

# **Hokkaido Toyako Summit -Peaceful Uses of Nuclear Energy and the “3S”-**

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**Disarmament, Non-Proliferation and Science  
Department, Ministry of Foreign Affairs**



# International situation surrounding nuclear energy

Energy security (expanding demand, rising crude oil prices)

Increase in the number of countries interested in introduction/expansion of nuclear power generation  
(Note)

Countermeasure against climate change (CO<sub>2</sub> emissions of nuclear power generation are 1/34 those of oil-fired generation)

(Note) As climate change and the rapidly expanding demand for energy become significant problems, there is a growing interest in nuclear energy, which is non-fossil fuel energy, does not emit CO<sub>2</sub> in the process of combustion of energy for electricity generation, and produces low levels of CO<sub>2</sub> emissions over its lifecycle as a whole. Amidst this trend, an increasing number of countries are considering introduction or expansion of nuclear power plants.

## The 3S to be ensured in the uses of nuclear power generation

Safeguards  
(against proliferation)

Safety  
(of nuclear energy)

Security  
(against nuclear terrorism)

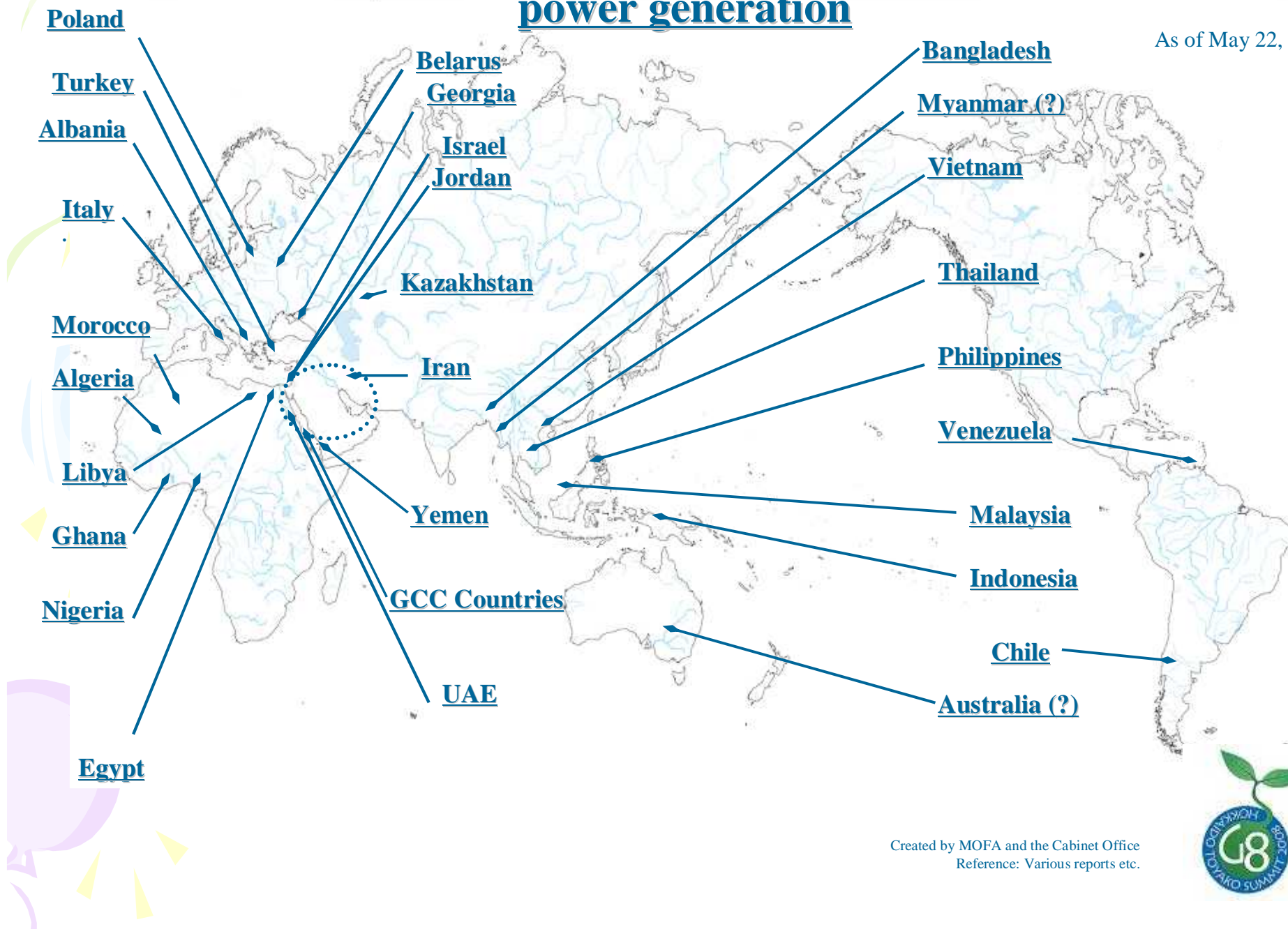
- Uses of nuclear power generation
- Ensuring the “3S”

The task is to strengthen measures for ensuring 3S against the background of possible increase in the uses of nuclear power generation



# Countries and regions proposing to newly introduce nuclear power generation

As of May 22, 2008



Created by MOFA and the Cabinet Office  
Reference: Various reports etc.

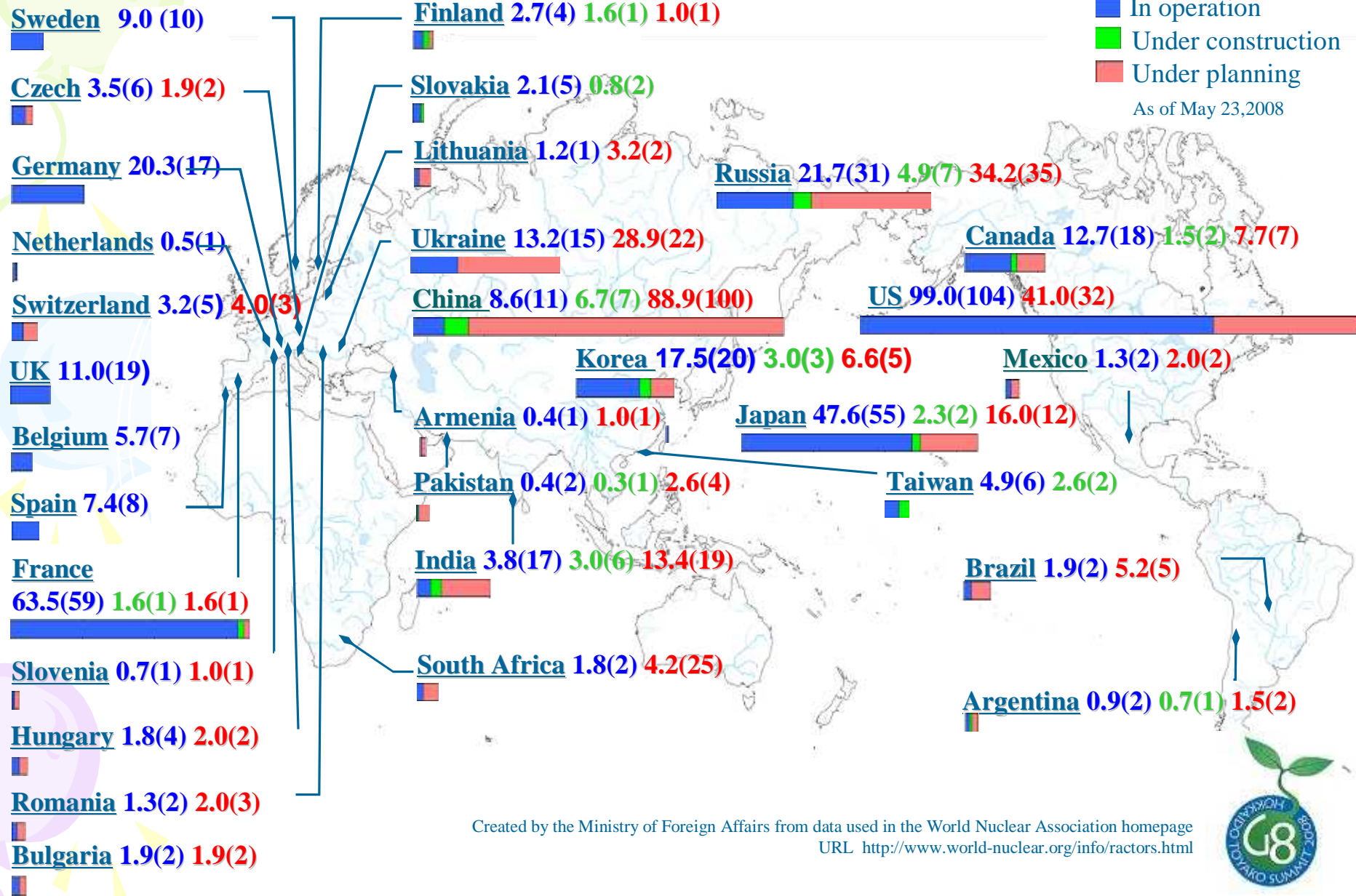


# Countries and regions proposing to expand nuclear power generation

\* Figures represent power generation facilities' capacity (Gwe); figures in brackets show the number of bases

■ In operation  
■ Under construction  
■ Under planning

As of May 23, 2008



Created by the Ministry of Foreign Affairs from data used in the World Nuclear Association homepage  
 URL <http://www.world-nuclear.org/info/ractors.html>





# Outcomes to be achieved at the Hokkaido Toyako Summit

- To set out the importance of ensuring the 3S in the peaceful uses of nuclear energy .
- To affirm the benefits of international cooperation in this field, while recognizing that the responsibilities of ensuring the 3S rest with countries interested in nuclear energy.
- To confirm that the G8 should play an active role in the promotion of international cooperation in this field.
- To raise awareness of the importance of the 3S worldwide and promote assistance aimed at developing 3S and relevant infrastructure through international cooperation.



# Japan's assistance performance

## 1. Non-proliferation/safeguards

Japan has hosted the Seminar on the IAEA Additional Protocol in Vietnam (August 2007) as well as Asian Senior-level Talks on Non-Proliferation (ASTOP), in addition, Japan participated in events such as IAEA Technical Meetings on Additional Protocol in the Asia-Pacific region.

## 2. Nuclear safety

Japan is carrying out activities to build the “Asian Nuclear Safety Network” in which 14 countries participate, with the objectives of sharing experience of the operating of nuclear power plants and improving the capacities of safety regulations. Japan is also implementing bilateral human resource development projects for Asian countries.

## 3. Nuclear security

In addition to carrying out technical cooperation and provision of equipment to Kazakhstan, Japan has hosted the Seminar on Strengthening Nuclear Security in Asian countries. Japan has also emphasized the importance of nuclear security at such fora as the Seminar on the Promotion of Accession to the International Counter-Terrorism Conventions and Protocols and others.

