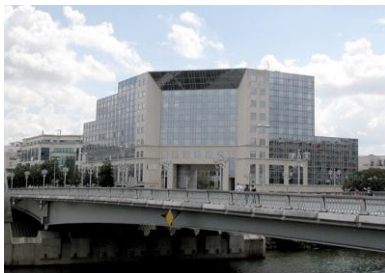


# NEA and NDD Activities

**Dr Ron CAMERON**  
**Head, Nuclear Development**  
**OECD Nuclear Energy Agency**



## NEA Mission



- To assist its member countries in maintaining and further developing, through **international co-operation, the scientific, technological and legal bases** required for a safe, environmentally friendly and economical use of nuclear energy for peaceful purposes.
- To provide authoritative assessments and to forge **common understandings** on key issues, as **input to government decisions on nuclear energy policy**, and to broader OECD policy analyses in areas such as energy and sustainable development.

## OECD/NEA Membership

- Australia
- Austria
- Belgium
- Canada
- Chile
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Iceland
- Ireland
- Israel
- Italy
- Japan
- Korea
- Luxembourg
- Mexico
- Netherlands
- New Zealand
- Norway
- Poland
- Portugal
- Russia
- Slovak Republic
- Slovenia
- Spain
- Sweden
- Switzerland
- Turkey
- United Kingdom
- United States



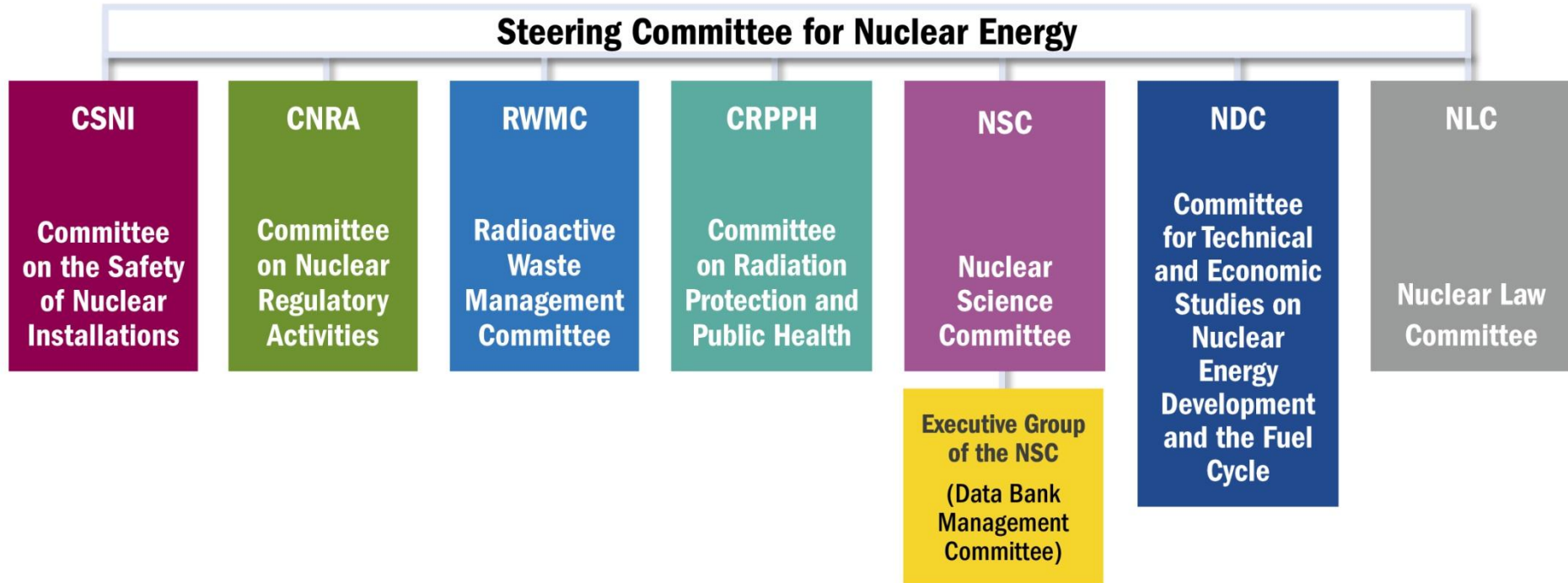
OECD and NEA member  
**OECD member, not NEA**  
**NEA member, not OECD**

# NEA Basic Facts and Figures

## Governing body: the Steering Committee for Nuclear Energy

- 31** member countries (24 in the Data Bank)  
~ 90% of global nuclear electricity generating capacity.
  - 55** years of international service.
  - 7** standing technical committees (including nuclear development, economics, safety, regulation...).
  - 21** international joint projects funded by participants (17 in the safety area, and others in radiological protection and radioactive waste management).
  - 71** working parties and expert groups.
  - 560** national experts participating in NEA committees and expert groups.
- + Technical Secretariat of the Generation IV International Forum (GIF)**  
**and the Multinational Design Evaluation Programme (MDEP).**

## NEA committee structure



As of 18 September 2012

## Multinational Design Evaluation Programme (MDEP)

- Initiative by national safety authorities to leverage their resources and knowledge for **new reactor design reviews**.
- Independent project among the regulators of **13 countries** (Canada, China, Finland, France, India, Japan, Korea, Russia, South Africa, Sweden, the United Arab Emirates, the United Kingdom and the United States) :
  - ✓ NEA secretariat support.
  - ✓ IAEA participates.
- Recently expanded membership (India, UAE associate member, Sweden).
- Assessing **Fukushima-related topics** through the design-specific working groups (EPR, AP-1000, APR1400).

## Generation IV International Forum (GIF)

- **Charter signed in July 2001** for 10 years, extended indefinitely in 2011. Currently 13 signatories (3 non-active status).
- **NEA Technical Secretariat.**
- **Goals:** improve sustainability (including effective fuel utilisation and minimisation of waste), economics, safety and reliability, proliferation resistance and physical protection.
- Intergovernmental Framework Agreement signed in February 2005, in force for Canada, China, Euratom, France, Japan, Korea, Russia, South Africa, Switzerland, United States. Depositary is the OECD Secretary-General.
- **Systems Arrangements:**

**SFR** (sodium-cooled fast reactor): China, Euratom, France, Korea, Japan, Russia, United States.

**SCWR** (supercritical-water-cooled reactor): Canada, Euratom, Japan, Russia.

**GFR** (gas-cooled fast reactor): Euratom, France, Japan, Switzerland.

**VHTR** (very-high-temperature reactor): China, Euratom, France, Korea, Japan, Switzerland, United States.

# Nuclear Development Committee

*Addresses economic and strategic issues associated with the nuclear power development and the nuclear fuel cycle*

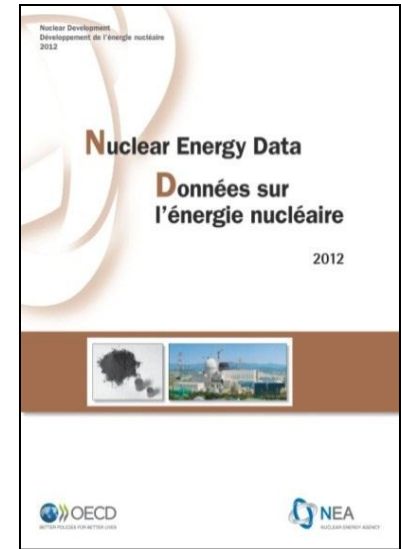
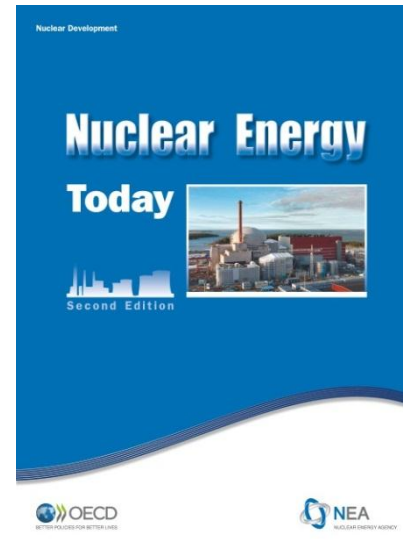
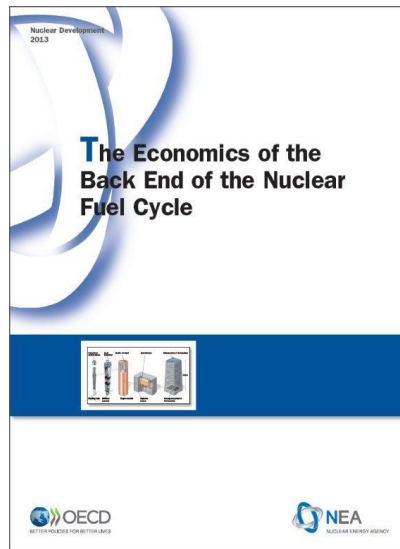
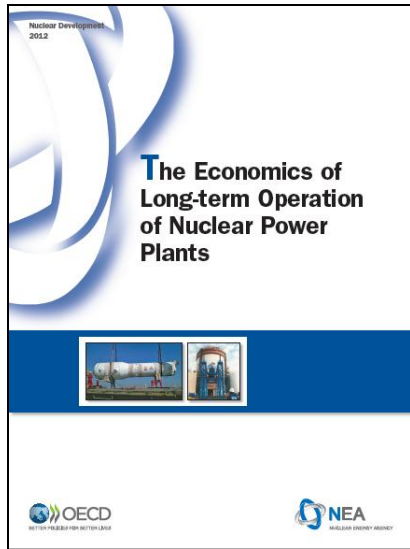
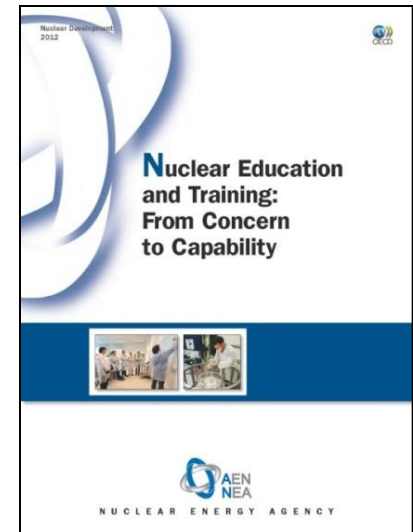
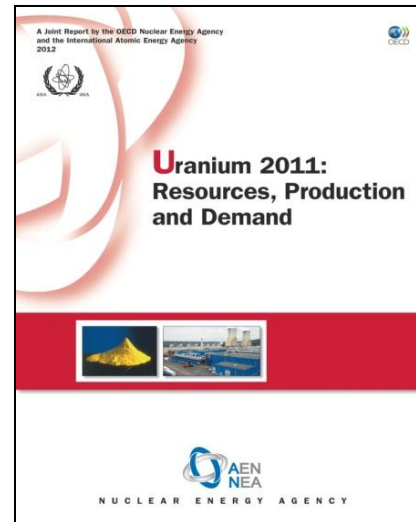
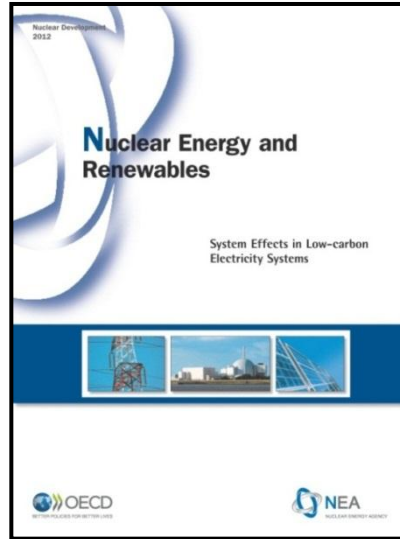
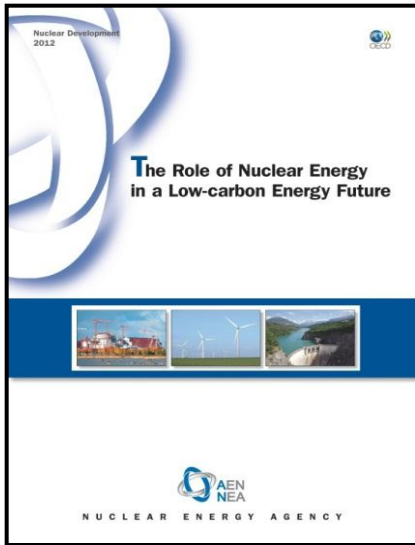
## ➤ Main areas of work

- ❖ *Nuclear power economics in context of energy markets and in comparison with other energy sources*
- ❖ *Security of supply, climate change, sustainability and nuclear*
- ❖ *Fuel cycle issues – from uranium resources to waste*
- ❖ *Developments in technology, human resources & supply chain relative to new build*

## ➤ Main working methods

- ❖ *Working groups on key topics*
- ❖ *Collaborative work with IEA and IAEA*
- ❖ *Sub groups in NP economics (WPNE) and the Uranium Group*
- ❖ *Special assistance to member countries on selected issues e.g. medical radioisotopes*
- ❖ *Provide factual information for member country use*





To be published in 2014: Managing Environmental and Health Impacts of Uranium Mining

ECONOMICS AND DATA	STRATEGIES AND POLICIES
Modelling employment in the Nuclear Power Sector	Uranium Resources, Production and Demand: 2014
Projected costs of electricity – 2015 update with IEA	Impacts of Fukushima on nuclear development policies
Costs of decommissioning – update with RWMC	OECD Nuclear Energy Data
On the Role and Economics of Nuclear Cogeneration in a Low Carbon Energy Future	Climate Change: Assessment of the Vulnerability of Nuclear Power Plants and Cost of Adaptation
Costs of nuclear accidents, liability issues and their impact on electricity costs (with CRPPH, NLC)	Review of Nuclear New Build in Relation to Project Structure, Supply Chain and Financing
Market Study of SMRs	Support to Other Parts of the OECD
	Advice to policy makers