

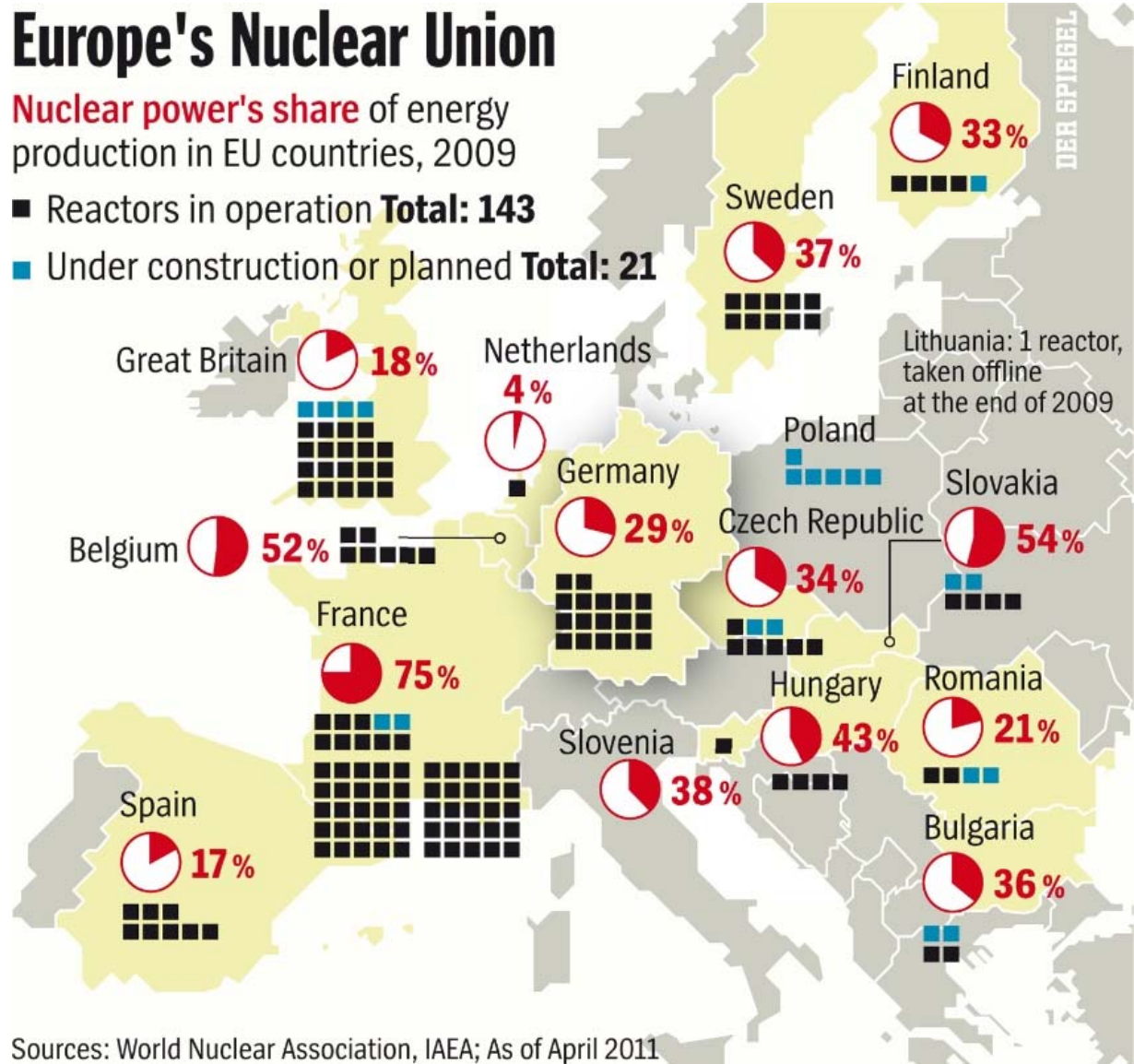


SMR – European perspective

Europe's Nuclear Union

Nuclear power's share of energy production in EU countries, 2009

- Reactors in operation **Total: 143**
- Under construction or planned **Total: 21**



Sources: World Nuclear Association, IAEA; As of April 2011

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Defining long term nuclear policy in Europe

Grown from 35 to >100 EU organisations

Industry:



Research / Engineering:



Academia:



Technical Safety Organisations:



Non-governmental Organisations:



Others:

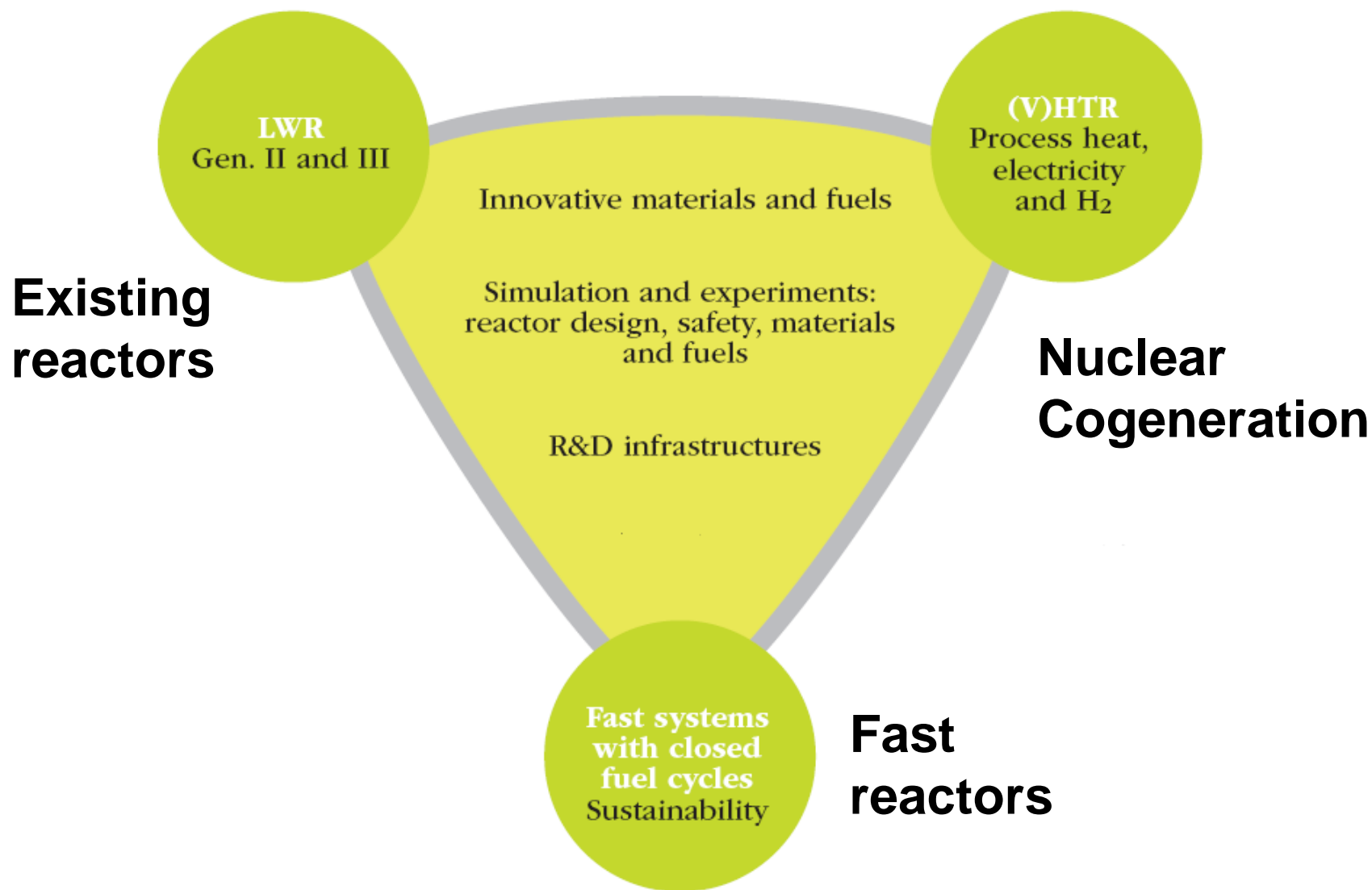


SNETP
SUSTAINABLE NUCLEAR ENERGY
TECHNOLOGY PLATFORM





SNE-TP: 3 pillars





SMR – European perspective

- **No dedicated effort for SMR as such**
 - no remote areas
 - market dominated by large utilities
 - **experience (regulators, producers, utilities) with large PWR & BWR reactors**
 - ⇒ SMR not mentioned in SNETP agendas
 - ⇒ no dedicated Euratom programme

However ...

- **Large need for processing heat for industry**
(+ district heating)
 - **strong EU dependence on fossil fuel import**
 - **nuclear cogeneration strongly supported by SNETP & Euratom**
 - ⇒ **room for SMR**



EURATOM project **NC2I-R**

Nuclear Cogeneration Industrial Initiative – Research

- 1.8 M€ for 2 years, launch: 10-11 Oct 2013 in Warsaw
- **Goals:**
 - Increase energy independence of Europe
 - Replace fossil fuels by nuclear power for industrial heat production
- **Work packages:**
 - Map of useful infrastructures & competences in Europe
 - Safety & licensing (incl. interface to eg. chemical factory)
 - Involving potential end-users
 - Roadmap towards deployment of a demonstrator reactor
- **Partners:**
 - **Industry:** Areva, E.ON, Fortum, AMEC, NRG, **Prochem**, ...
 - **Regulators & TSO:** TÜV, IRSN, ...
 - **Research:** JRC Petten, **AGH Cracow**, **WarsawUnivTech**, **NCBJ (coord.)**
 - ...

The first EURATOM project coordinated by Polish institute

National Centre for Nuclear Research

Reactor MARIA



Nuclear Centre at Swierk
30 km from Warsaw
1100 employees

Possible cooperation on SMR:

- Safety analysis
- Licensing issues in Poland
- R&D on specific topics

