Le Partenariat européen pour l'évaluation des risques liés aux substances chimiques

Christophe ROUSSELLE

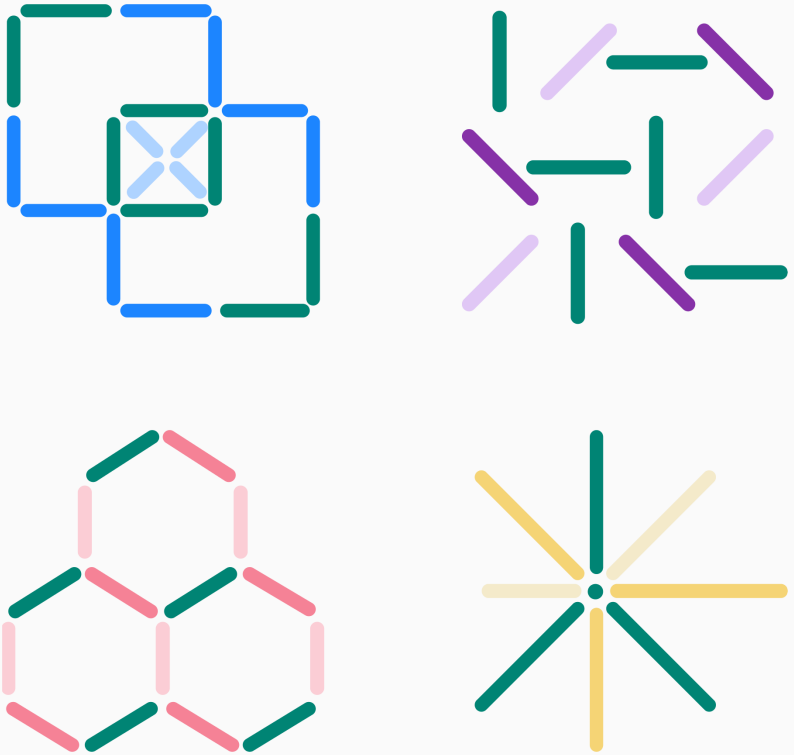
Rencontres de Santé publique France 2023

21 Juin 2023

PARC

Co-funded by the European Union

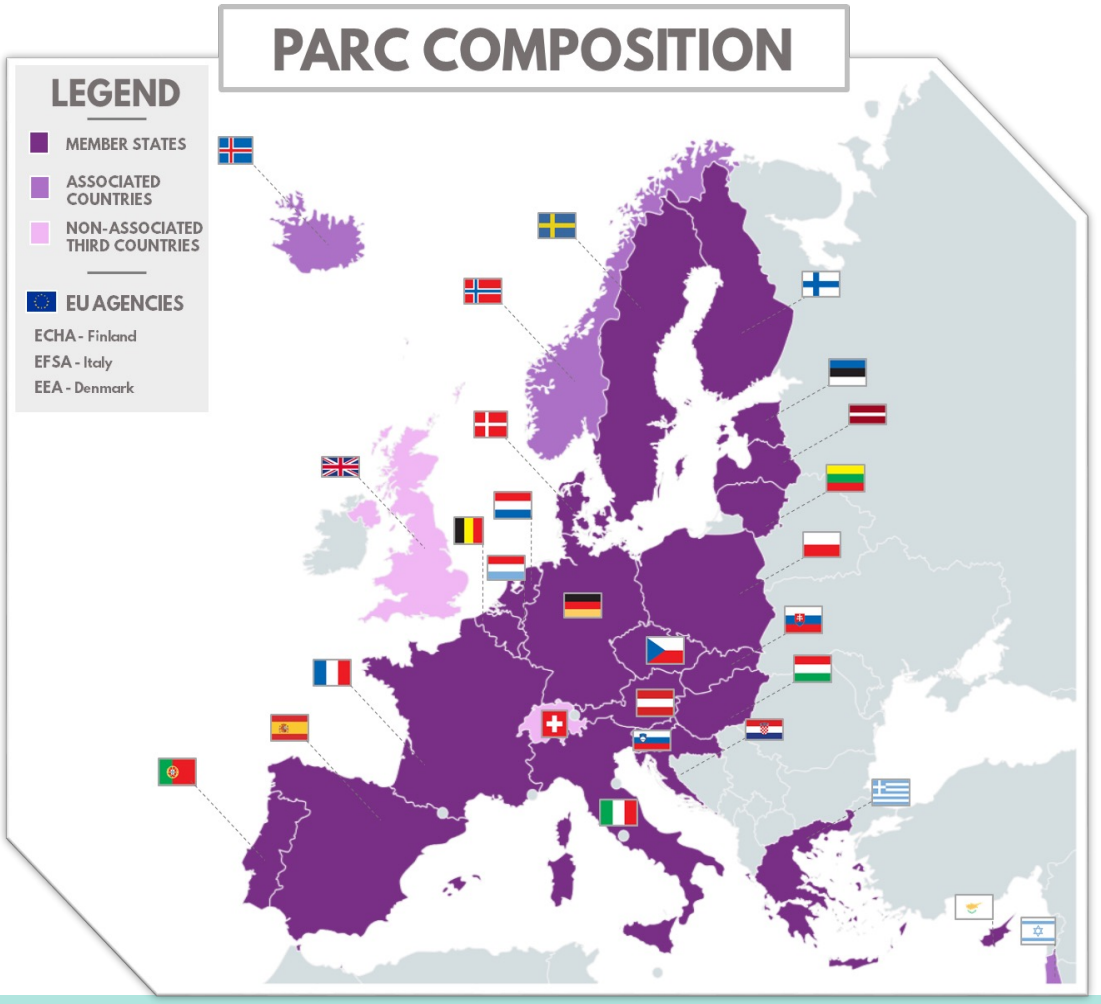
Cette intervention est faite en toute indépendance vis-à-vis de l’organisateur de la manifestation.
Je n’ai pas de lien d’intérêts avec le sujet traité.



PARC en quelques mots

→ **Objectif**: soutenir conjointement l'élaboration et la mise en œuvre d'un programme d'activités de R&I **pour renforcer les capacités européennes en évaluation du risque chimique pour protéger la santé humaine et l'environnement**

- Partenariat européen **public-public** sous Horizon Europe
- **Cofinancé** 50/50 par la CE et les partenaires
- **Budget de 400M€**, remboursement max 200M€ par la CE
- Durée de **7 ans -** lancement printemps 2022
- **198 partenaires de 28 pays** - 23 EM, 3 pays associés, 2 pays non associés (Suisse, UK), et **3 agences UE (EFSA, ECHA et EEA)**



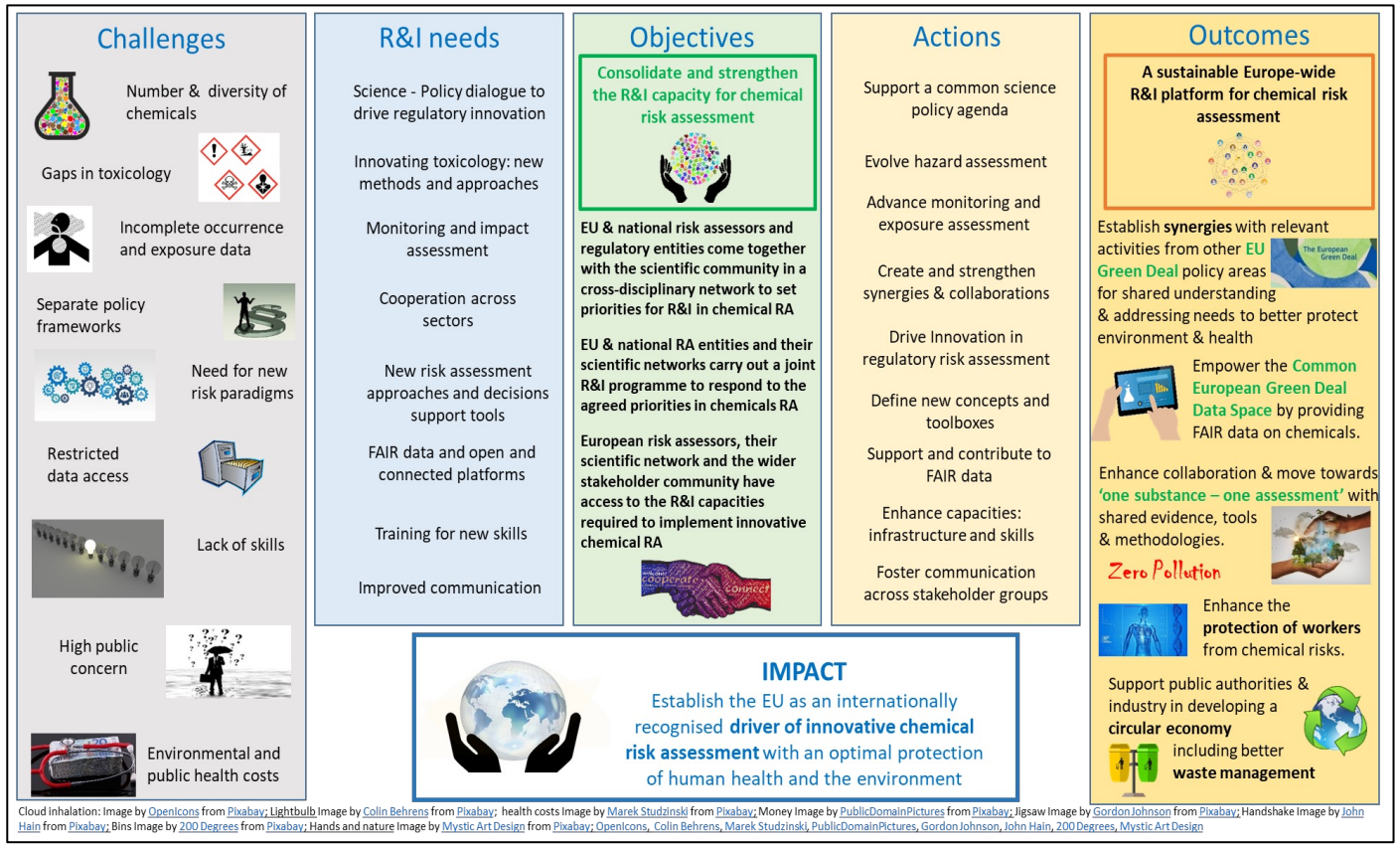
HBM4EU science and policy for a healthy future

Co-funded by the European Union

Objectifs de PARC

3 axes stratégiques :

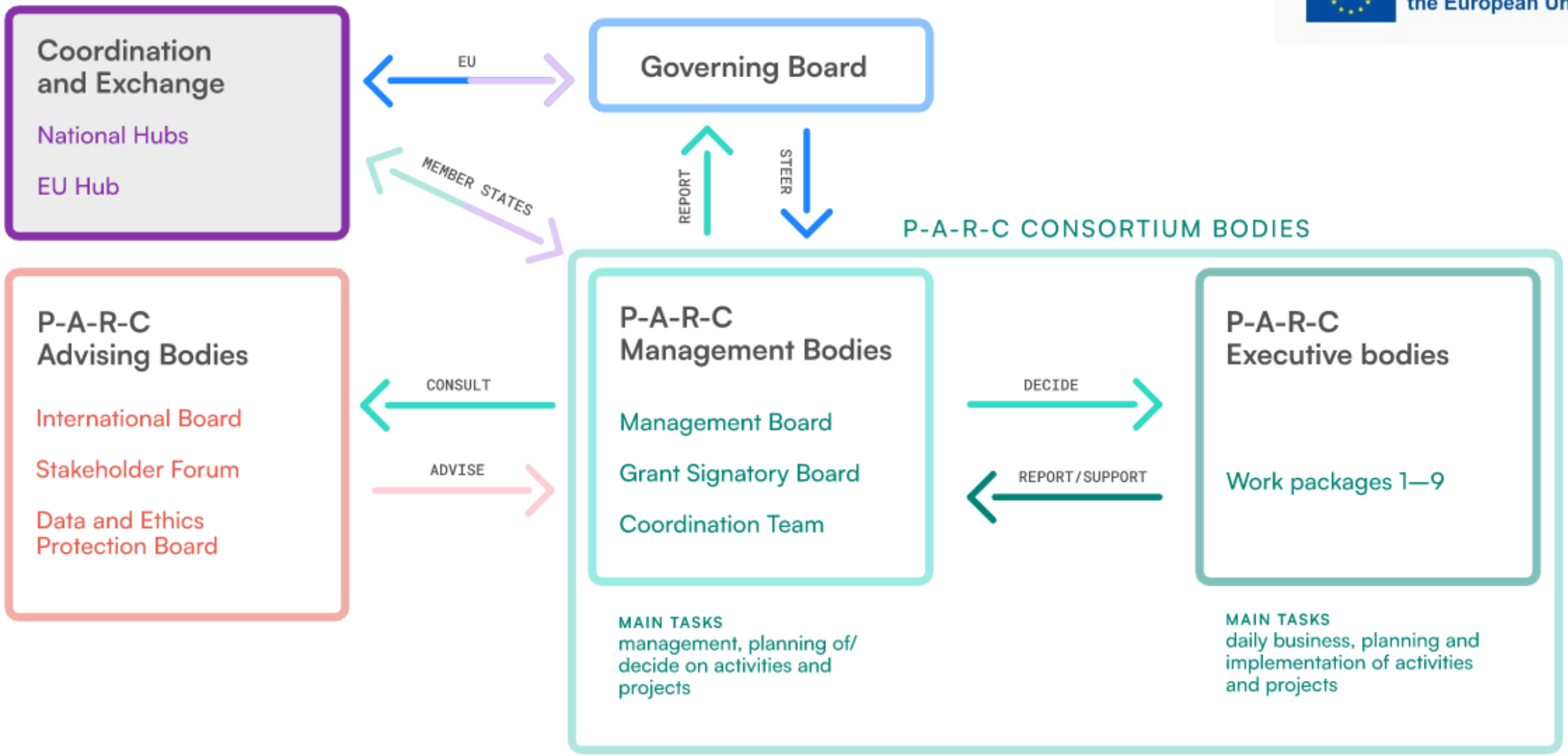
- La **collaboration** des évaluateurs de risque au niveau national et EU, avec les réseaux scientifiques de chercheurs dans un **environnement transdisciplinaire**, pour **fixer les priorités communes**
- La mise en place d'un **programme de recherche et d'innovation coordonné** pour répondre aux priorités identifiées
- **L'accès** des évaluateurs de risques, de leurs réseaux scientifiques et des parties prenantes **aux capacités de recherche et innovation** nécessaires pour une **évaluation du risque chimique innovante**



Co-funded by the European Union

Gouvernance de PARC

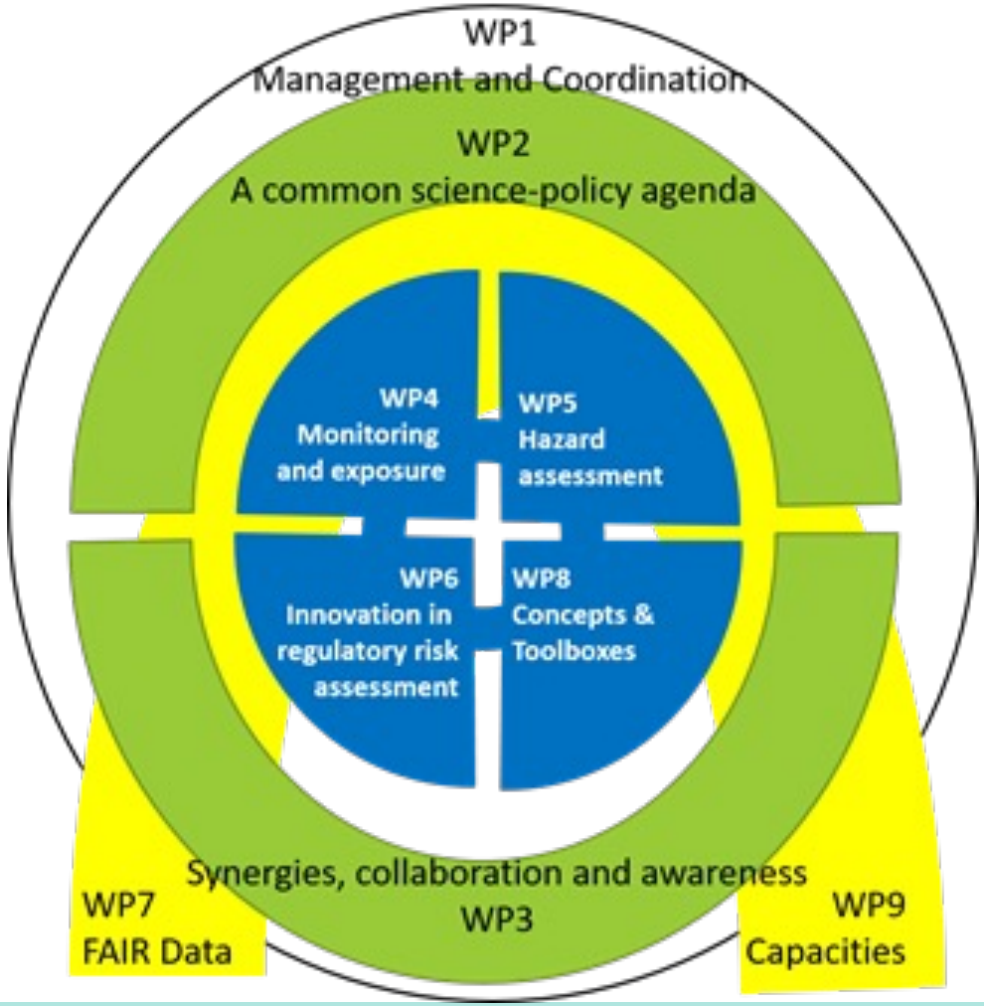
Co-funded by the European Union



Organisation et structure de PARC

Le programme de travail de PARC est structuré autour de **9 « *Work-packages* (WPs) »** avec **2 co-leaders par WP** (sauf WP1 coordination) qui forment le « ***Management Board* (MB) »**

WP1 – Management & Coordination
WP2 – Common Science-Policy agenda
WP3 – Synergies, collaboration and awareness
WP4 – Monitoring & exposure
WP5 – Hazard assessment
WP6 – Innovation in regulatory risk assessment
WP7 – Fair Data
WP8 – Concepts & toolboxes
WP9 – Capacities



Co-funded by the European Union

WP4: Monitoring et Exposition

WP4

Santé publique France

Sebastien Denys - SpF

Umwelt Bundesamt

Marike Kolossa - UBA

Monitoring des substances chimiques chez l'Homme (exposition interne) et dans les compartiments alimentaires et environnementaux (exposition externe)

4.1 Biomonitoring Humain

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 Monitoring environnemental

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

4.3 Methodes et outils innovants

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

Co-funded by the European Union

WP4: Monitoring et Exposition

PARC Aligned Studies

	Children 6-11 yrs.	Teenagers 12-17 yrs.	Adults 18-39 yrs.
Min # countries	11	11	11
Min #participants	3300	3300	3300

Sex
- ✓ Male
- ✓ Female

→ 50:50 ratio

SES socio-economic status
- ✓ Educational level (ISCED- classification from UNESCO)
- ✓ Level 0-6

Subject living environment

Inhabitants of
- ✓ Low
- ✓ Medium
- ✓ high density communities

GenHBMSurvey

Derivation of HBM GVs

Rodamap Linking HBM Health

Sustain HBM System

Data Analysis within HBM4EU

Targeted surveys

OccupFeasability

Sentinel System

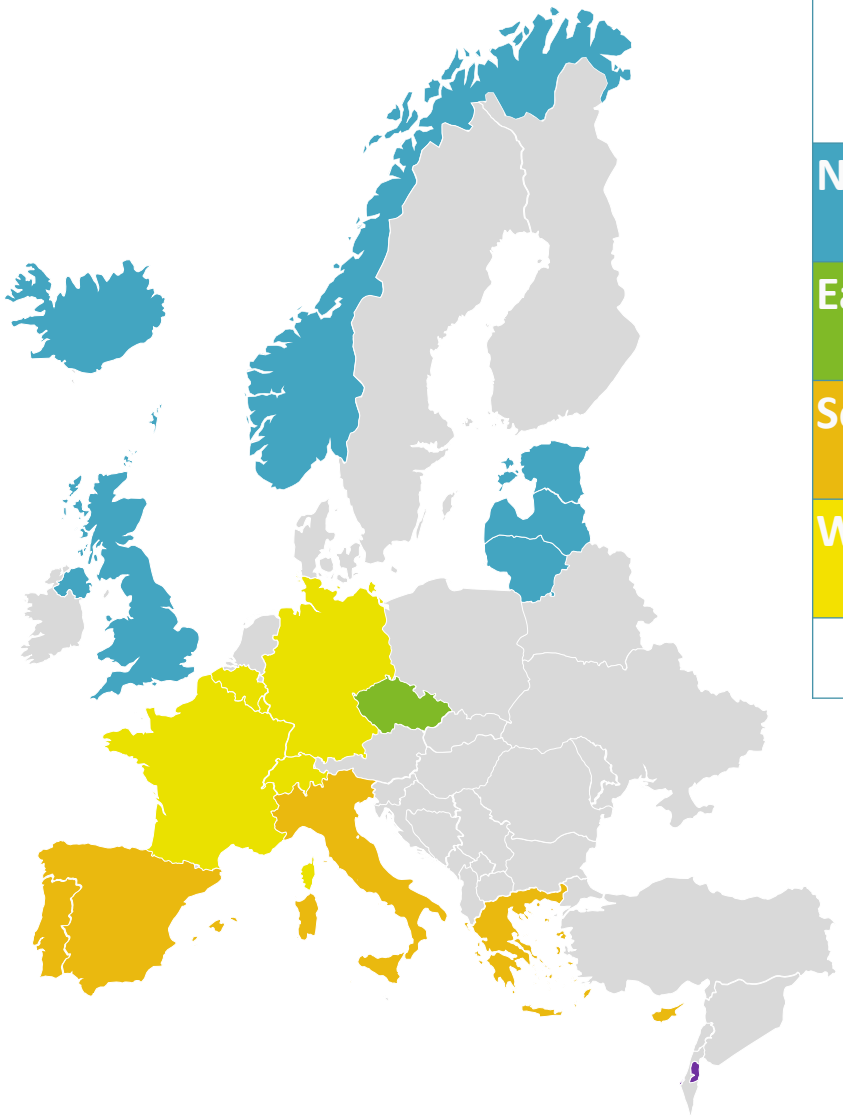
HealthCareSurvey

Occup Waste

Co-funded by the European Union

WP4: Monitoring et Exposition

PARC Aligned Studies – en préparation



	EU inhabitants presented by the region, compared to whole EU* (%).		**Minimal N of countries** to be included	**Target sample size** to be included
North	DK, EE, FI, LV, LT, SE, NO, IS, (IE)	20 %	2	600
East	CZ, HU, PL, SK, (BG), (RO)	17 %	2	600
South	HR, CY, IT, PT, Sl, ES, (MT)	26 %	3	900
West	AT, BE, FR, DE, LU, NL, CH	37 %	4	1200
			11 countries	**3300 participants**

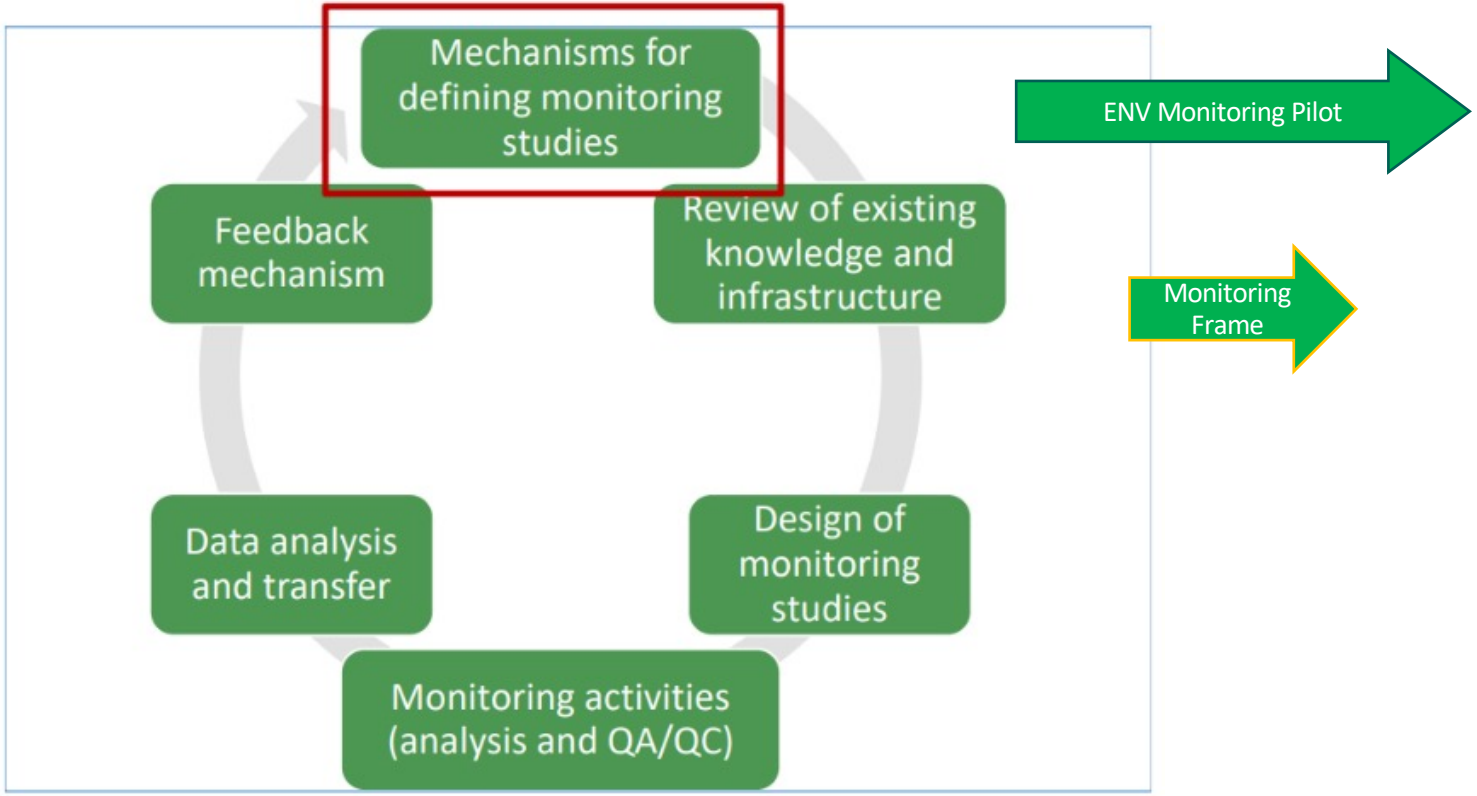
Children	Teenagers	Adults
PFAS	PFAS	PFAS
Pesticides	Pesticides	Pesticides
Bisphenols	Bisphenols	Bisphenols
Metals (Cd)	Arsenic species	Metals (Cd)
Mercury	Phthalates & substitutes	Mercury
Phthalates & substitutes		UV-filters (*tentative*)
OPFRs		

Liste préliminaire

Co-funded by the European Union

WP4: Monitoring et Exposition

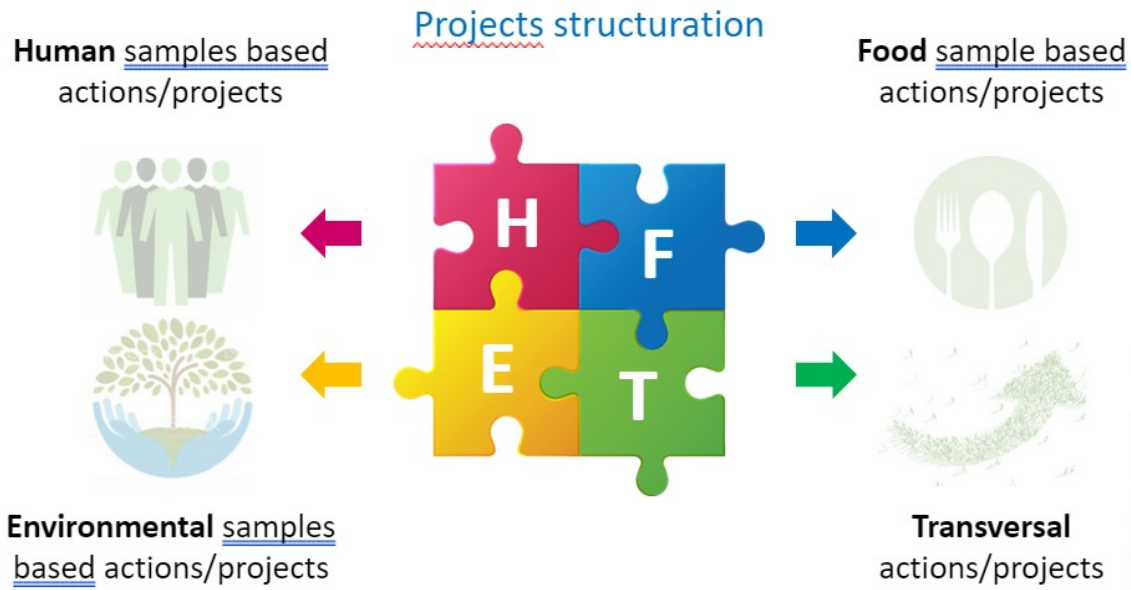
Environment

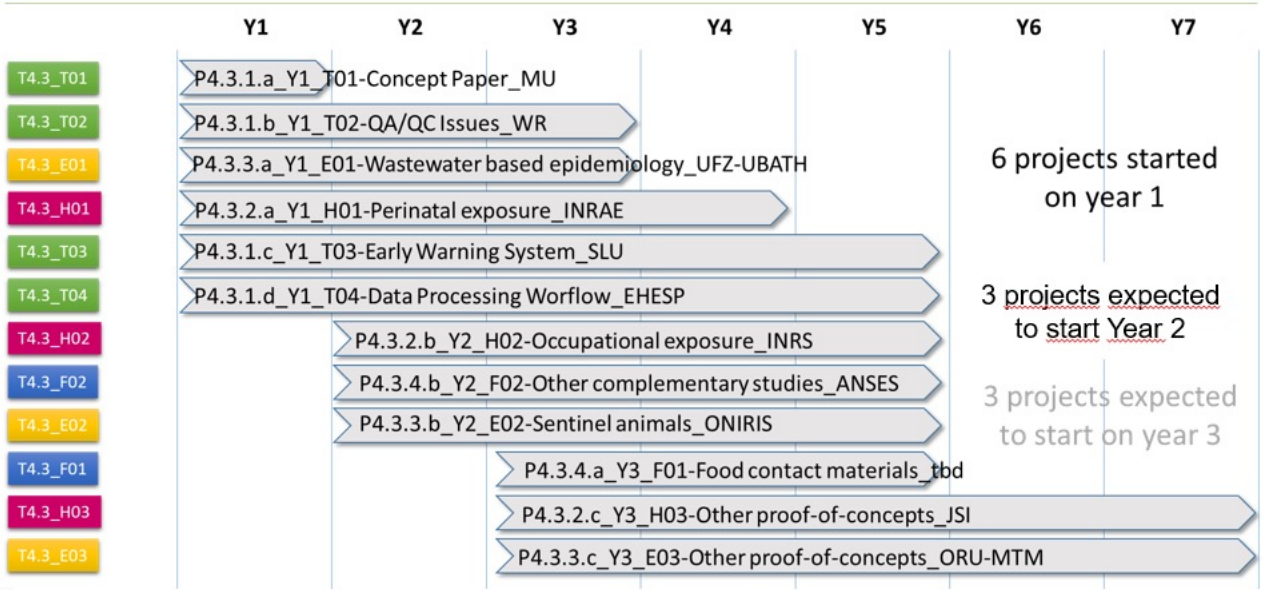


Co-funded by the European Union

WP4: Monitoring et Exposition

Développement de Méthodes et Outils d'analyse innovants





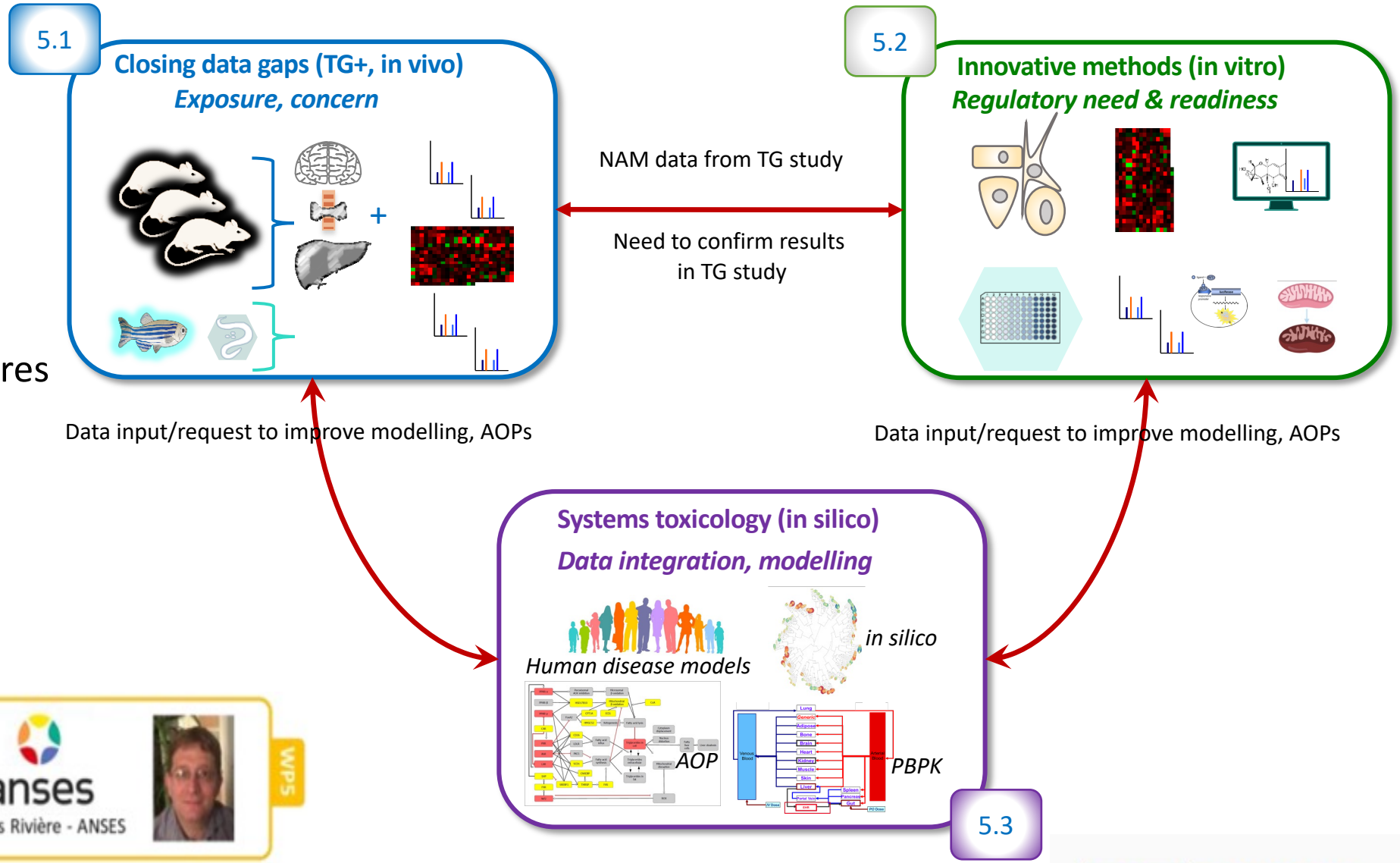
Co-funded by the European Union

Evaluation des dangers des substances (WP5)

Work-streams

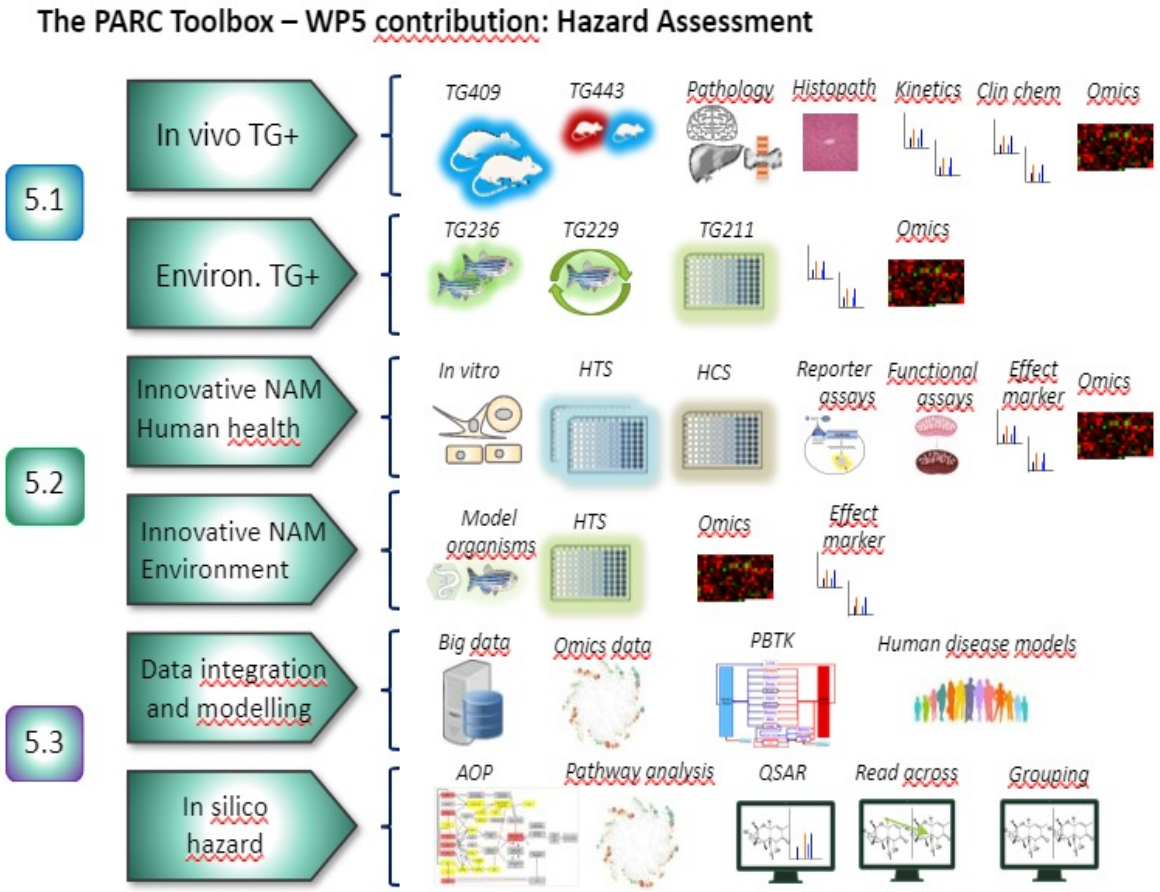
- Substances
- Effets
- Besoins réglementaires

Santé Humaine
Environnement



Co-funded by the European Union

Evaluation des dangers des substances (WP5)



Substances

Toxins

BPA Hum Tox

Natural Toxins

BPA alternatives

Methodes

Systems Tox

AOP Develoment

PBK/QST

Effets

NGTXCs

Metabolic Endocrine Disruption

ED-Thyro

Immunotox

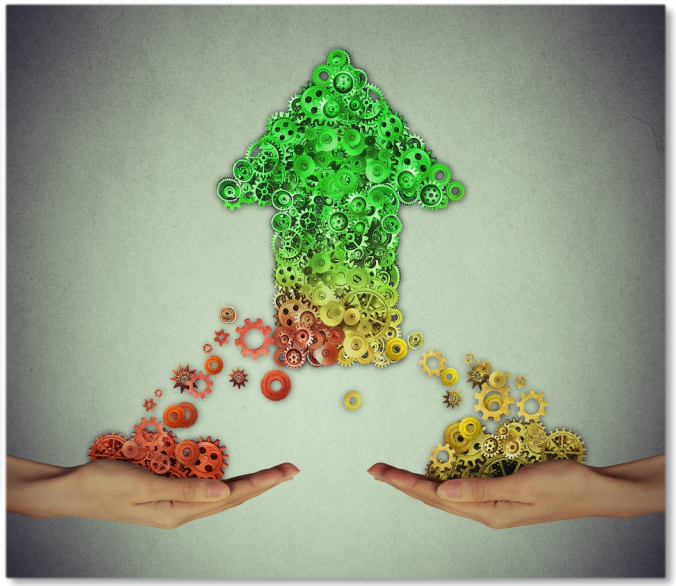
Neurotox

WP6: Innovation en valuation des Risques réglementaires

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
Heatlh 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

WP6

KEMI Swedish Chemicals Agency

Lina Wendt-Rasch - KEMI

National Institute for Public Health and the Environment
Ministry of Health, Welfare and Sport

Mirjam Luijten - RIVM

Co-funded by the European Union

Substances d'intéreêt dans PARC (1ère Phase)

- ✓ 3rd round of Prioritisation done under **HBM4EU**
- ✓ Methods, endpoints and substances prioritised in the interim **GB's survey**
- ✓ **"Chemical Strategy for Sustainability"** and the **"Strategic Research and Innovati Chemicals and Materials"** documents
- ✓ **Regulatory needs** identified by WPL/TL according to their WP/Task objectives
- ✓ **Hazardous** properties and characteristics of substances
- ✓ Available **data** and knowledge **gaps**
- ✓ **Partners'** interests, their capacities and **resources**
- ✓ Interactions and crosslinks with other WPs or Tasks within **PARC**
- ✓ Scientific activities done **outside** PARC
- ✓ **Discussions** with regulatory agencies (e.g.: SCCS, ECHA, EEA, EFSA, etc.)

Substances / Group of substances	WP4	WP5	WP6
Biocides	✓	✓	✓
Pharmaceuticals / Hazardous medicinal products	✓		✓
Veterinary pharmaceuticals			✓
Plant protection products	✓	✓	✓
PFAS	✓		✓
BPA, BPA analogues, BPA alternatives, Bisphenols	✓	✓	✓
Natural Toxins		✓	✓
Metals	✓		✓
Mercury	✓		
Arsenic	✓		
Phthalates	✓		✓
Flame retardants			✓
Endocrine Disrupting Compounds (EDC)	✓	✓	✓
Metabolic Disrupting Compounds (MDC)		✓	
Emerging chemicals	✓		
Mixtures	✓	✓	✓
Food contact material		✓	✓
Cosmetics		✓	✓
PBT/vPvB	✓		✓

Co-funded by the European Union

PARC: Synergies, collaboration and awareness

Co-funded by the European Union

Regulators

Policy Makers

EU Agencies

Citizens

National Hubs

Stakeholder Community

Stakeholder Forum

International Board

Synergies Networks

JRC

The European Partnership for Alternative Approaches to Animal Testing

European Commission

EURAMET

EIRENE RI

IRISS

ASPIS

biodiversa+ European Biodiversity Partnership

- GSCL (GR) and INSA (PT)

Visibilité de PARC

Co-funded by the European Union

PARC (@PARC_chemicals) / Twitter

linkedIn

Instagram

Presse

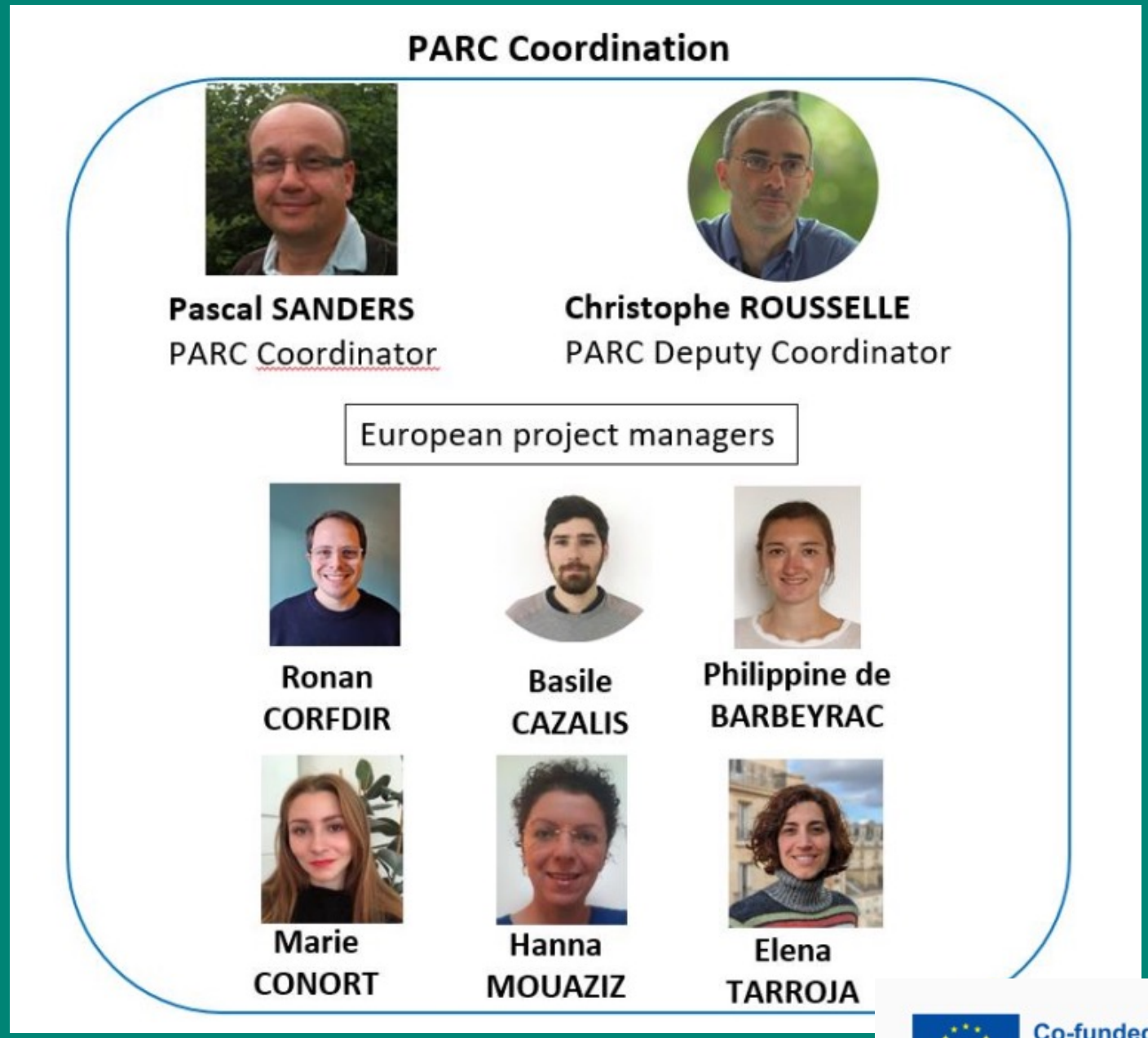
Un tout nouveau site web:

→ Très bonne adhésion de toute la communauté scientifique et des agences autour de PARC

Parc (eu-parc.eu)

Merci de votre attention!

Questions ?



Co-funded by the European Union