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Oman Society for Petroleum Services

Visualising and Mobilising Action Defending the Global Commons

Climate change and biodiversity crisis: where do we stand and the way forward?

Muscat, Oman, September 18th, 2022

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العاصمة العربية الرقمية

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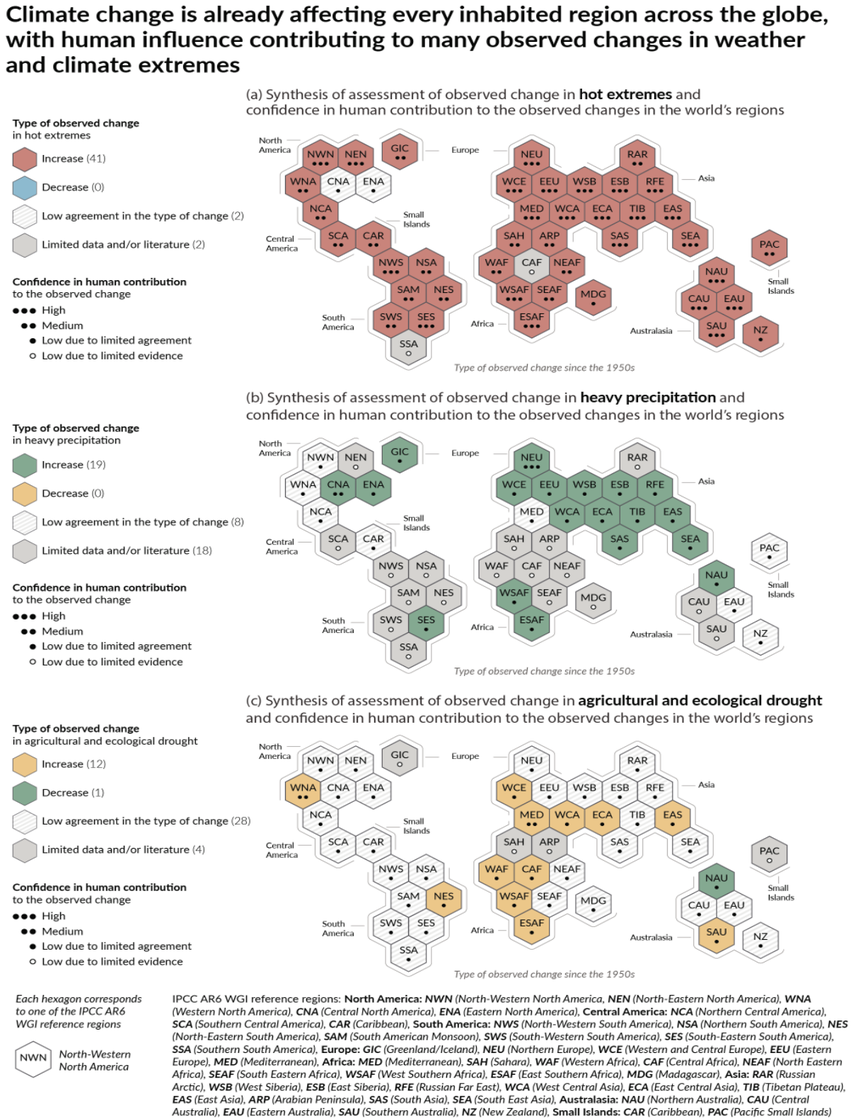
IPCC_AR6_WGI_SPM_Figure_3.png (PNG Image, 2032 × 3013 pixe... https://www.ipcc.ch/report/ar6/wg1/downloads/figures/IPCC_AR6_..

Observed regional changes in hot extremes, rainfall, and drought



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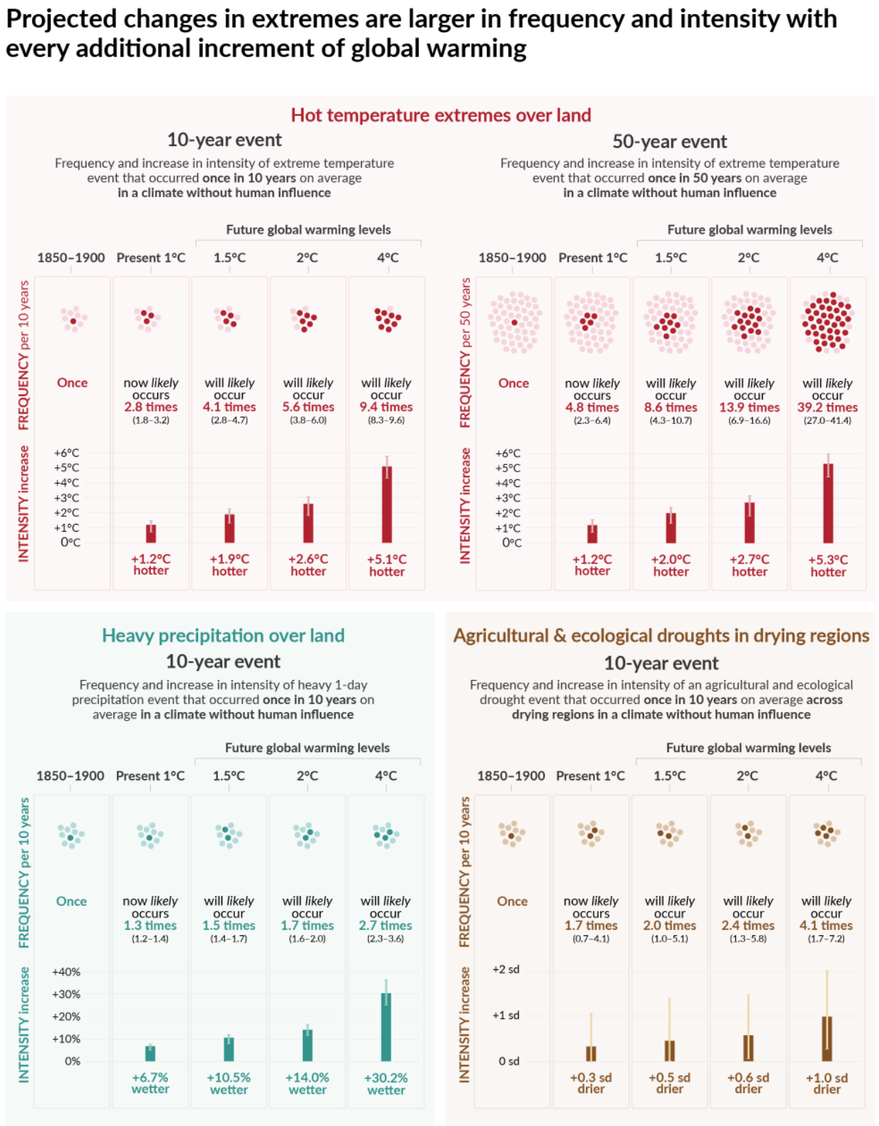
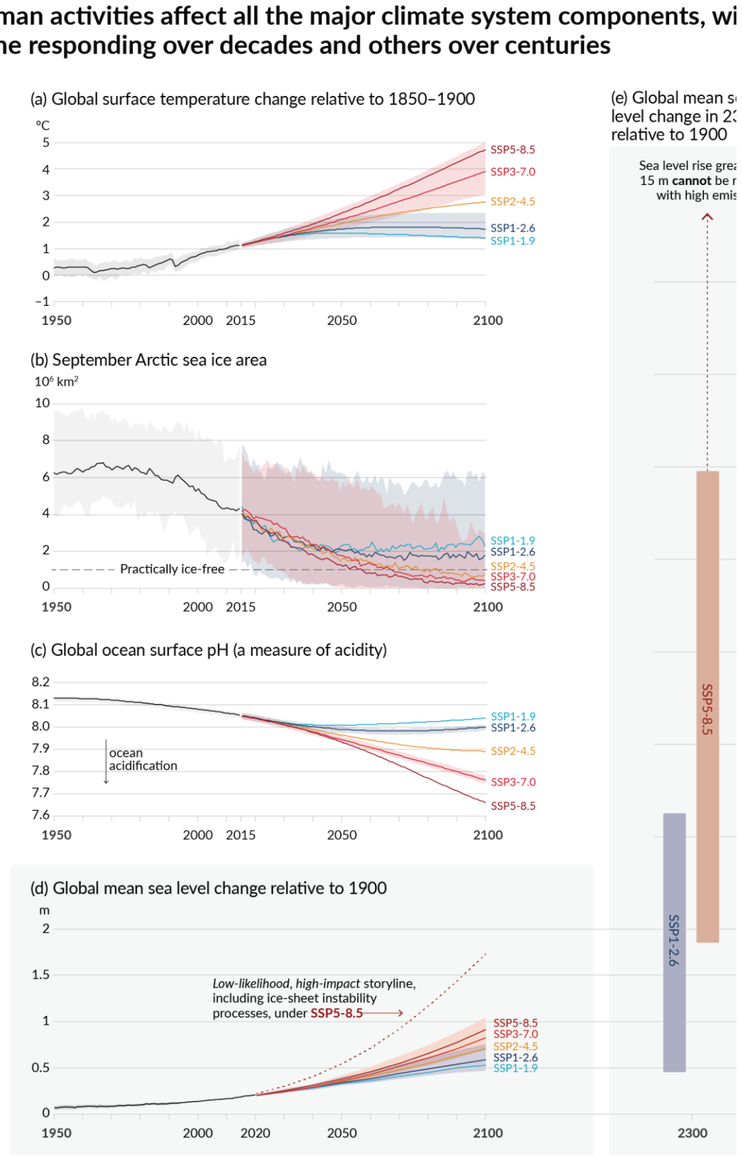
The frequency of extreme events will increase



Predicted changes in temperature, sea ice, ocean pH and sea level

Note: Sea may rise more than 7 meters in the future (2300 vs 1900)

Future of coastal cities?



Key West (Florida) sport fishing in 1950's

Bycatch

Decline in Biodiversity

- Between 1989 and 2016, the abundance of flying insects declined by over 75% in Germany.
- Worldwide, an average 68% drop in mammal, bird, fish, reptile, and amphibian populations since 1970
- The decline is linked to human activities and climate change
- 75% of crops depend on pollinators!

- Not only biodiversity – nature provides **ecosystem services** on large scale

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Sweden's Environmental objectives: A complete failure

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- In 1999 the Swedish parliament identified 15 environmental objectives to be achieved within a generation, adding a 16th in 2005.
- The end date for reaching the objectives (one generation) was set to 2020.
- During the follow-up in 2020: **15 (!) out of the 16** environmental objectives had **not been reached**.
- Reaction from Swedish government(s)?

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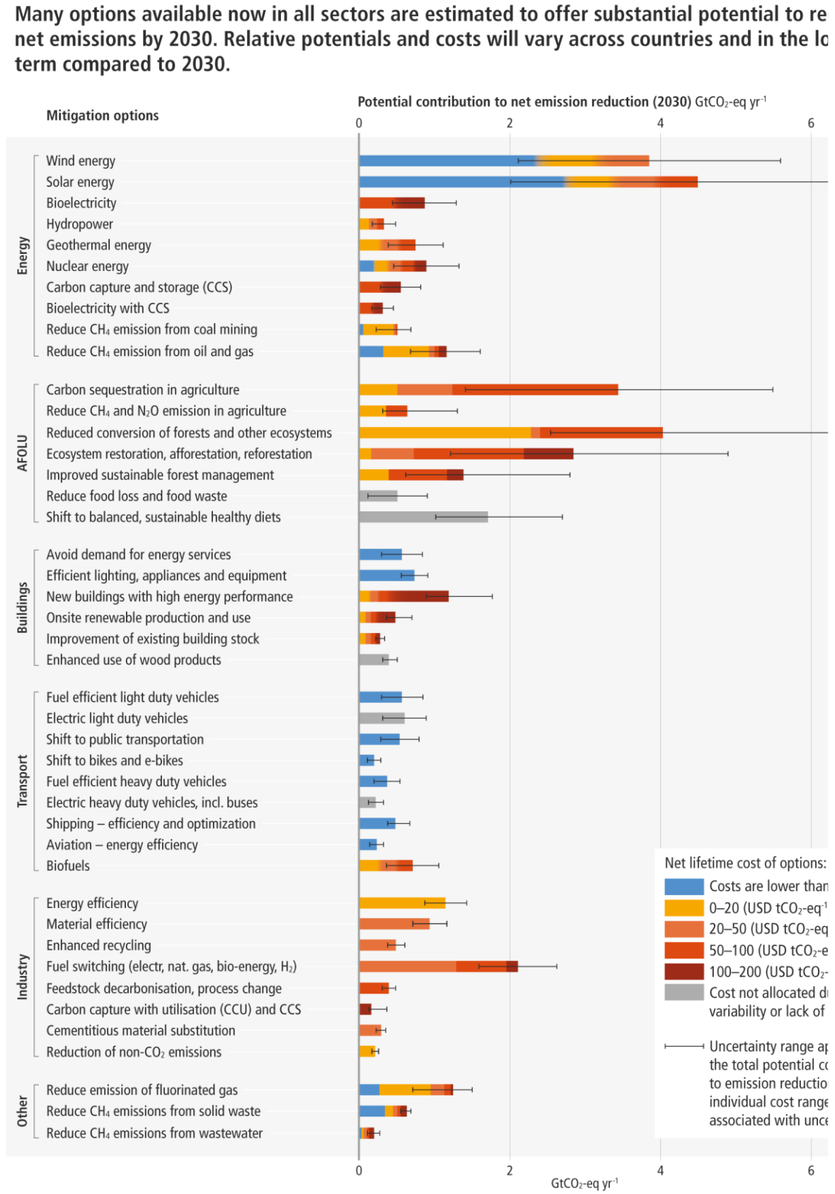
Other Swedish Examples

- Agriculture and Forestry have among the highest potential to mitigate climate change and support biodiversity
- Swedish policy:
  - Sweden actively lobbies to include Forest biomass as a green and sustainable energy source – resulting in immediate increases in greenhouse gas emissions.
  - Sweden actively lobbies to weaken the role of the forest industry to support biodiversity and to enable the continuation of large-scale clear cuts.
  - Swedish government is **actively instructing government agencies not to follow** the ECs directive on **water policy** (2000/60/EC).

Ways forward

Potential to reduce emissions and relative costs



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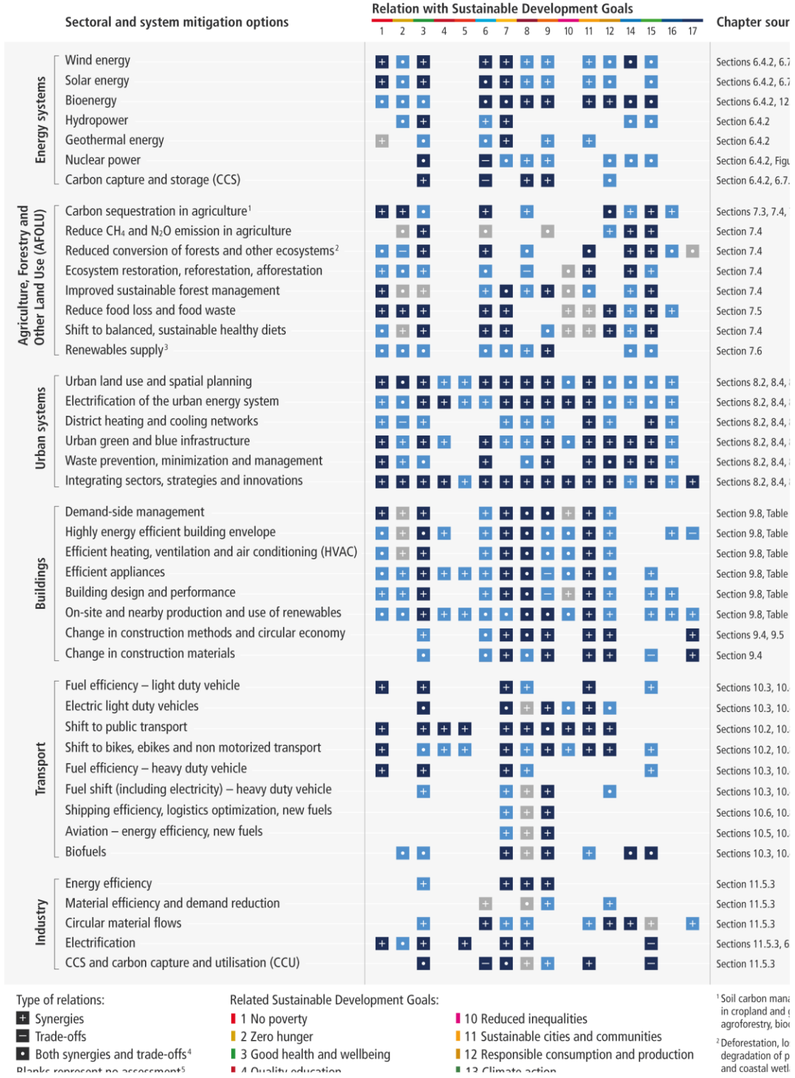
Synergies between mitigation and Sustainable development Goals

Mitigation options have synergies with many Sustainable Development Goals, but some opt can also have trade-offs. The synergies and trade-offs vary dependent on context and scale.



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Ways forward

- **Reduce greenhouse gas emissions:** focus on areas with synergies
- **“Mapping”** and **protecting ecosystem services**
- **Reduce human pressure on biodiversity on land and oceans**: large regions in even densely populated countries are “rewilding” as natural vegetation, and wild animals can exploit the decreased human pressure on rural areas.
- **Reduce toxic pollutants** to support biodiversity, human health, and clean water

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