OF NUCLEAR

Roles of Entities

Benefits Of NPP

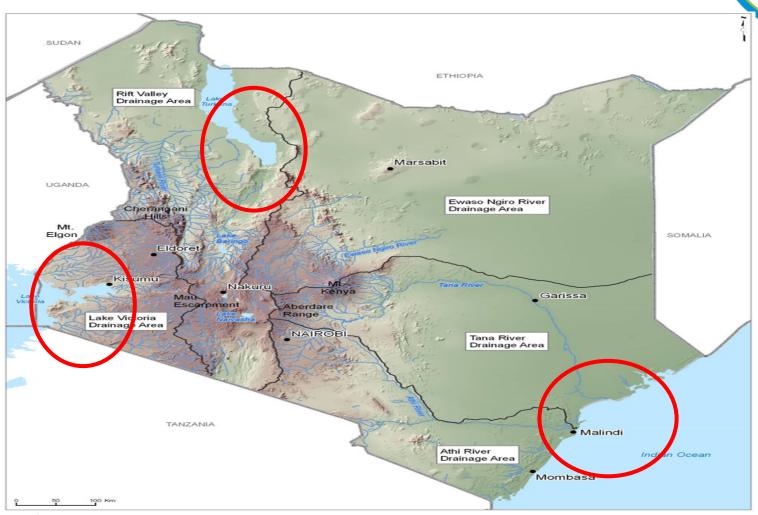
Conclusion





NPP SITING REGIONS

NuPEA







SITING PROGRESS

NuPEA

Preliminary Siting
Activities in Lake
Victoria, Coast, Turkana

Regional Ranking for Preferred and Alternative Sites

National Ranking for Preferred and Alternative Sites

Best Site Selected

Developed Land
Acquisition Strategy for
Characterization

Developed Site Characterization ToRs





REACTOR TECHNOLOGY ASSESSMENT



Large NPP Assessment



Vendor Readiness Assessment











RUSSIA

- WESTINGHOUSE: USA
- EDF: FRANCE
- KEPCO: SOUTH KOREA
- ROSATOM: RUSSIA
- CGN: CHINA
- GE:US/JAPAN



INDUSTRIAL INVOLVEMENT



Analysis of Local Industries ability to supply

A database of relevant industry capability



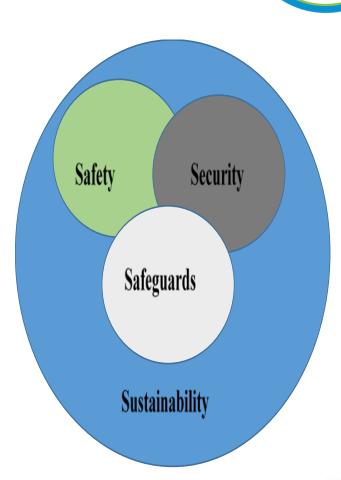




Nuclear Regulatory Act, 2019



Covers the 4S of a comprehensive Radiation and Nuclear Regulatory Regime







Human and Institutional Capacity Development for the NPP



>500 Kenyans trained through the IAEA National Liaison Office (NLO)

KINGS - South Korea - 31 graduates, 9 ongoing

Institute of Nuclear
Science & Technology
(UoN) - 66 sponsored
students

Kenyan Students in Russia & China Universities





APPLICATION OF NUCLEAR TECHNOL

NuPEA

Power Generation

Industrial Applications
(I&C, NDT,
Roads,Desalination,
Hydrogen Gen)

Research & Capacity
Building

Transport (Submarine, Space Missions)

Radio-Isotope Generation Medicine, insect control

Agriculture
(Plant Mutation
breeding,Fertilizer,insect
control)



ROLES OF DIFFERENT ENTITIES



NEPIO

provide detailed guidance on a holistic approach to national nuclear infrastructure development

Regulator

peaceful use of nuclear energy are carried out in a safe manner

Owner Operator

owns and operates a nuclear power plant in a country



BENEFITS OF NPP



Carbon free

Revenue Streams for State & Hosting Counties

Faster Economic Growth

Direct Employment-1500 Construction-5000 **Economic Ripple Effect in locality**

Stable Power Supply

Schools, Roads, Healthcare facilities

Lower Electricity Tariff





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