

**6th High-Level Officials' Meeting of the Regional
Forum on Environment and Health**

Recent Development of the NEHAP in Japan

**23-24 October 2012
Bandung, Republic of Indonesia**

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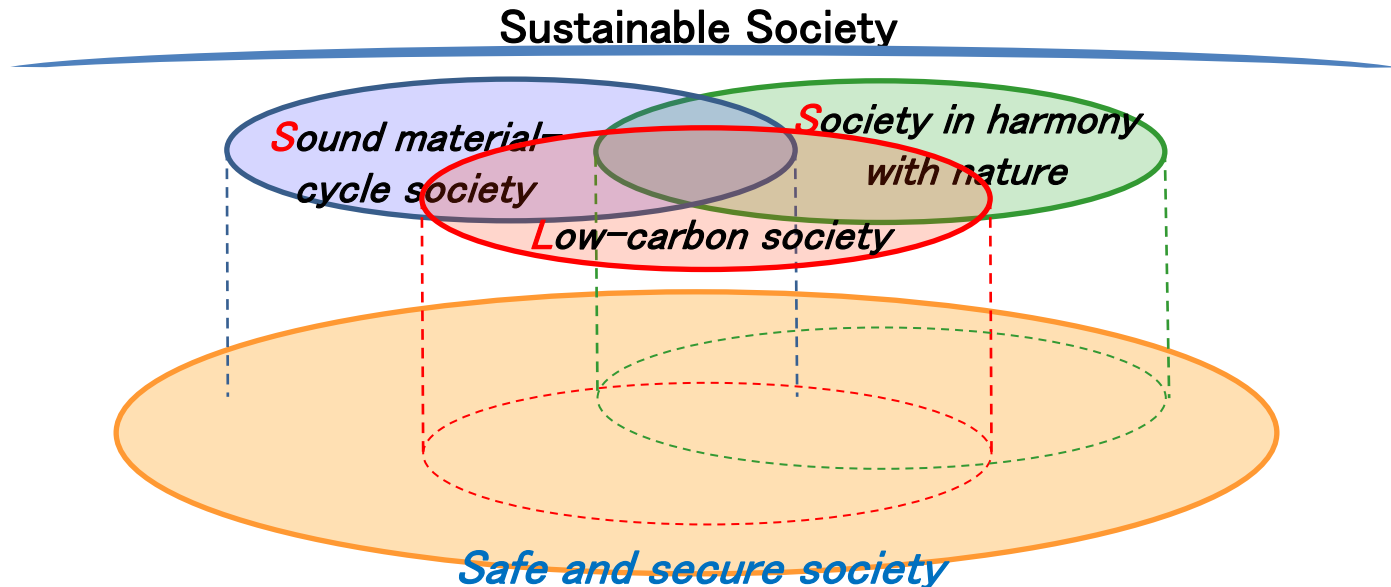
1. Basic Environment Plan

The Basic Environment Plan: Features

- The Basic Environment Plan is authorized by the Article 15 of the **Basic Environment Law** (Law No. 91, 1993).
- The Plan, drafted by **Ministry of the Environment** in consultation with the **Central Environment Council**, is **decided by the Cabinet**.
- The first plan was established in 1994 and revised every 6 years.
- The fourth plan was decided on April 27, 2012.

The Basic Environment Plan: Vision

- To establish a **Sustainable Society** through achieving (1) **low-carbon society**<Energy>, (2) **sound material-cycle society**<Resources>, and (3) **society in harmony with nature**<Natural Ecosystem> in integral manner, while ensuring security and safety as a basis



The Basic Environment Plan: Guiding Principle

- ① **Policy integration** to create a sustainable society (e.g. environment-economy-society, environmental fields such as climate change and biodiversity)
- ② Strengthening **strategic approach** appropriately corresponding to international circumstances (both national interests and global environment interests)
- ③ **Maintaining and nursing land and natural ecosystem** as foundation of a sustainable society
- ④ Promotion of **concerted actions with various stakeholders at all levels**

The Basic Environment Plan: Priority Programs

- 1 . **Greening Economy and Society, and Green Innovation**
- 2 . **Strategic approach** in Accordance with International Circumstances
- 3 . **Environmental Development at Local Level,** Building Capacity and Policy Foundation
- 4 . **Climate Change** Policy

The Basic Environment Plan: Priority Programs

- 5 . Conservation and Sustainable Use of **Biodiversity**
- 6 . **A Sound Material-Cycle Society**
- 7 . Conservation of **Water Environment**
- 8 . Conservation of **Air Environment**
- 9 . Comprehensive Measures against **Chemical Substances**

The Basic Environment Plan: Environmental Health

1. Relief of Health Damage
 - Pollution-related Health Damage Compensation Law (air, water)
 - **Minamata Disease**
 - **Asbestos**
2. Prevention of the Damage
 - Environmental Surveyance
 - Health Damage by **Heat Wave**, Environmental Allergen (**hay fever**)
3. **Chemical Substances**
 - Risk Assessment and Management
 - Risk Reduction through Life-cycle of the Chemicals
4. Air Pollution
 - **PM2.5, Photochemical Oxidants**, etc.

The Basic Environment Plan: Recovery from Disaster

1. Recovery from Great East Japan Earthquake and Tsunami

- Reconstruction of damaged areas as **a model of sustainable society** (energy, resources and ecosystem)

2. Decontamination of Radioactive Pollution

- **Decontamination** of land, residence and buildings, etc.
- Treatment of **polluted wastes**
- **Risk management** of the residents and workers
- Review and reform of the laws and regulations for radioactive pollution

Annual Performance Review (PDCA: measurement, reporting, verification)

Annual Review: The Central Environment Council

- **Public hearing** from Sectoral Ministries, Local Governments, Business, Societies and NGOs
- **Analysis of the performance** by the Council
- **The annual performance review report** is published.
It includes **recommendations** for better implementation in following years

Annual Performance Review (PDCA: measurement, reporting, verification)

1. Numerical Targets (some examples)

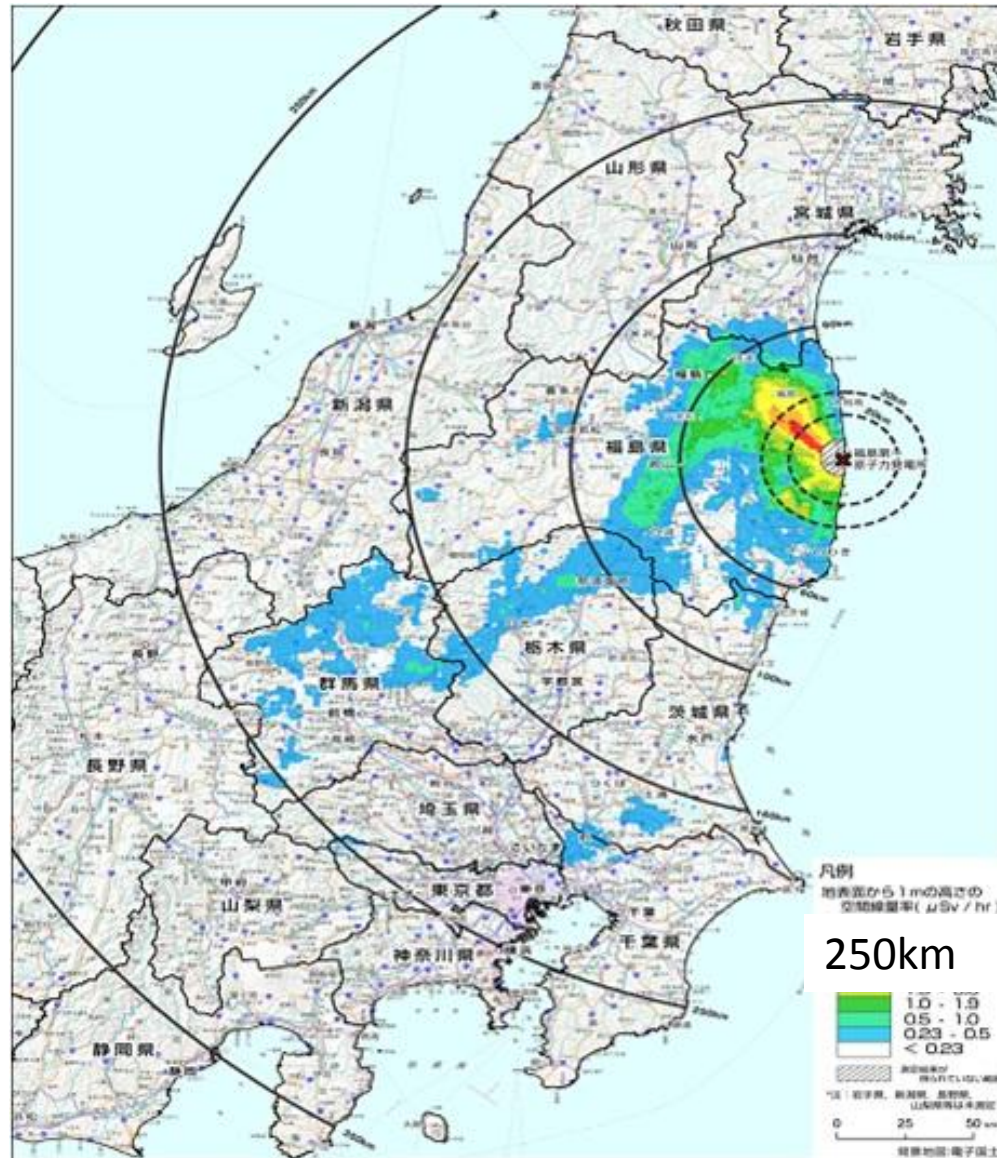
- Climate Change: **Kyoto Target** (▲6%), **2020 Target** (▲25% with premise) & **2050 Target** (▲80%)
- Air and Water Pollution: **Ambient Quality Standards**
- Waste Treatment & Recycling: **Resource Productivity, Cyclical Use Rate, Final Disposal Amount**

1. Indicators (some examples)

- Climate Change: **GHG Emissions, Carbon Sink**
- Air and Water Pollution: **number of Monitoring Stations and Points**
- Waste Treatment & Recycling: see above

2. Progress on Offsite Decontamination in Japan

Radioactive Pollution caused by the accident at Fukushima Dai-ichi NPP



Framework of Decontamination

New legislation for promoting decontamination

- ◆ **The Act on Special Measures Concerning the Handling of Radioactive Pollution** came into force on January 1, 2012.
- ◆ Based on this Act the followings are carried out:
 - Planning and implementation of **decontamination work**
 - Collection, transfer, temporary storage, and final disposal

Special Decontamination Area

- ◆ **11 municipalities** in (former) **restricted zone** or **planned evacuation zone** (<20km from the NPP, or annual cumulative dose is >20mSv)
- ◆ Decontamination is implemented by **Ministry of the Environment**

(*) Entire area of Naraha, Tomioka, Okuma, Futaba, Namie, Katsurao, and Iitate.
Some area of Tamura, Minami Soma, Kawamata, and Kawachi.

Intensive Contamination Survey Area

- ◆ **104 municipalities in 8 prefectures** (*), in which over 0.23 mSv/hour of air dose rate (equivalent to over 1 mSv/Year) is observed, were designated.
- ◆ Decontamination is implemented by each municipality. Ministry of the Environment provides financial and technical assistance.

(*) Iwate, Miyagi, Fukushima, Ibaraki, Tochigi, Gunma, Saitama, and Chiba

Special Decontamination Area and Intensive Contamination Survey Area



Decontamination Targets

Additional * exposures over 20mSv/y

- Aim at stepwise and rapid reduction of those areas based on the **ICRP Recommendation (2007)**.
 - * 'additional' means beyond natural background and medical exposure

Additional exposures < 20mSv/y

- As a long term goal, aim at reducing to 1 mSv/y or less
 - Reduce estimated annual exposure of the general public **by 50 % in 2 years** (by Aug 2013)
by radioactive decay, decay by natural factors and by decontamination
 - Reduce estimated annual exposure of children **by 60 % in 2 years** (by Aug 2013) by thorough decontamination of their living environment.
by radioactive decay, decay by natural factors and by decontamination
- The goals will be reviewed periodically

General Public

Children

Decontamination Activities (Example1)

〈Residential land〉

roof: water cleaning,
cleaning with brush



wall: wiping



Gutter (vertical): high-pressure
water cleaning



Concrete floor:
High-pressure
water cleaning



Concrete floor:
Shot blast



Concrete floor:
Surface grinding
machine



Garden: removal
of topsoil



Decontamination Activities (Example2)

〈Street Surface〉

High-pressure water cleaning by vehicle for recovering functions of water drainage pavement



〈Roadside tree〉

Cleaning of trunk (with water and brush)



Surface grinding by shot blast



Removal of topsoil



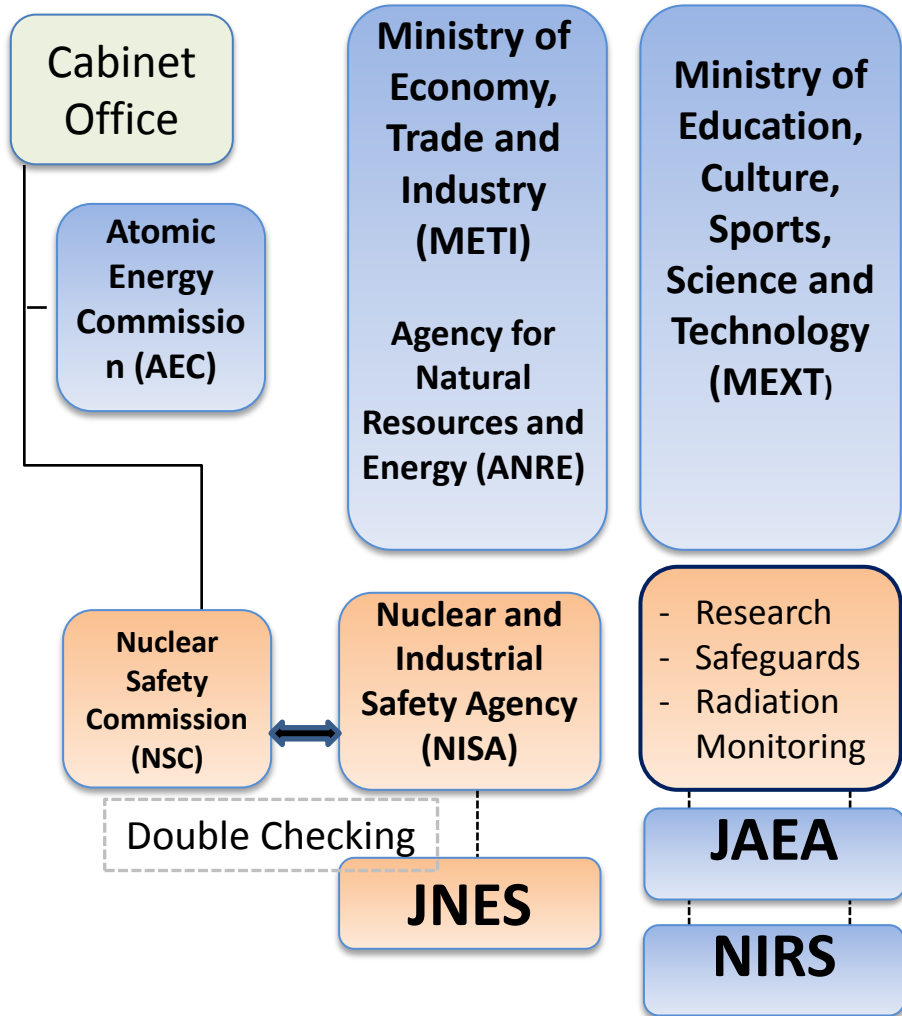
3. Reform of the Nuclear Safety Regulation

Reform of Nuclear Regulatory Organisations

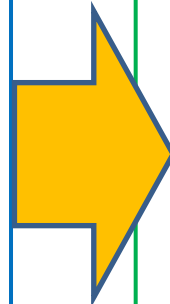
- **Independence:** To separate nuclear regulatory body from nuclear promotion body. A new “**Nuclear Regulation Authority (NRA)**” was established on Sep. 19, 2012, as an independent commission affiliated to the MOE. Chairman and 4 Commissioners are appointed by the Prime Minister. “**Secretariat of NRA**” was established as a secretariat to the NRA and an administration agency.
- **Integration:** To integrate nuclear regulation functions, namely, nuclear safety, security, safeguards, radiation monitoring and radioisotopes regulation, into the NRA.
- **Crisis Management:** To establish “**Nuclear Emergency Preparedness Commission (NEPC)**” in a cabinet and implement nuclear emergency measures in close cooperation with relevant organisations.

Reform of Nuclear Regulatory Organisations

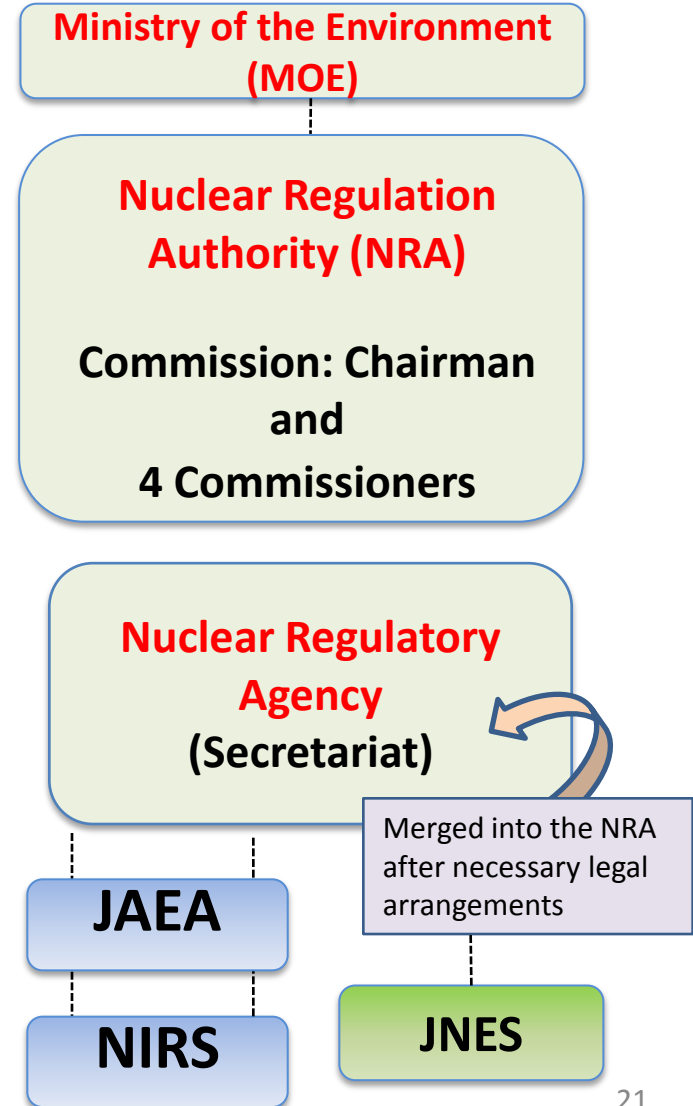
Previous Organisations



- JNES: Japan Nuclear Energy Safety Organisation
- JAEA: Japan Atomic Energy Agency
- NIRS: National Institute of Radiological Sciences



New Organisation



Conclusion

- Action Plan should be **authorized at highest level**. (political will and commitment).
- Preparation and performance review **process should be made open** for involvement of all of stakeholders.
- A set of **numerical targets and indicators** should be set for clear message to the stakeholders and effective performance review.
- The governments should be well prepared for **new environmental health issues** in respective countries.