

# Climate Change Mitigation Policies & Population Health

Minimizing trade-offs and maximizing co-benefits

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LONDON  
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& TROPICAL  
MEDICINE



**Climate Change  
& Planetary  
Health**



**F**ood System  
**A**daptations in  
**C**hanging  
**E**nvironments  
**AFRICA**

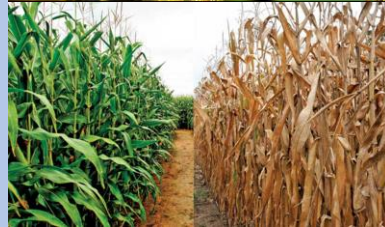
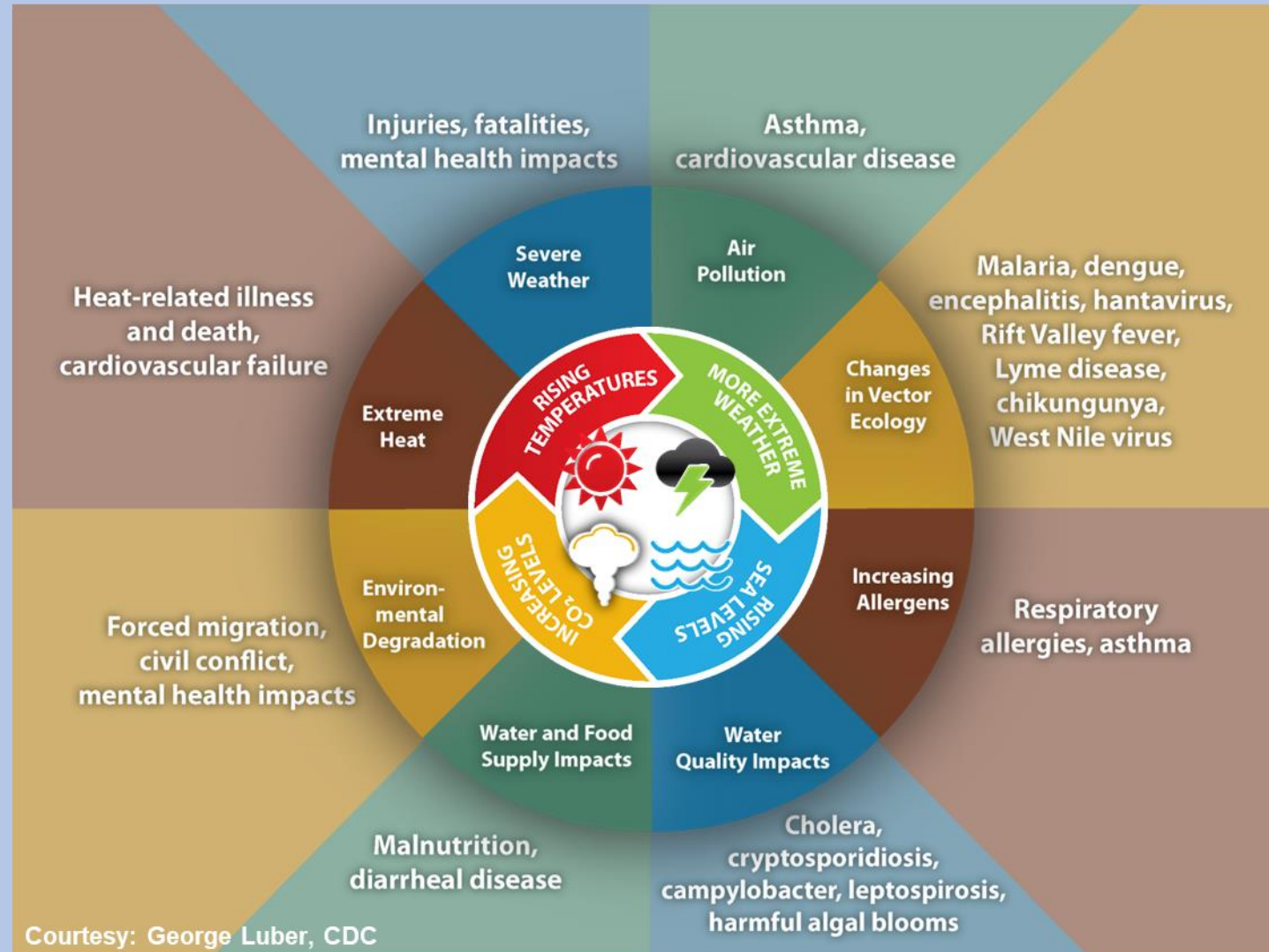


**SHEFS**

Sustainable & Healthy Food Systems



# Challenges: major impact pathways



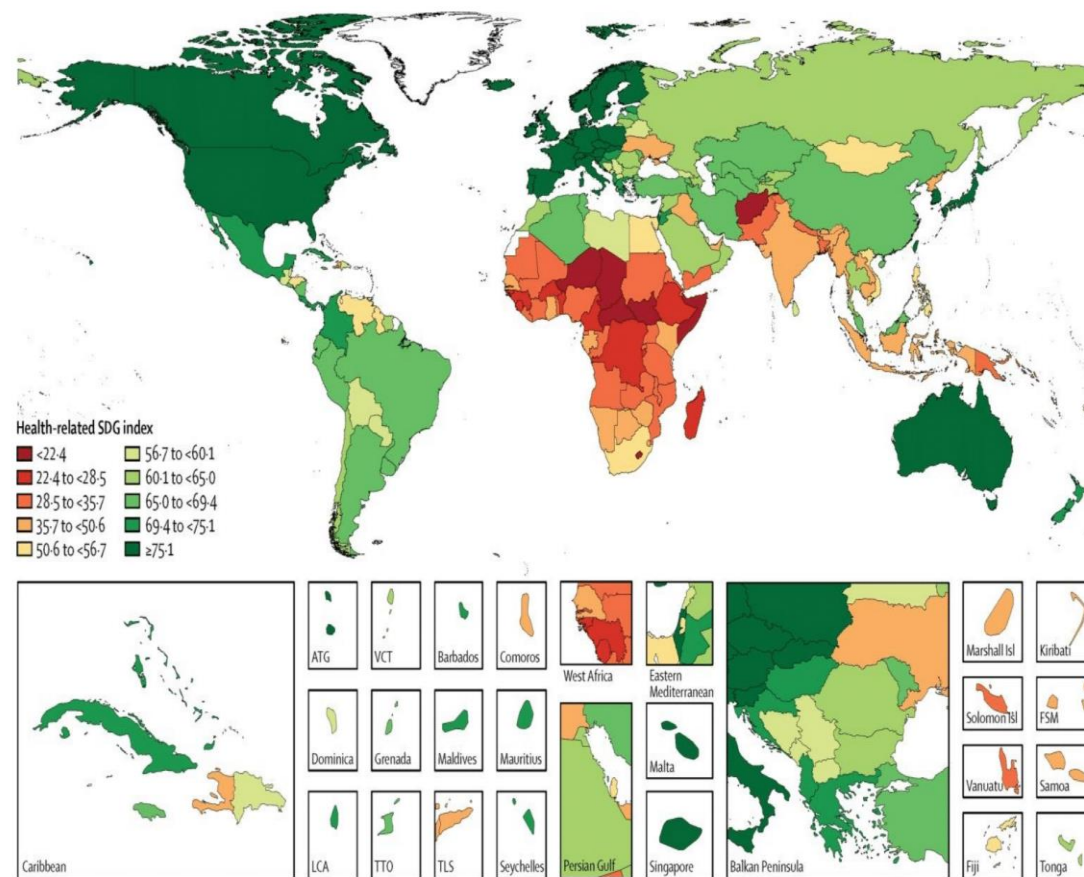


# Health throughout SDGs

## HEALTH IN THE SDG ERA



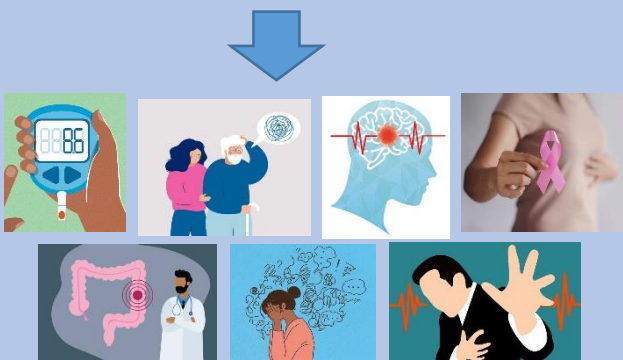
## Map of the projected health-related SDG index based on past trends, by decile, in 2030





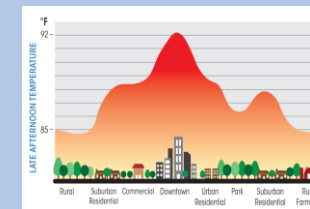
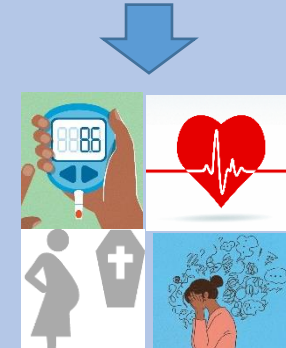
# Evidence: pathways to impacts (co-benefits)

Jarrett *et al* 2012 - Lancet



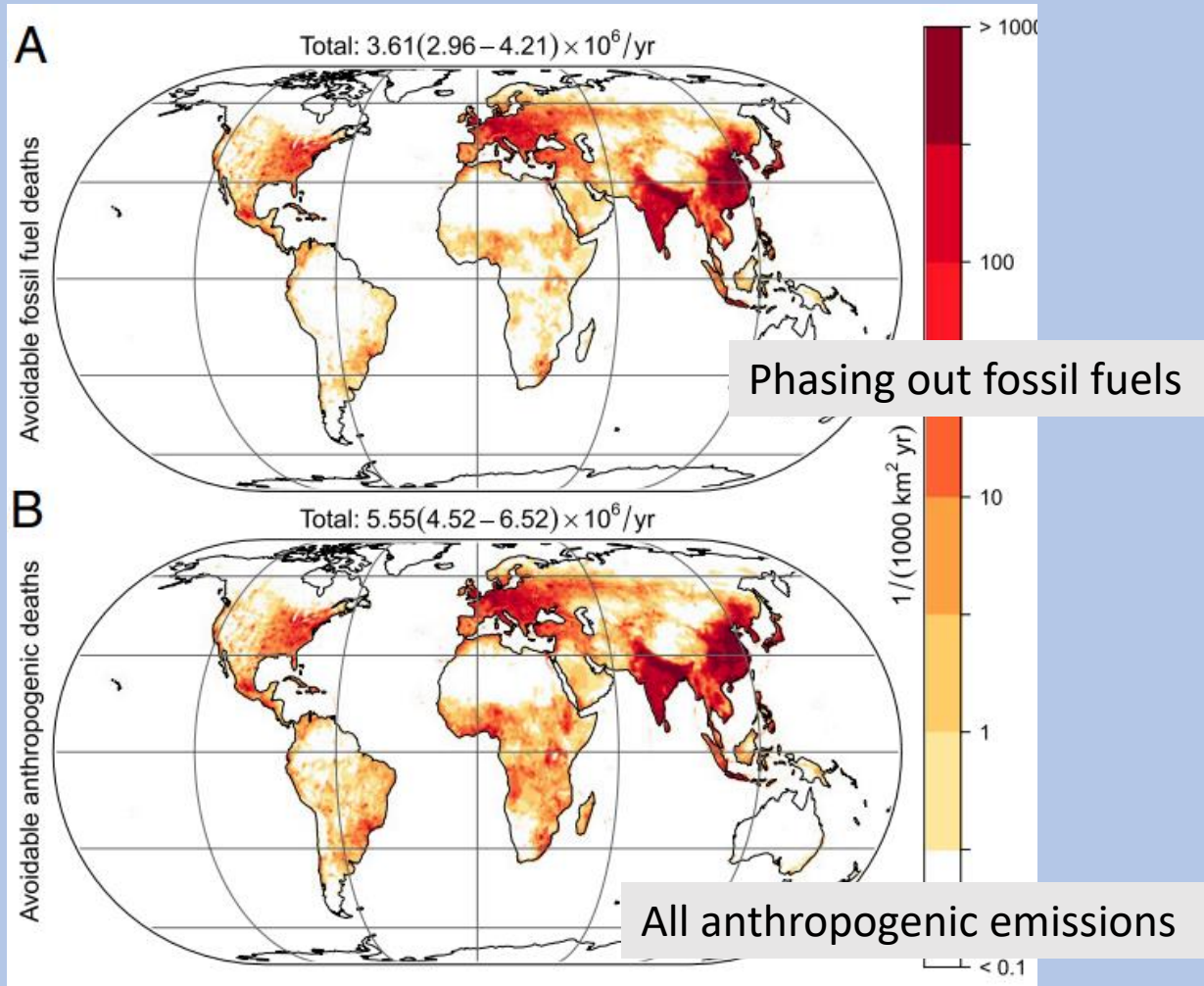
- £17 billion NHS costs (20 years)

WHO Regional Office for Europe, 2016

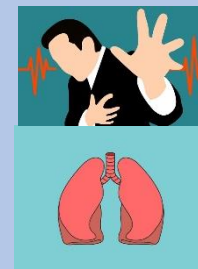




# Evidence: pathways to impacts (energy)



Lelieveld *et al* 2019 - PNAS



12,500 fewer DALY  
per 1M population

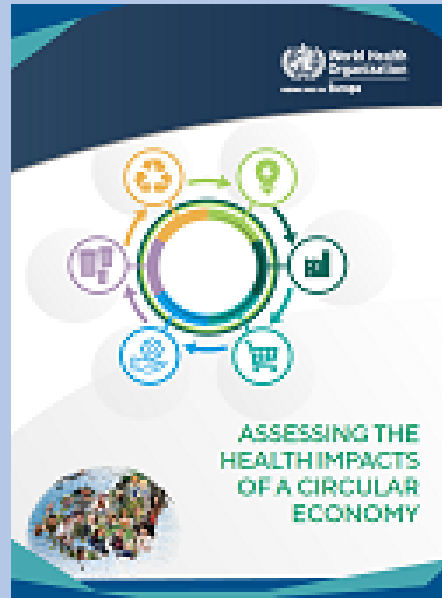
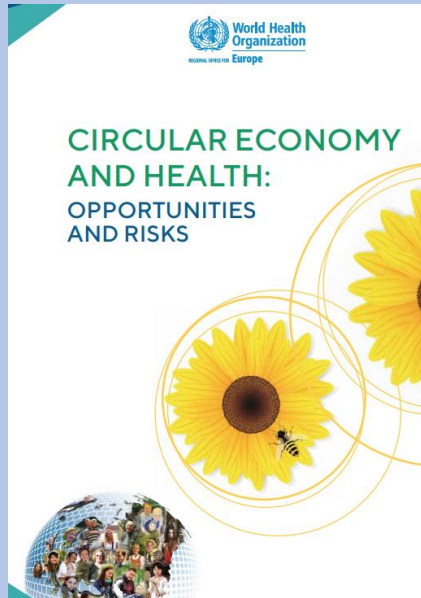


0.1–0.2 MT  
CO<sub>2</sub>-equivalent



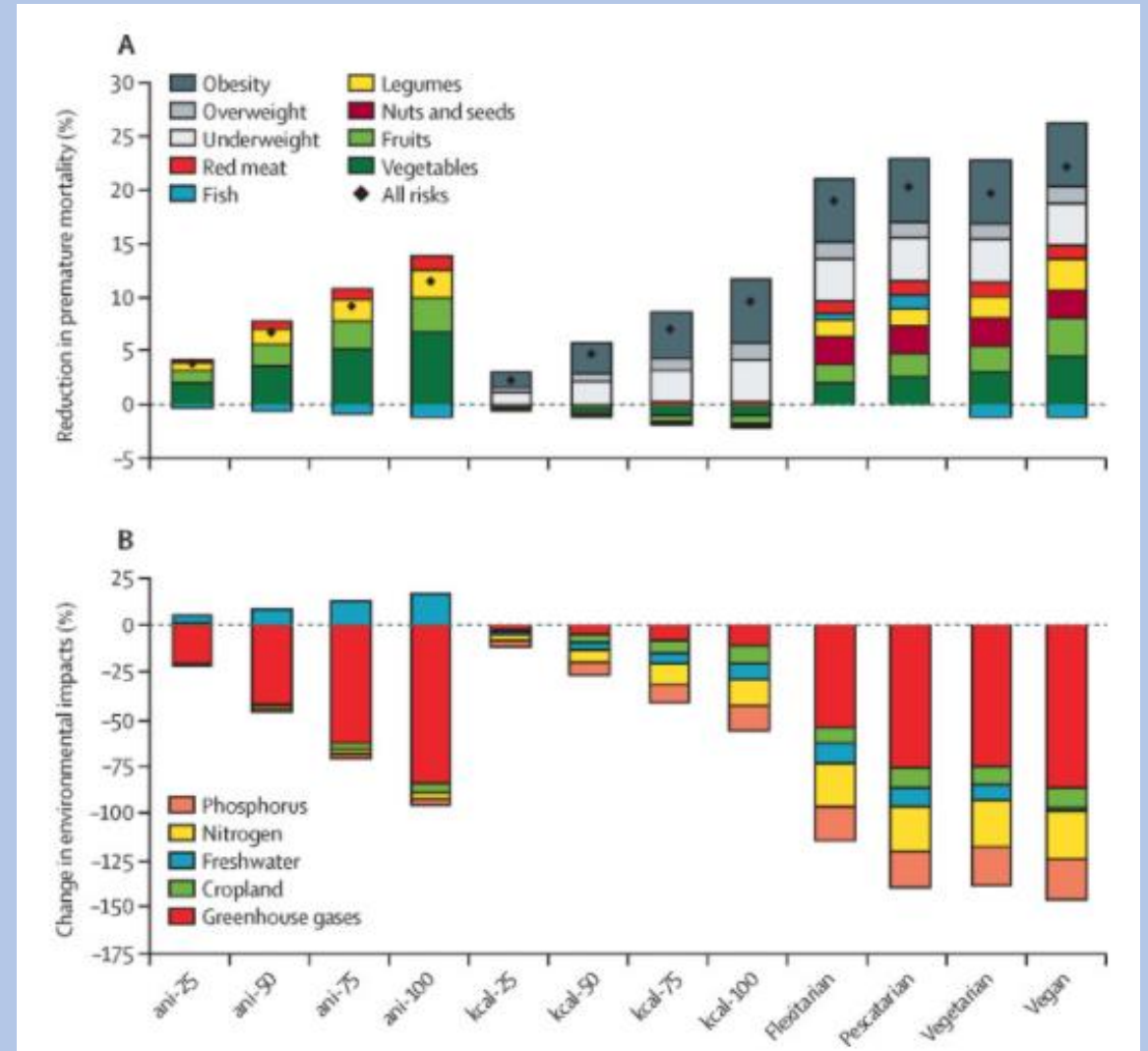
Wilkinson *et al* 2009 - Lancet

# Evidence: pathways to impacts (food & waste)



*“A key [...] conclusion [...] is [...]that the transition to a circular economy could provide a major opportunity to yield substantial health benefits that will contribute to achieving the SDGs.*

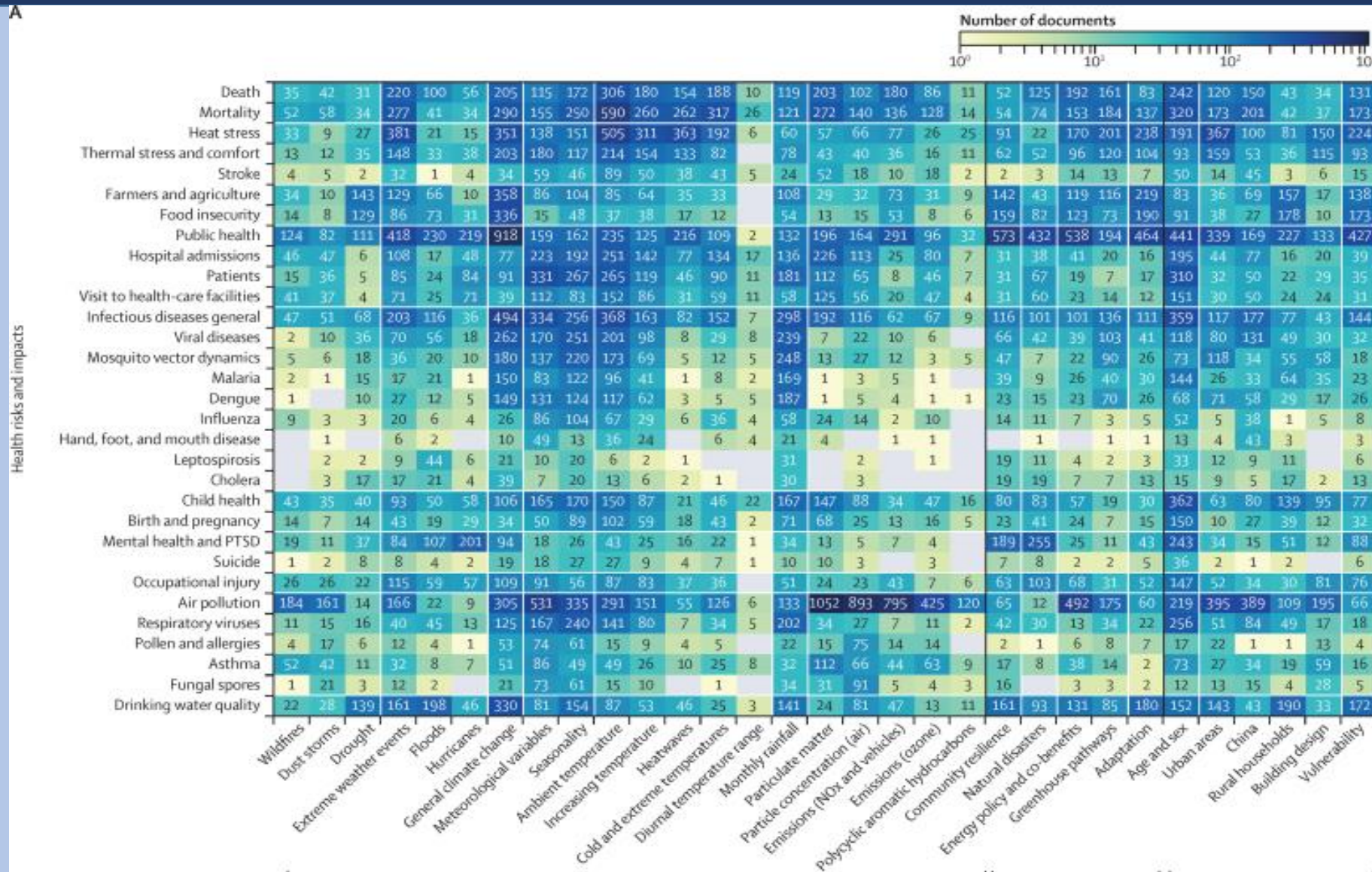
*Nevertheless, the transition also carries risks of adverse unintended health effects, for example, in processes related to hazardous materials.”*



Springmann et al 2018 - Lancet



# Lack of evidence...



Berrang-Ford *et al* 2021  
Lancet Planetary Health

# Opportunities: Supporting Policies



fresh air, clean water,  
healthy soil and  
biodiversity



renovated, energy  
efficient buildings



healthy and affordable  
food



more public transport



cleaner energy and  
cutting-edge clean  
technological  
innovation



longer lasting  
products that can be  
repaired, recycled and  
re-used



future-proof jobs and  
skills training for the  
transition



globally competitive  
and resilient industry



# Opportunities: Supporting Policies – Air pollution



Rialtas na hÉireann  
Government of Ireland

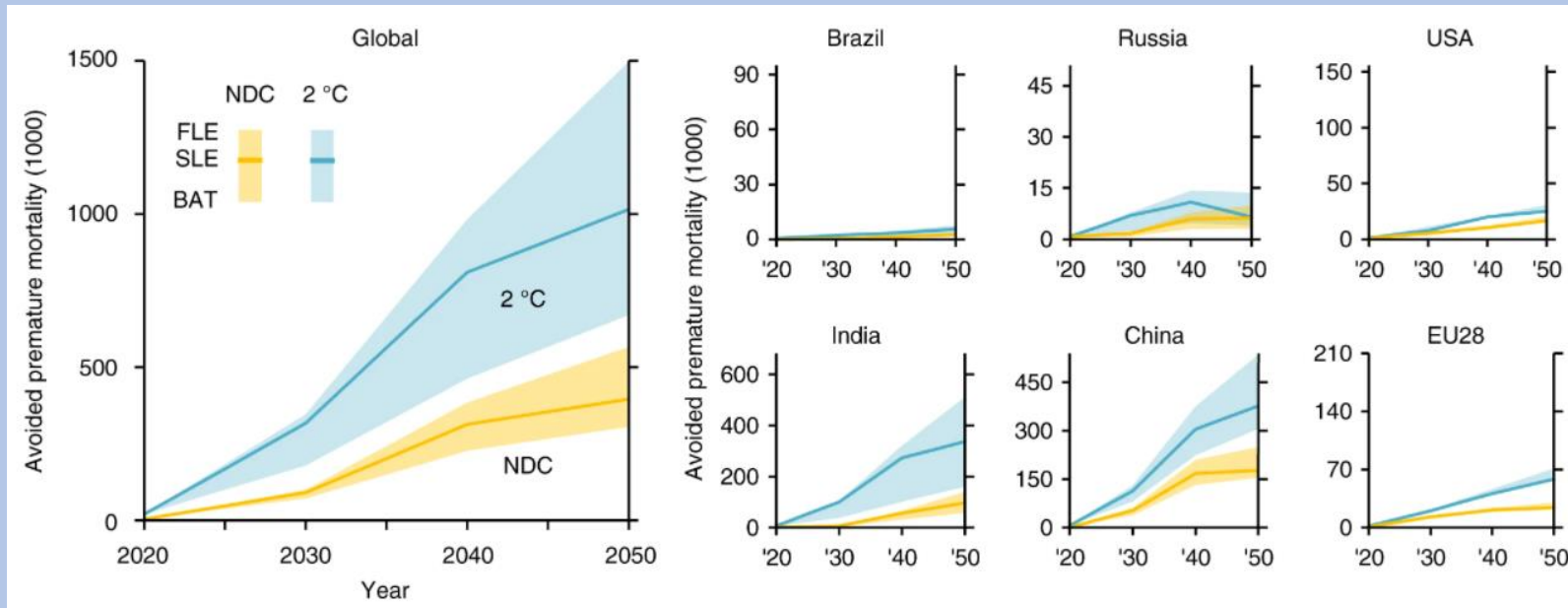
## National Air Pollution Control Programme Report Update 2021

Summary of public consultation submissions  
March 2021

### EU Member States

- National air pollution control programme (NAPCP) - April 2019.
- Policies and measures (PaMs) - relevant for fulfilling their commitments to reduce emissions
- 2020-2029 and 2030 onwards

# Opportunities: Supporting Policies – SLCPs

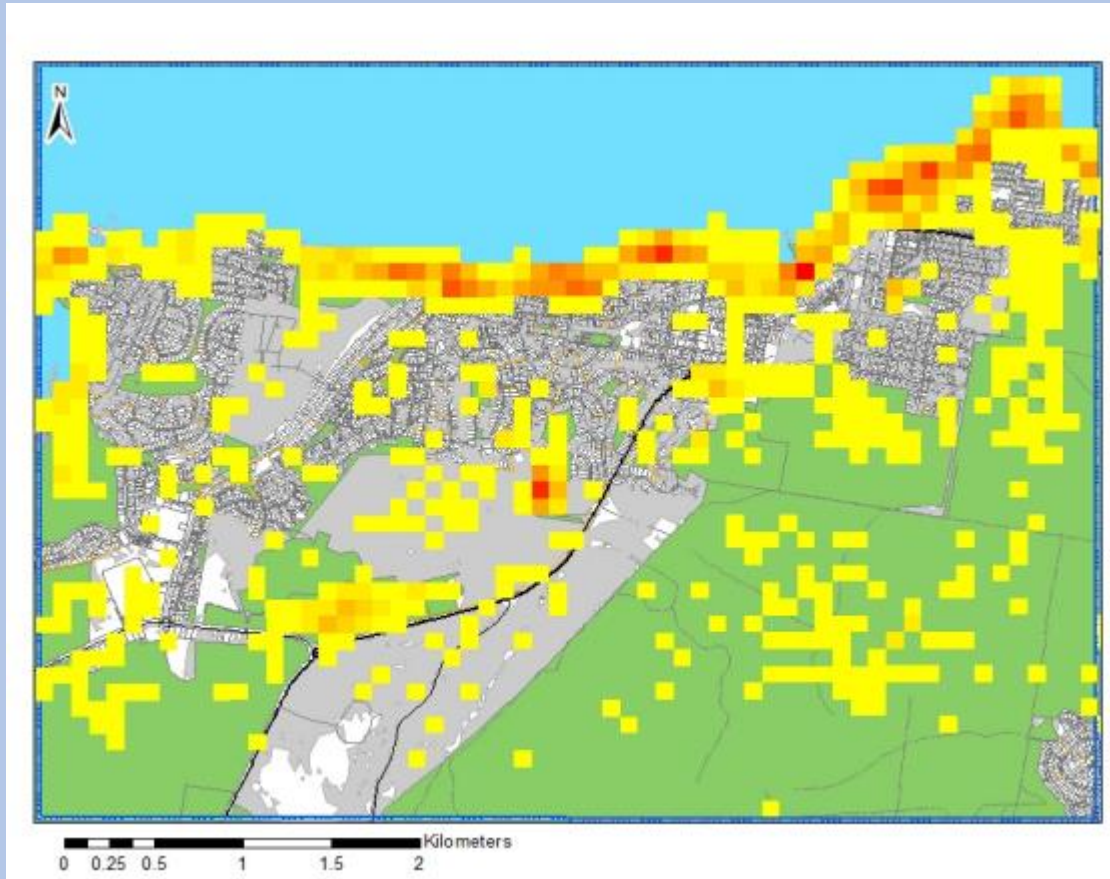


Vandyck *et al* 2018, Nature Communications





# Opportunities: Supporting Policies – Cities

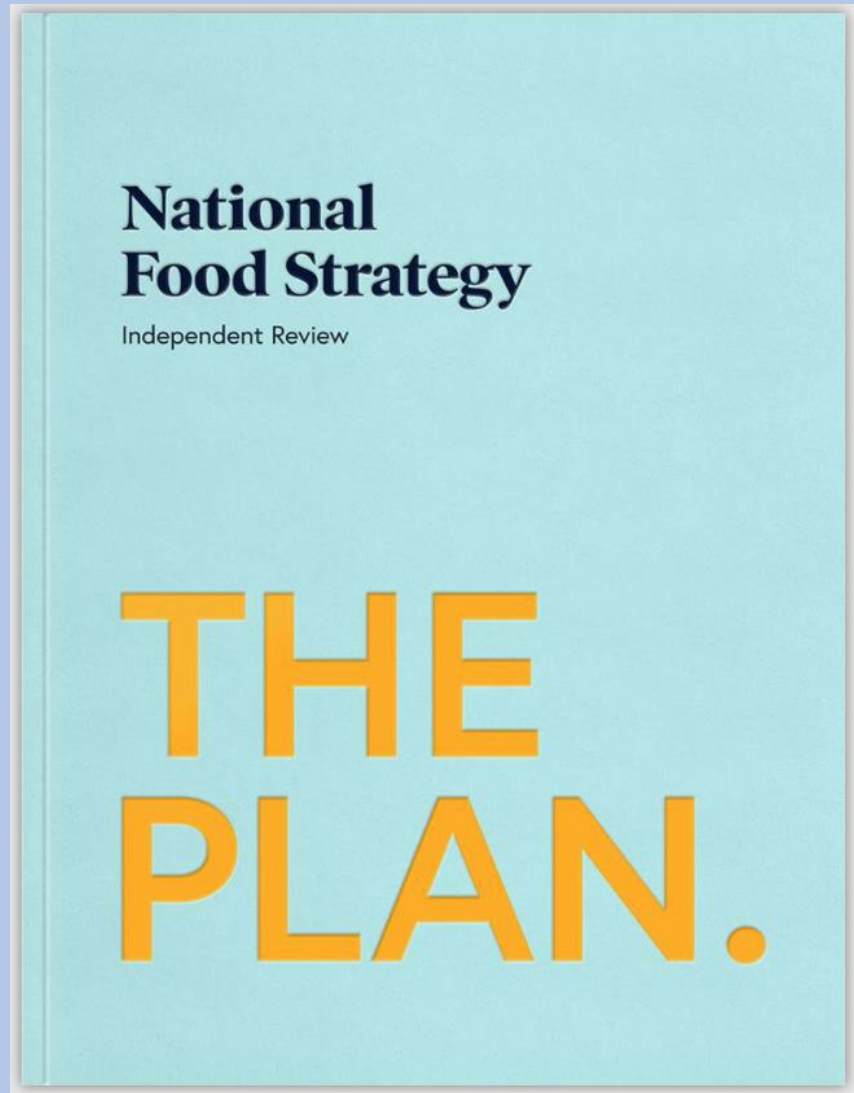


Nelson Bay, Australia



New York, US

# Opportunities: Supporting Policies – Food Systems



FOOD AND FARMING | 21 July 2021 ⌚ 8:00

## Q&A: Will England's National Food Strategy help tackle climate change?

The government has committed to producing a white paper and proposals for future laws in response within the next six months, although the early response from UK prime minister Boris Johnson has been “noncommittal” to many of the NFS proposals, according to [the Guardian](#).



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