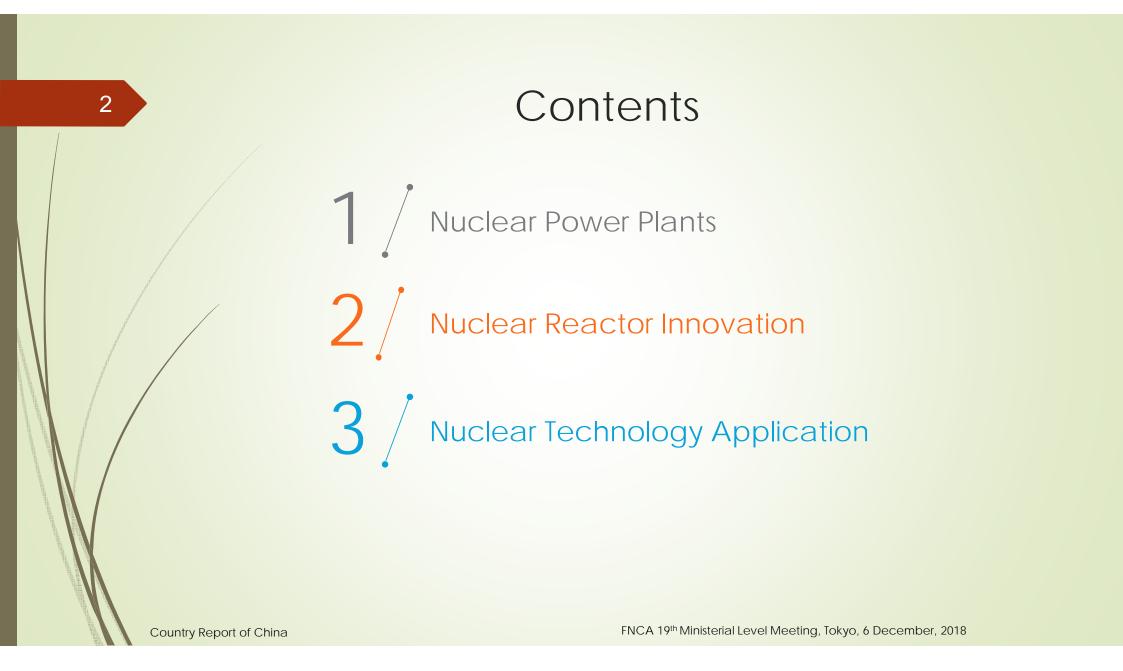
FNCA 19<sup>th</sup> Ministerial Level Meeting, Tokyo, 6 December, 2018

# **Country Report of China**

LONG Maoxiong

**China Nuclear Energy Association** 



## Nuclear Power Plants in China



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### Nuclear Reactor Technology Innovation

#### Gen III







## Gen IV







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## Application of Nuclear Technology in Agriculture

In last 60 years , irradiation technology has made remarkable contributions to the advancement of agricultural science and agricultural production in China

**Mutation Breeding** 

- nearly 1/4 of the world

Agricultural Product Irradiation Processing

- annual irradiation > 200,000 tons

Nuclide tracer

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## Application of Nuclear Technology in industry

X-ray non-destructive testing/CT equipment manufacturing and operation quality assurance

- petrochemical
- aerospace
- nuclear energy
- other industries

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Application of Nuclear Technology in life and health

medical linear accelerators ~2000 units

- nuclear medical imaging clinical diagnosis and treatment
- proton treatment
- heavy ion treatment
- high current proton cyclotron

Application of Nuclear Technology in public security

 X-ray, gamma ray and neutron detection for large-scale container and vehicle inspection

- aviation
- railway
- sea
- road

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# Application of Nuclear Technology in environmental protection

- electron beam irradiation dyeing wastewater
  - 2000m<sup>3</sup> per day
- electron accelerator industrial wastewater
  - close to industrialization
- electron beam irradiation desulfurization and denitrification of emission gases in thermal power plant

# 感谢聆听 敬请指教

# Thank you for your attention.

Questions?



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