



Nuclear Fuel Supply Security in the European Union

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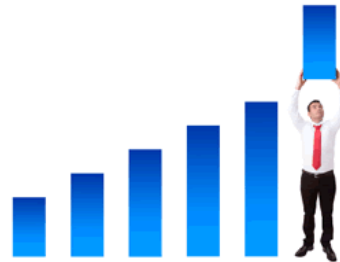
Euratom Treaty - the aims

Create the conditions for the establishment and growth of nuclear industries



Contribute to:

- the raising of the standard of living
- the development of relations with other countries

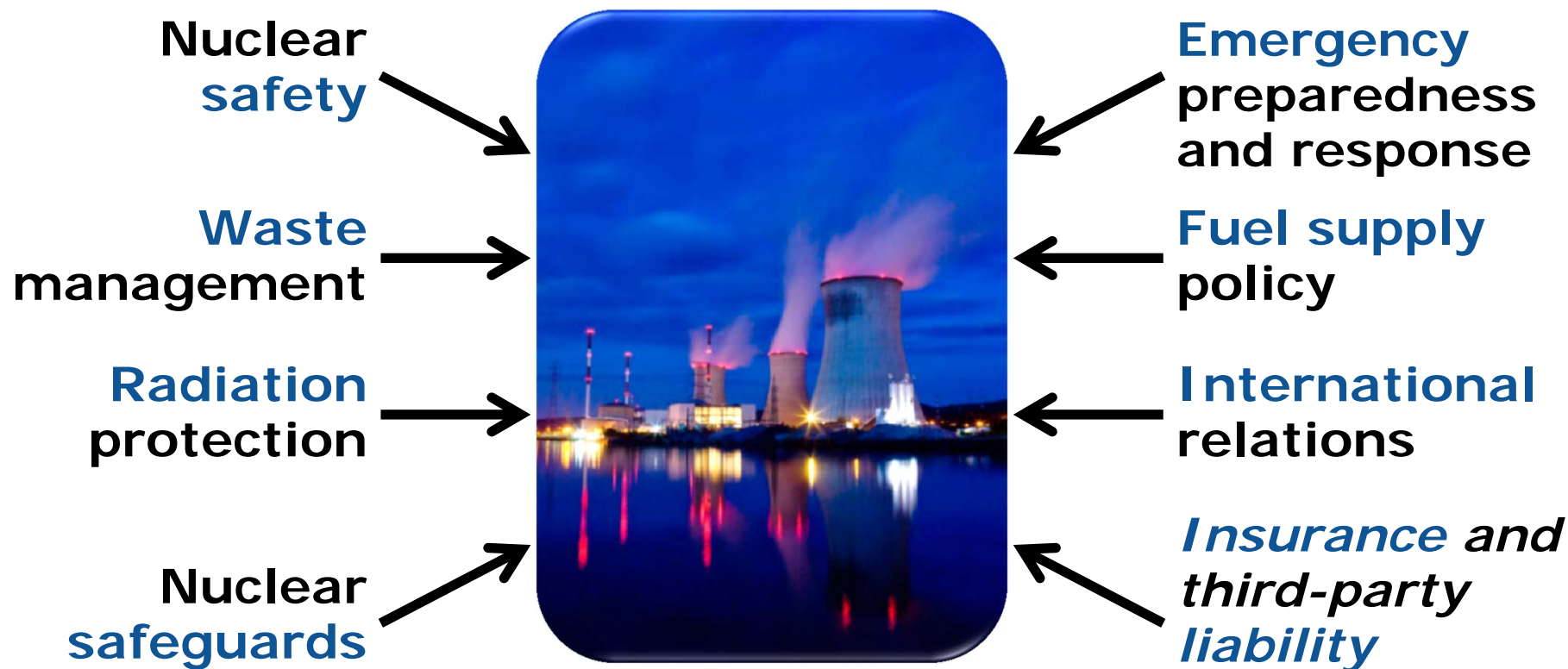




Article 194 – Energy:

1. In the context of the functioning of the internal market ..., **Union policy on energy shall aim**, in a spirit of solidarity between Member States, to
 - a. Ensure the functioning of the **energy market**
 - b. Ensure the **security of energy supply** in the Union
 - c. ...
 - d. ...
2. ...European Parliament and the Council ..., shall establish the measures necessary to achieve the objective ... Such **measures shall not affect a Member State's ... choice between different energy sources** and the general structure of its energy supply

Euratom Treaty competences



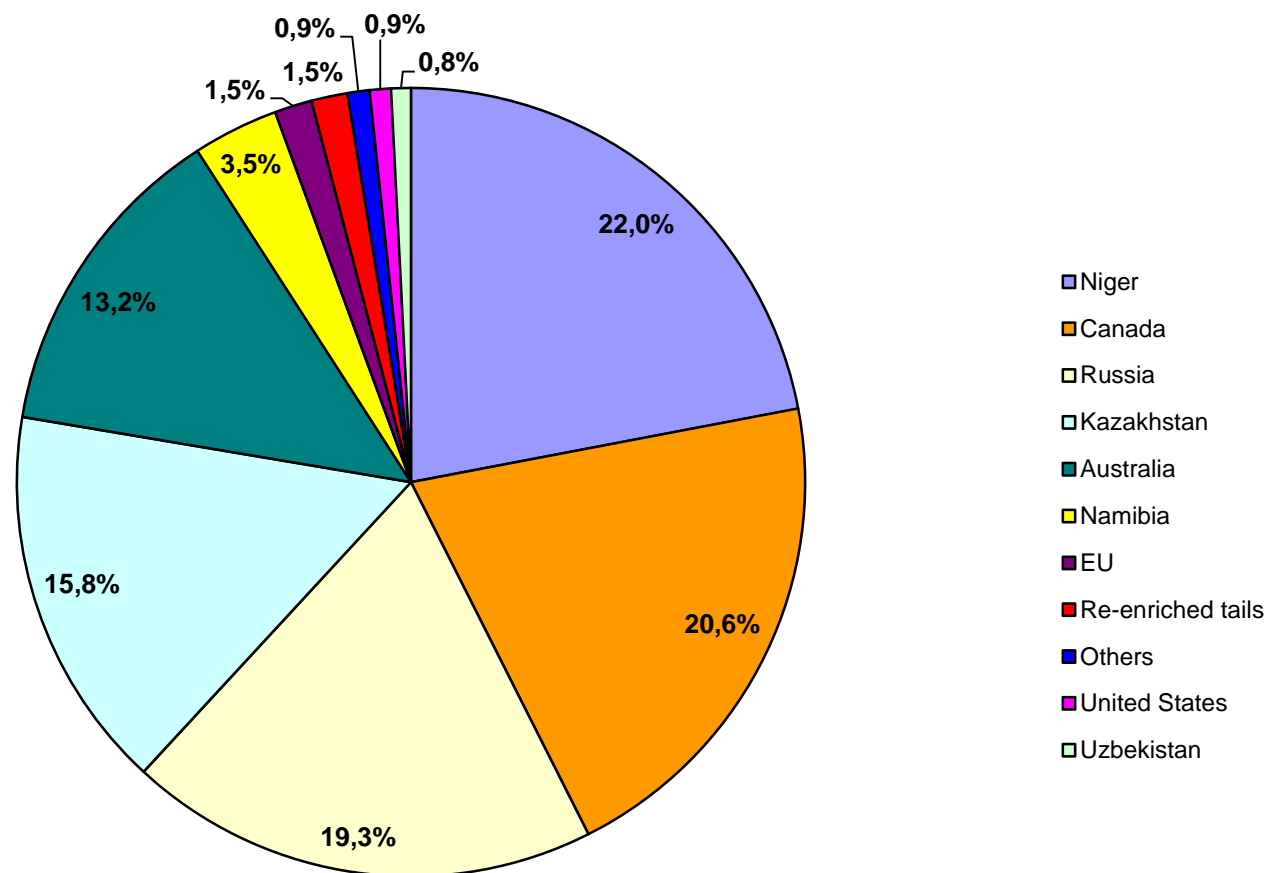
Euratom Treaty



... establishes the **Euratom Supply Agency (ESA)**

- ✓ independent but under the supervision of the European Commission
- ✓ to ensure regular and equitable supply of nuclear materials (common supply policy)
- **ESA concludes supply contracts for nuclear materials (Art. 52 ET)**
 - ✓ Fuel cycle services notified to ESA (Art. 75 ET)
- **Market monitoring & reporting & facilitation**

Natural uranium deliveries to the EU by origin



Diversification



Why is it important?



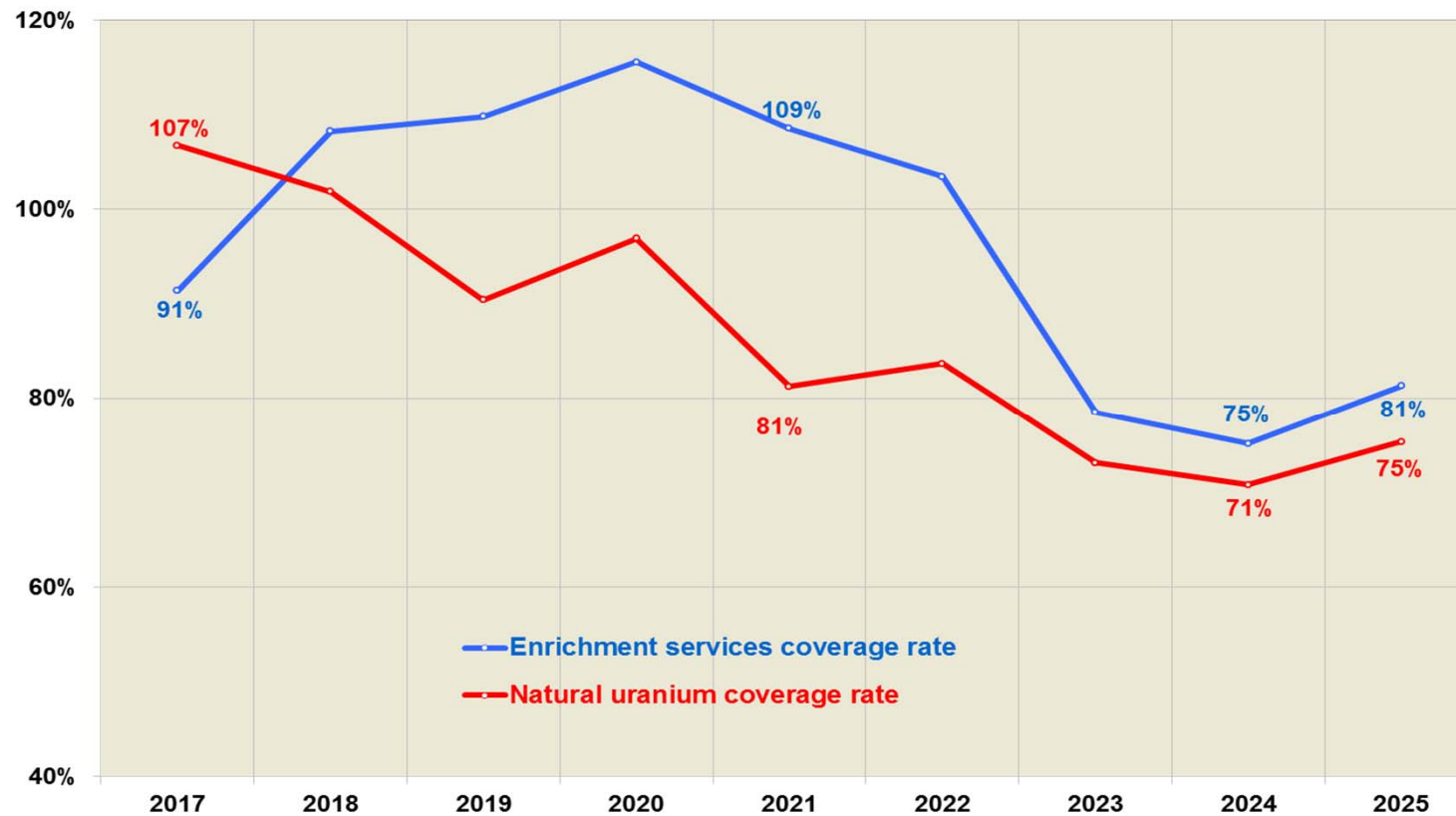
- Improves security of supply
- Increases competition in the market
- Ensures fair market prices



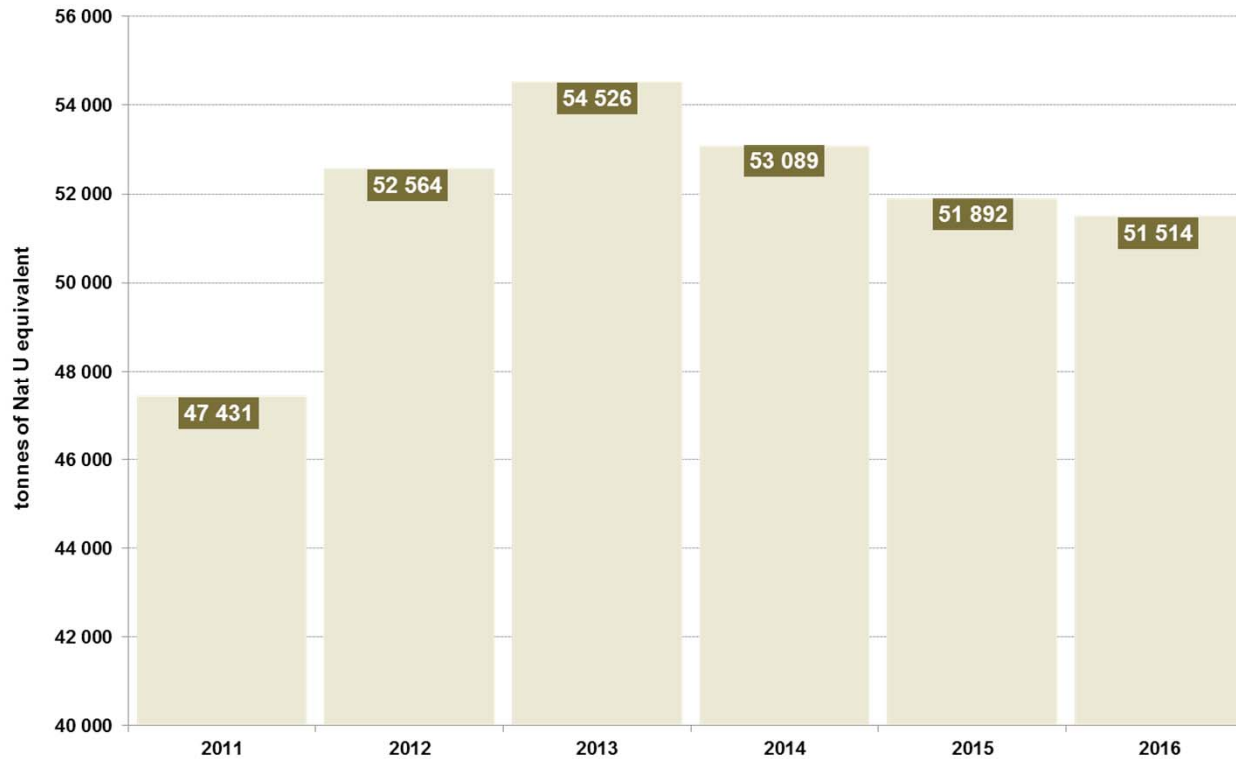
Security of supply



Long-term contractual coverage for U & SWU



EU Uranium inventories



- **Cover 3 years of EU gross reactor requirements**
- **Most utilities keep a sufficient quantity of inventories for at least one reload**

Challenges



✓ Security of Supply

- No shortage of uranium (currently) but..
- Over capacity for some services
- **Over dependence of some operators on one supplier**
- Availability of **fuel fabrication or conversion**
- **Transport** issues
- Business concentration vs. **competition**

✓ Viability of the industry

- Needed for **long-term security of supply**
- Maintaining **jobs**
- Maintaining and further developing **technology** & future **growth prospects**



Conclusions I



- In general the **security of supply** of nuclear fuel for EU utilities **is satisfactory**.
 - Some exceptions
- EU utilities should maintain their policy of concluding long-term supply contracts and should have **diversification** at all stages of the fuel cycle.
- Balance of spot and long-term contracts
- Allowing for alternatives
(e.g. testing & licencing of alternative fuel)

Conclusions II



- Appropriate levels of **inventories** should be maintained by EU utilities and producers.
- Producers should maintain their **capacity** and invest in the future.
- For **new build**:
 - Start planning fuel supply early
 - Consider options for all parts of the fuel cycle
 - Keep contracts flexible
 - Ensure availability of sufficient data on fuel
 - Develop contacts with others operating or building similar reactors.



Thank you for your attention

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http://ec.europa.eu/euratom/index_en.html