

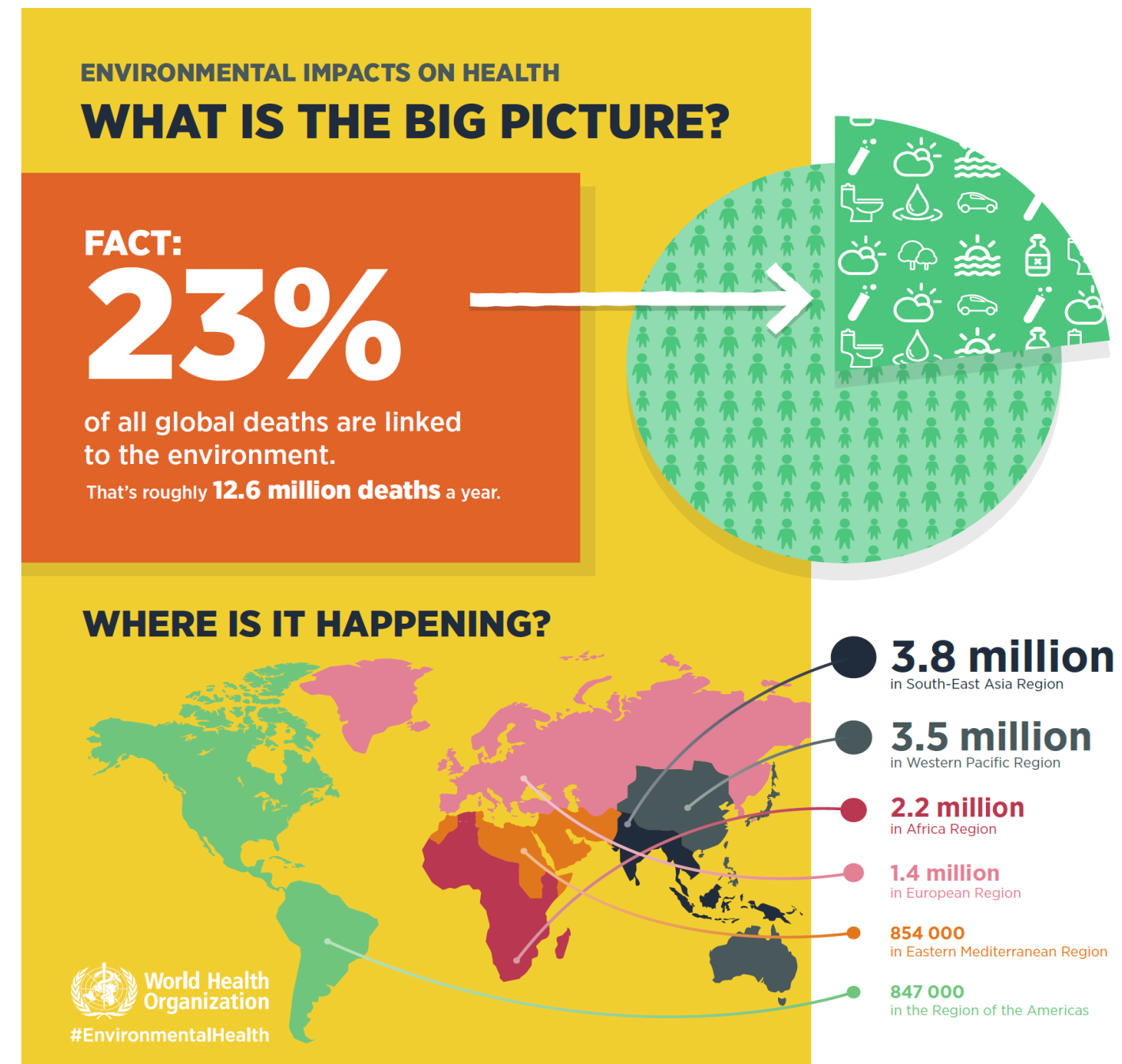
Urbanizzazione e salute

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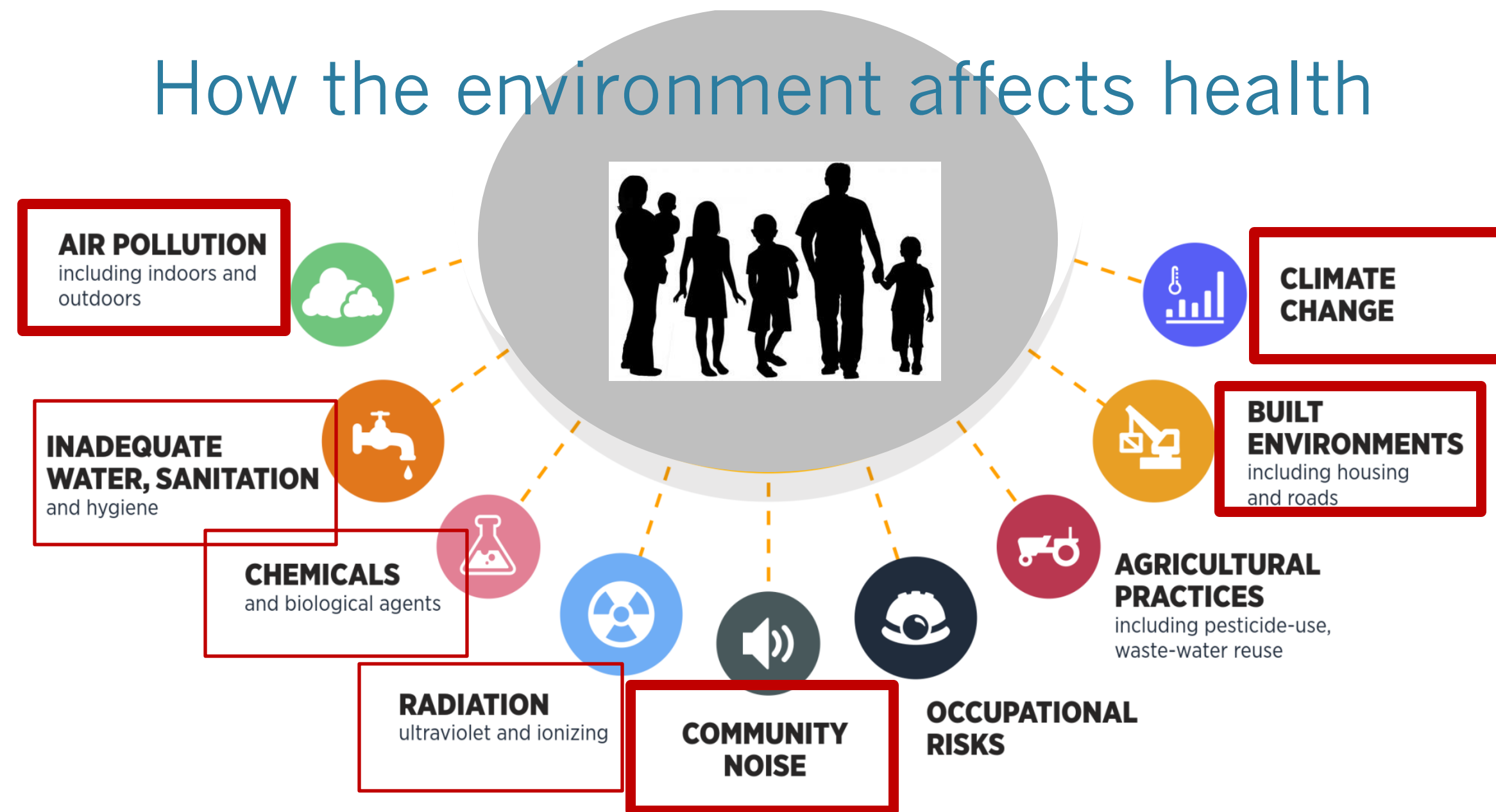


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How the environment affects health

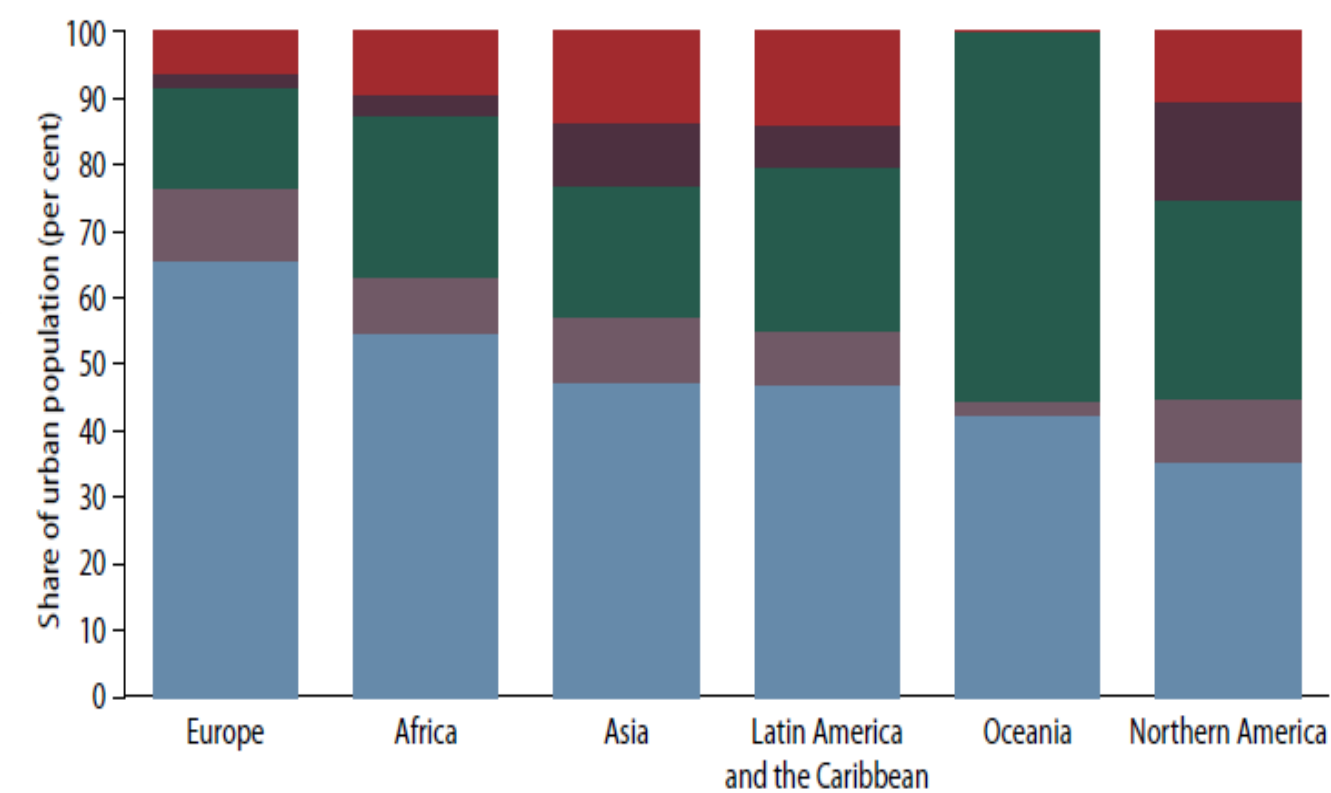


By 2030, 80% of Europeans will live in cities

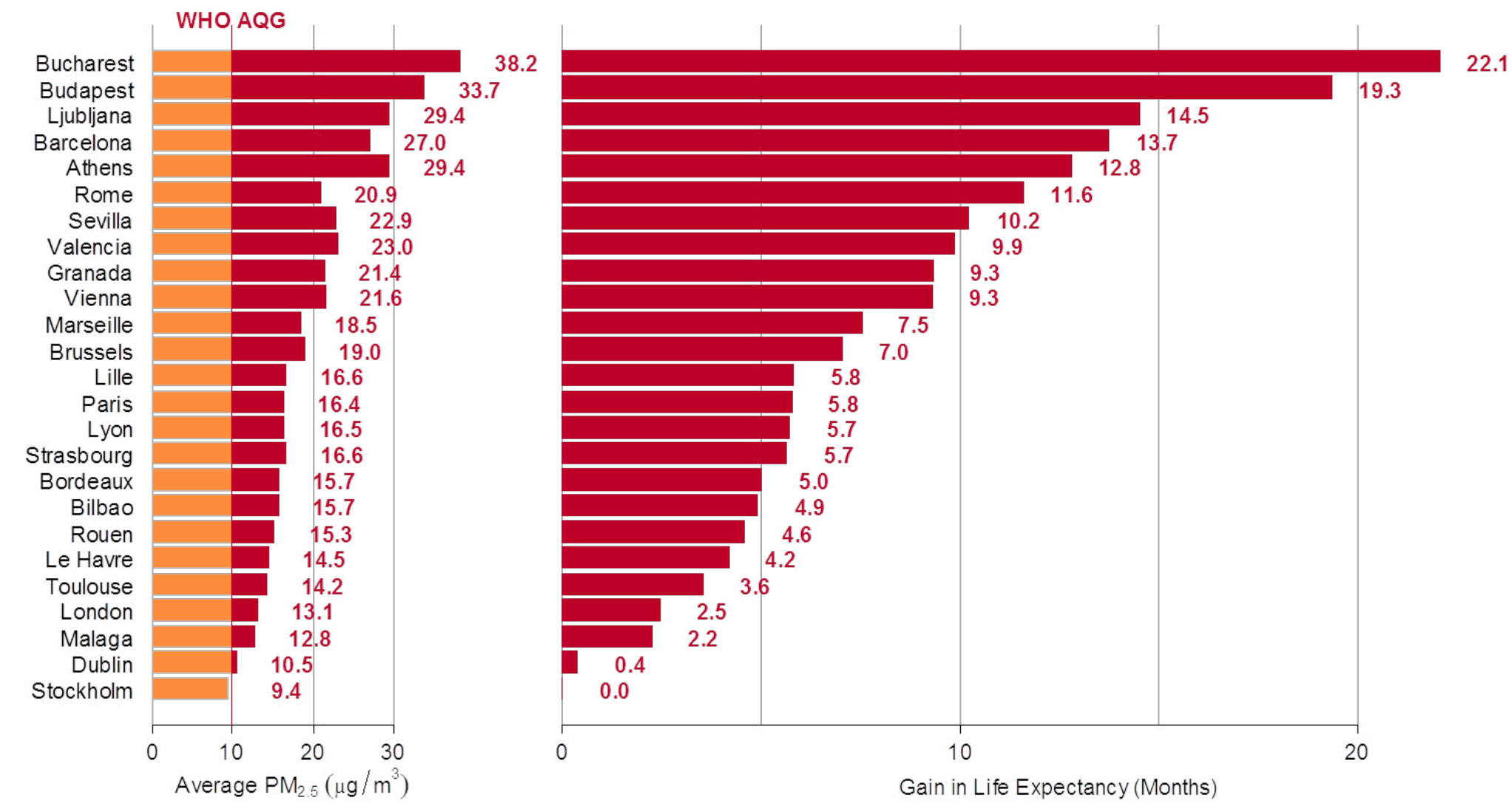
Population distribution by city size varies across major areas in 2014

United Nations, Department of Economic and Social Affairs, Population Division (2014). *World Urbanization Prospects: The 2014 Revision, Highlights (ST/ESA/SER.A/352)*.

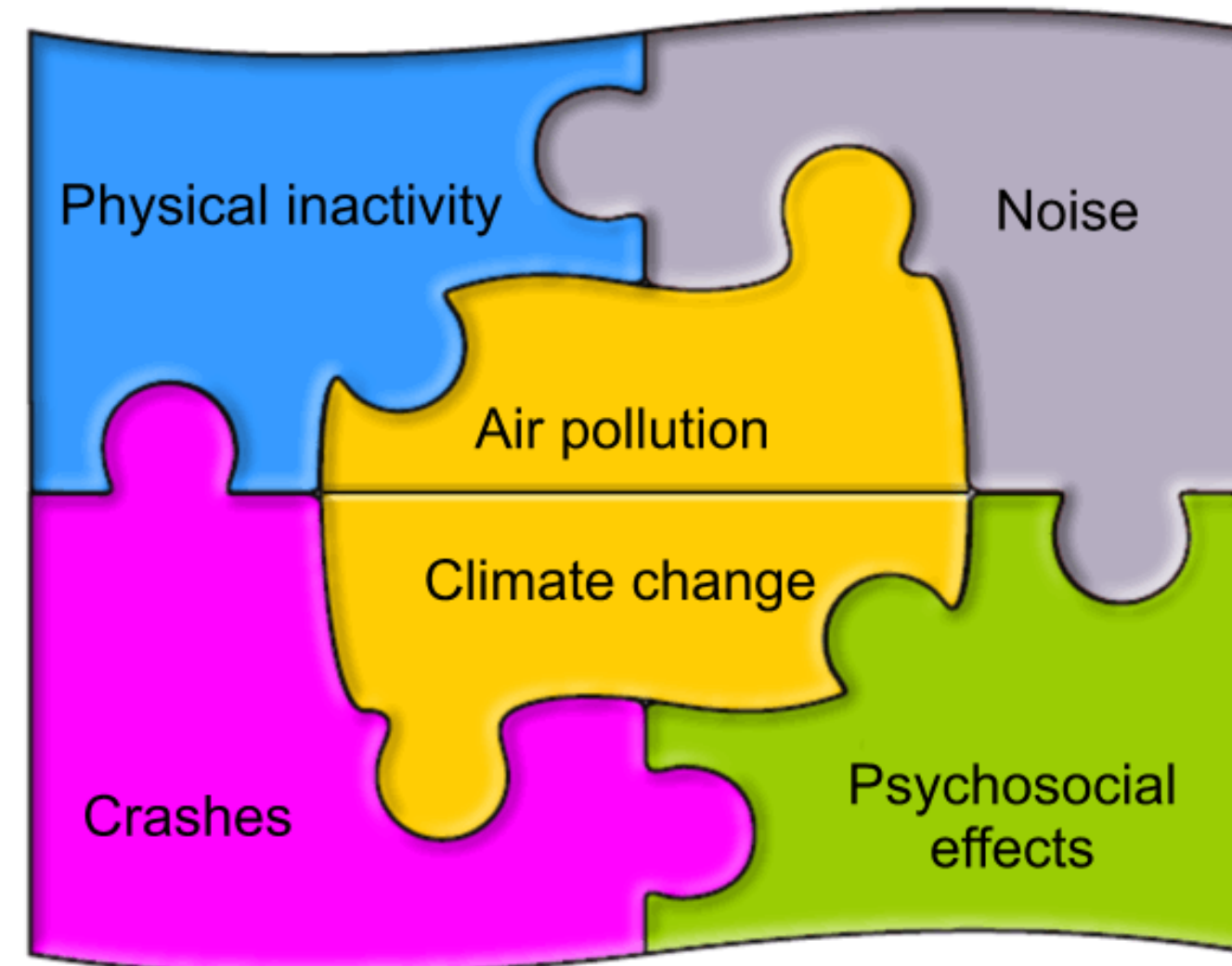
- Megacities of 10 million or more
- Large cities of 5 to 10 million
- Medium-sized cities of 1 to 5 million
- Cities of 500 000 to 1 million
- Urban areas smaller than 500 000

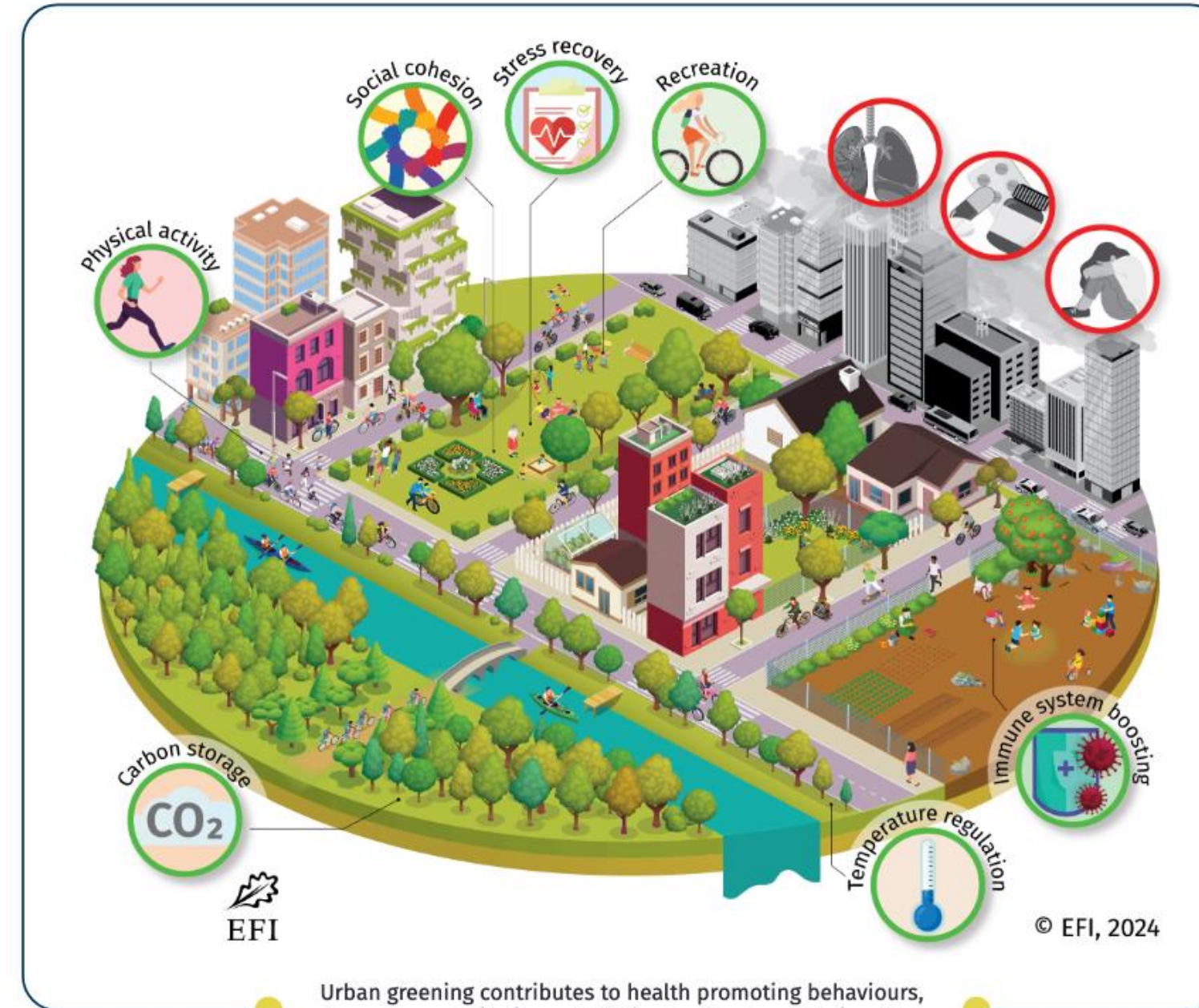


Predicted average gain in life expectancy (months) in 25 cities



Transport and health





Van den Bosch 2024 <https://doi.org/10.36333/>

Art work by Anne Cleary

Green space – pathways to health



Reduced urban heat island effect
 (e.g. Bowler et al., 2010)



Flood mitigation
 (Gill et al., 2007)



Improved air quality
 (e.g. Nowak et al., 2006)



Anthropogenic noise buffering and production of pleasant sounds
 (e.g. Pathak et al., 2008)



Exposure to diverse microbiota
 (e.g. von Hertzen et al., 2015)



UV exposure
 (e.g. Grant and Holick, 2005)



Social interaction
 (e.g. Maas et al., 2009)



Community Cohesion
 (e.g. Weinstein et al., 2015)



Promotion of physical activity
 (e.g. Bowler et al., 2010a)



Enhanced nature connection
 (e.g. Cleary et al., 2017)

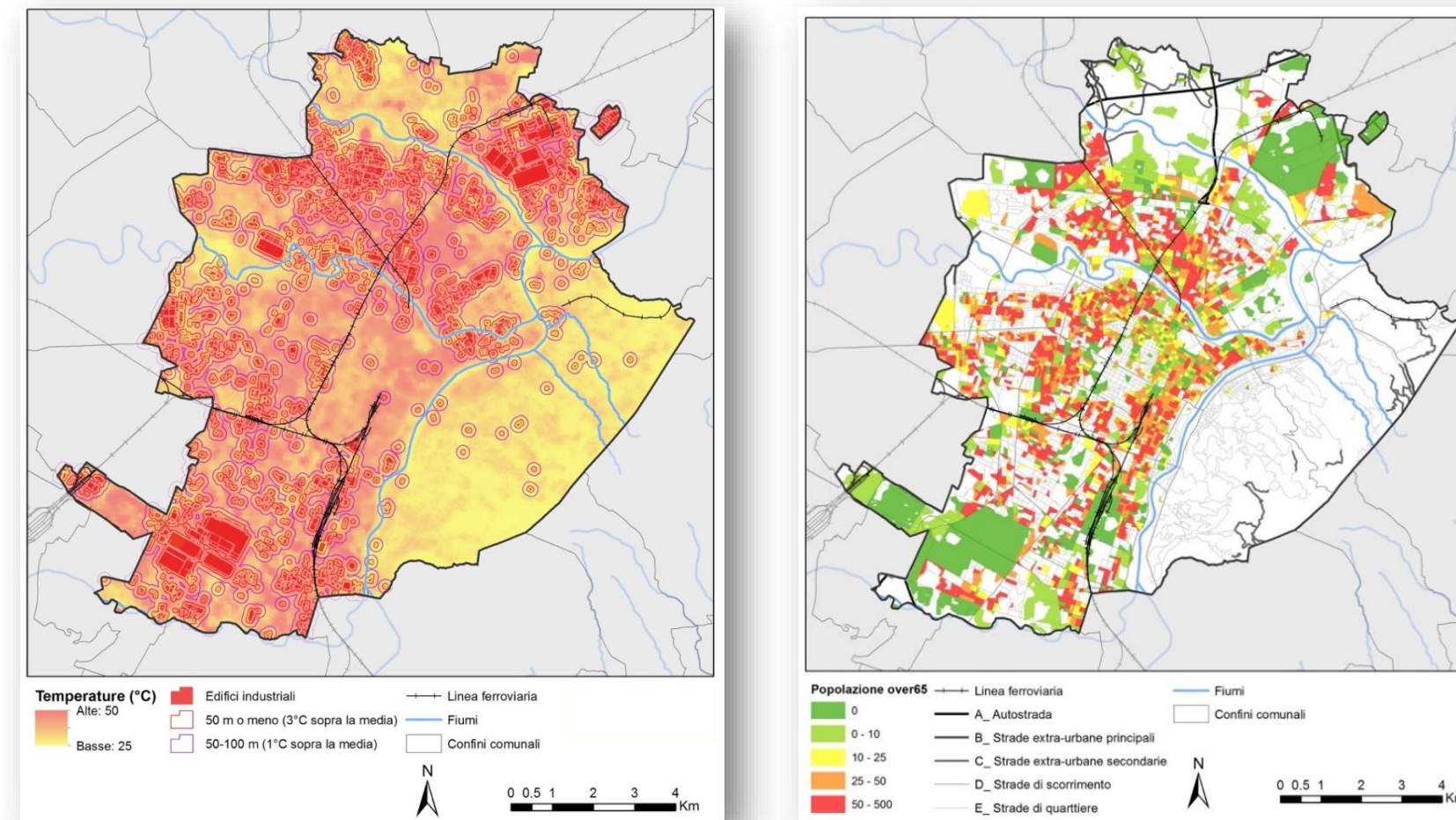


Stress reduction
 (Ulrich et al., 1991)



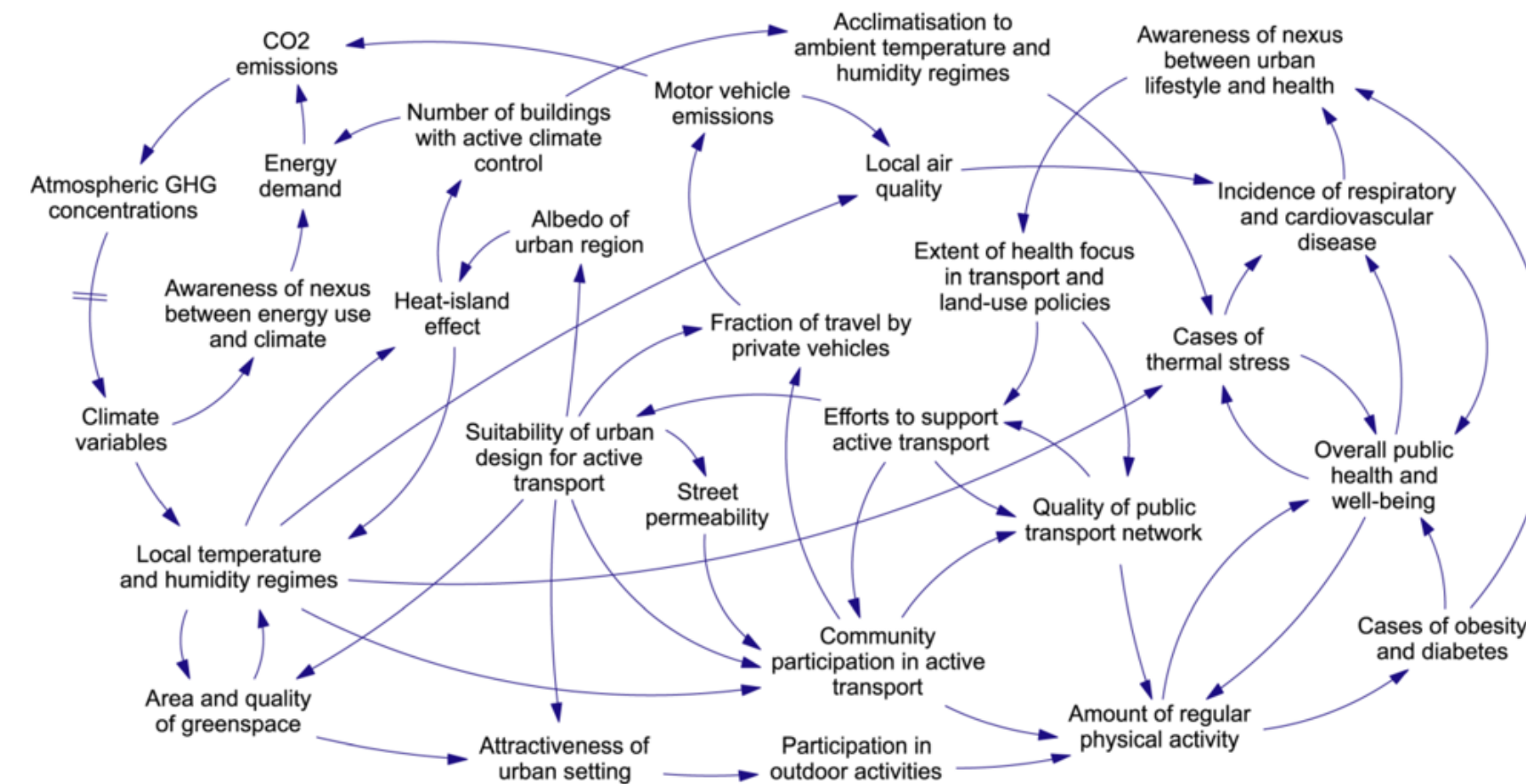
Attention restoration
 (Kaplan, 1995)

Heat vulnerability



Turin, Italy – Courtesy Enrico Gallo, City of Turin

Causal structure of urban climate-health systems (Proust 2012)



Planetary boundaries (Richardson 2023)

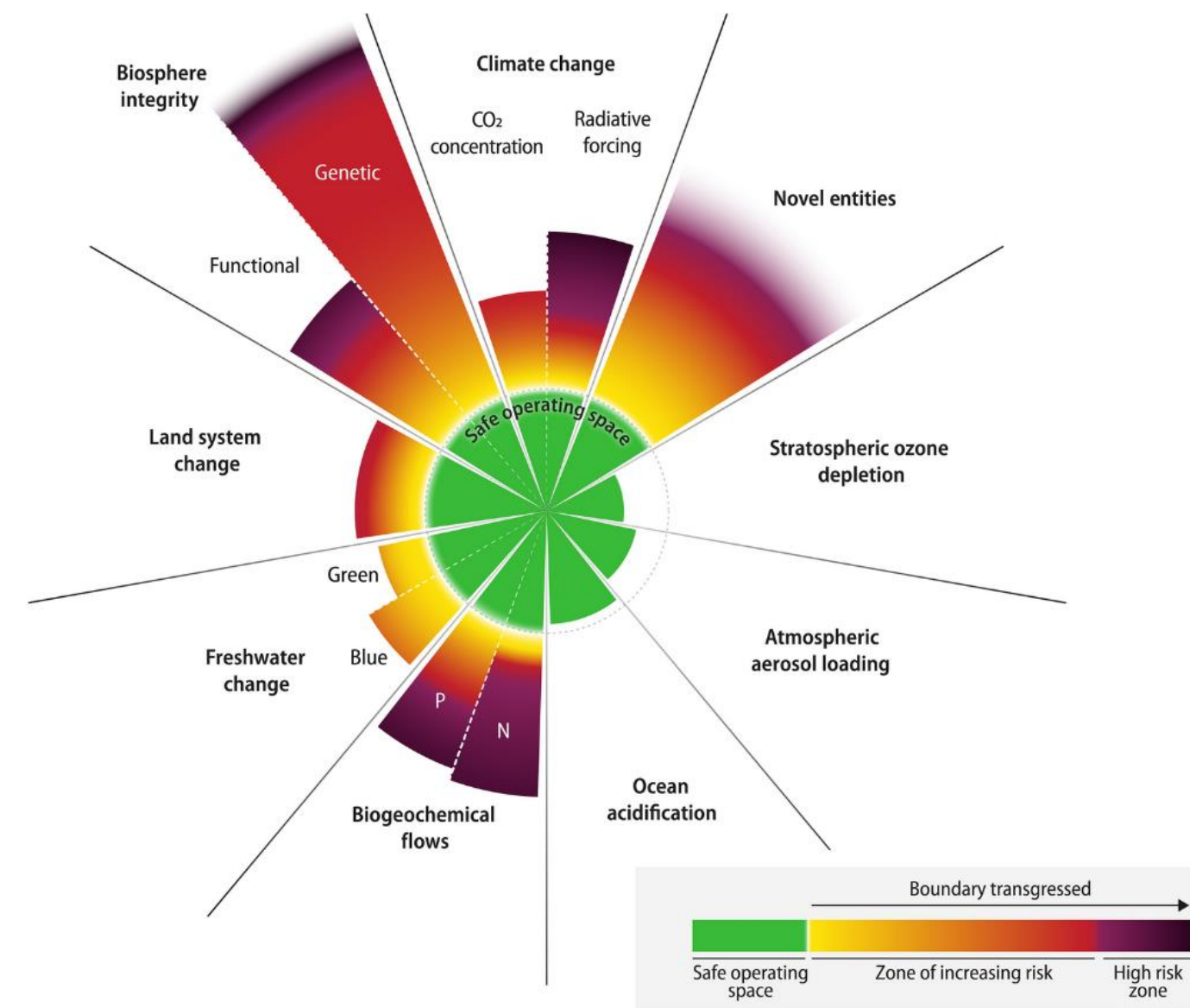
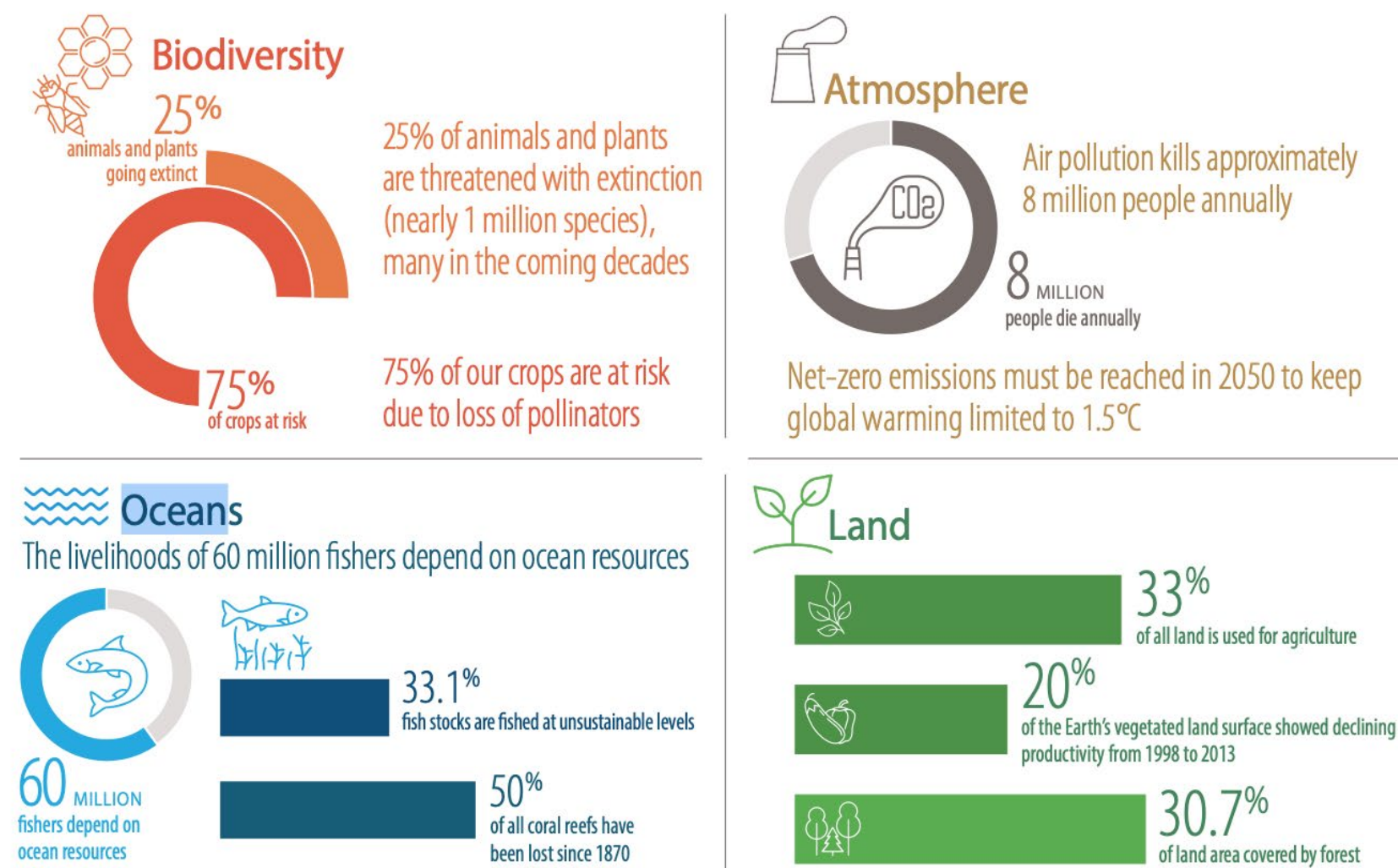


Figure 2-15:
 Human survival and the global commons



UN, The Future is Now, 2019

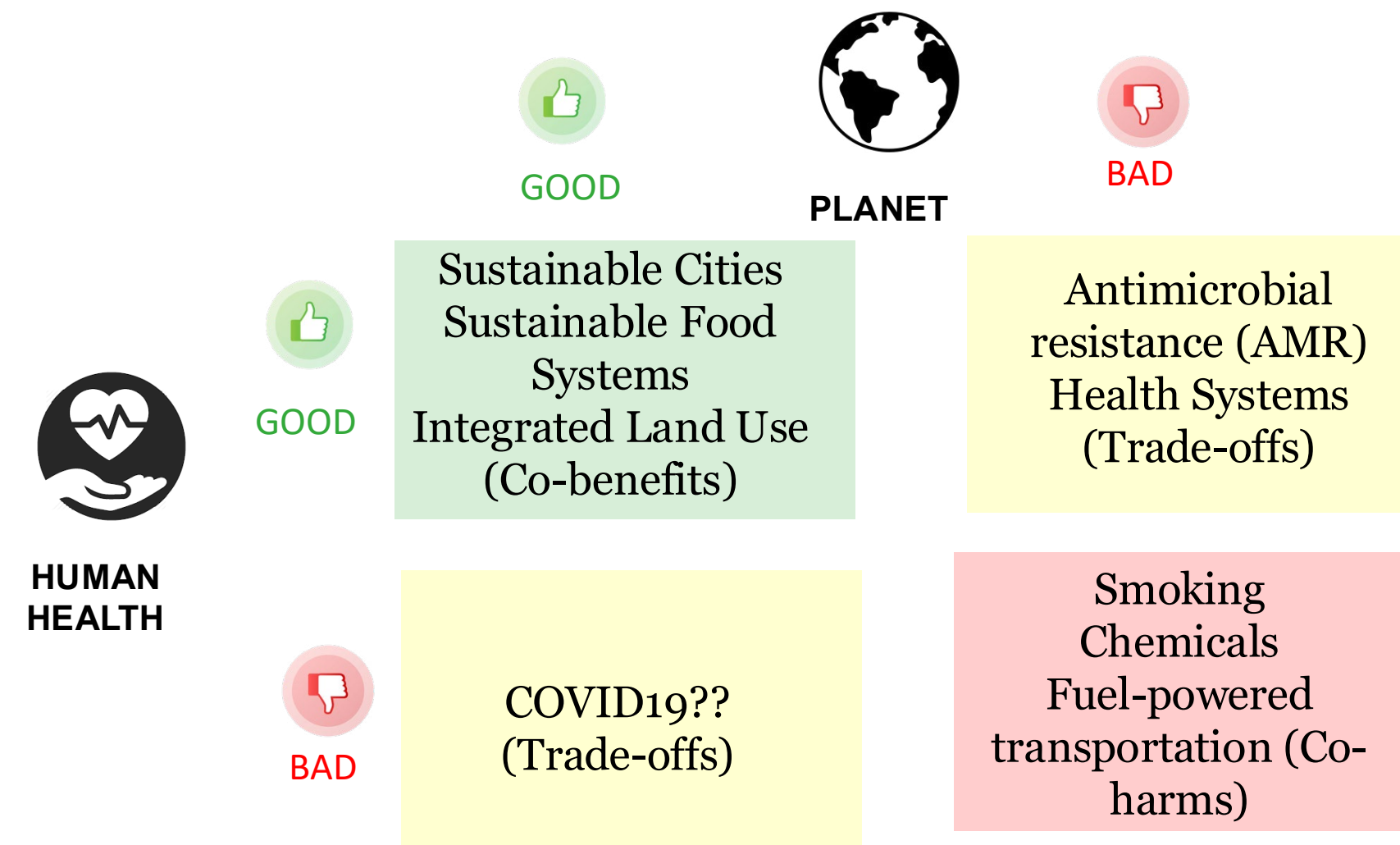
Cities as the solution

- Smart city design can and must be the engine of the “ecological transition”
- Key example: green/blue spaces as nature-based solutions
- Urban heat islands; synergistic effects between air, temp, deprivation, building quality etc
- Key role of transport

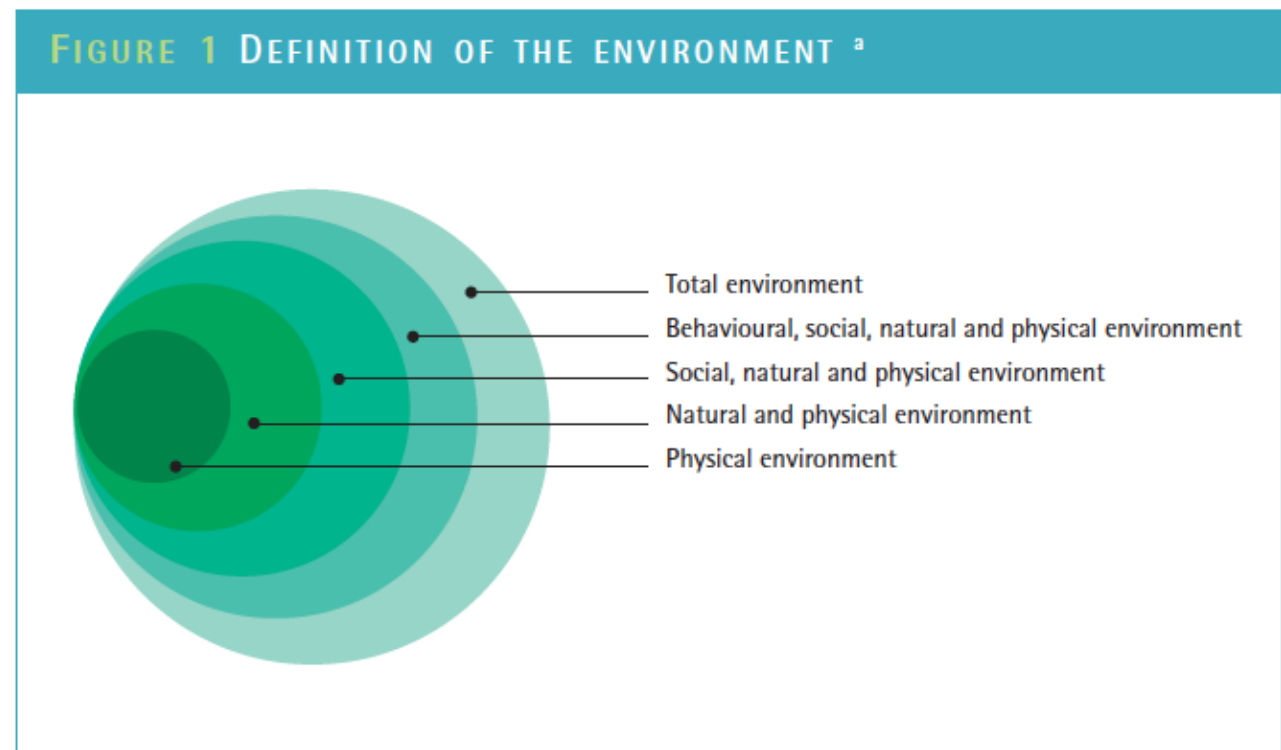
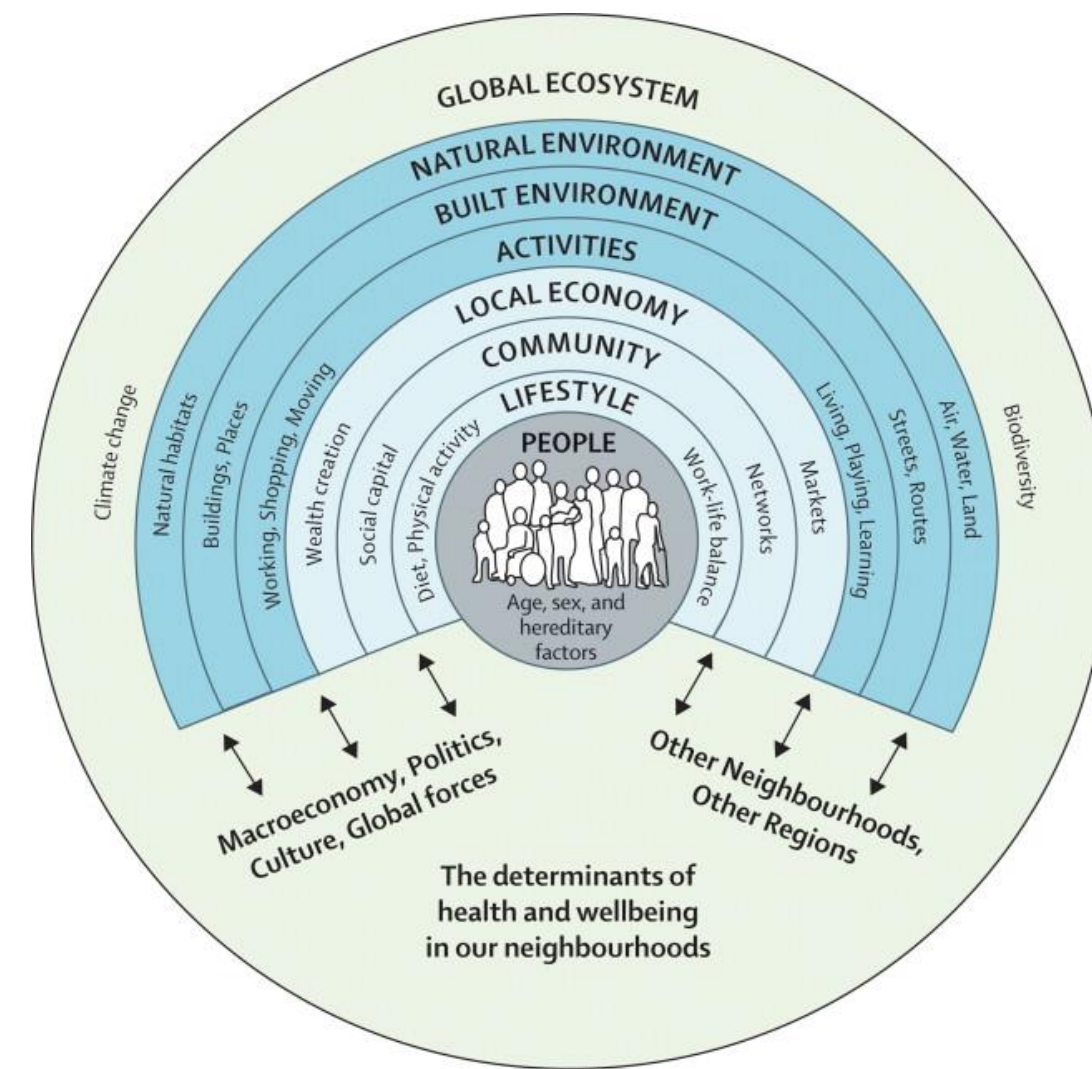
Cont

- Phenomenal source of high resolution data, existing and to be collected (eg big data)
- Production of new valuable, policy-relevant quality evidence
- Multidisciplinarity at work (eg architects, botanists in Climactions)
- Realistic

Implementation Challenge: A Practice Agenda for Planetary Health



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^a (Adapted from Smith, Corvalán and Kjellström, 1999)