

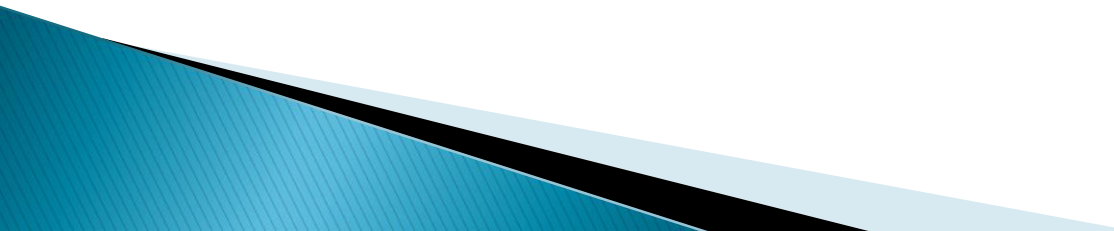
# The Current Regulatory Framework in Kenya

IAEA–KINS Workshop on Safety Review and Assessment for Licensing Nuclear  
Power Plants

27<sup>th</sup> to 31<sup>st</sup> May 2019

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Radiation Protection Board

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# Country Profile




**Population:** 49.5 Million (2015)  
**Total Area:** 580,367 sq. Km  
**Official Language:** English and Swahili

# Applications

- ▶ Medical field – teletherapy units, HDR brachytherapy units and nuclear medicine
- ▶ Agriculture – irradiators
- ▶ Industry – Industrial gamma cameras, nucleonic gauges(level, thickness), moisture density gauges.
- ▶ Well logging – oil exploration
- ▶ Research and teaching – Universities.



# Regulatory Framework: The Radiation Protection Board

- ▶ The Regulatory Authority established in 1986 through Radiation Protection Act Cap 243 of 1982, under the Ministry of Health;
  - ▶ Protection of the public, the environment and future generations from the harmful effects of Radiation
  - ▶ Regulates import/export, sale, use and disposal of radioactive materials;
  - ▶ Inspects and Licenses RN facilities and activities;
  - ▶ There are Regulations under the Act
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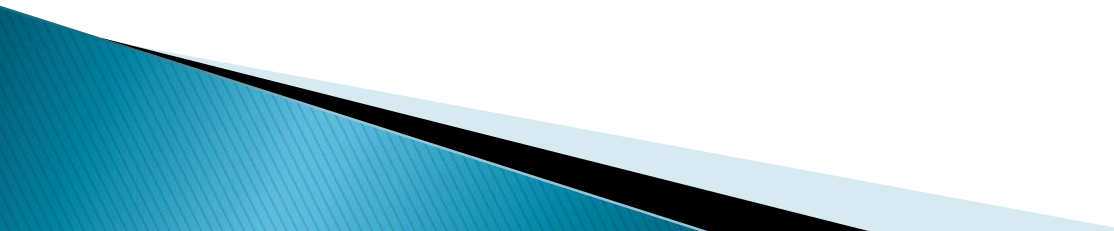
# Nuclear Energy Power Programme

- ▶ The Nuclear Electricity Project Committee established under Ministry of Energy in November 2010.
- ▶ Renamed Kenya Nuclear Electricity Board (KNEB) in 2012
- ▶ Renamed the Nuclear Power and Energy Agency in 2015

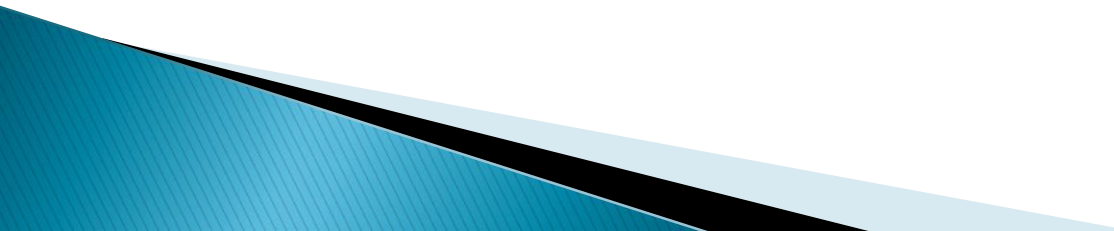
Mandate : To fast track the development of nuclear electricity generation in Kenya as well as undertake all other research for development of energy technologies and capacity building for the energy sector.

- ▶ **Apart from promoting;** In collaboration with relevant Government agencies, develop a comprehensive legal and regulatory framework for nuclear electricity generation in Kenya;

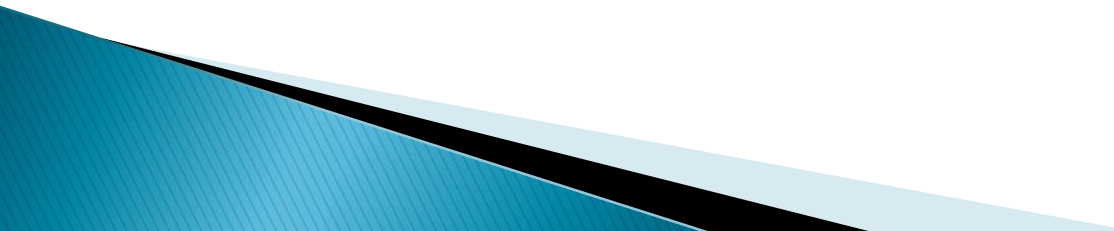
# Nuclear Regulatory Bill 2018

- ▶ Status: National Assembly Level
  - ▶ Establishes a nuclear regulatory infrastructure to regulate nuclear activities
  - ▶ Extensive consultations done
  - ▶ IAEA Inputs considered
  - ▶ INIR (2015), EPREV (2015) and IRRS (2016) Peer Review Missions Reports
  - ▶ Is considered adequate at the starting point
- 


# Provisions in the Bill: Safety of radiation sources and facilities

- ▶ Control of radiation sources
  - ▶ Responsibility for safety of radiation sources
  - ▶ National register for radiation sources
  - ▶ Criteria for exemption
  - ▶ Report of loss of a radiation source
  - ▶ Orphan radiation sources
- 

# Provisions in the Bill: Safety of nuclear facilities and decommissioning

- Authorization for construction and operation
  - Responsibility for safety of facilities and activities
  - Site evaluation
  - Authorization for a nuclear facility
  - Information to public
  - Research reactors
  - Authorization for research reactors
  - Extended shutdown for nuclear reactors
  - Decommissioning requirements
  - Decommissioning plan
  - Decommissioning responsibilities
  - Finances for decommissioning
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# Provisions in the Bill: Authorization for a nuclear facility

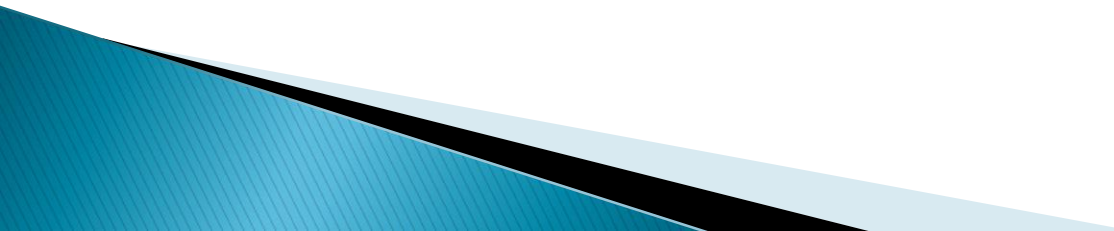
- (1) Before authorizing a nuclear facility, the Commission shall review and assess
    - the competence and capability of the applicant or authorized
    - the site evaluation the potential environmental impact
    - the basic design of the proposed facility
    - the management systems
    - research and development plans
    - arrangements for decommissioning
  - (2) During construction, the Commission shall review and asses...
  - (3) Before commissioning of a nuclear facility, the Commission shall review and assess....
  - (4) Before authorizing the loading of nuclear fuel or initial criticality....
  - (5) Before approving routine operation of a nuclear power reactor at full power.....
  - (6) During operation of a nuclear power reactor, the Commission shall require.....
- 

# Central Radioactive Waste Processing Facility (CRWPF)

- ▶ DSRS, Orphan and Spent
- ▶ For processing and temporarily storage



# In Conclusion

- ▶ Kenya is actively working to develop adequate framework towards implementing the nuclear power programme;
  - ▶ IAEA Milestone approach
  - ▶ Starting from developing a policy and strategy for safety;
  - ▶ revise and complete the national legal framework to ensure consistency with IAEA safety standards;
  - ▶ building and maintaining the necessary competencies for all parties having responsibilities in relation to the safety of facilities and activities.
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Thank You