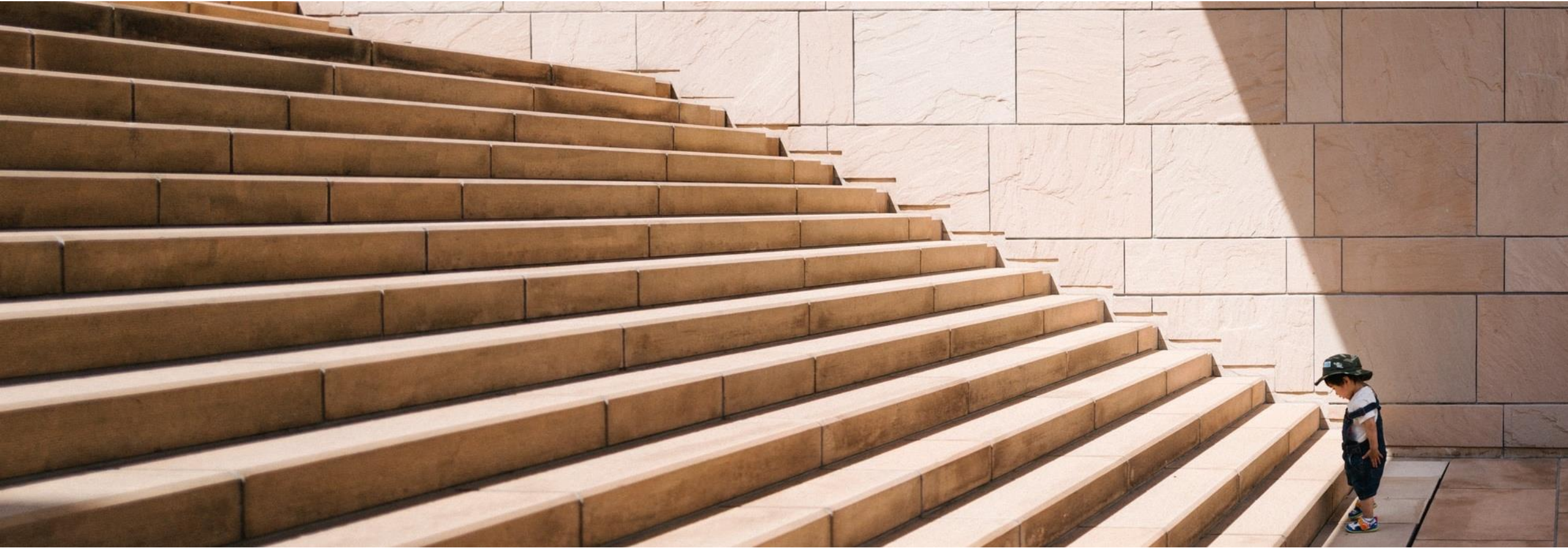


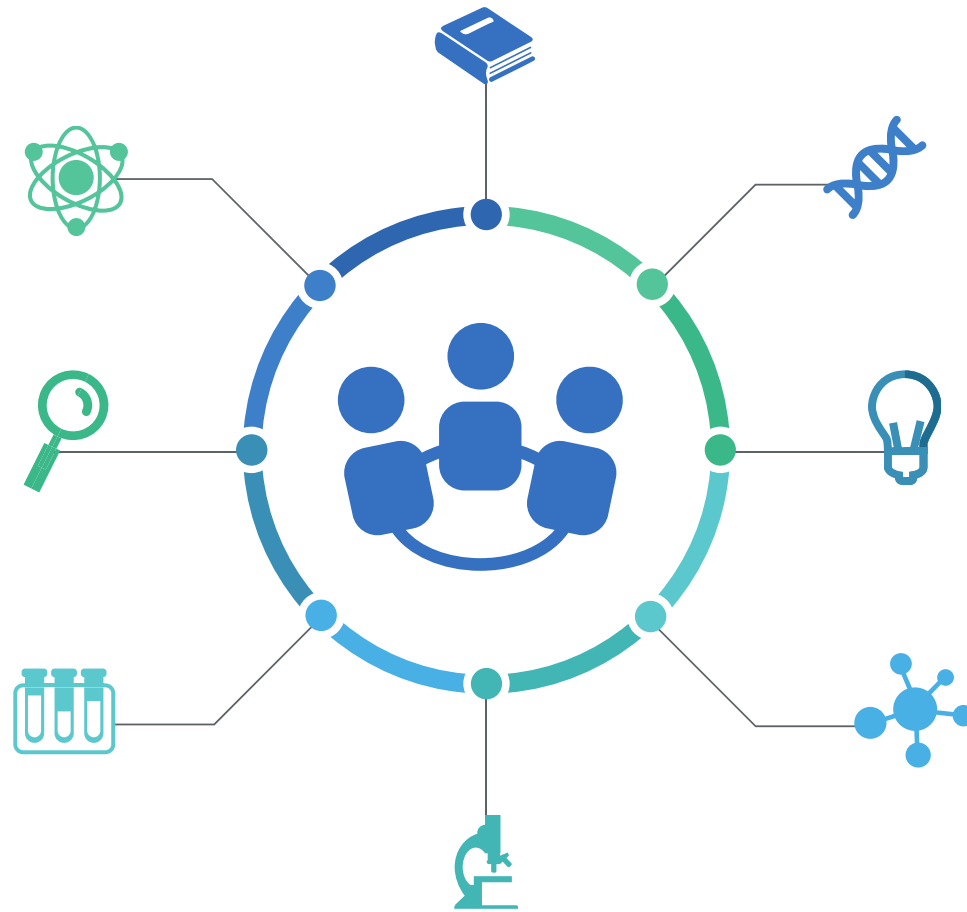
# The Joint Research Centre

Piotr Szymański  
Petten, 24 May 2024

# Society is facing many challenges



# The need for evidence to inform policy

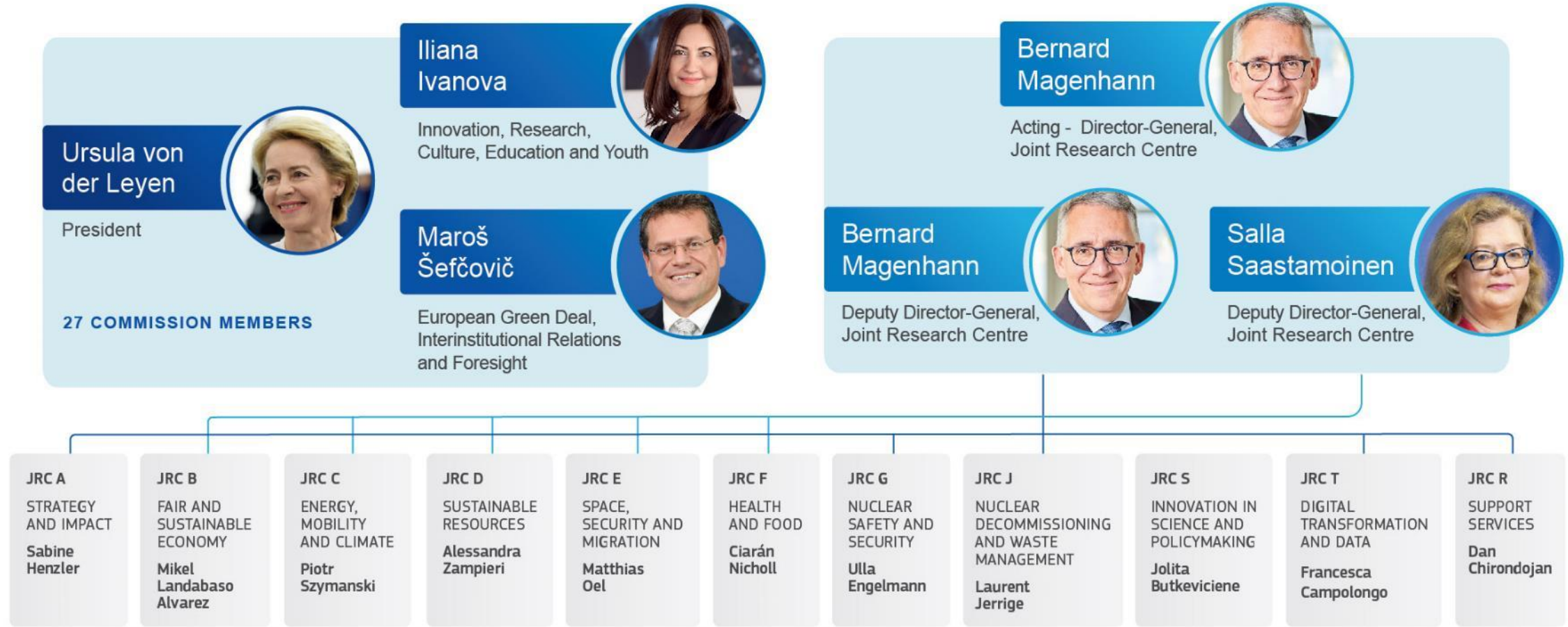


# The European Commission's political leadership

 <p><b>Ursula von der Leyen</b> President</p>	 <p><b>Dubravka Šuica</b> Vice-President <i>Democracy and Demography</i></p>	 <p><b>Margrethe Vestager</b> Executive Vice-President <i>A Europe Fit for the Digital Age</i></p>	 <p><b>Valdis Dombrovskis</b> Executive Vice-President <i>An Economy that Works for People</i></p>	 <p><b>Josep Borrell Fontelles</b> High Representative/ Vice-President <i>A Stronger Europe in the World</i></p>	 <p><b>Maroš Šefčovič</b> Vice-President <i>Interinstitutional Relations and Foresight</i></p>
 <p><b>Věra Jourová</b> Vice-President <i>Values and Transparency</i></p>	 <p><b>Margaritis Schinas</b> Vice-President <i>Promoting our European Way of Life</i></p>	 <p><b>Wopke Hoekstra</b> Commissioner <i>Climate Action</i></p>	 <p><b>Johannes Hahn</b> Commissioner <i>Budget and Administration</i></p>	 <p><b>Stella Kyriakides</b> Commissioner <i>Health and Food Safety</i></p>	 <p><b>Nicolas Schmit</b> Commissioner <i>Jobs and Social Rights</i></p>
 <p><b>Paolo Gentiloni</b> Commissioner <i>Economy</i></p>	 <p><b>Janusz Wojciechowski</b> Commissioner <i>Agriculture</i></p>	 <p><b>Thierry Breton</b> Commissioner <i>Internal Market</i></p>	 <p><b>Elisa Ferreira</b> Commissioner <i>Cohesion and Reforms</i></p>	 <p><b>Olivér Várhelyi</b> Commissioner <i>Neighbourhood and Enlargement</i></p>	 <p><b>Didier Reynders</b> Commissioner <i>Justice</i></p>
 <p><b>Helena Dalli</b> Commissioner <i>Equality</i></p>	 <p><b>Ylva Johansson</b> Commissioner <i>Home Affairs</i></p>	 <p><b>Janez Lenarčič</b> Commissioner <i>Crisis Management</i></p>	 <p><b>Adina Vălean</b> Commissioner <i>Transport</i></p>	 <p><b>Mairead McGuinness</b> Commissioner <i>Financial services, Financial Stability and Capital Markets Union</i></p>	 <p><b>Jutta Urpilainen</b> Commissioner <i>International Partnerships</i></p>
 <p><b>Kadri Simson</b> Commissioner <i>Energy</i></p>	 <p><b>Virginijus Sinkevičius</b> Commissioner <i>Environment, Oceans and Fisheries</i></p>	 <p><b>Iliana Ivanova</b> Commissioner <i>Innovation, Research, Culture, Education and Youth</i></p>			

#Eustrivesformore #vdLcommission

# The Joint Research Centre within the Commission



# Science for policy



ANTICIPATE



INTEGRATE



IMPACT

## Our purpose

The Joint Research Centre provides independent, evidence-based knowledge and science, supporting EU policies to positively impact society.

# Keeping the pace with the development of research

- Fully **policy-relevant** and world class **knowledge production**
- Priorities driven **knowledge and competence management**
- One JRC – **anticipating** emerging issues, **understanding** complexities and **bridging** silos
- **Addressing challenges of research**  
(information deluge, multidisciplinary, integrity, reproducibility)



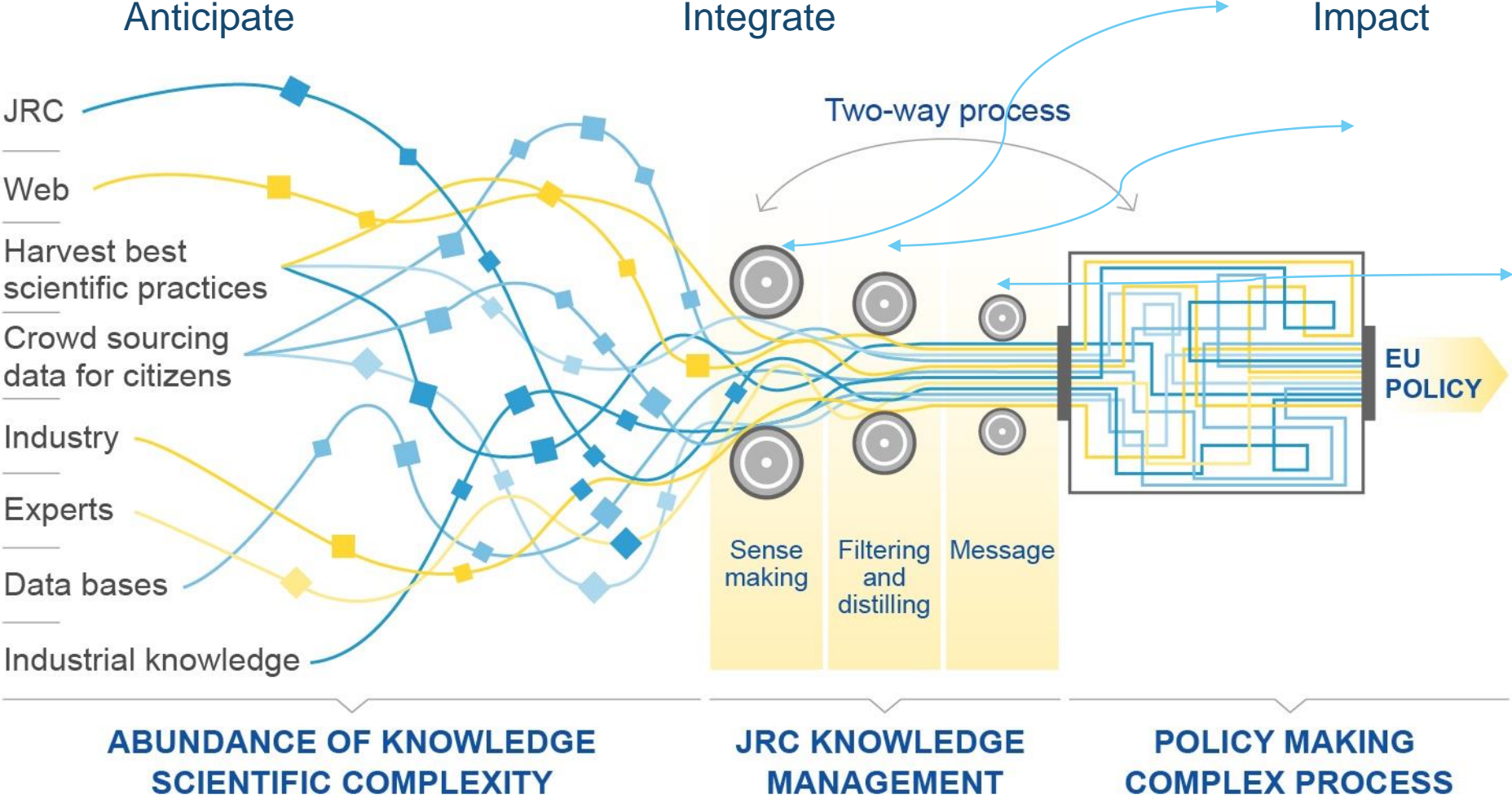
# Our role

- **Independent** of private, commercial or national interests
- Works for more than **40 European Commission policy departments**





# Dealing with the information overload



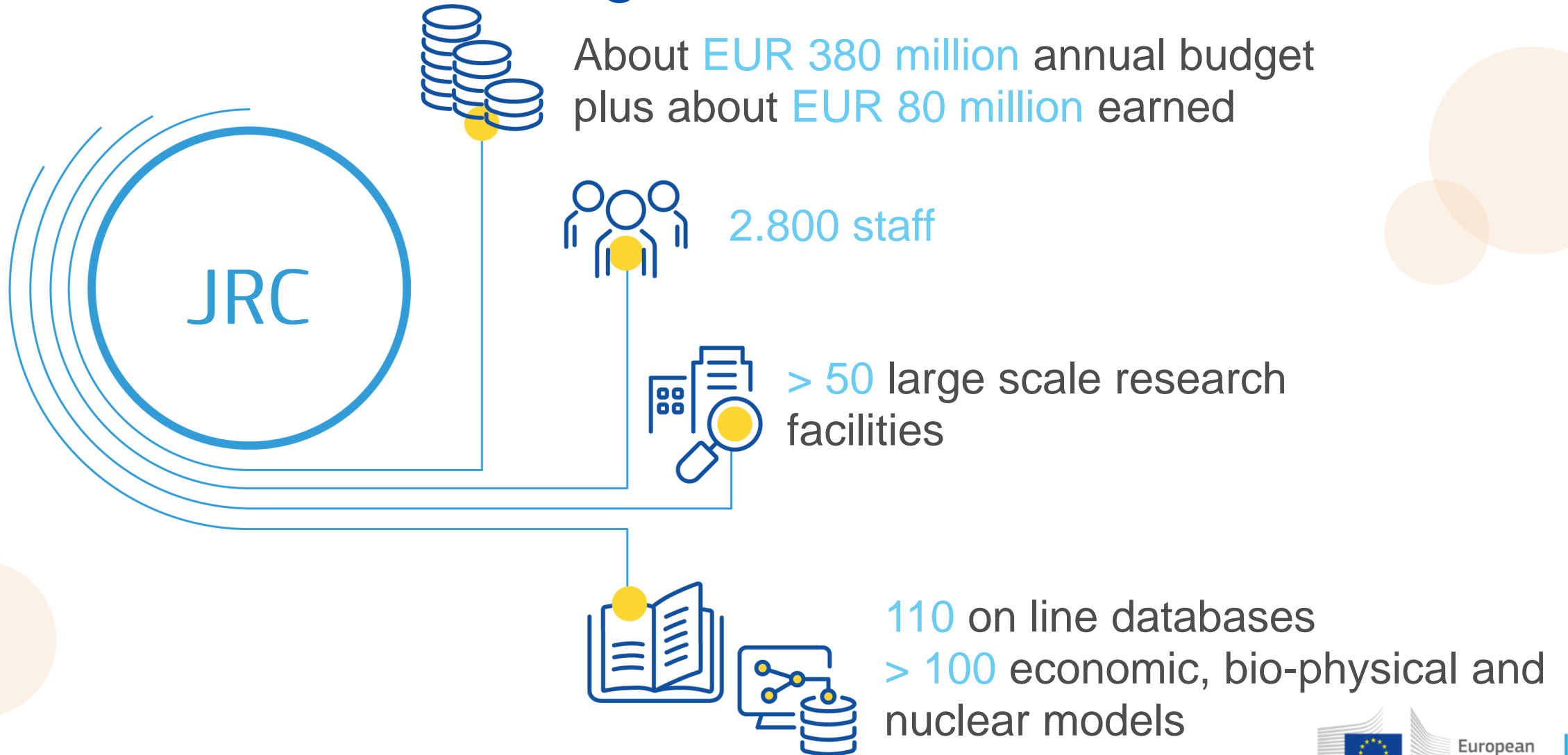
# JRC sites

Headquarters in **Brussels**  
and research facilities located  
in **5 EU Countries:**

- Belgium (Geel)
- Germany (Karlsruhe)
- Italy (Ispra)
- The Netherlands (Petten)
- Spain (Seville)

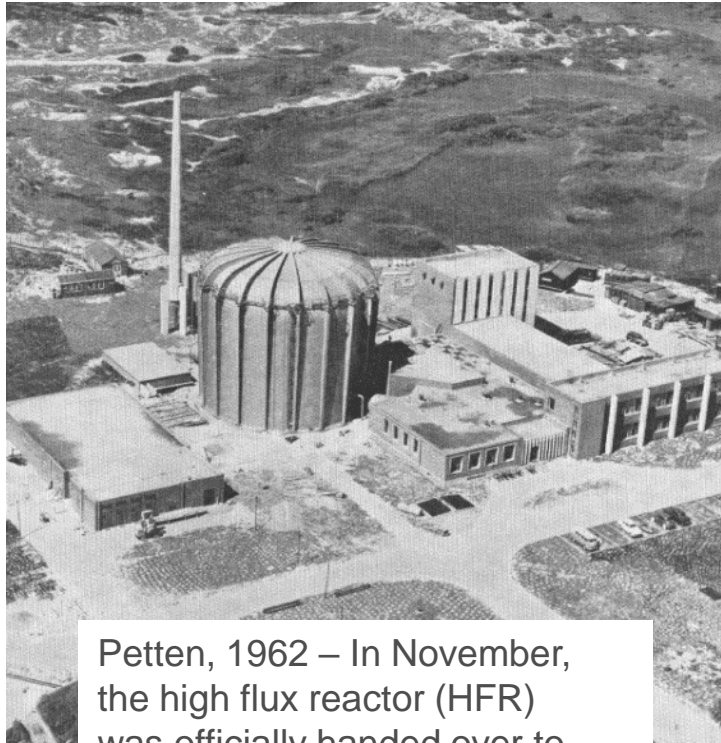


# JRC – Facts and figures

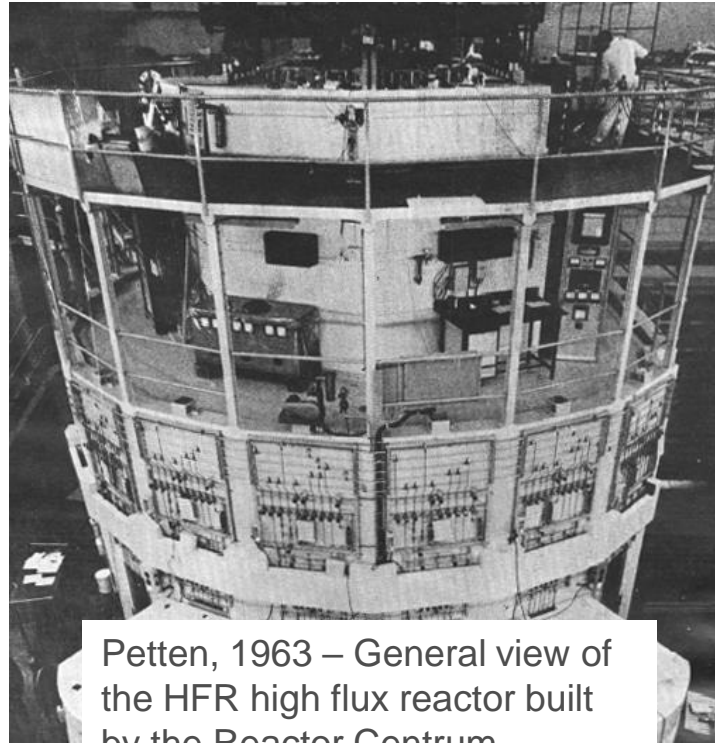


# JRC History

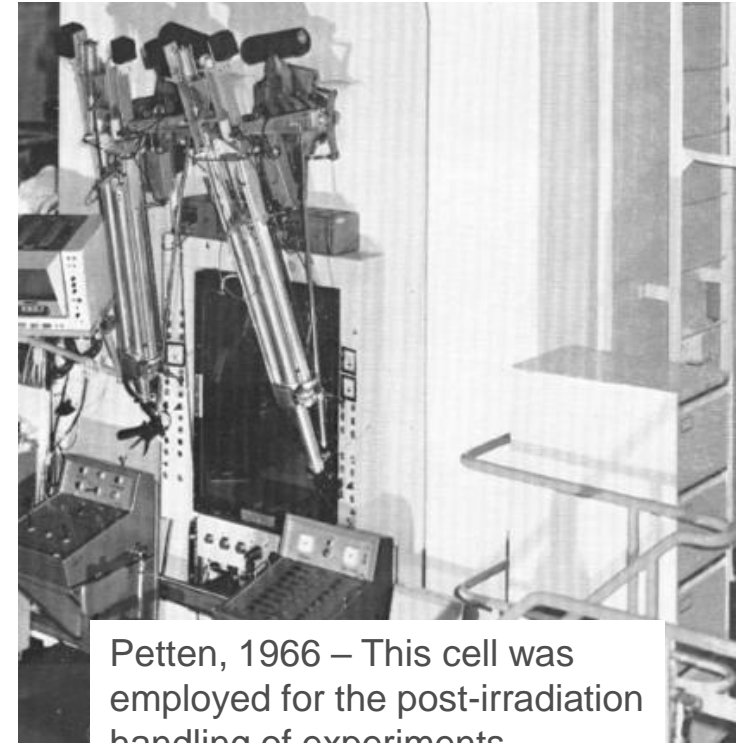
# JRC Petten: the birth



Petten, 1962 – In November, the high flux reactor (HFR) was officially handed over to the Community. Areal view of reactor and its auxiliary laboratories.



Petten, 1963 – General view of the HFR high flux reactor built by the Reactor Centrum Nederland (RCN). The reactor went into operation at the end of 1962.



Petten, 1966 – This cell was employed for the post-irradiation handling of experiments inserted in the reactor.

# Royal visits



# Directorate Energy, Mobility and Climate

# Battery and Hydrogen Technologies



- **What?**  
Batteries  
Hydrogen and fuel cells
- **Why?**  
Can't decarbonize without them  
Users need to trust their performance and safety
- **How?**  
Experimental work  
Standardisation  
Science for policy



# Energy, Security Digitalisation and Markets

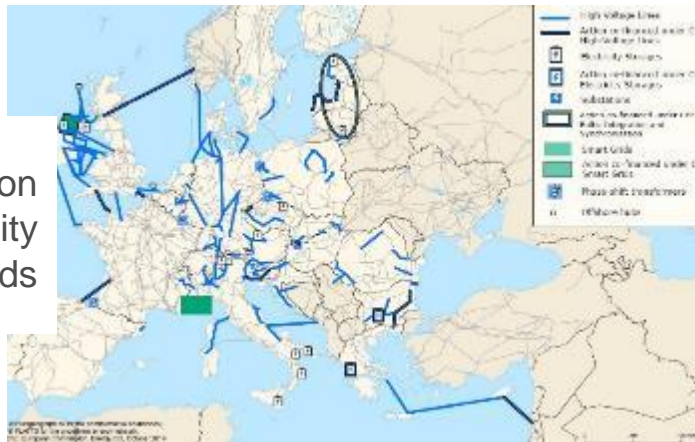
Smart Grid Interoperability Laboratory



European Interoperability Centre for Electric Vehicles and Smart Grids



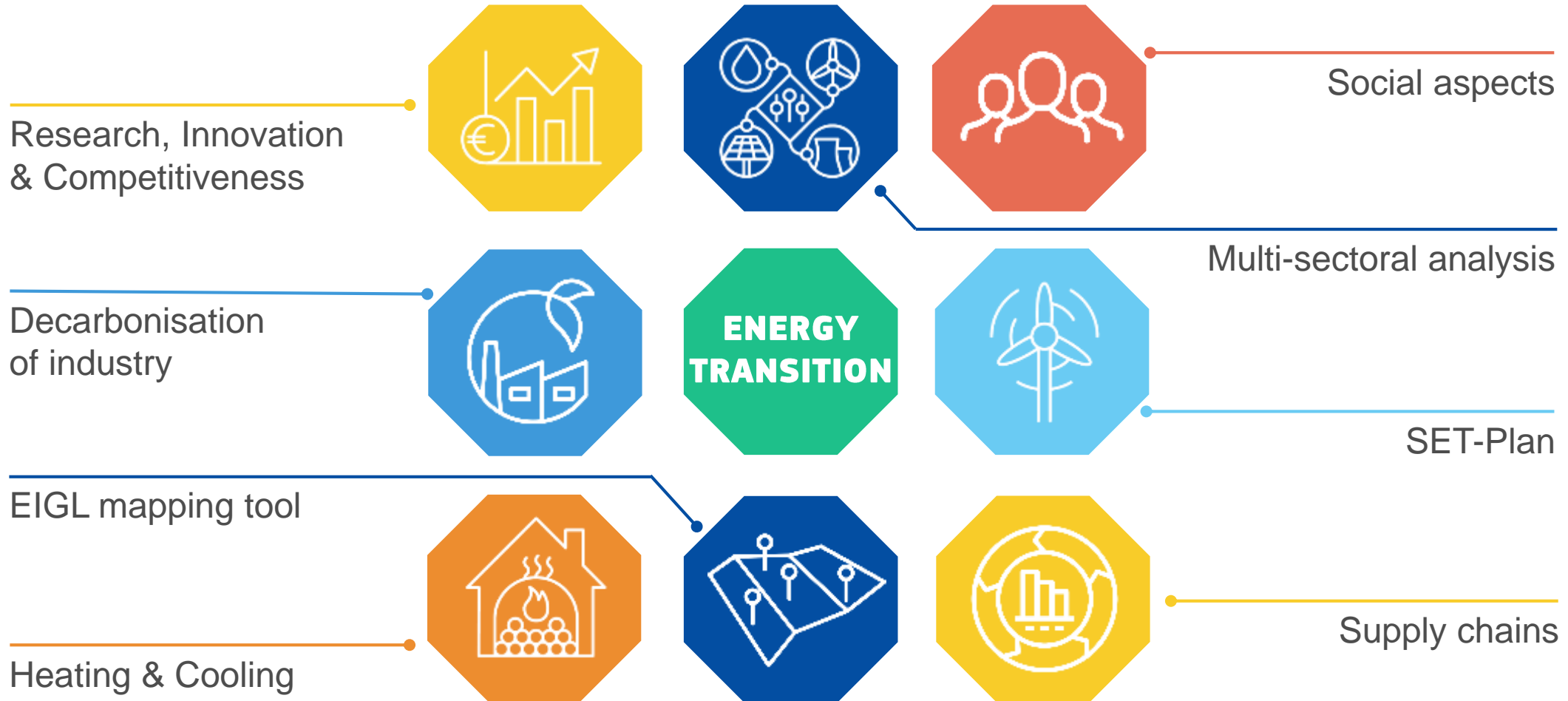
Projects of common interest – Electricity and Smart Grids



Hydraulic model of the European High Pressure Natural Gas Network



# Energy Transition Insights for Policy



# Directorate Nuclear Safety and Security

# Directorate for Nuclear Safety and Security

## Implementing the EURATOM Research & Training Programme

### Radioactive Waste Management

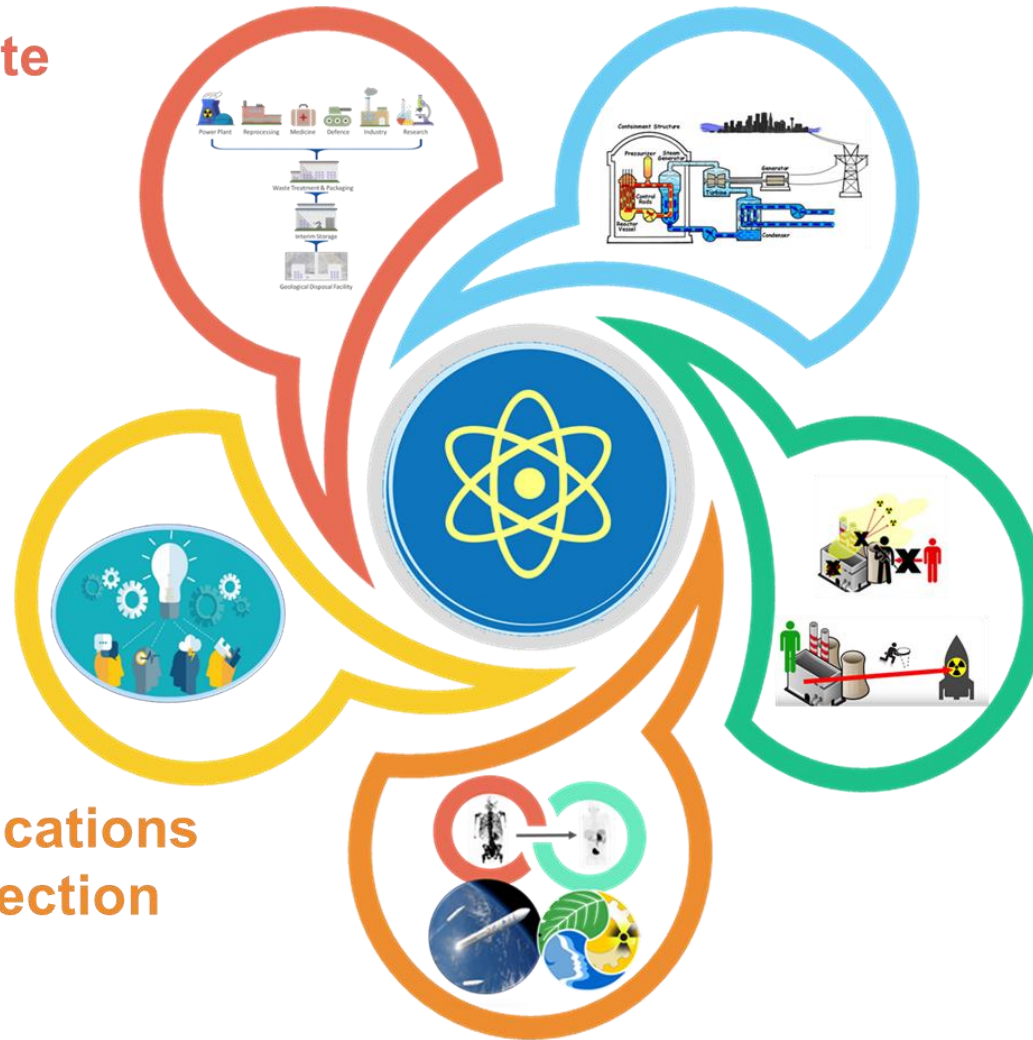
Deep Geological Disposal  
Extended Interim Storage  
New Waste Forms (ATF, SMR)  
Regulatory framework  
E&T, KM, Open Access

### Nuclear Knowledge & Competence

Maintain Competence (E&T)  
Human Resources Observatory  
Support JRC Open Access  
Reference Data & Standardization  
Innovation & Technology  
from Research to Industry

### Non-power Applications & Radiation Protection

Medicine, Environment, Space  
EU beating Cancer  
Standardization  
Accelerators  
Open access, E&T



### Nuclear Power Plants Safety

Nuclear reactor safety  
Update of safety regulations  
LTO, SMR, Gen-IV  
Innovative materials  
Fuel development and testing  
Infrastructures: JHR, HFR and Open Access  
Emergency Preparedness

### Nuclear Safeguards, non Proliferation, Security

EU and international safeguards obligations  
Synergies with Security Union & Defense  
Strategic trade control  
Nuclear Security Training Centre

# JRC Petten nuclear facilities

Virtual tour at [Environmental and Mechanical Materials Assessment Facilities](https://ec.europa.eu/jrc/en/activities/Environmental-and-Mechanical-Materials-Assessment-Facilities) | European Commission ([europa.eu](https://ec.europa.eu))

**LILLA** - Liquid Lead Laboratory



**SMPA** – Structural Material Performance Laboratories

**MCL** – Micro Characterization Laboratory

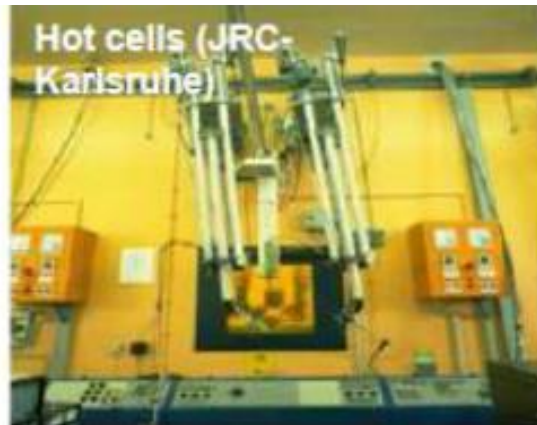


**AMALIA** – Laboratory for the materials in Light Water Reactor environment

# Directorate Nuclear Decommissioning and Waste Management

# Directorate Nuclear Decommissioning and Waste Management

The mission is to pursue the decommissioning of the Commission's nuclear installations at the JRC sites and to safely manage the resulting spent fuel, nuclear material and radioactive waste. It is complemented by the aim of contributing to the dissemination of knowledge on the decommissioning process gained through the EC Nuclear Decommissioning and Waste Management to all Member States.



# Site Management and Development



# New Petten Site Entrance

Fit for purpose  
Security Entrance  
NEB Principles  
Delivery Q2 2026



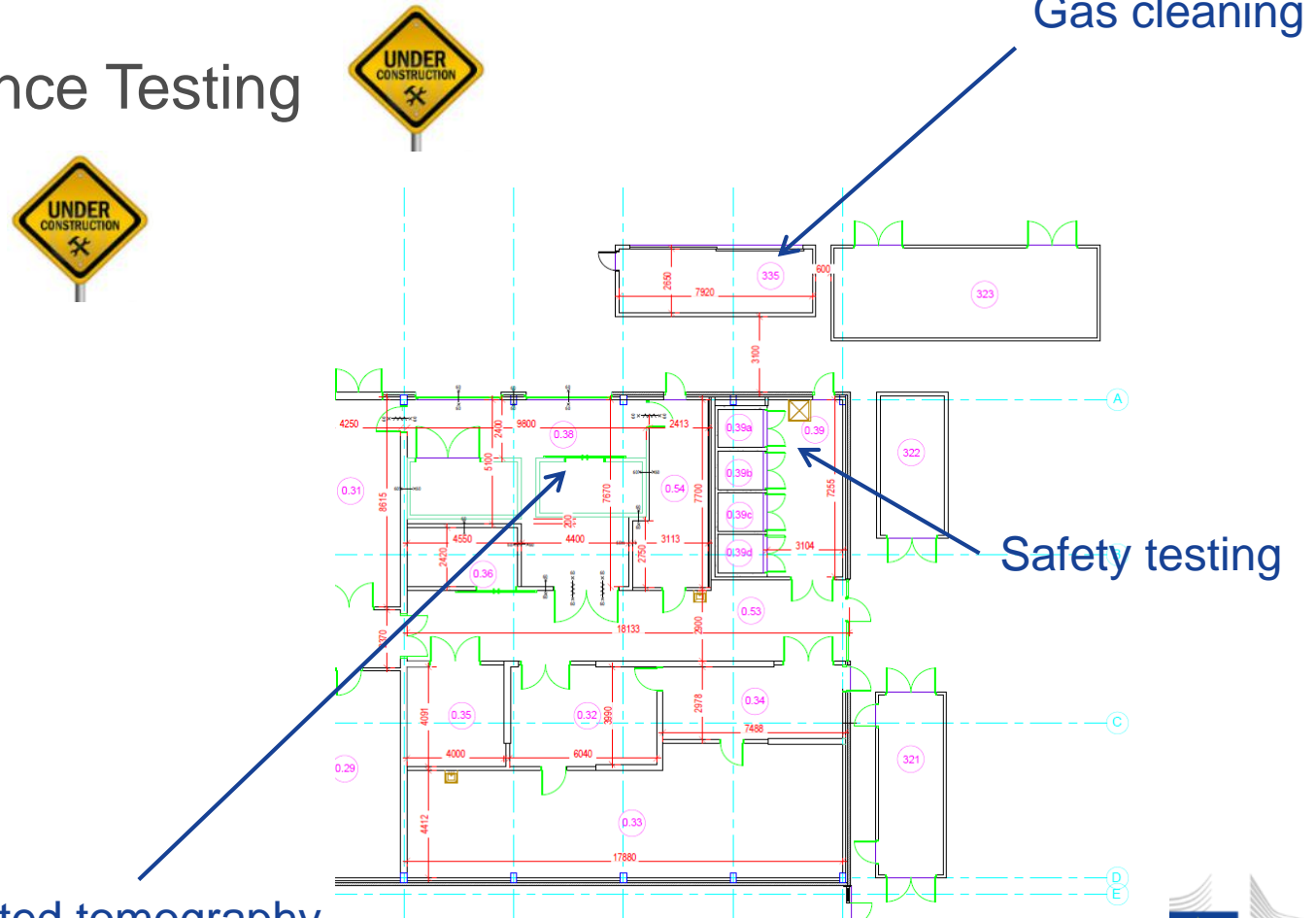
# New Battery Testing Facilities

- State-of-the-art
- Overall budget: ca. 9 MEuro
- Close to completion

- Battery Cell/Material Performing Testing
- Battery Pack Performance Testing
- Battery Safety Testing



X-ray computed tomography



# JRC Petten in the Energy and Health Campus



[www.ehcampus.com](http://www.ehcampus.com)



[hello@ehcampus.com](mailto:hello@ehcampus.com)



# European School Bergen



# Basic organisation of the European School Bergen

- Nursery, Primary and Secondary education
- 3 language sections: Dutch-speaking, Anglophone and Francophone
- Dominant language (L1) determines the language section
- A pupil is placed in a section in 2 possible ways:
  - 1) EN, FR or NL -> same section as the dominant language
  - 2) Pupils with the dominant language being any other EU language than EN/FR/NL
    - The section will be that of the second working language (L2) of the pupil
    - Dominant language is offered regardless of number of pupils

# Thank you and keep in touch



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[Joint-research-centre.ec.europa.eu](https://joint-research-centre.ec.europa.eu)

# We do science for policy

Joint  
Research  
Centre

Watch our video!



# We are hiring



Check our vacancies  
[recruitment.jrc.ec.europa.eu](https://recruitment.jrc.ec.europa.eu)





# USE YOUR VOTE OR OTHERS WILL DECIDE FOR YOU

EUROPEAN ELECTIONS  
**6-9 JUNE 2024**



# Hoe blijf je in contact met de EU?

De EU is er voor jou. Er zijn verschillende manieren om op de hoogte te blijven van wat er gebeurt in de EU, in contact te komen, vragen te stellen of suggesties te doen:

- Webpagina met [informatie over de realisaties van de huidige Commissie](#), een [brochure](#) en [tijdlijn](#) en verschillende links naar 12 thematische webpagina's
- [De EU in 2023 — Algemeen verslag over de activiteiten van de EU](#)
- [Website Europese verkiezingen](#)
- [Website van de Europese Commissie](#)
- [Europees platform voor burgerparticipatie](#)
- [Europese jongerensite](#)
- [EU-centra in uw regio - via "De EU bij mij in de buurt"](#)
- [Contactcentrum van de EU](#) (gratis) 00800 6 7 8 9 10 11



Credit: Media and Information Literacy Project Lab participants in Tallinn, Estonia. Photo: Karin-Liis Tambaum