[ROK] Country Report

Dec. 8 2015, Tokyo, Japan
The 16th Ministerial Level Meeting FNCA

Ministry of Science, ICT and Future Planning

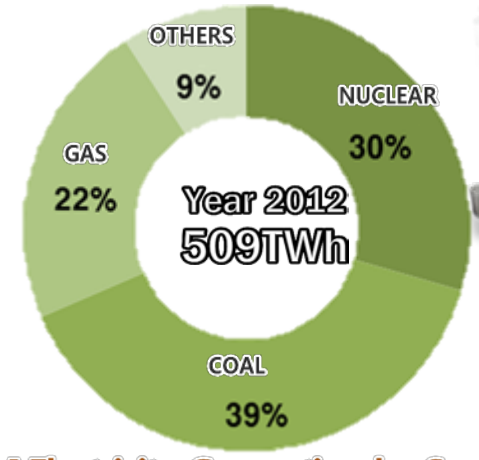
Contents

Ministry of Science, ICT and Future Planning

1. Current Status

Current Situation of Nuclear Power Plants in Korea

- **In Operation** ❯ 24 Units (21,677 MWe)
- **Under Construction** ❯ 4 Units (6,600 MWe) – ShinKori 3·4, ShinHanul 1·2
- **Planned** ❯ 6 Units – ShinKori 5·6, ShinHanul 3·4, Chunji 1,2



[Electricity Generation by Source]

2. National Nuclear Energy Policy

Comprehensive Nuclear Promotion Plan

❍ CNEPP has been established and implemented as the highest concept of nuclear policy since 1997

1st CNEPP ('97~'10)
- Localization of reactor technology
- Construction of domestic NPPs
- Establishment of regulation basis
- Centered on nuclear power

2nd CNEPP ('02~'06)
- Advancement of nuclear tech.
- Establishment of basis for exportation
- Advancement of regulation
- Balanced development of nuclear and radiation tech.

3rd CNEPP ('07~'11)
- Securing core tech.
- Development and exportation of nuclear products
- International leader of regulation tech.
- Creation of high value new industry

❍ 4th CNEPP(2012- 2016) will focus on nuclear safety as the first priority since the Fukushima accident

Vision Realizing the World's best country model on nuclear technology

Objective Expediting new leap of nuclear technology

Securing Trust + Creation of high value growth power + Strengthening sustainable fundamentals

Strategy and tasks

- Securing nuclear safety for pubic trust
- Promoting of exportation through tech. innovation
- Expanding nuclear utilization for stable elec. supply
- Strengthening role in the int'l community as a nuclear advanced country
- Creating new market for radiation by expanding strategic assistance
- Strengthening virtuous circle of nuclear infrastructure

3. Korea's National Nuclear Policy Trend

Latest Nuclear Policy Issues

SMART Commercialization

- SMART (System-integrated Modular Advance RecaTor)
  A single reactor pressure vessel contains major primary components
  100MWe small integral reactor
- MOU between K.A.CARE and MSIP(Mar, 2015)
  PPE between K.A.CARE and KAERI(Sep,2015)

Decommissioning Technology

- Permanent shut down of the Kori1 reactor in 2017
  ->present a difficult challenge of decommissioning
- Need skills and techniques in the areas of dismantling, decommissioning and radioactive waste management

Spent Fuel Management

- The first saturation point for wet-storage spent fuel rods is coming in Korea.
- Established 'PECOS and formulated 'Basic Plan for Management of Spent Nuclear Fuel'

Thank you!