

# European Partnership for the Assessment of Risks from Chemicals

**PARC**

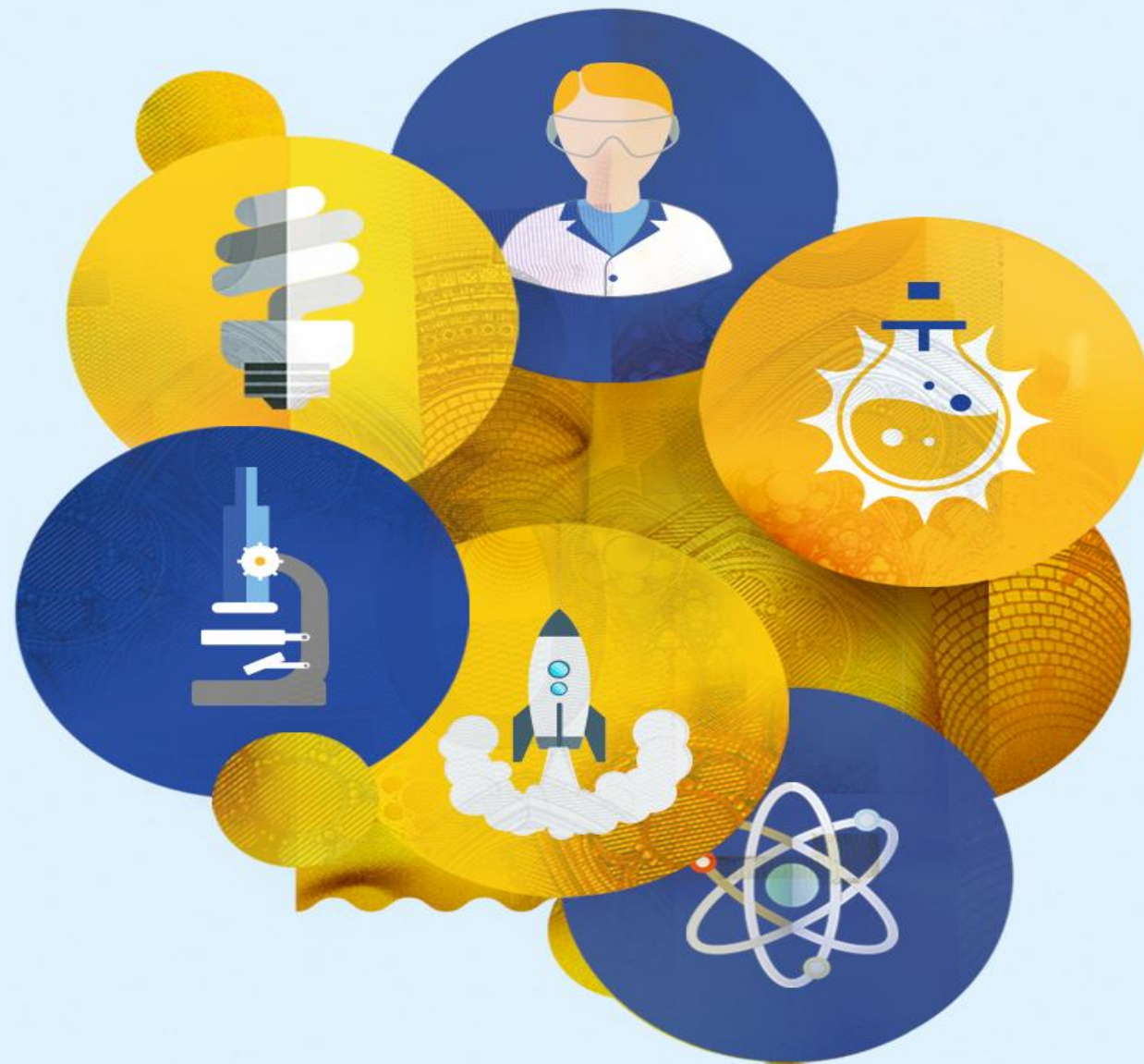
*Horizon Europe candidate Partnership*

**EU-ToxRisk Final Symposium**

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# What is PARC?

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- A public-public **partnership** under Horizon Europe
- 7 years partnership – 400 million Euros co-funded
- An initiative where the **European Union**, prepared with early involvement of **Member States and Associated Countries**, together with public partners (EU and National Risk Agencies, Universities, Public Research Organisations), commit to **jointly support the development and implementation of a programme** of research and innovation activities in relation with **the assessment of risk of chemicals**



# PARC composition

## Number of participating countries: 27

Austria (AT), Belgium (BE), Croatia (HR), Czech Republic (CZ), Denmark (DK), Estonia (EE), Finland (FI), France (FR), Germany (DE), Greece (EL), Hungary (HU), Iceland (IS), Israel (IL), Italy (IT), Latvia (LV), Lithuania (LT), Luxembourg (LU), Netherlands (NL), Norway (NO), Poland (PL), Portugal (PT), Slovakia (SK), Slovenia (SI), Spain (ES), Sweden (SE), Switzerland (CH), United-Kingdom (UK)

## Participating EU agencies/services:

**3 agencies:** EEA, EFSA, ECHA

**and 5 DGs:** DG R&I, DG ENV, DG SANTE, DG GROW and JRC

Pending countries for whom participating entities are still to be confirmed : 4

**Bulgaria (BG), Cyprus (CY), Ireland (IE), Romania (RO)**

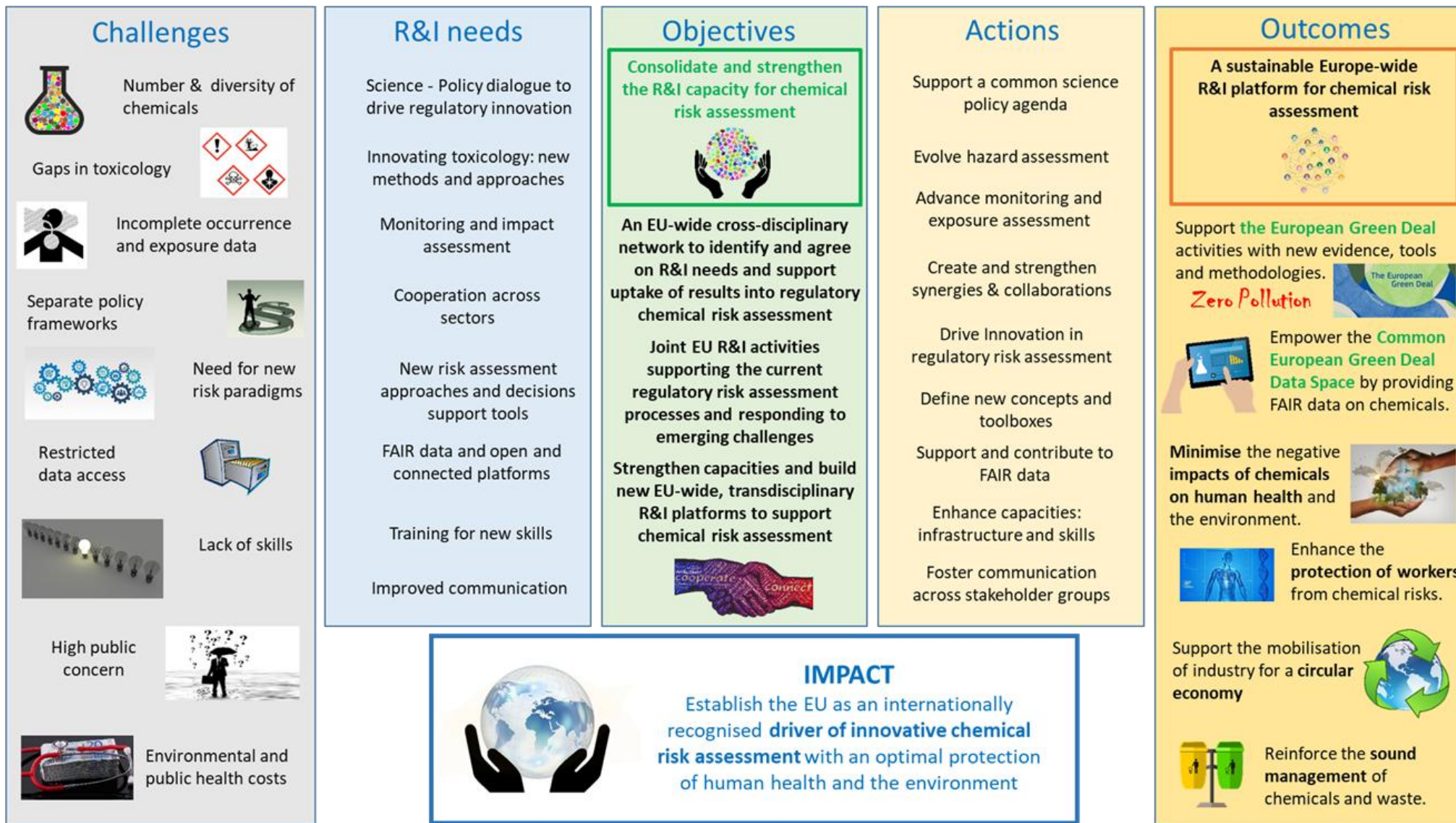
Countries with which no contact has been achieved: 1

**Malta (MT)**





# Concept paper



Free images from Pixabay: OpenIcons, Colin Behrens, Marek Studzinski, PublicDomainPictures, Gordon Johnson, John Hain, 200Degrees, Mystic Art Design

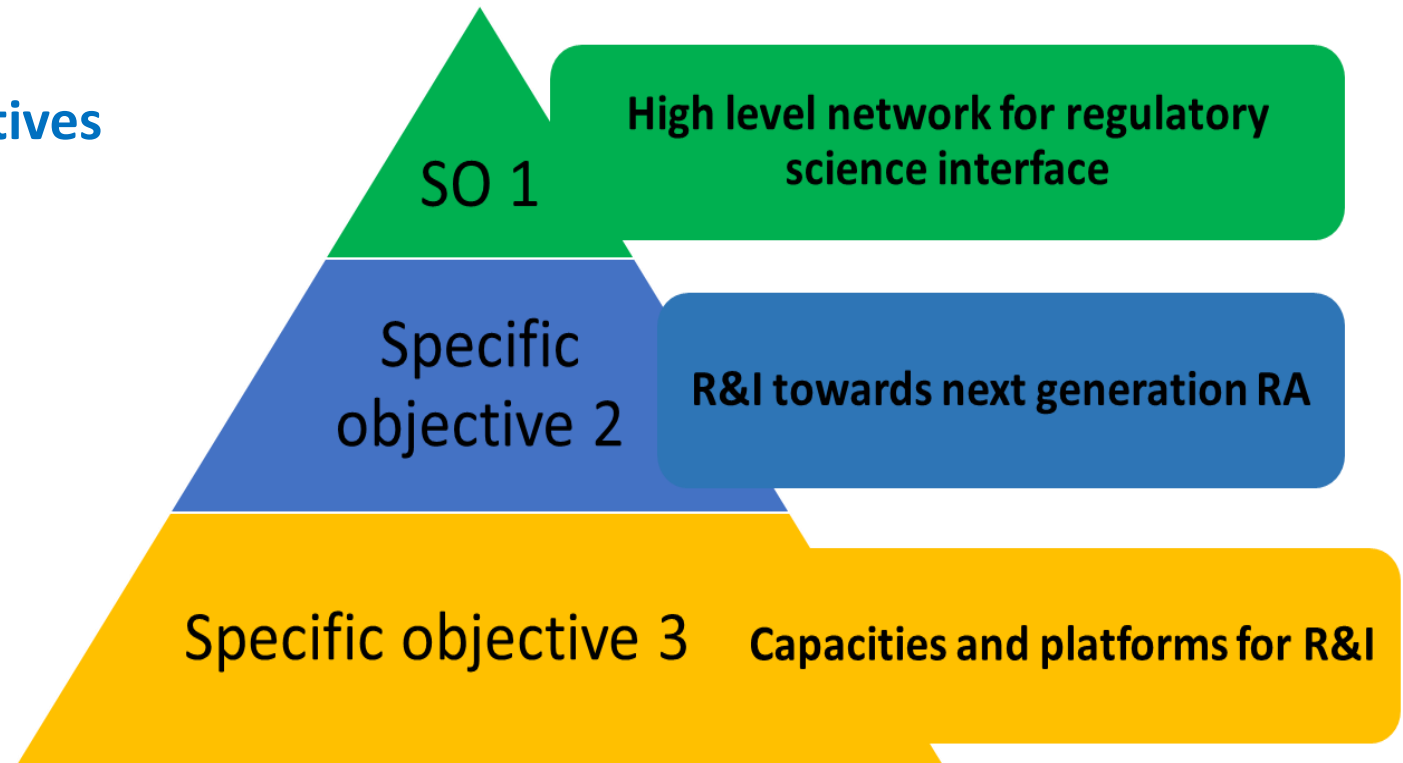


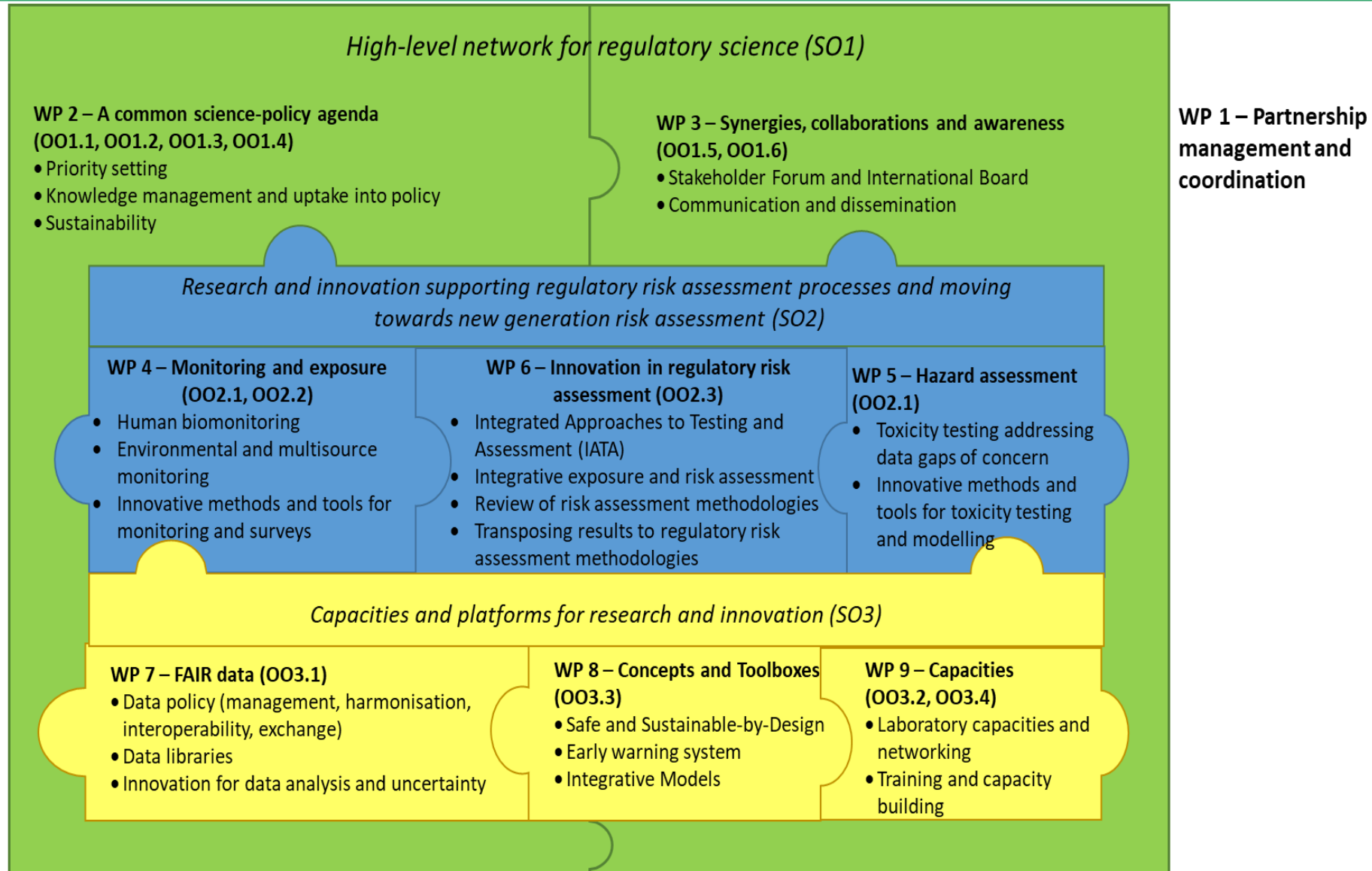
# Objectives of the Partnership

The **general objective** is to:

Consolidate and strengthen the EU's research and innovation capacity for chemical risk assessment to protect human health and the environment and contribute to a non-toxic environment and a circular economy.

The **impacts** related to the **specific objectives** comprise three levels:





# PARC boundaries

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## In

- **Chemical compounds**, including mixtures, toxins, nano, release from articles...
- **Human Biomonitoring**
- **New monitoring activities in environment**, new sampling and analytical methods
- **Priority knowledge gaps** for evidence based chemical risk assessment as identified by risk assessors and risk managers and where **research and innovation activities** bring added value
- **Regulatory concern** that cannot be clarified under existing regulatory frameworks and which require independent and additional R&I activities (e.g. controversies, orphan chemicals (incl. toxins))
- **Innovative** analytical, testing and data analysis **tools and methods**
- **New risk assessment approaches** to develop more inclusive risk assessment frameworks
  - Hazard and exposure assessment
  - Risk assessment of mixtures

## Out

**Biohazards** and noise, radiation, ...

**Testing and information requirement under existing regulatory frameworks**

- REACH activities
- Part of marketing authorisation applications for chemicals or products
- Regulatory monitoring

**(Research) Questions without linking to a regulatory/policy concern**





# PARC and the rest of the world...

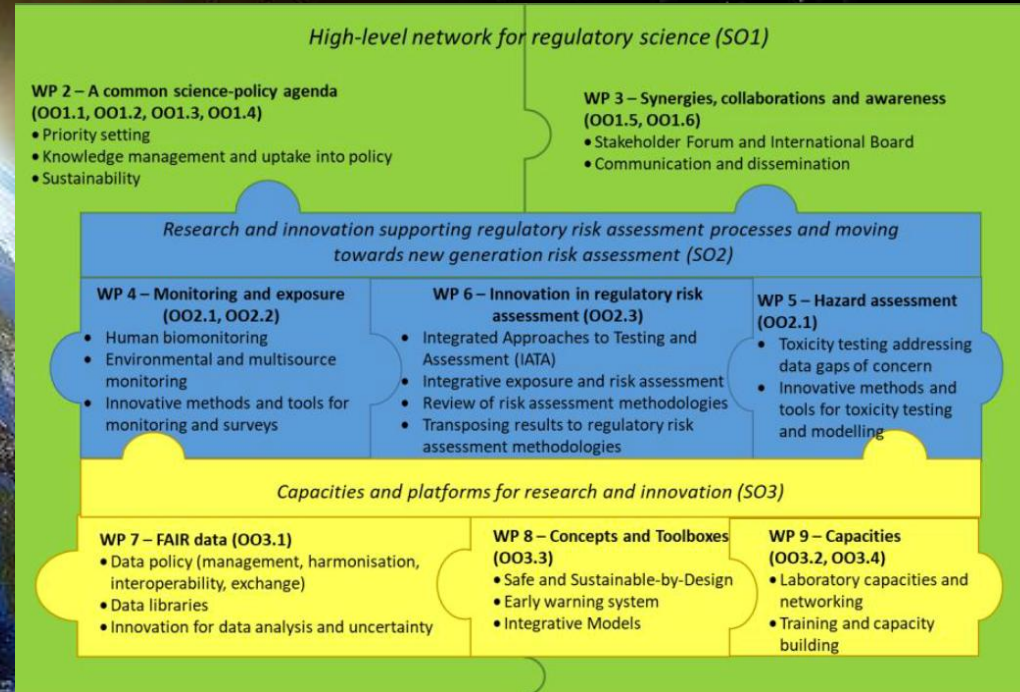
Developments at the international level, e.g. OECD, WHO, U.S. EPA

Ongoing regulatory implementation DG SANTE/EFSA and DG ENVI/ECHA

New knowledge, new science

Strategies under the EU Green Deal

## Related research projects

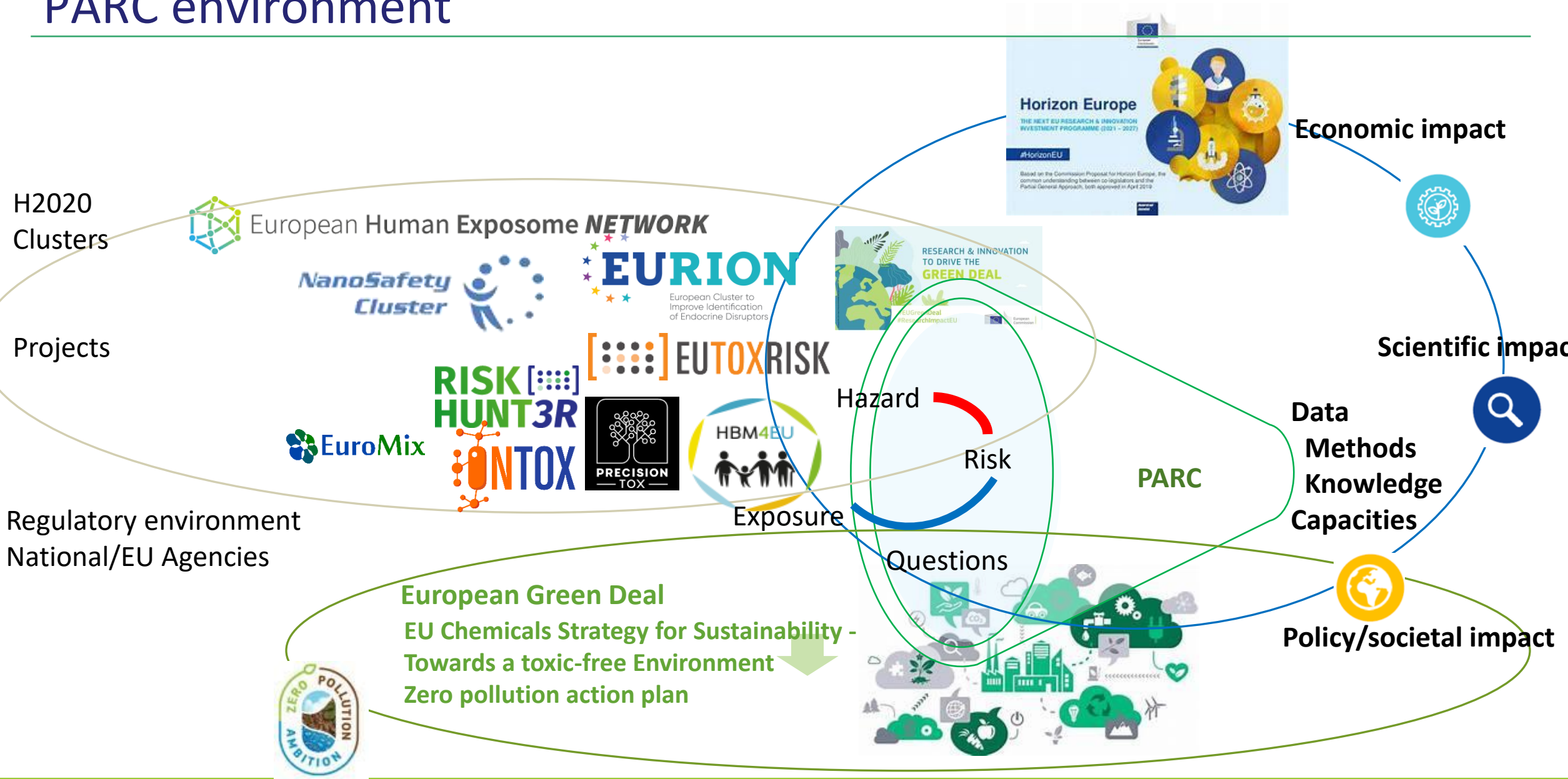


Innovations in technologies and methodologies





# PARC environment



# How PARC will contribute to the Chemicals Strategy for Sustainability

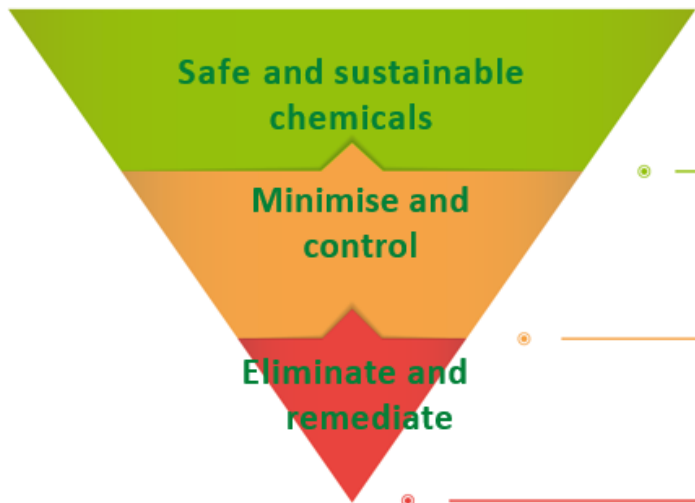
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## By

- **Establishing a permanent dialogue between regulatory risk assessors at EU / National level and the research community**
- **Consolidating EU networks and infrastructures involved in risk assessment of chemicals**
  - Mapping of laboratories capacities and harmonisation of performances:
    - Human and Environmental Monitoring
    - Hazard assessment and characterisation
  - Strengthening a community of risk assessors involved in a regulatory context
- **Developing or promoting new innovative methods/ tools/ platforms** that will support Next Generation Risk Assessment approaches
  - AOPs/IATAs
  - Exposure driven assessment, e.g. 'real-life mixtures' identification
  - (Re)use of data, FAIRness of data
  - Modelling tools
- **Direct support to**
  - Safe and Sustainable by Design approach
  - Early Warning System



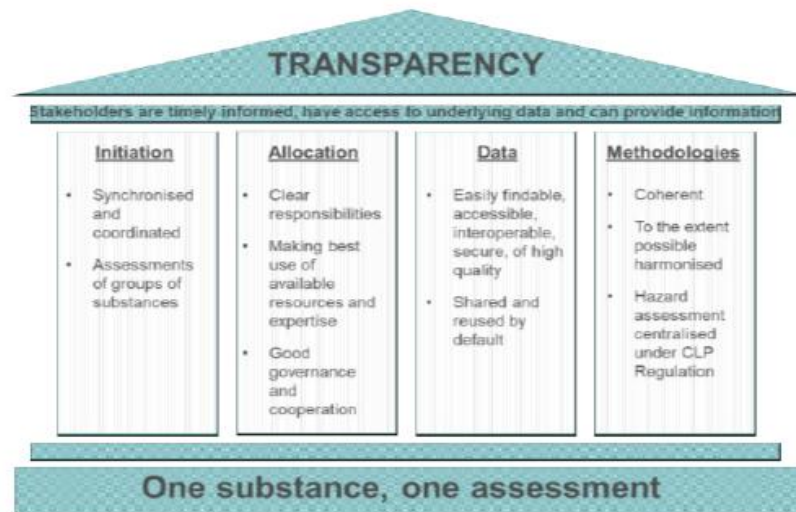
# PARC: Link to EU Chemicals Strategy for Sustainability



## Encourage innovation

Promote the development of **safe and sustainable chemicals and materials**, clean production processes and technologies, **innovative tools for testing and risk assessments**.

- **Contribute to the development of EU criteria**
  - Safe and sustainable chemicals (WP8)
  - Early Warning System (WP8, WP4)
  - Mixtures assessment factors (WP6, WP8)
  - Environmental risk assessments (WP6)
- **Development of**
  - Innovative tools (WP4, WP5, WP6, WP8)
  - Methodologies that take into account the whole life cycle of substances and materials
- Development and uptake of methods to generate information on endocrine disruptors through screening and testing of substances (WP5, WP6)
- Contribute to methodologies and data (WP5, WP7)

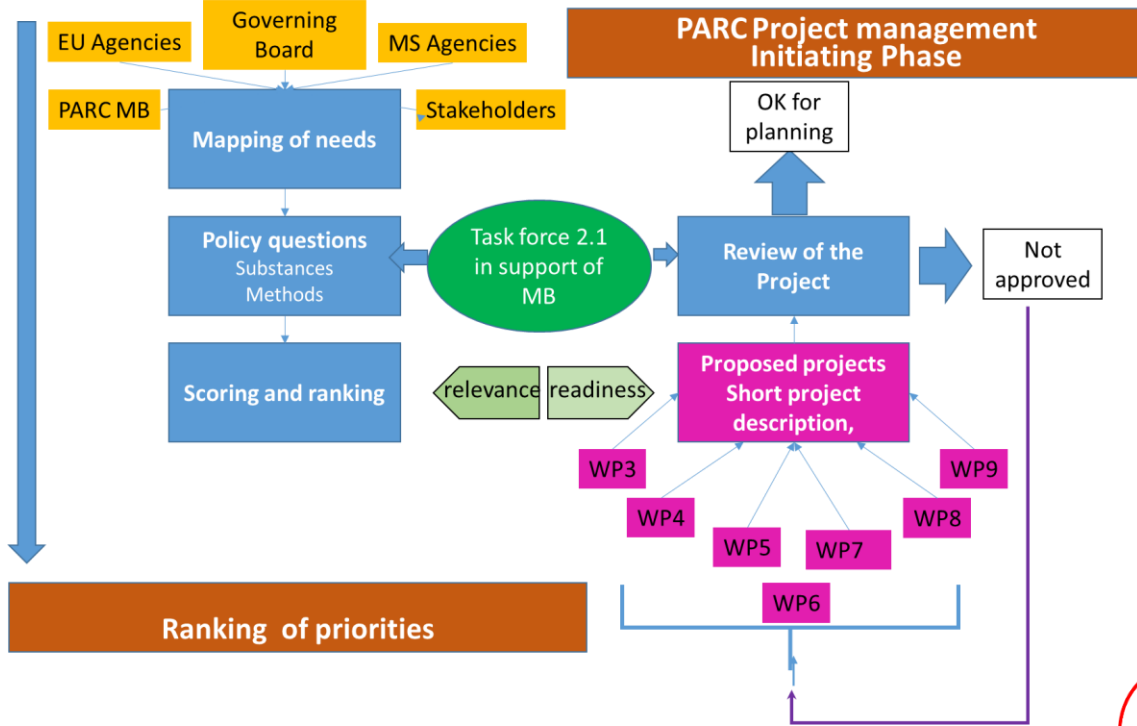




## Priority setting

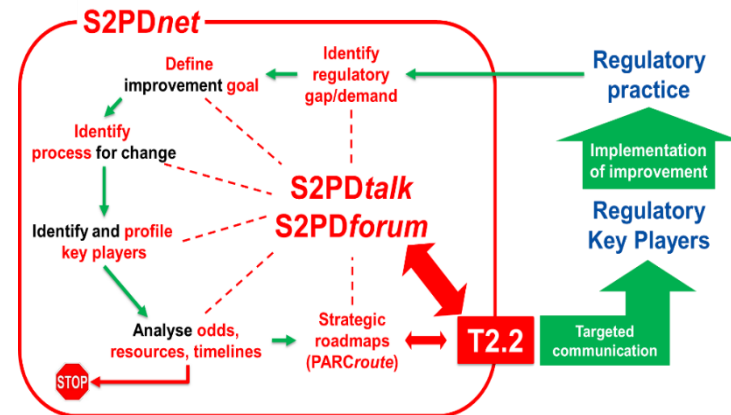
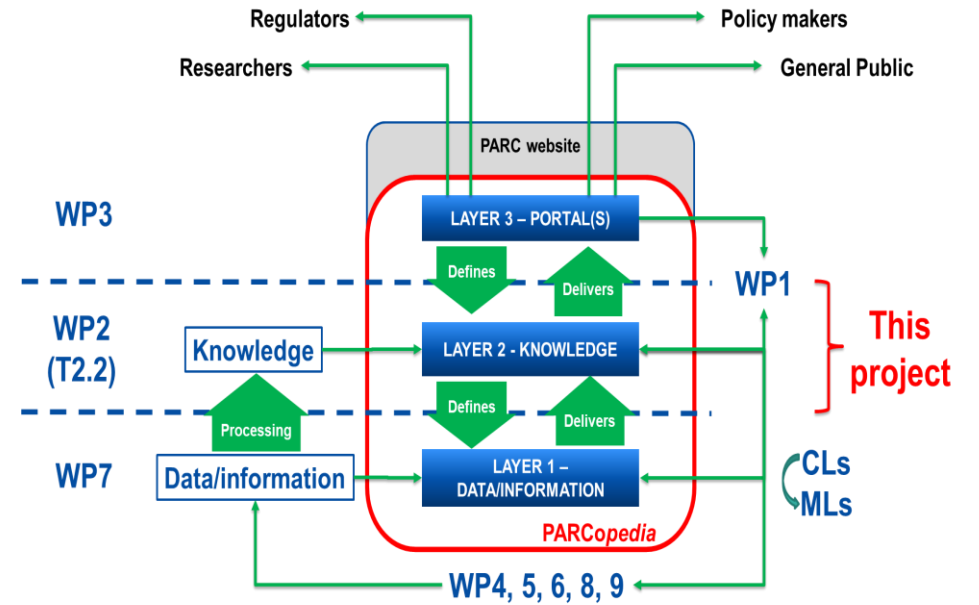
## Project Priorisation

## Knowledge Management



**WP2**

Environment Agency Austria (AT)  
European Environment Agency (EU)

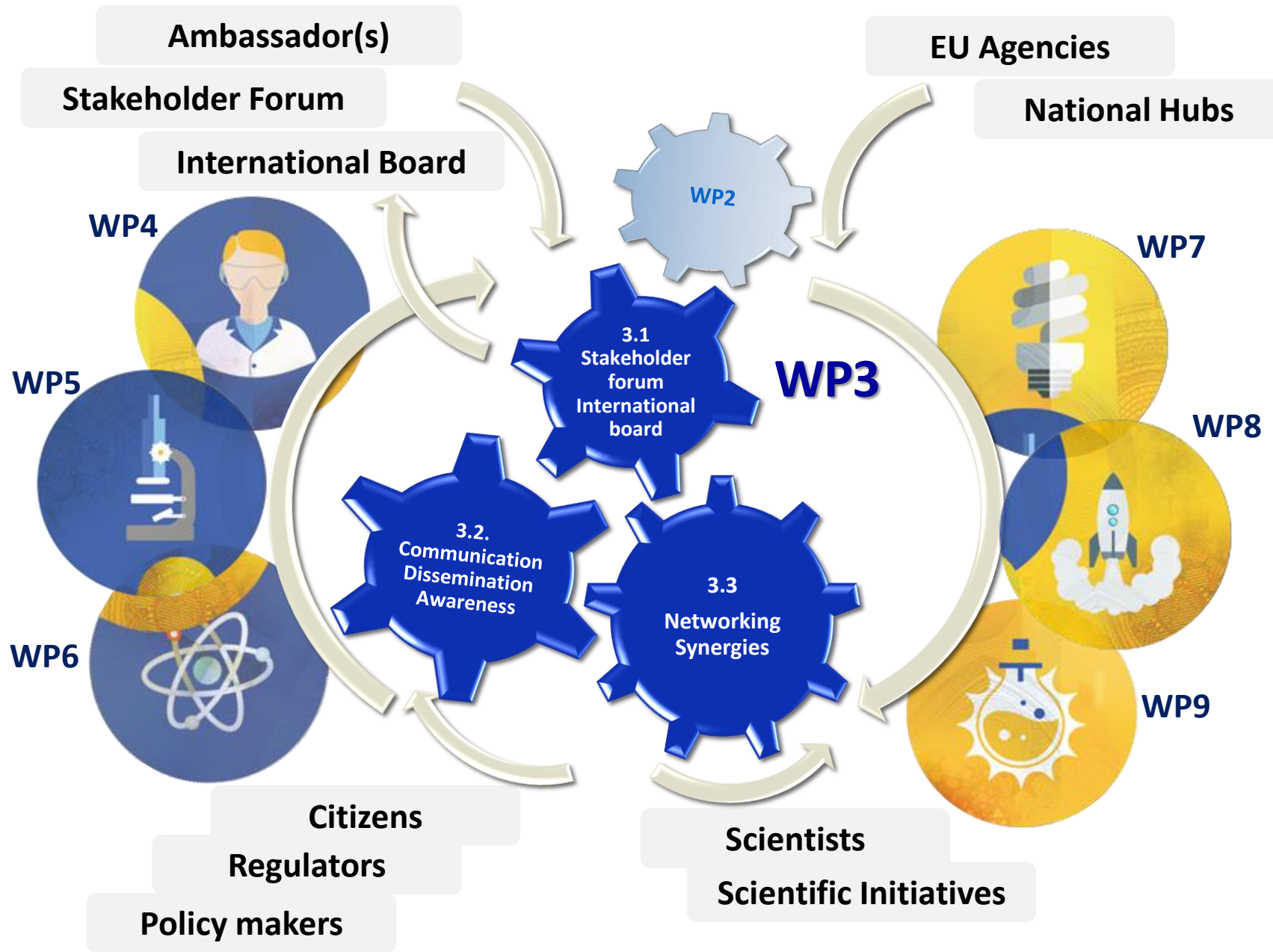


uptake into policy



# WP3: Synergies, collaboration and awareness

➤ GSCCL (GR) and INSA (PT)



## WP4: Monitoring and Exposure

➤ UBA (DE) and SpF (FR)

Monitoring chemicals in humans (internal exposure) and in the environmental and food compartments (external exposure).

### 4.1 Human Biomonitoring

Consolidate and further develop the **human biomonitoring platform**, generating and analysis of HBM data, and develop the network of qualified laboratories for biomarkers analysis

### 4.2 Environmental Monitoring

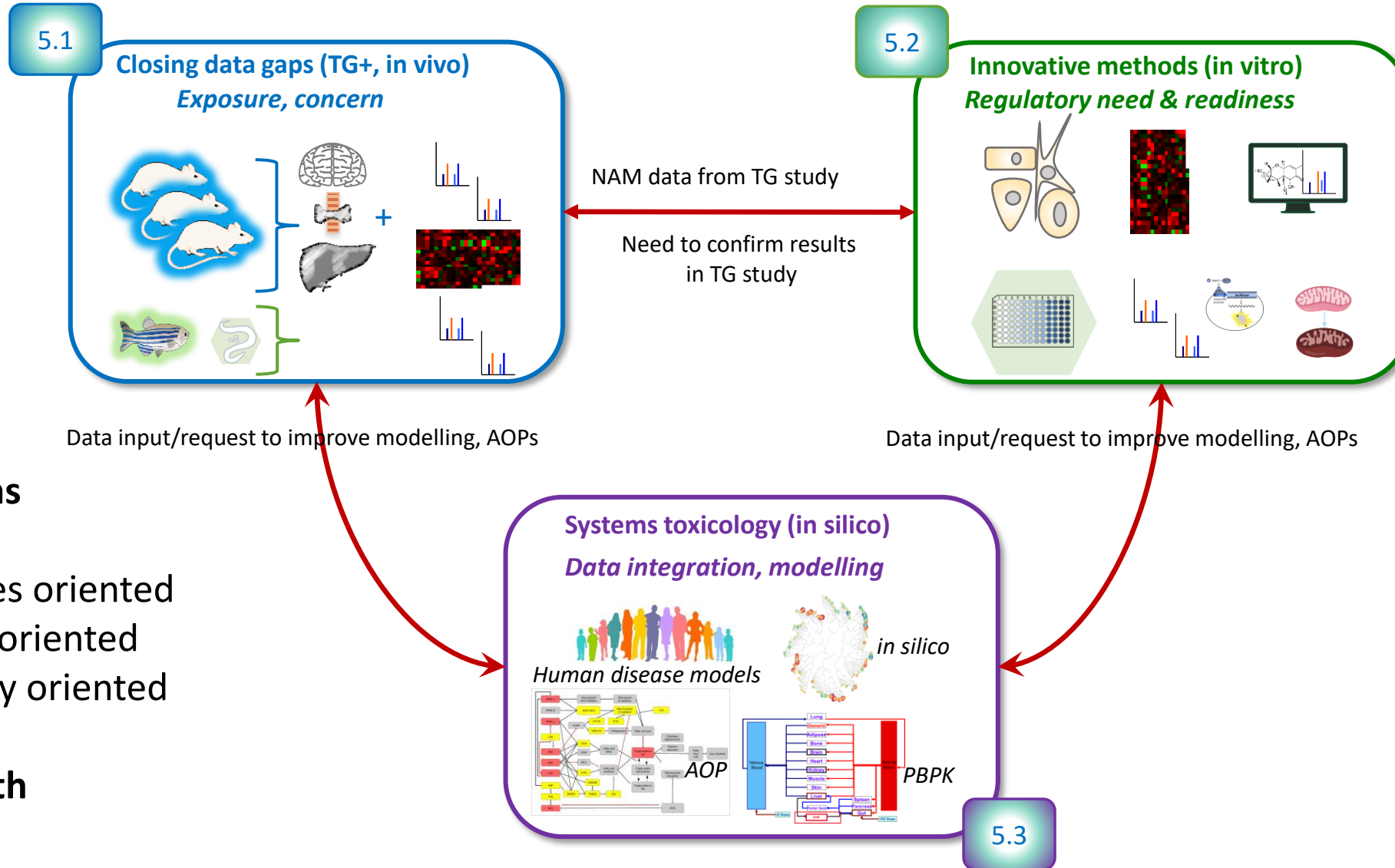
Understand the **presence of chemicals in the environment**, their exposure to humans, considering multiple sources (e.g. air, water food, consumer products)

### 4.3 Innovative tools and methods

Develop **innovative tools and methods** to improve human, food and environmental monitoring schemes, contribute to an early warning detection of chemicals of emerging concern.







## Work-streams

- Substances oriented
- Endpoint oriented
- Regulatory oriented

**Human Health  
Environment**

Protect human health and the environment; contribute to a non-toxic environment and a circular economy



## Scientific basis for NGRA

**Quantitative** AOP networks  
**Mechanism-based** IATAs, using  
**New Approach Methodologies**  
**Multiple route exposure**  
workers and general population  
**Unintentional** mixtures and real-life exposure  
**Health impact assessment**  
Across regulatory silos

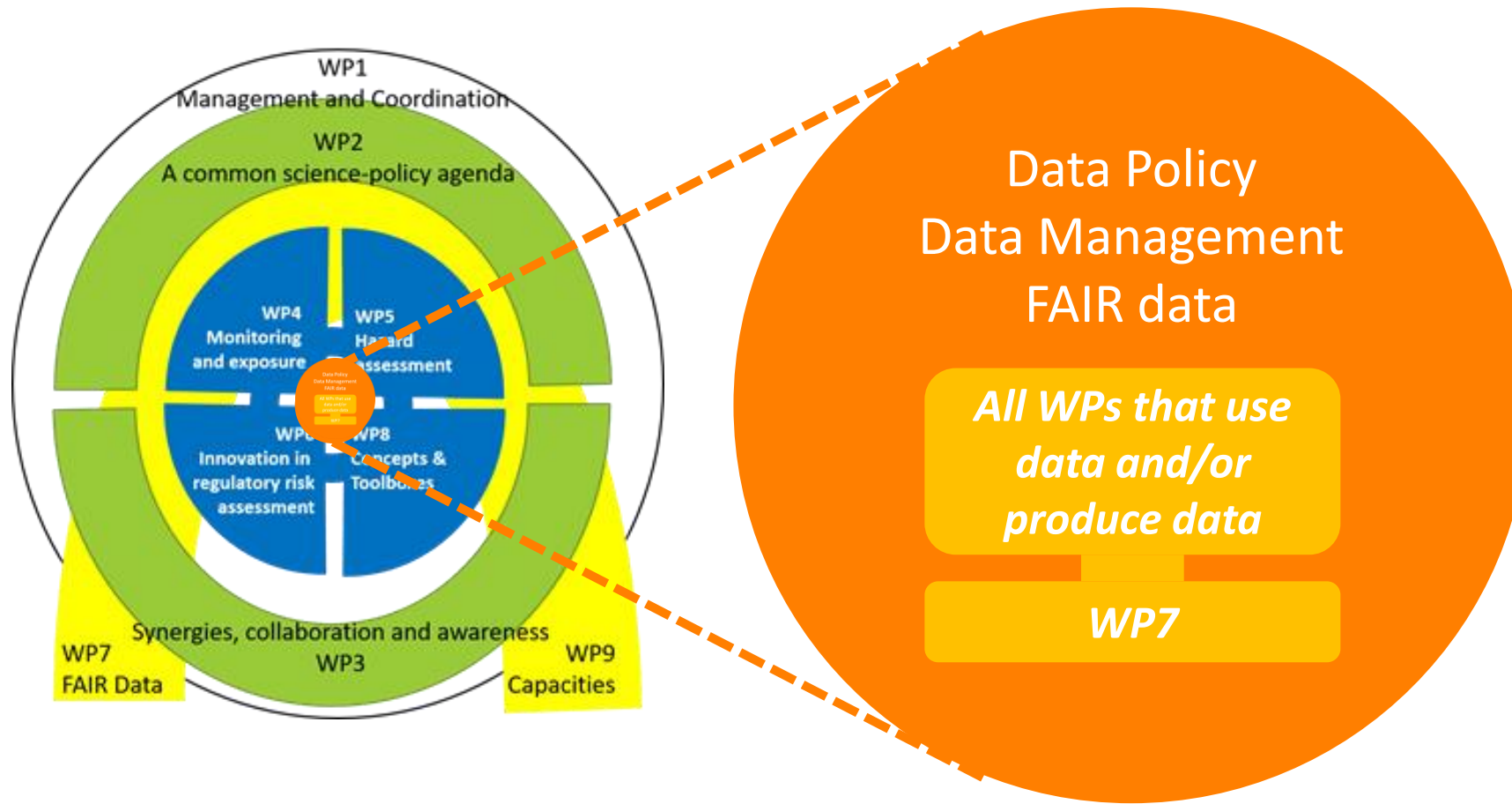


## Regulatory science

Driven by **regulatory needs**  
Determine **feasibility**, within  
**existing legislations** and in  
the **future**  
**Efficiency** of **existing** and  
**emerging** methods  
**Data availability and quality**  
**Across legislations**  
**Regulatory acceptance**

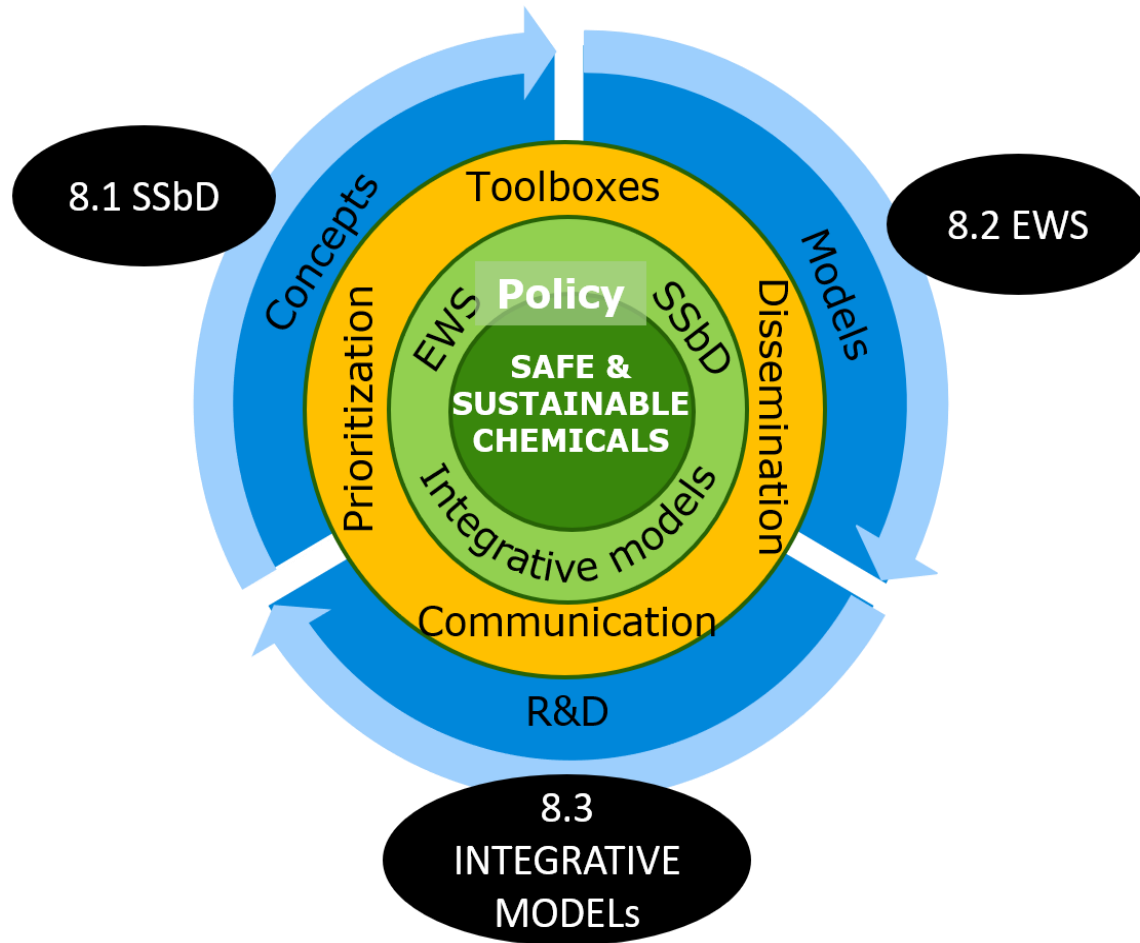
*Generating the best science  
to answer regulatory questions*

*Ensure that science meets  
regulatory needs*



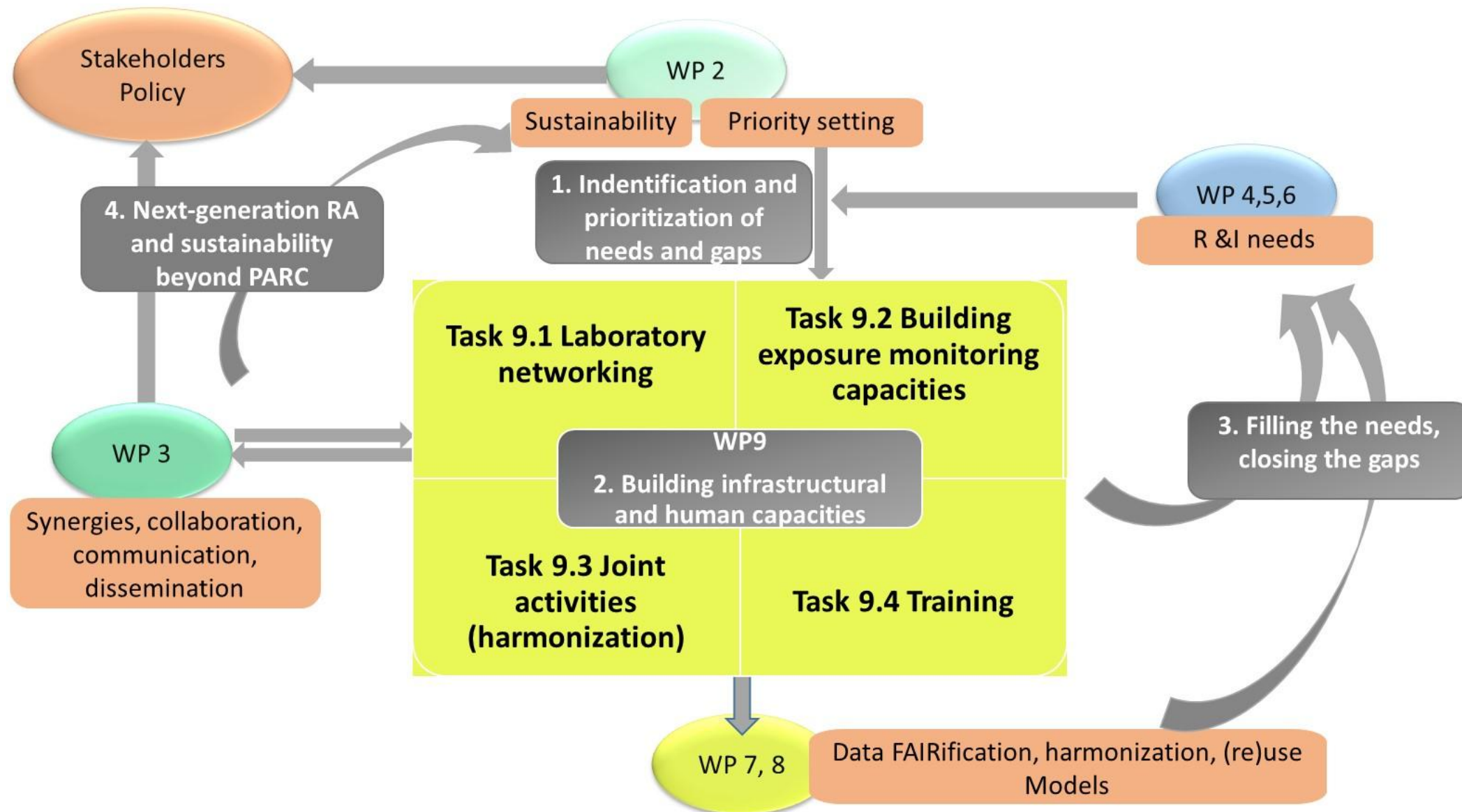
Efficiency – Reuse and integration – Sustainability





**WP8** aims at supporting the development and consolidation of new concepts and approaches such as:

- **Safe and Sustainable by Design** chemicals, and their applications in materials and products (Task 8.1)
- Trans-regulatory approaches for **Early Warning Systems** for chemical risks, identification of information need (Task 8.2)
- **Integrative models** approaches for chemical exposure, hazard and risk assessment (Task 8.3)



# PARC: benefits from EU-ToxRisk

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- Case studies: build on results obtained
- Case studies: benefit from lessons learned
  - approaches used (what worked well, what did not)
  - science-policy interactions
- Vast amount of data generated: additional analyses (in combination with new data)





# PARC proposal preparation roadmap



SEPTEMBER  
-  
NOVEMBER  
2021

- ❖ **Evaluation** by the European Commission.
- ❖ **Preparation of the Consortium Agreement** in collaboration with all partners and eventual collaboration agreements with EU organisations.

NOVEMBER  
2021  
-  
EARLY 2022

- ❖ **Preparation of the Grant Agreement** in collaboration with all partners: verification of administrative information, revision of the budget and Description of Action (DoA) if necessary, signature of the administrative forms and preparation of the Kick-off meeting that will take place in March-May 2022 (TBC).

**May 10-13, 2022 (TBC) : Launch of the Partnership and kick-off meeting in France (under French presidency of the Council of the EU)**







Merci!