



Case: climate change

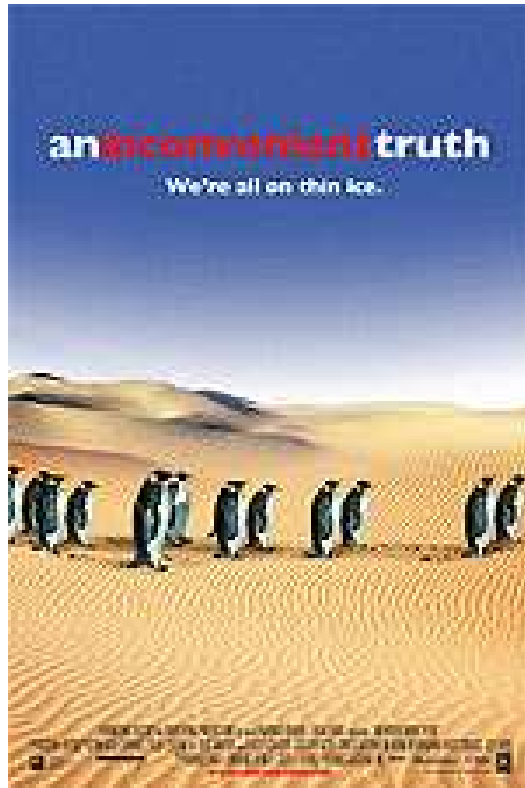
safe

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Climate change

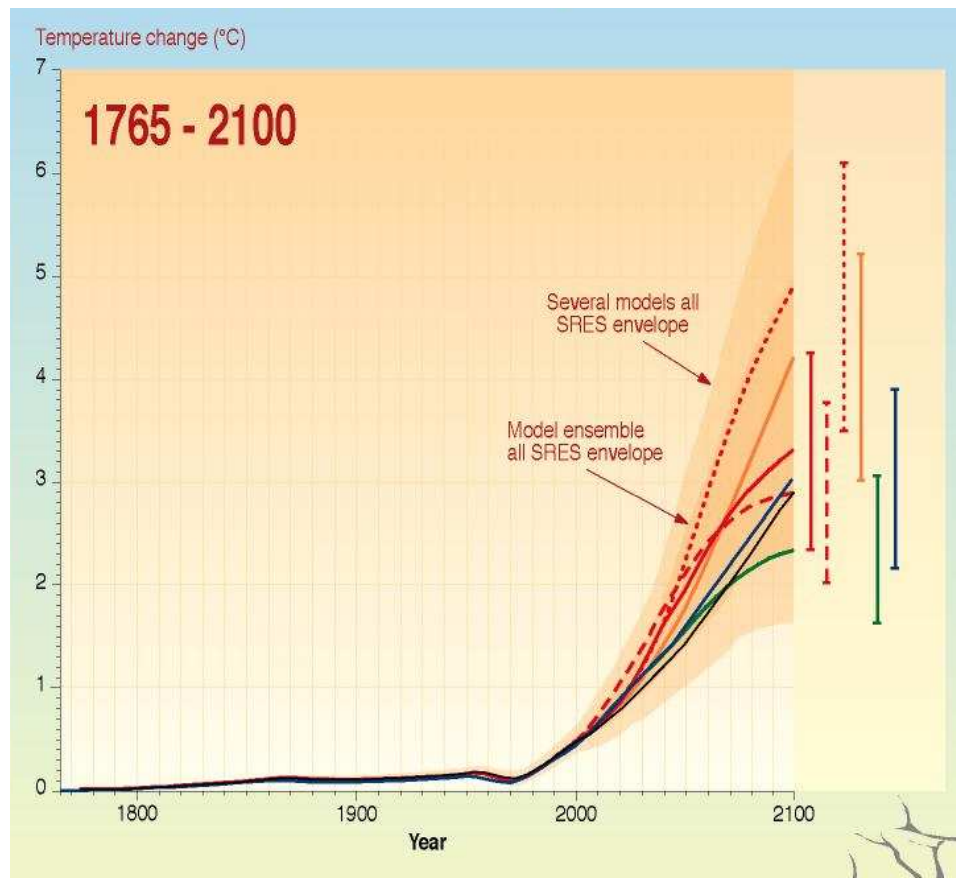
The issue of climate change is increasingly receiving attention



“Branson pledges \$3bn transport profits to fight global warming”

Climate change

The International Panel on Climate Change predicts, for example, that temperatures will rise



Source:
www.ipcc.org



Possible consequences for food safety

- Mycotoxins, fungal growth on crops
 - Aflatoxins (*Aspergillus*): hot and humid
 - Fumonisin (*Fusarium*): more temperate
- Bacterial growth at increased temperatures
 - Marine pathogens in surface water (*Vibrio*)
 - Shorter storability of products post-harvest

Possible consequences for food safety

- Phycotoxins
 - Produced by harmful algal blooms (“red tide”)
 - Climate is one factor influencing formation
 - Similar issue: cyanobacteria in fresh water
- Viruses
 - Accumulation in water-filtering organisms
 - Shorter halflife in warmer water
- Insects
 - Primary concern (biological hazard)
 - Secondary relationships, e.g. zoonotic vectors



Possible consequences for food safety

- Pesticide residues
 - Changes in use due to changed pests/weeds
 - Enhanced evaporation and condensation in colder environments
- Extreme weather conditions
 - Dissemination of contaminants and pathogens more likely
 - Power outages, interruption of cold chains



Participants experiences

- Does any of the above apply to the participants' local environments?
- Which other conditions may prevail?
- How can these risks be mitigated or prevented?

Thanks!
Any questions?

