



European
Commission

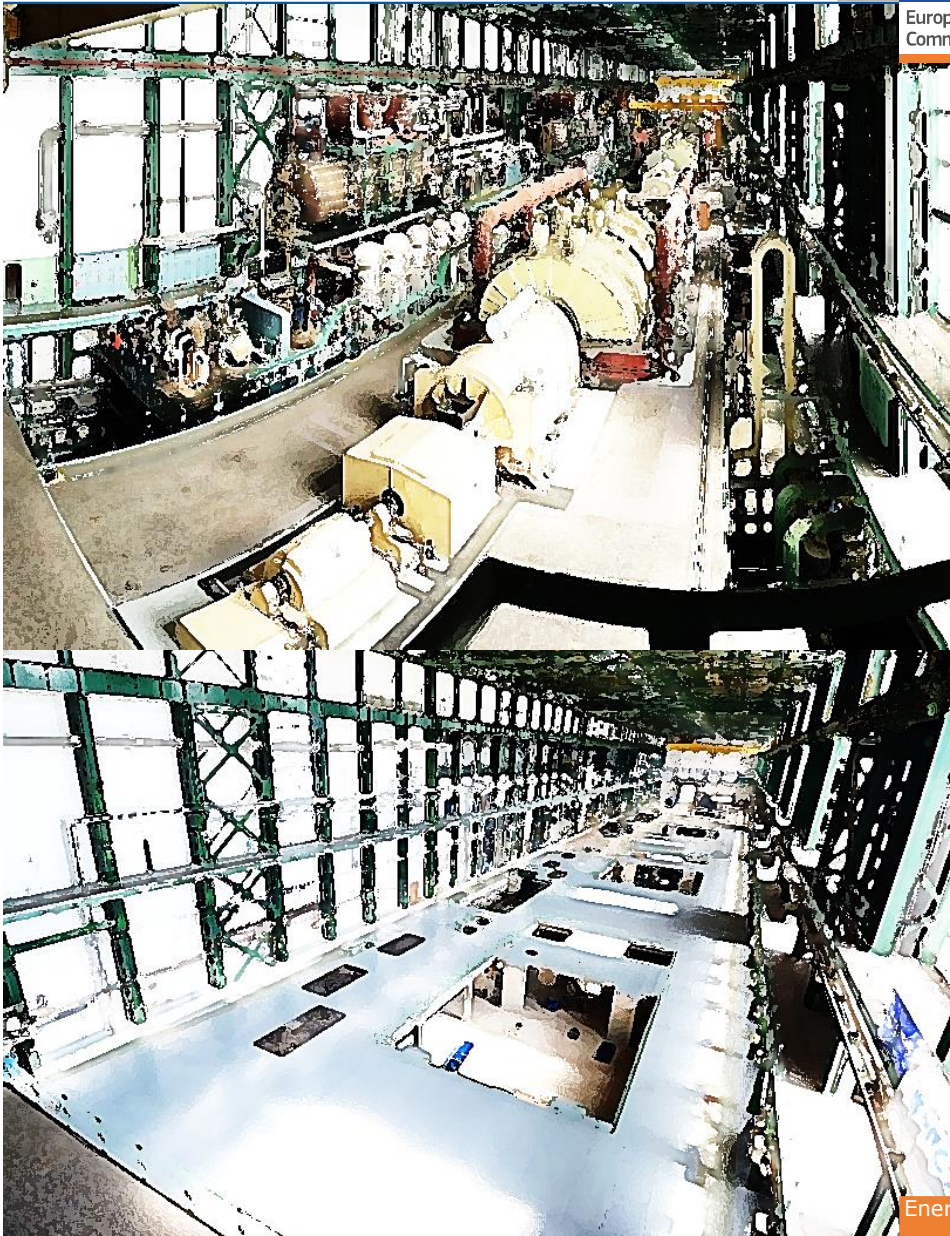
ENSREG 2017 Conference

Nuclear Safety in Europe

EU Spent Fuel and Radioactive Waste Management: An Overview

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Energy





1957

EURATOM TREATY

DFG

2006

Recommendation on financial resources for back-end

Nuclear Safety Dir.

2011

Rad-Waste Directive

Stress tests

Amended Basic Safety Standards

2013

Amended Nuclear Safety Directive

2014

PINC

Rad-Waste Report

now



**Integrated, Interconnected,
Resilient and Secure**

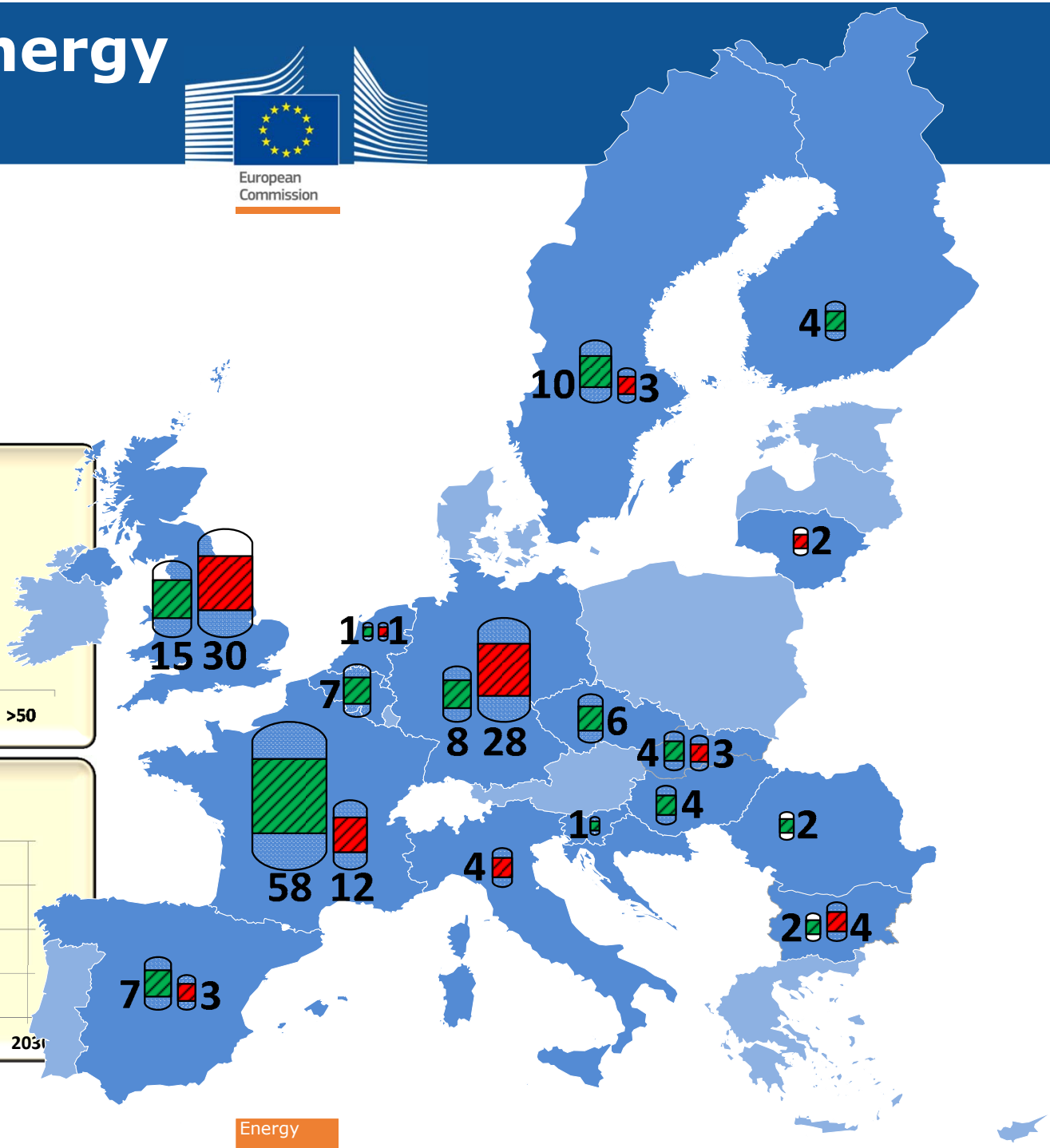
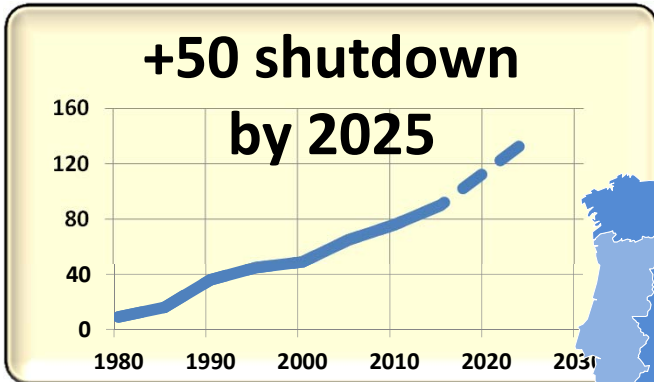
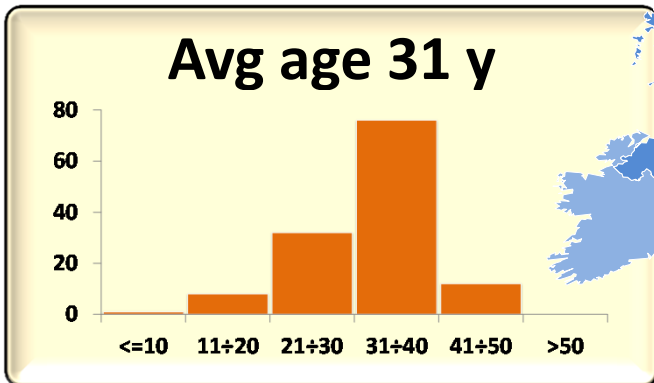
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EU Nuclear Energy Landscape



Reactors

- 129 operating
- 90 shut-down





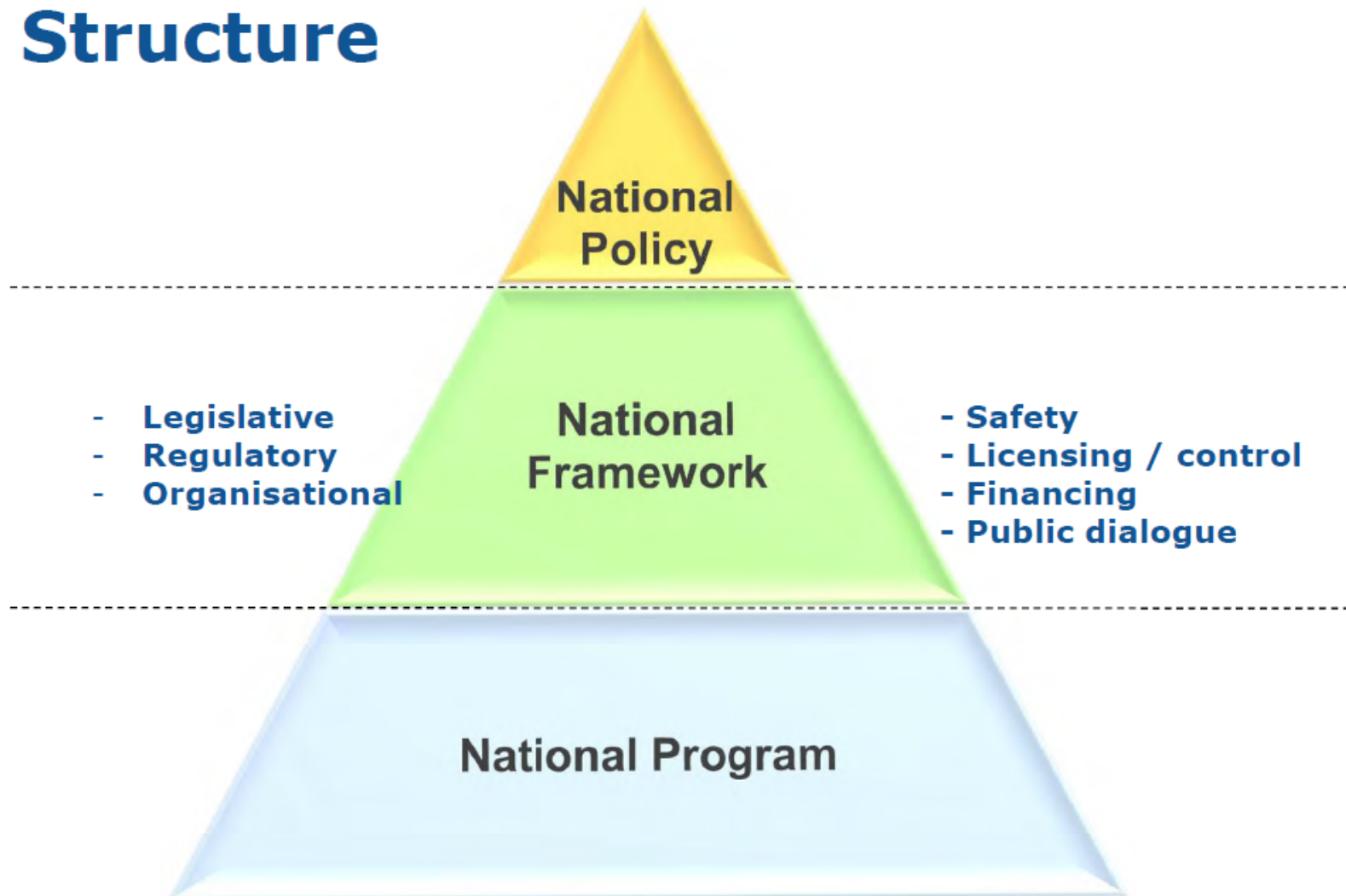
1st Commission Report on Radioactive Waste

- ✓ Provides an **inventory** of radioactive waste and spent fuel present in the Community's territory, including future prospects
- ✓ Provides a **comprehensive overview** to the Council, European Parliament and EU citizens on implementation of the Directive
 - ✓ **Directive 2011/70/Euratom**



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Structure

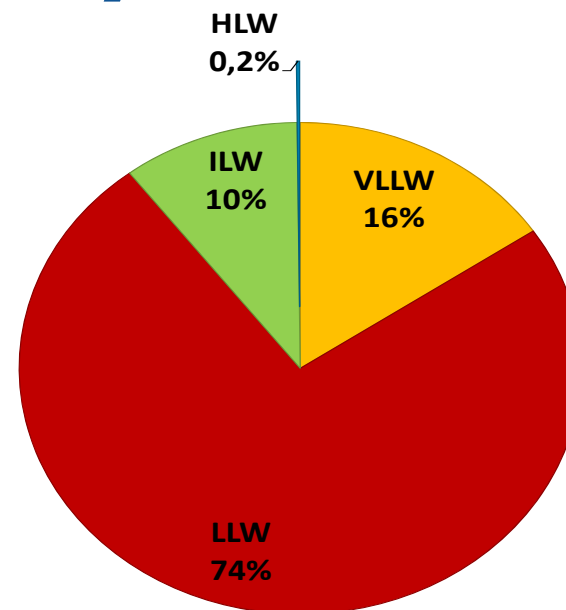
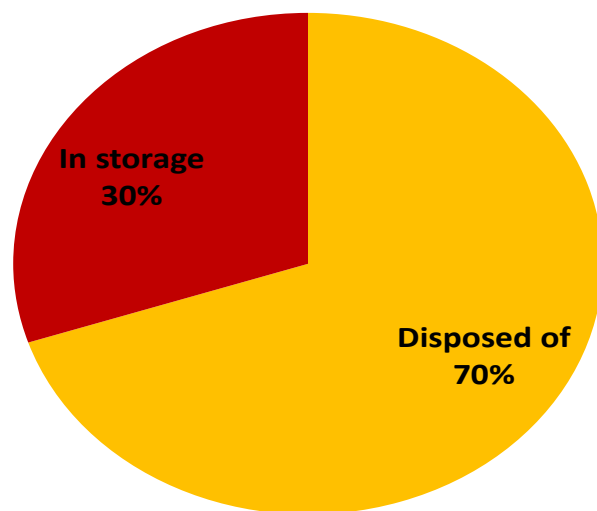


Energy

A generally good level of compliance

- ✓ Legal arrangements ensuring safety
 - ✓ Competent regulatory authorities
 - ✓ Clear allocation of responsibilities
 - ✓ Education and Skills
- ***Self-assessment and peer reviews***
 - ***Transparency***

Inventory



- Estimated total inventory of radioactive waste on the EU territory **3 313 000 m³**
- Spent fuel stored in the EU **54 000 tHM**



Disposal

- Disposal of very low level waste and low level waste remains a challenge in several MS
- Decisions on disposal of intermediate level waste, high level waste and spent fuel are often put on the long term.
- Half of MS consider shared disposal solutions without specific proposals



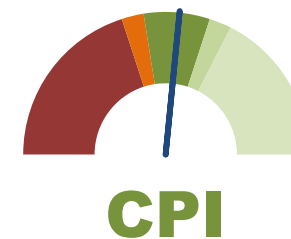
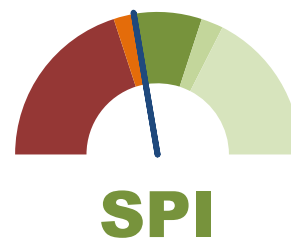
Monitoring

➤ Monitor progress

Only one third of Member States have defined clear and detailed milestones and time frames

➤ Key performance indicators

Most Member States have not clearly defined key performance indicators





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Financing costs





Going Forward

- ✓ **Studies and evaluations**
- ✓ **Workshop 6-8 November**
 - Lessons learned from the directives implementation
 - Shared solutions for spent fuel disposal
- ✓ **Feedback to Member States**
 - on national programmes for waste management
 - International peer reviews
- ✓ **Periodical reporting (3 years)**



Thank you!

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