

# Climate, health and inequity: Overcoming silo approaches creates opportunities in challenging times

## Interdisciplinary Analysis of Climate Change and Health Policy

Willi Haas<sup>1</sup>, Christina Lampl<sup>2</sup>, Ernest Aigner<sup>2</sup> and Andrea E. Schmidt<sup>2</sup>

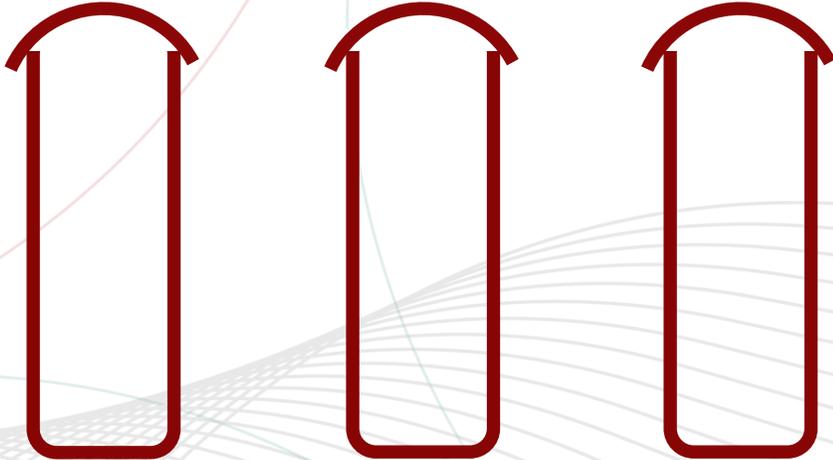
1 University of Natural Resources and Life Sciences, Department for Economics and Social Sciences, Institute of Social Ecology

2 Austrian National Public Health Institute, Competence Centre Climate and Health



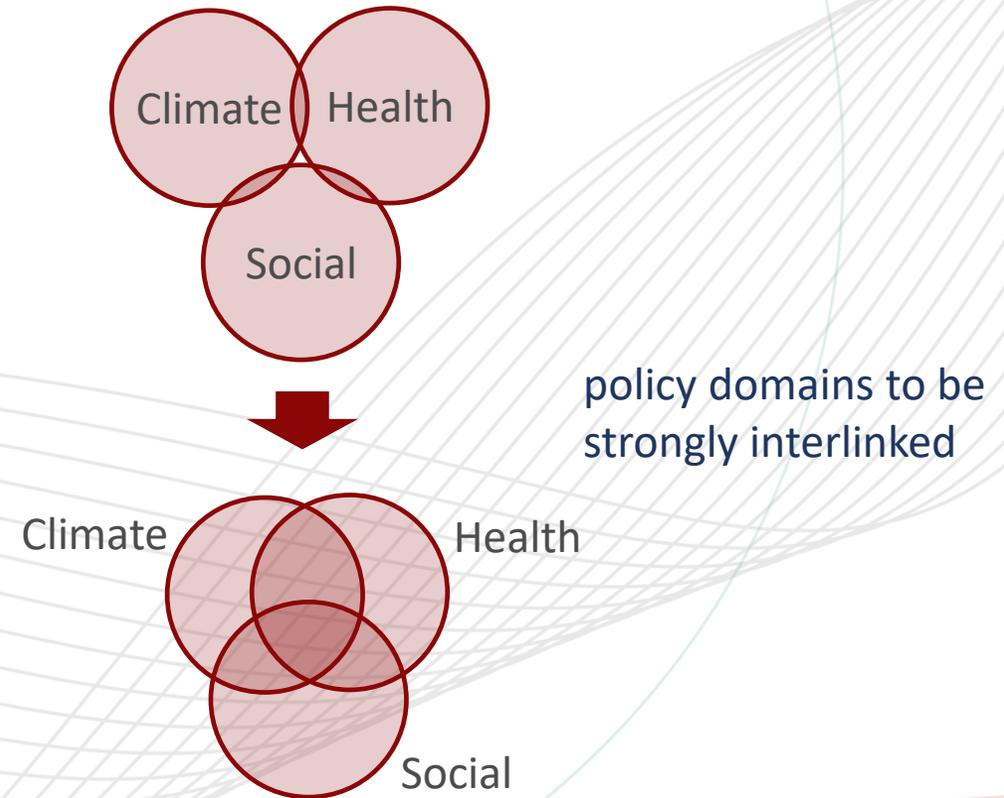
# The past

Thinking and acting in different silos contributed to today's great challenges.



Continued silo-thinking will not adequately address complex societal problems in a far-reaching transformation.

# The future needs ...



**Concerted action across boundaries is an underestimated challenge in itself. It requires understanding complex and interacting systems.**

**Significant potential for both**

- health policy to mitigate climate change
- climate policy to reduce the disease burden

### CC affects health

### But outcome depends on inequity

### CC affects economic sectors

- Directly via CC impacts
- Indirectly via health care demand & labour supply

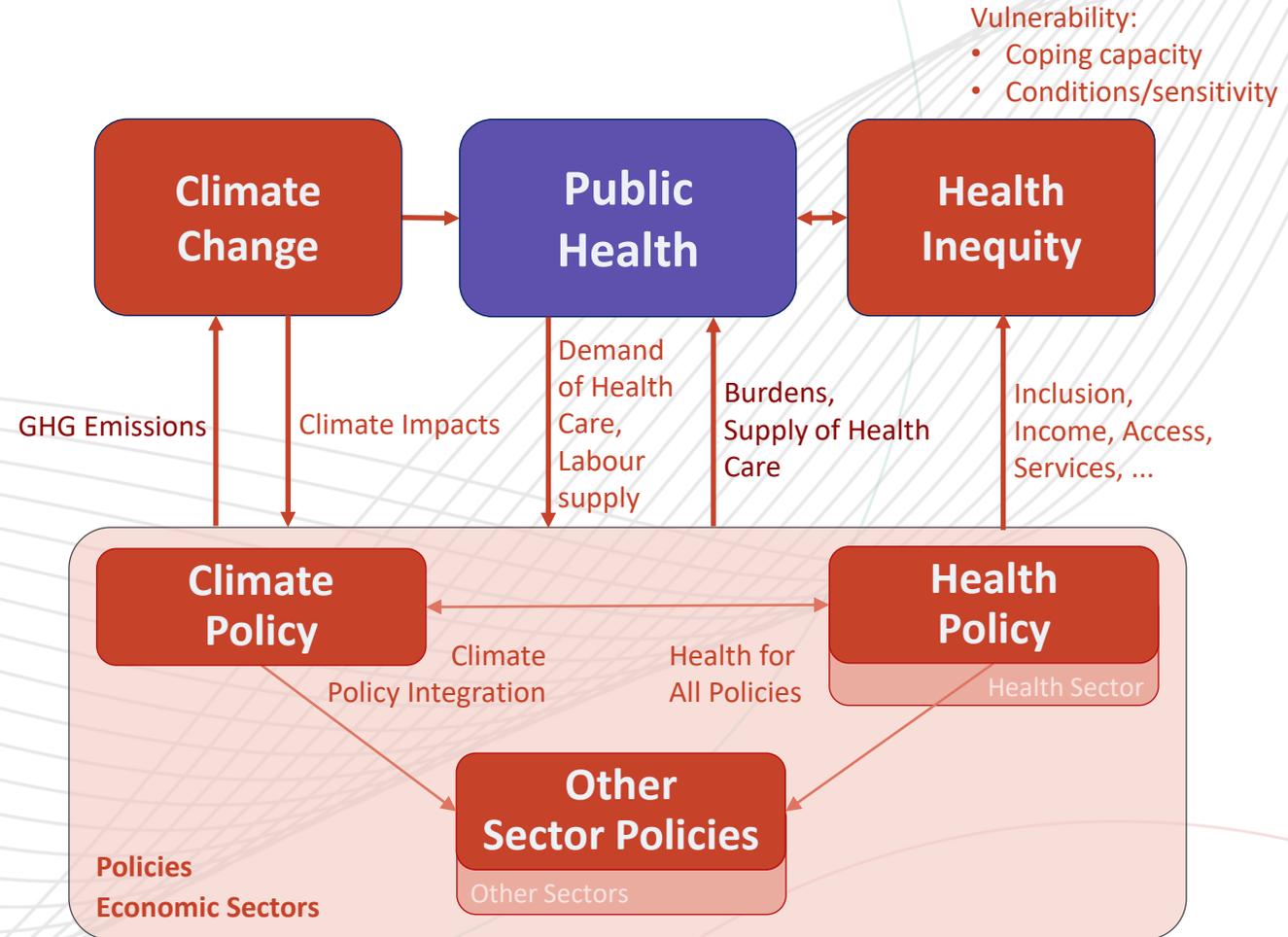
### Economic sectors affect inequity

### Economic sectors affect health

- Directly due to burden/care
- Indirectly via contributing to CC health

### Policies play a key role to avoid risks and to grasp opportunities

- Adaptation
- Mitigation
- Health promotion
- Greening hospitals
- And their integration



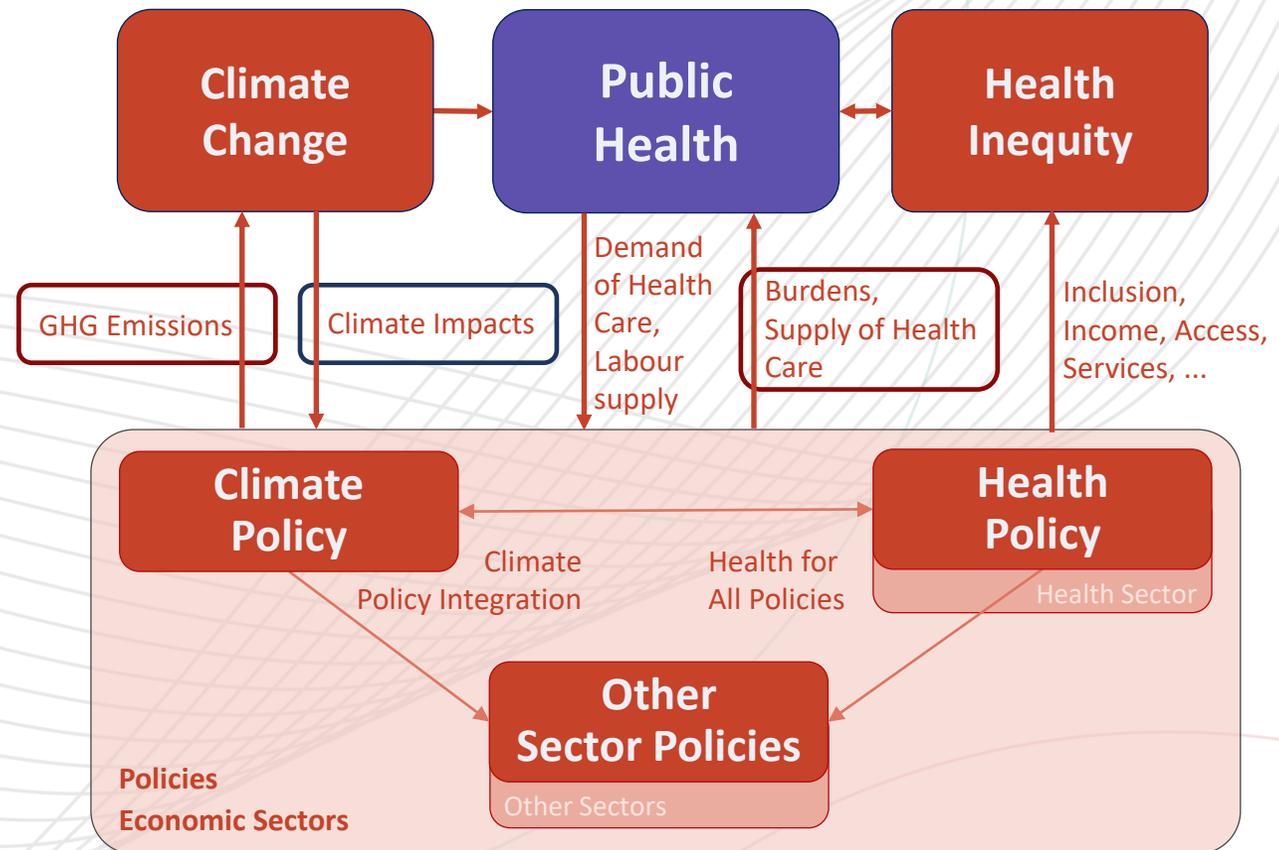
**A guiding scheme for trade-offs and co-benefits**

*No action is likely to have high costs too, not only on the environment, but also on society and economy*

- In 2018, monetized value of European **heat-related mortality** was equal to **1-2%** of regional national income
- Climate change-related **labour productivity losses** due to heat stress might be up to **670 million Euros per year** by 2080
- **PM 2.5 exposure** (fossil fuel combustion) led to years of life lost with an **economic value of 129 billion Euro per year** – bad for health and due to GHG co-pollutants bad for climate

Vulnerability:

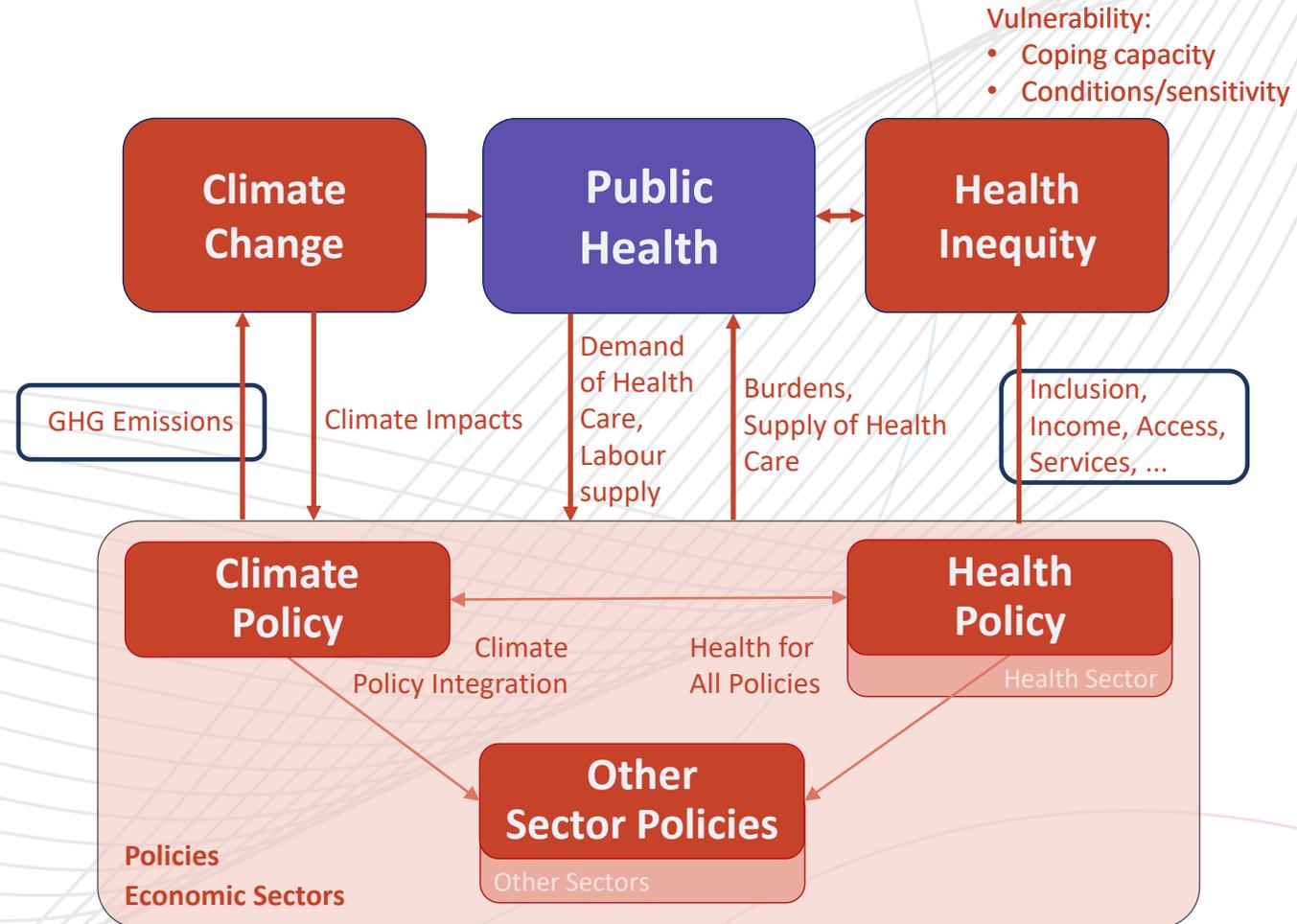
- Coping capacity
- Conditions/sensitivity



# Not addressing the interlinkages between climate and health will likely result in unjust, unhealthy and climate-unfriendly outcomes

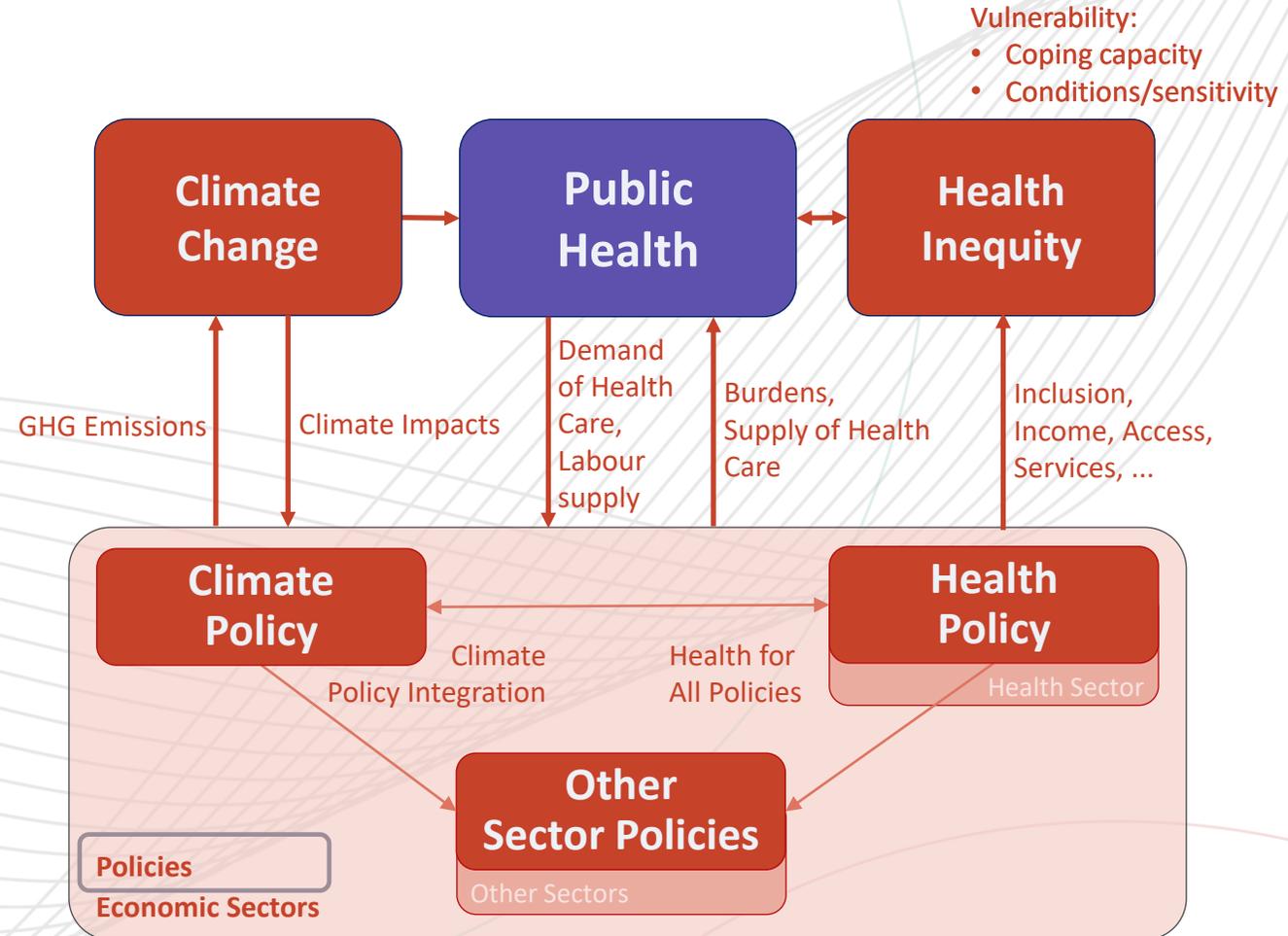
## Poorly planned mitigation policies

- existing health problems remain, e.g. lack of exercise or health inequity (life expectancy)
- equitable access to health services may decrease particularly for vulnerable groups (equity conflict)
  - due to increased costs for transport to reach a medical treatment



## Multiple barriers to interlinking policy domains are manifold

- **Separation of responsibilities** e.g. of GHG and non-GHG emissions or of economic sectors (as polluters) and protected domains (climate and health) in different Directorate-Generals
- The **world has complex problems** and universities have departments/disciplines supported by existing disciplinary credit systems and research funding
- Lack of interdisciplinarity leads to **language silos** and lack of understanding of each other's concepts
- **Vested interests** by economic sectors prioritize particular interests and economic growth over well-being for all
- **Bureaucracy** is led by a specific “culture”, accomplishing everyday tasks in terms of **own priorities and ambitions**



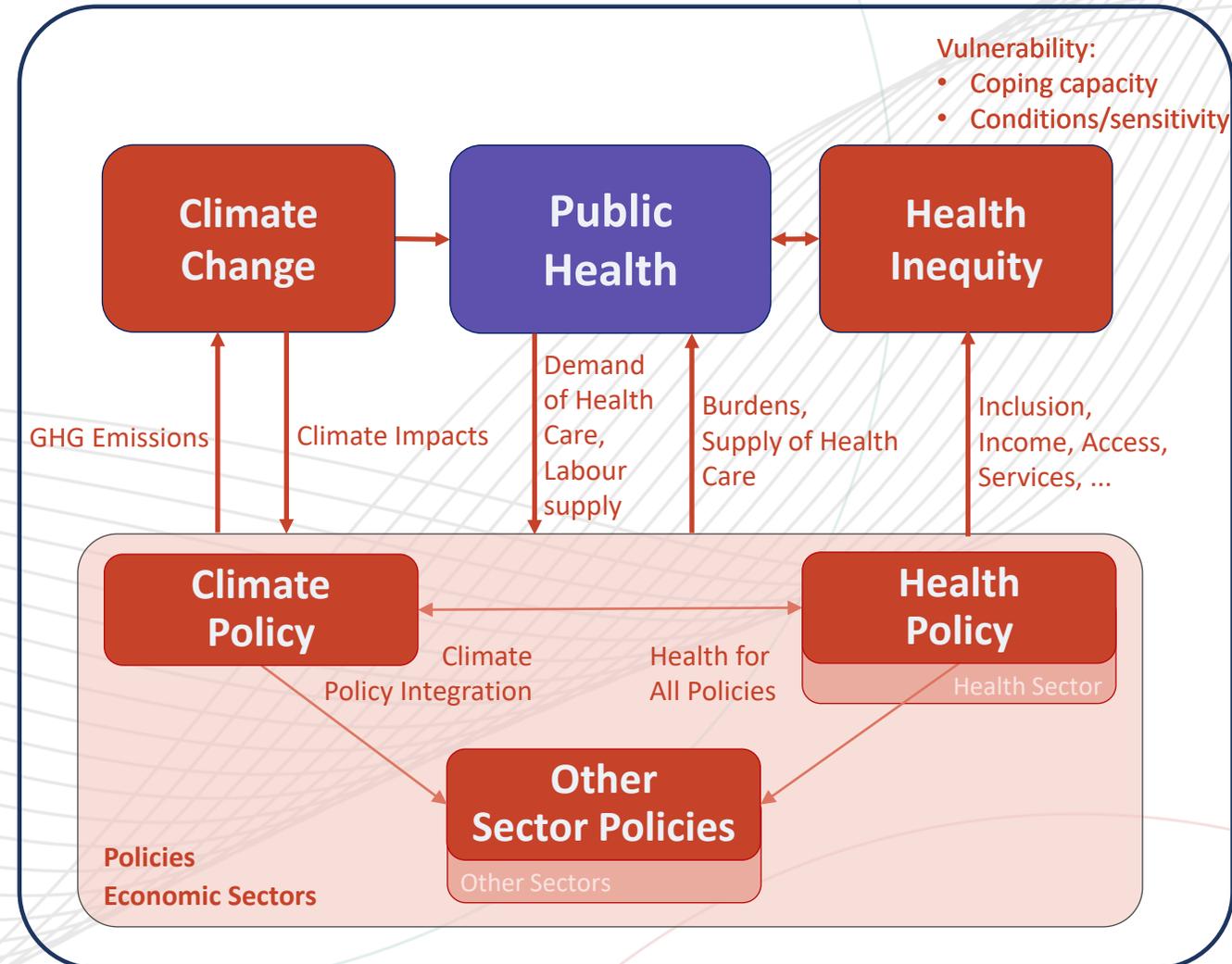
*Co-benefits occur when measure aimed at benefits for one policy domain achieve benefits in other domains, thereby increasing the total gains for society and/or the environment*

## Concept of Multisolving

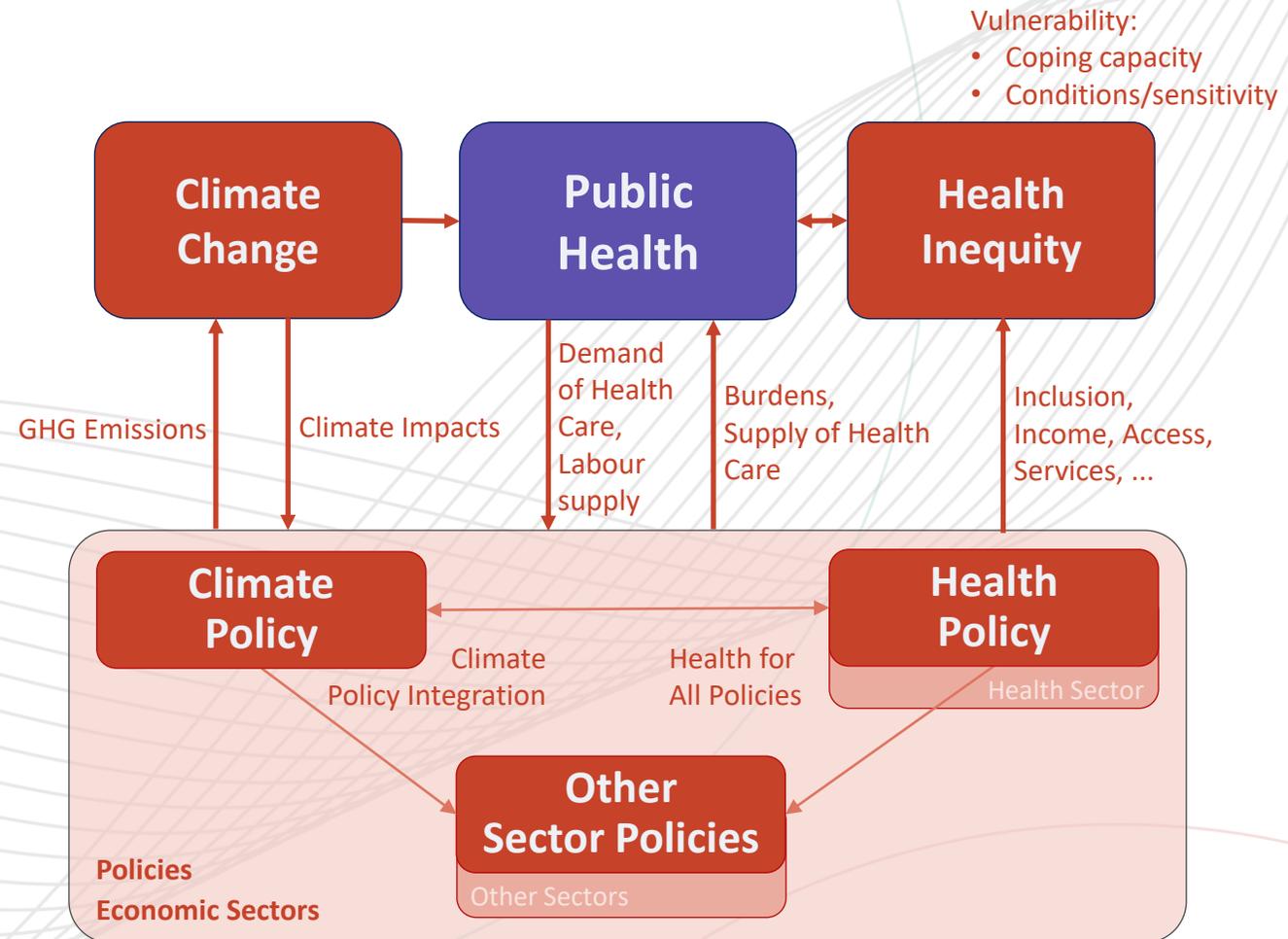
### Superblocks in Barcelona

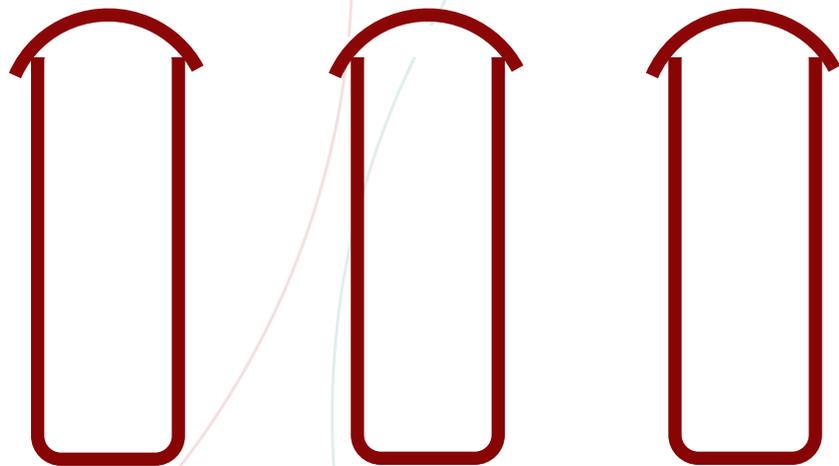
- Development of conceptual framework and the assessment of the policy's combined health and environmental effects
- Improves air quality and reduces harmful emissions by 25%
- 50% of women and men interviewed recognised reduced noise and air pollution
- Positive effects on well-being, quality of sleep and other health-related outcomes

**Other studies** show that promotion of **active mobility** in cities can reduce GHG emissions by 40% and premature mortality by 60 deaths per 100,000 inhabitants

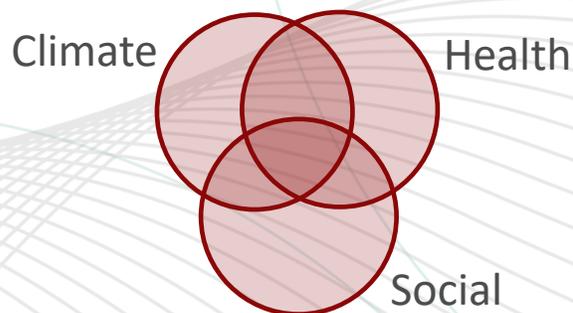


- Clear **goals** for climate, health and inequity for the transformation
- Naming concrete challenges without concealing the underlying **conflicts** with transparency principles for dealing with them
- **High-level commission** from different Directorate-Generals with academics from different disciplines for steering
- Developing an **interdisciplinary evidence base** for climate, health and inequity
- Integrated assessments focusing on interrelations, specifically for **synergies and trade-offs**
- **Setting-based or place-shaping approach** for change; reporting back to the high-level commission for removing obstacles and roll-out





Leaving silos = leaving the comfort zone



However, extraordinary complex societal problems demand new concerted responses across boundaries

# Thank you

# References

- Greer SL, Falkenbach M, Siciliani L, McKee M, Wismar M, Figueras J. From Health in All Policies to Health for All Policies. *Lancet Public Health*. August 2022;7(8):e718–20
- (2) Watts N, Amann M, Arnell N, Ayeb-Karlsson S, Belesova K, Boykoff M, u. a. The 2019 report of The Lancet Countdown on health and climate change: ensuring that the health of a child born today is not defined by a changing climate. *The Lancet*. November 2019;394(10211):1836–78.
- (3) Swiss Re. World economy set to lose up to 18% GDP from climate change if no action taken, reveals Swiss Re Institute’s stress-test analysis [Internet]. 2021 [zitiert 12. August 2022]. Verfügbar unter: <https://www.swissre.com/media/press-release/nr-20210422-economics-of-climate-change-risks.html>
- (4) Burke M, Davis WM, Diffenbaugh NS. Large potential reduction in economic damages under UN mitigation targets. *Nature*. 55(7706):549–53
- (5) Workman A, Blashki G, Bowen KJ, Karoly DJ, Wiseman J. The political economy of health co-benefits: embedding health in the climate change agenda. *Int J Env Res Public Health*. 15(4):674.
- (6) Brewer GD. The challenges of interdisciplinarity. *Policy Sci*. 1999;(32):327–37.
- (7) SL, Lillvis D. Beyond leadership: Political strategies for coordination in health policies. *Healthy Policies*. 2014;116:12–7.
- (8) Mehdipanah R. Effect of Superblocks on health and health inequities: a proposed evaluation framework. *J Epidemiol Community Health*. 2019;(73):585–99
- (9) Agència de Salut Pública de Barcelona. Report of results of the environmental and health effects of the Superblocks model in Barcelona. [Internet]. 2021. Verfügbar unter: [https://www.aspb.cat/wp-content/uploads/2021/10/English-ASPB\\_salut-carrers-resultsreport-Superblocks.pdf](https://www.aspb.cat/wp-content/uploads/2021/10/English-ASPB_salut-carrers-resultsreport-Superblocks.pdf)
- (10) Wolkinger, B., Haas, Wi., Bachner, G., Weisz, U., Steininger, K., Hutter, H.-P., Delcour, J., Griebler, R., Mittelbach, B., Maier, P., & Reifeltshammer, R. (2018). Evaluating Health Co-Benefits of Climate Change Mitigation in Urban Mobility. *International Journal of Environmental Research and Public Health*. <https://doi.org/10.3390/ijerph15050880>
- Workman A, Blashki G, Bowen KJ, Karoly DJ, Wiseman J. The political economy of health co-benefits: embedding health in the climate change agenda. *Int J Env Res Public Health*. 15(4):674.
- (12) Greer SL, Lillvis D. Beyond leadership: Political strategies for coordination in health policies. *Healthy Policies*. 2014;116:12–7.
- (13) Brewer GD. The challenges of interdisciplinarity. *Policy Sci*. 1999;(32):327–37