

EU-Human Exposome Project

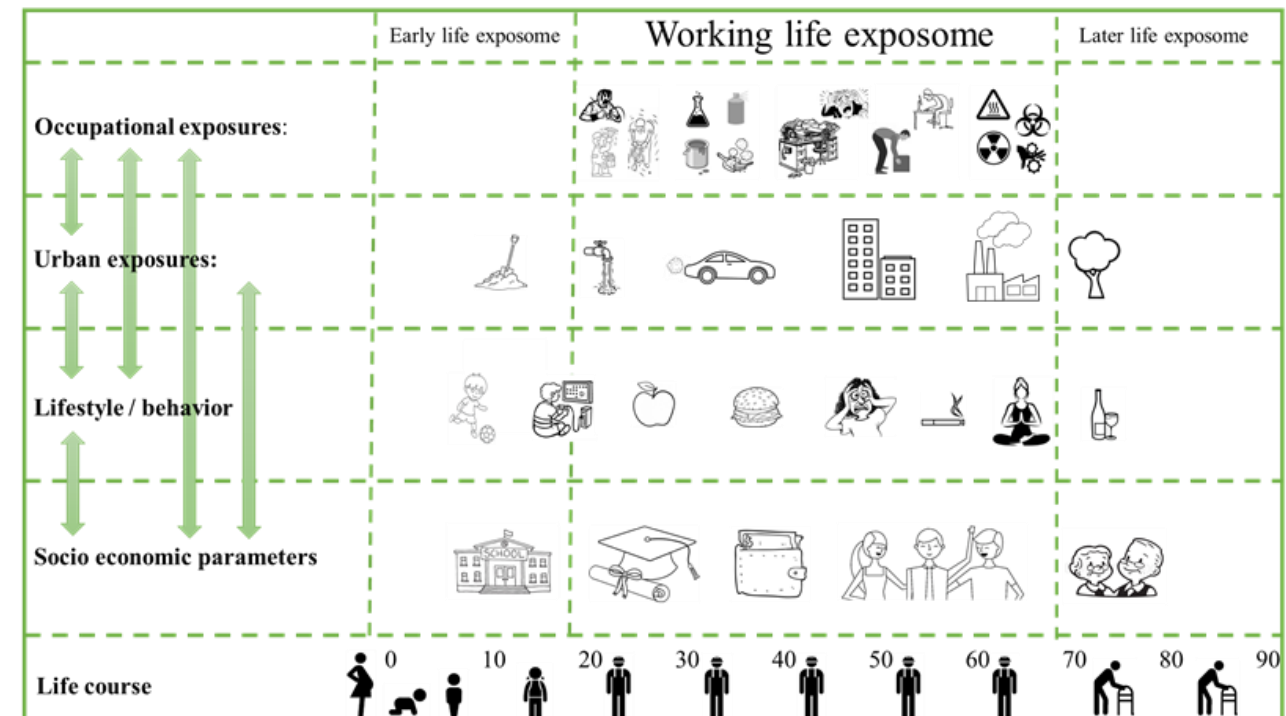
EXPOSOME PROJECT FOR HEALTH AND OCCUPATIONAL RESEARCH (EPHOR)

Anjoeka Pronk, Rob Stierum (TNO, The Netherlands)

What is EPHOR about?

The working life exposome: 'All occupational and related non-occupational (i.e. general environment, lifestyle, behavioural and socio-economic) exposure factors'

- Applying the exposome concept to working life health
- Providing better insights into the relationships between exposures during the working life and health at different life stages
- Laying the groundwork for evidence based and cost effective preventive actions

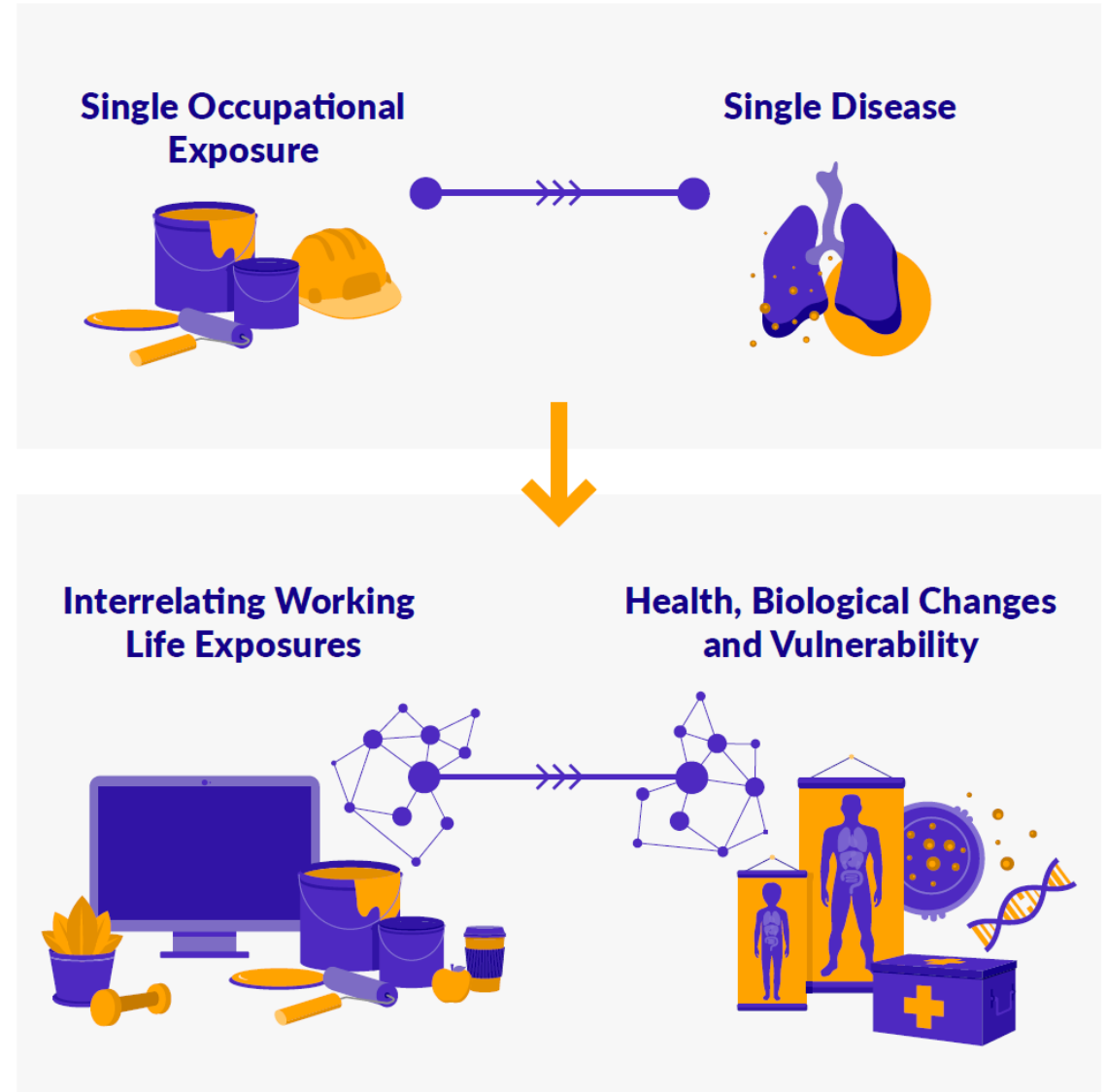


Why is this important?

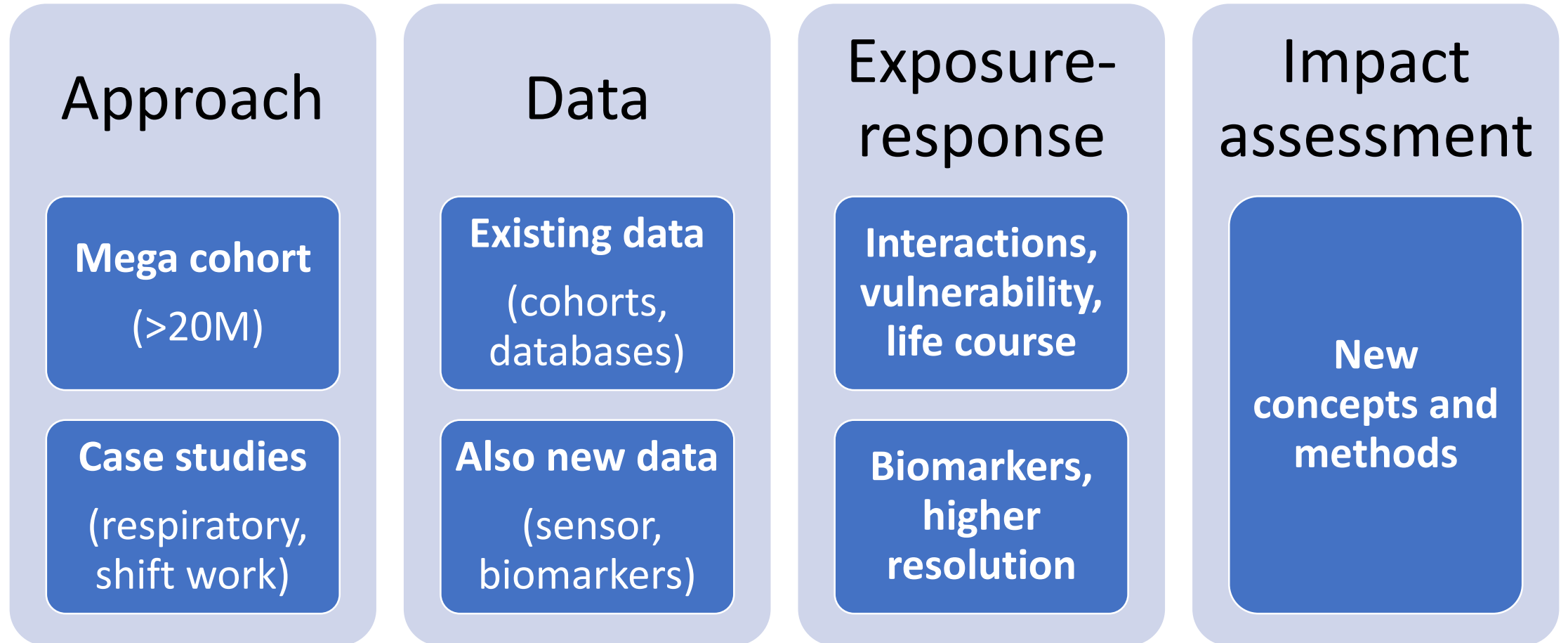
- Occupational disease in EU countries:
 - 5-7% mortality, 2-6% GDP
- Challenges:
 - Single occupational exposure-single disease
 - Vulnerability unknown
 - Biological mechanisms unknown
 - Upcoming challenges:
 - Demographic changes: Ageing workforce, female participation
 - Changing nature of work
- Working life largely neglected in exposome studies

Working Life Exposome

A Fundamental Shift



How will EPHOR reach that goal?



What will EPHOR deliver in 5 years



Better and more complete knowledge

- multiple exposures within the working-life exposome → NCDs
- complex interactions of exposures, internal markers, vulnerability

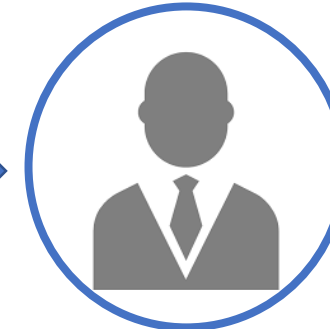


Innovative methods for working life exposome

- Collection, storage and interpretation
- Impact assessment



Scientists



Policy makers



Occ. health practitioners

What are the critical needs for success

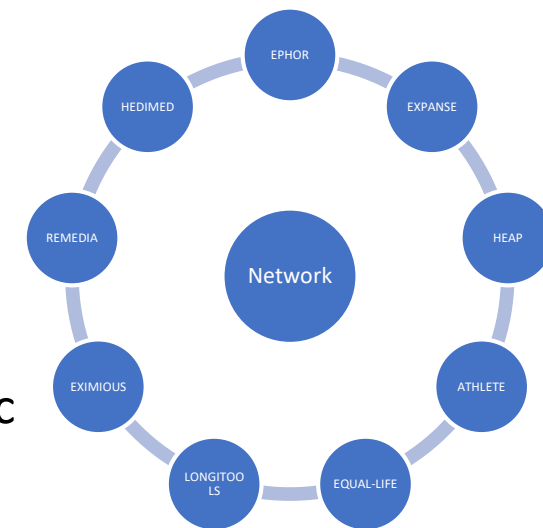
- Stakeholder interactions on their needs



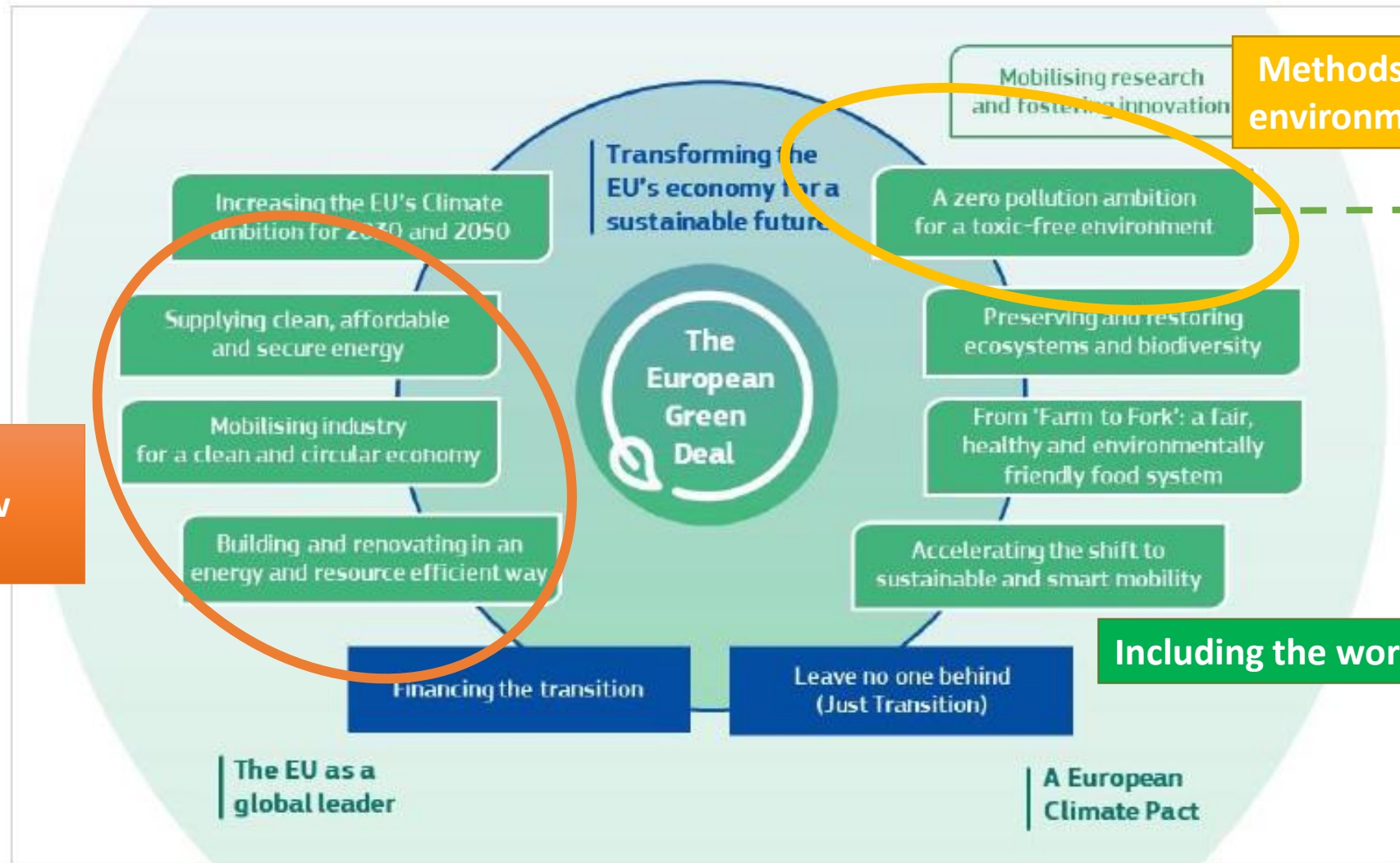
- Stakeholder advisory board:
 - ETUI, ICOH, NIOSH, EU EOSHA, ECETOC
- 4 Stakeholder consultations

- European Human exposome Project interactions

- Joint communication and dissemination strategy
- Exchange of knowledge:
 - Technical, e.g. data storage and analyses, sensors, internal exposome
 - Other: ethical aspects, making available and implementation of tools etc



How will EPHOR contribute to reaching the goals of the Green Deal



Methods for monitoring of environmental levels

Dealing with emerging risks (e.g. recycling, new energy sources)

Including the work environment

Acknowledgements



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