HEIMTSA and INTARESE

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INTARESE and HEIMTSA are Integrated Projects funded under the EU 6th Framework Programme - priority 6.3 Global Change and Ecosystems

Large European research consortia...

Two Integrated Projects under EU FP6:Environment and Health, Global Change and Ecosystems

- INTARESE – 5 years; 33 partners; will finish 31 October 2010
- HEIMTSA – 4 years; 21 partners; will finish 31 January 2011

Both developing methods and tools in environmental health impact assessment (HIA)

Working closely together and with other projects

- European: Including EU FP6 and FP7 projects such as 2-FUN, NoMiracle, HENVINET, APHEKOM etc.
- Local and regional HIA projects, including EDPHiS in Scotland

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Fundamental idea of these projects

INTARESE and HEIMTSA are trying to take us

- Beyond risk assessment of pollutants….
- To environmental health impact assessment (HIA) of policies and measures
  - May be designed to reduce pollution or otherwise improve health
  - May be for other purposes, i.e. not primarily health; but may have health consequences

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General approach to environmental HIA

- Develop a baseline scenario, i.e. projecting forward but without the proposed policies
- Alternative scenarios, i.e. with policies and measures in place
- Look at differences in (environmental) health impacts between alternative and baseline
  - Those health effects that are caused by the interaction of people (populations) with the physical environment, i.e. by 'environmental exposures'
  - Includes aggregated effects of changes in environmental exposures (good as well as bad), including mixtures

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This talk...

Briefly

- Describe the methodology being developed in INTARESE and HEIMTSA

- Followed by
  - Toolbox
  - Case study

With thanks to people in both project teams and many others – too numerous to name

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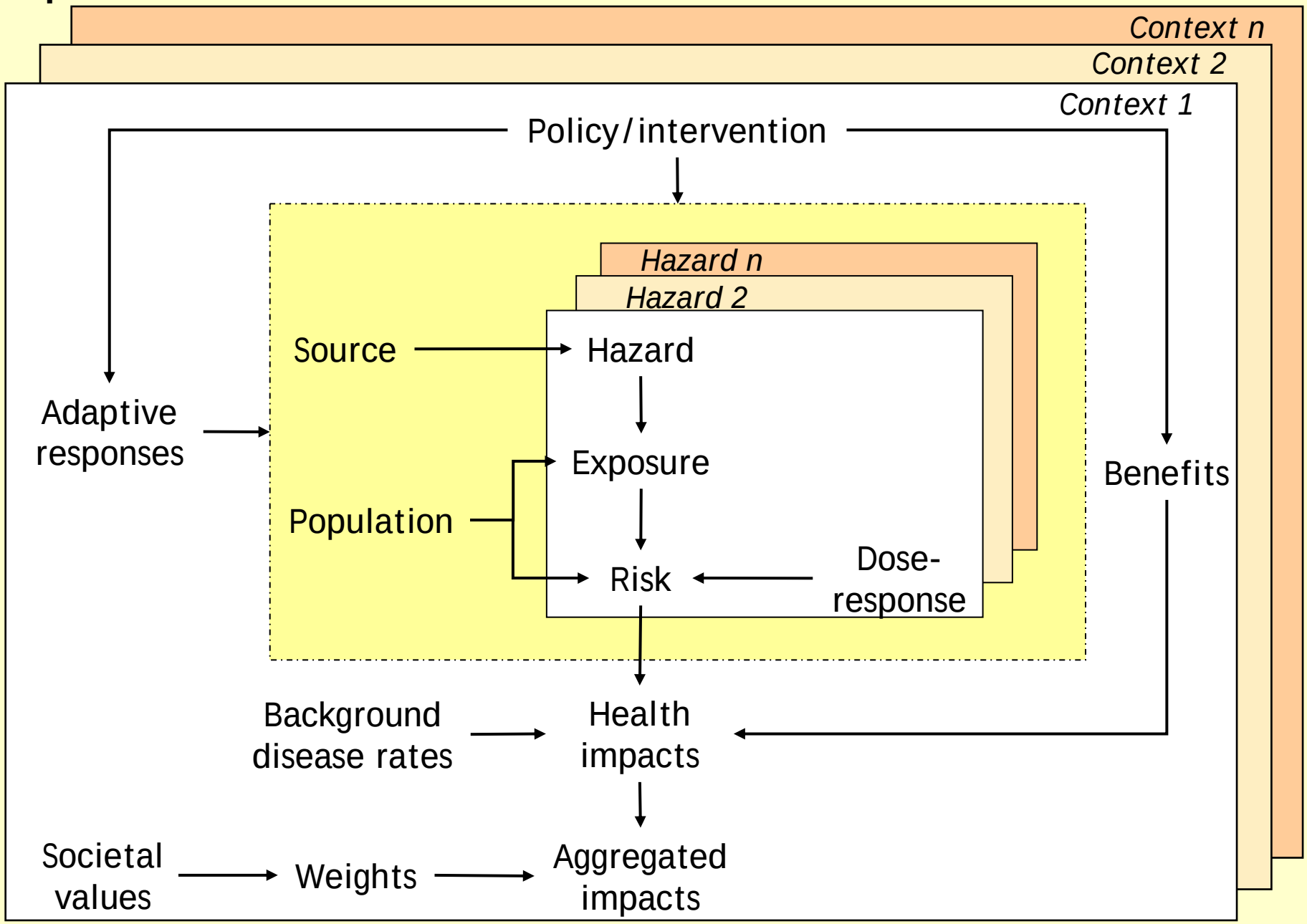
Integrated environmental health impact assessment



Conceptual Frameworks
for Integrated Environmental HIA
- For understanding and to guide actions

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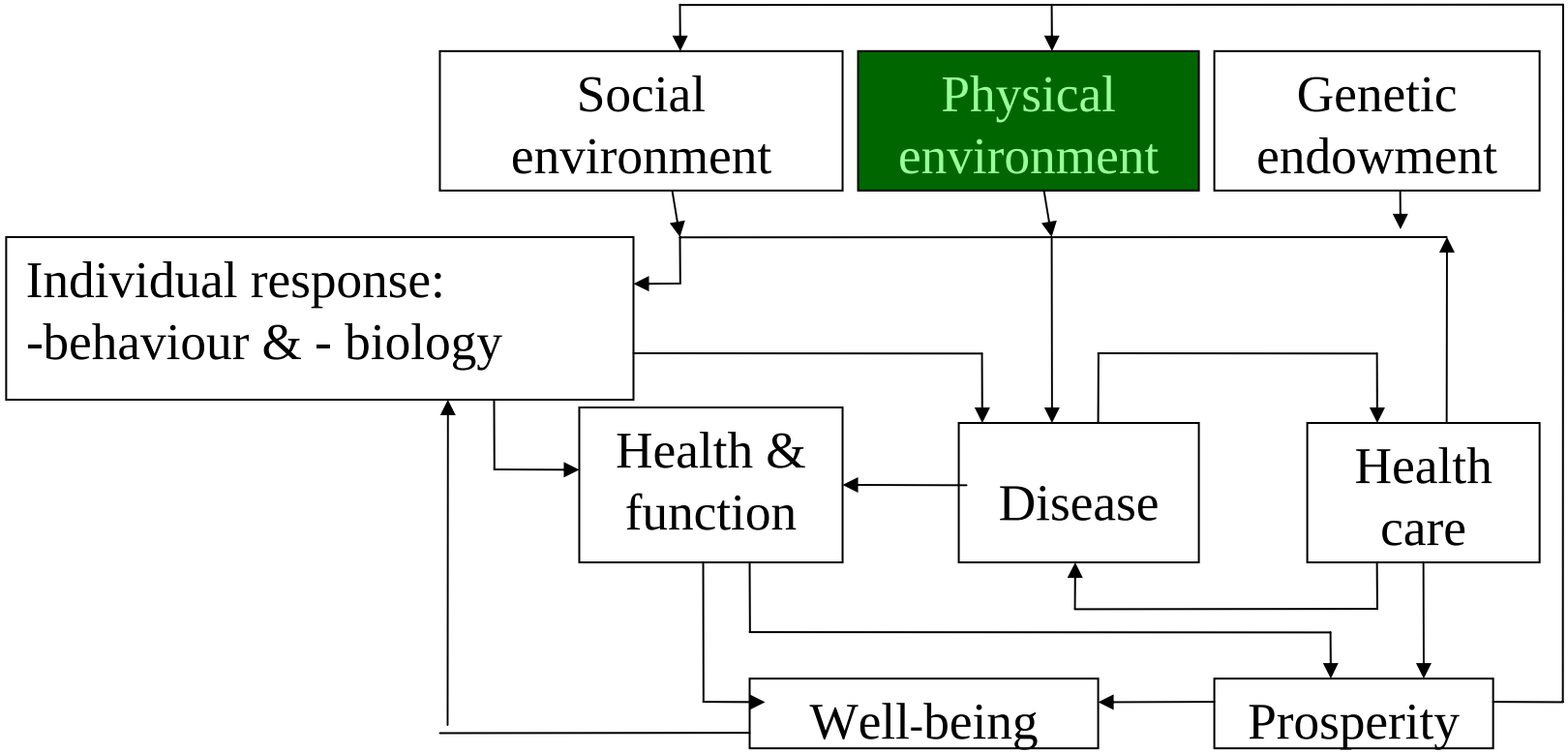
The Socio-ecological model of health – too simple re. environment



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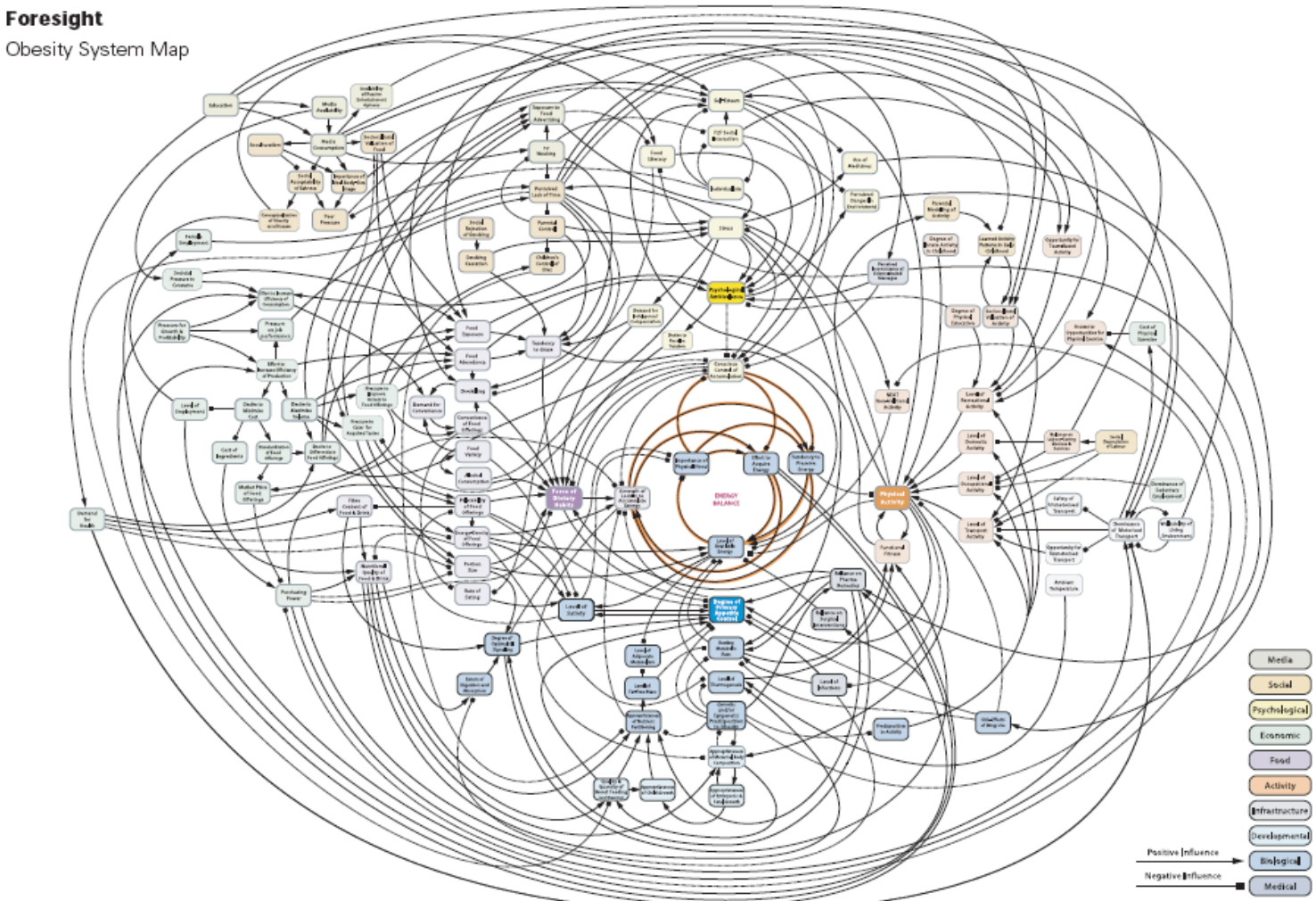
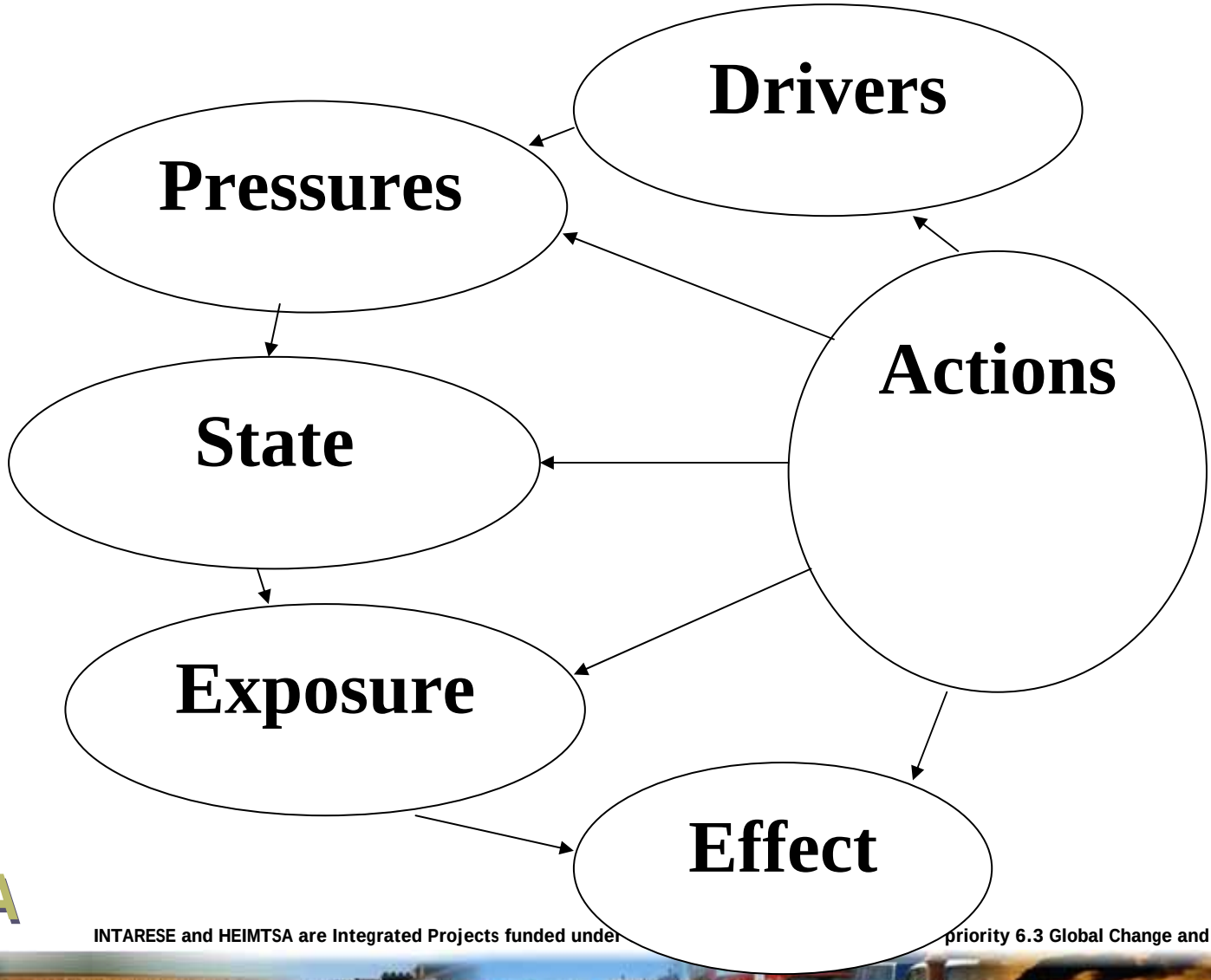
Too complex to guide policy action?



DPSEEA from WHO



DPSEEA

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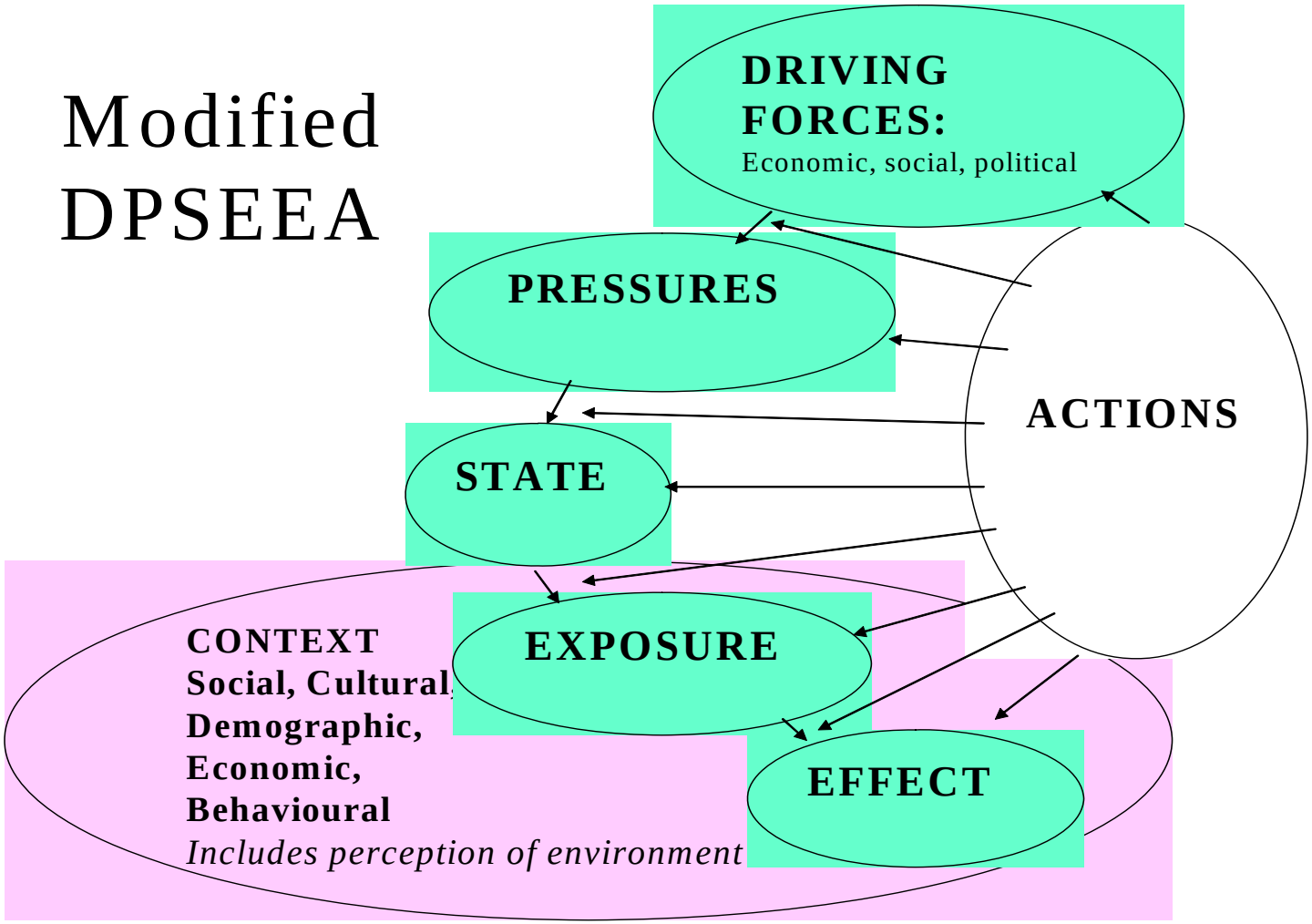
Modified DPSEEA – Morris et al, 2006

Modified DPSEEA



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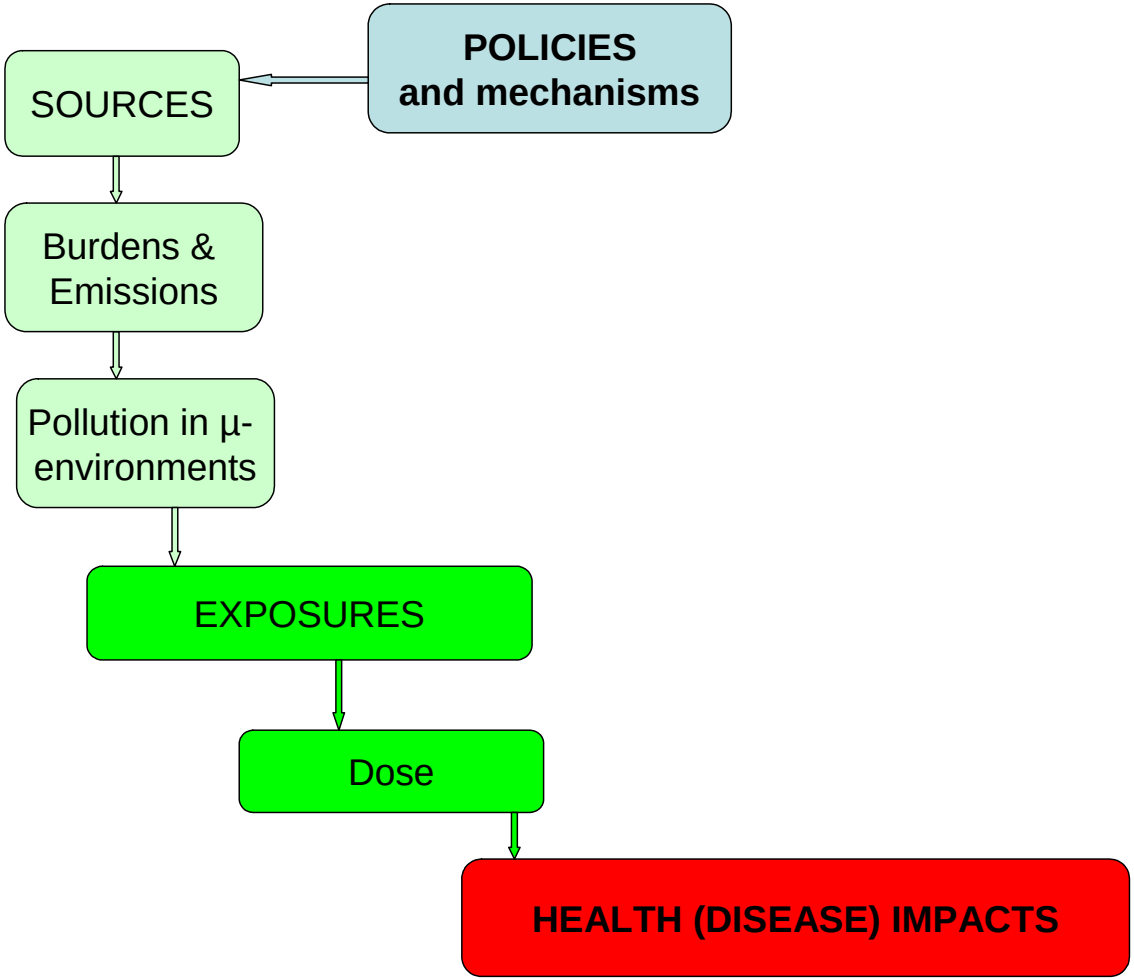
Simple impact pathway or full chain



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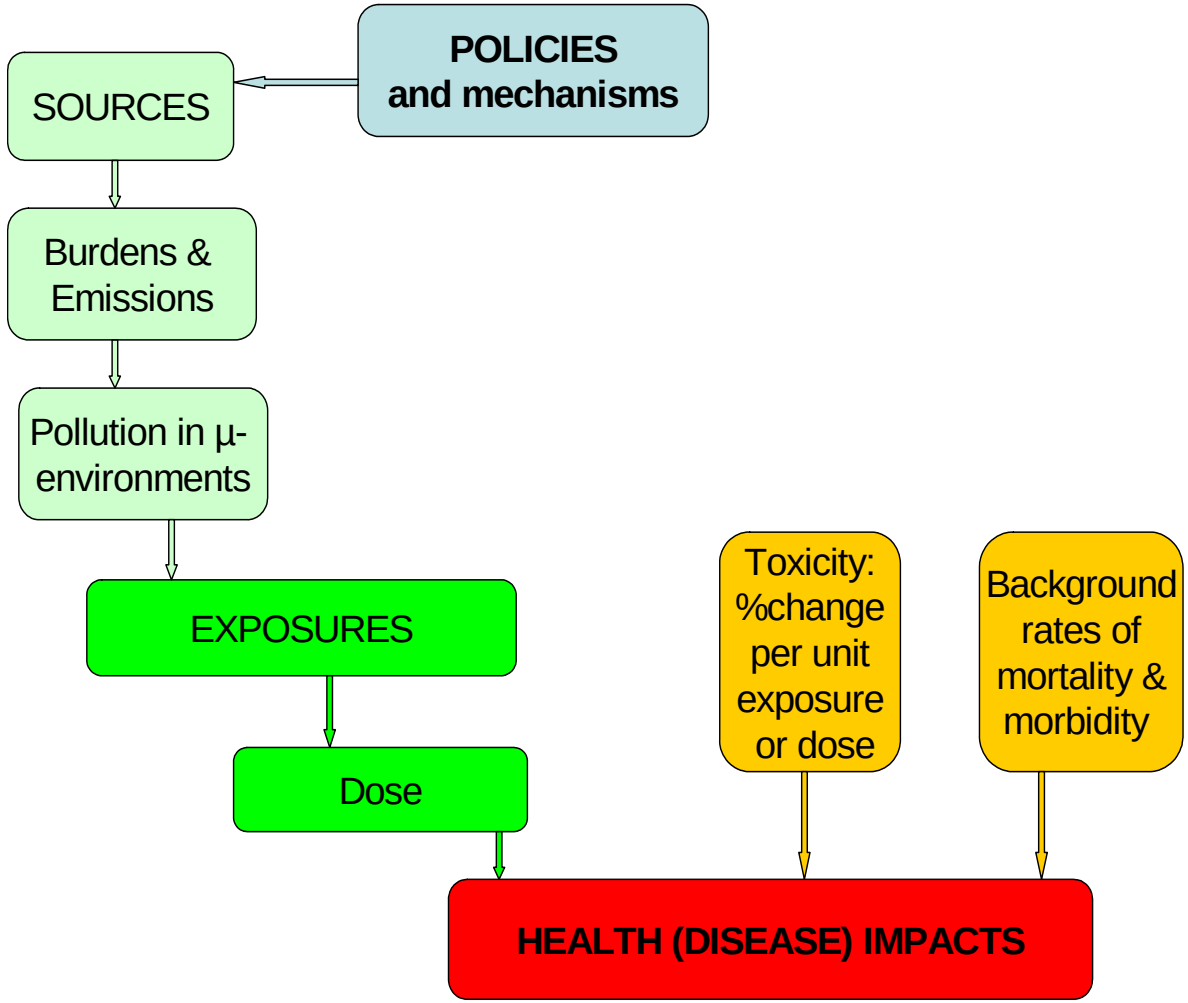
More realistic full chain approach



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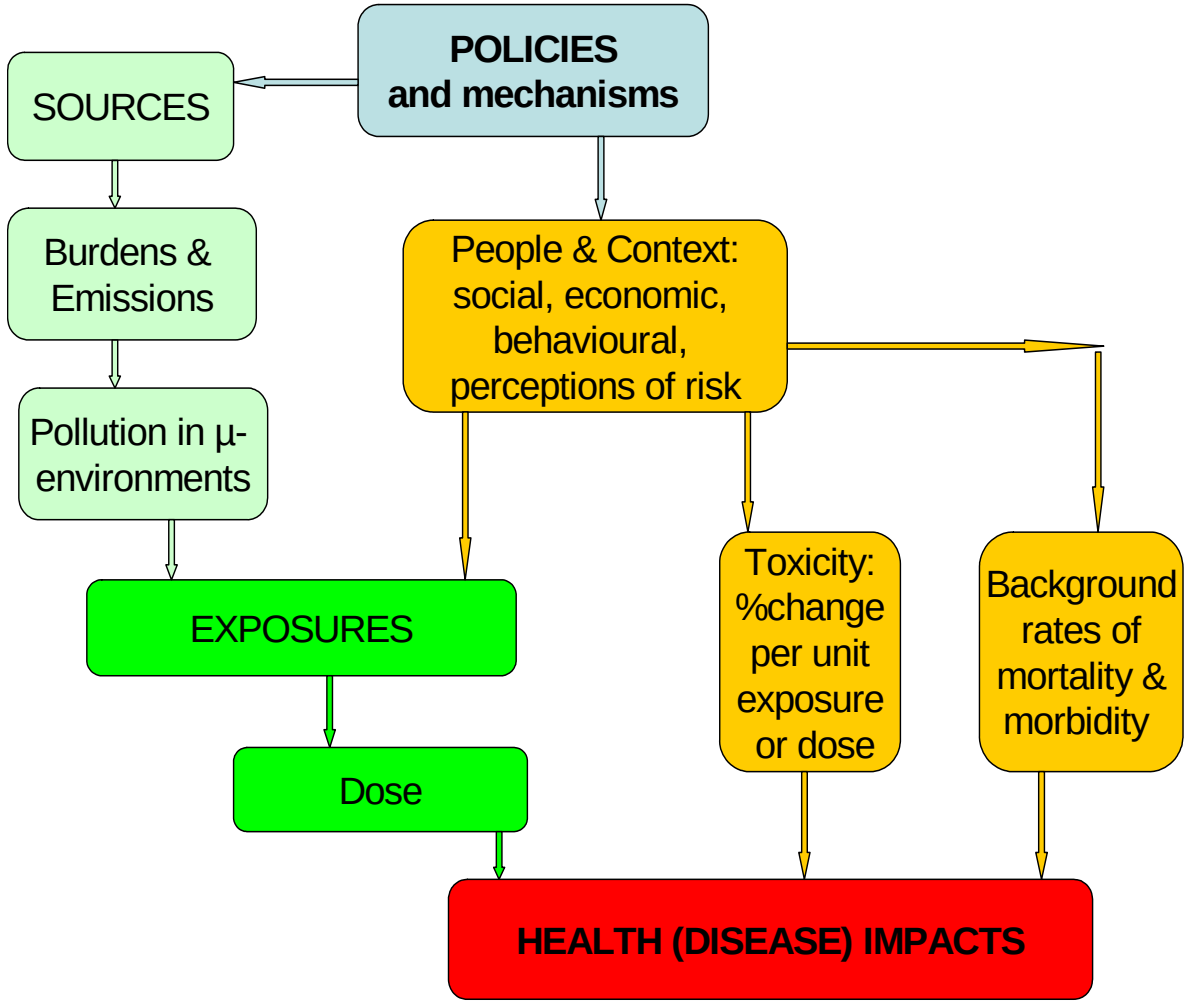
Including population and social determinants



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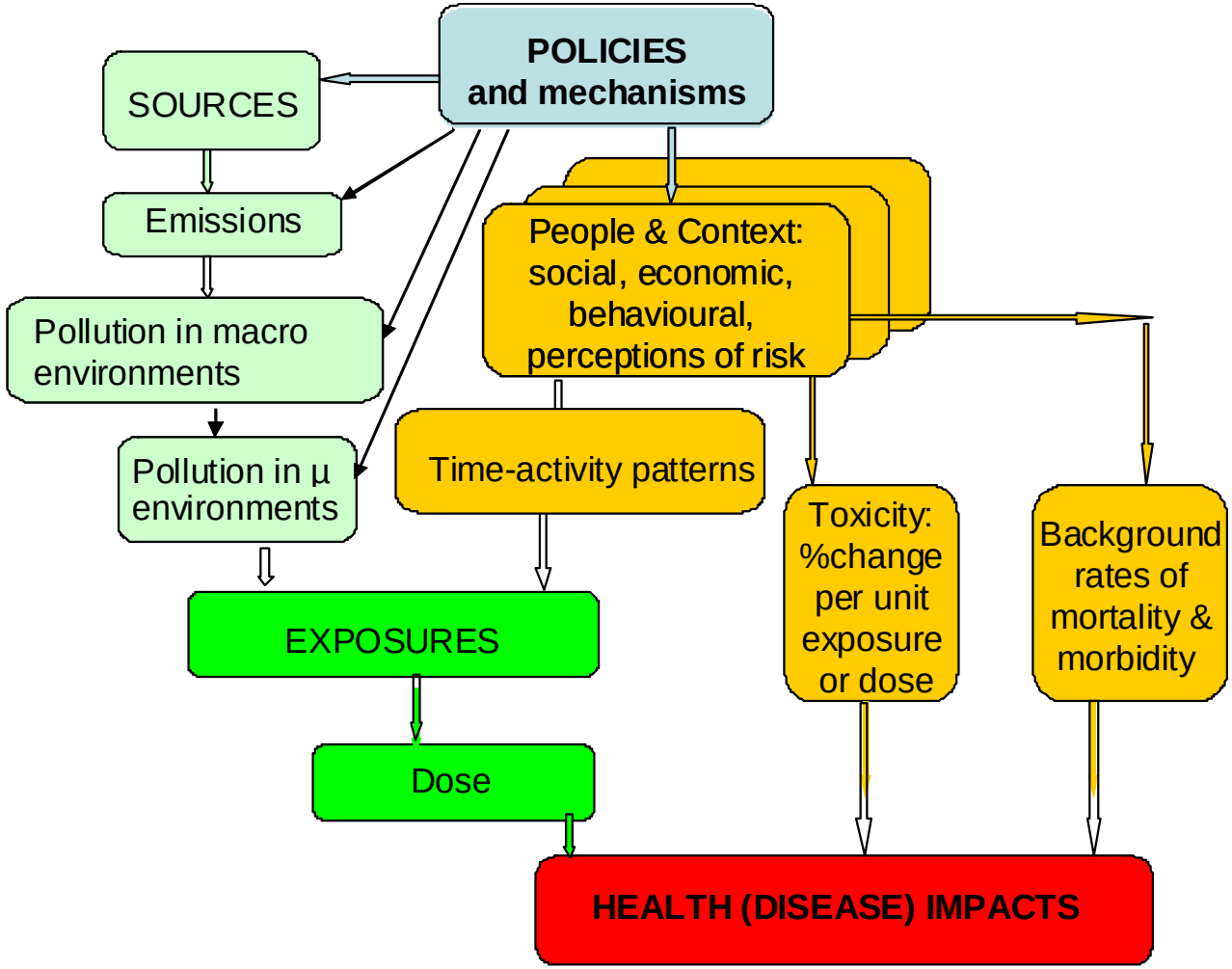
In reality - more complicated...



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Cross-cutting issues, for any chain

1. The links between steps of the chain
2. What spatial scale?
3. What time dimension?
4. What level of population dis-aggregation
   - Vulnerable sub-groups
   - To track issues of environmental justice
5. Level of approximation – a tiered approach
6. Assessment and representation of uncertainty

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Methodological Process

A tiered approach

- Identify and map out the pathways, from policies and measures through to (aggregated) health impacts

- Preliminary scoping analysis; identify
  - Links along the pathway
  - Issues in space and time and population disaggregation
  - Main evidence and data gaps
  - Other uncertainties

- Identify pathways and aspects of pathways that matter most; focus on improving analysis of these

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Some specific 'chains' from HEIMTSA

Pollutant-based 'case studies'

1. The classical air pollutants
   - Improve and extend what was done in CAFE for PM and ozone
2. Selected pollutants in indoor air
   - Naphthalene, radon, formaldehyde and ETS
   - Other combustion sources – heating and cooking
3. Noise from road traffic
4. Pollutants with complex pathways
   - Metals: Lead, Arsenic; some work on PCBs

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Next steps

- INTARESE / HEIMTSA toolboxes
- Joint case study

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