

2007 Nobel Peace Prize

The Intergovernmental Panel on Climate Change and **Albert Arnold (Al) Gore Jr.** were awarded the Nobel Peace Prize

"...for their efforts to build up and disseminate greater knowledge about man-made climate change, and to lay the foundations for the measures that are needed to counteract such change."

ipcc

INTERGOVERNMENTAL PANEL ON climate change



<https://www.ipcc.ch/>

Climate Change 2023: Synthesis Report of the IPCC AR6 Adaptation Challenges and Opportunities

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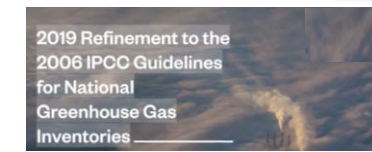
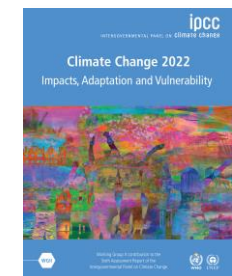
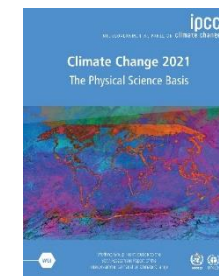
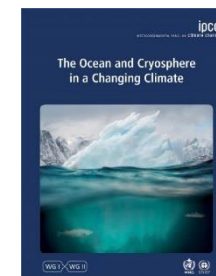
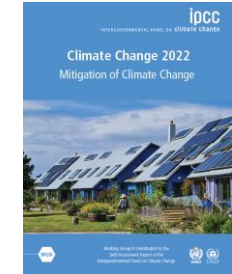
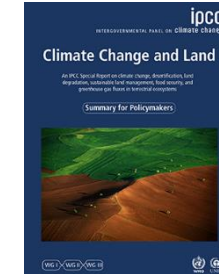
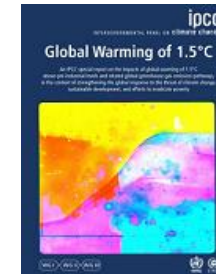
Asian Network on
Climate Science and Technology
(ANCST)

<http://ancst.org>

THE ROLE OF THE IPCC IS...

“... to **assess** on a comprehensive, objective, open and transparent basis the **scientific, technical and socio-economic information** relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts and options for adaptation and mitigation.”

“IPCC reports should be **neutral with respect to policy**, although they may need to **deal objectively with scientific, technical and socio-economic factors** relevant to the application of particular policies.”



Adverse impacts from human-caused climate change will continue to intensify

a) Observed widespread and substantial impacts and related losses and damages attributed to climate change

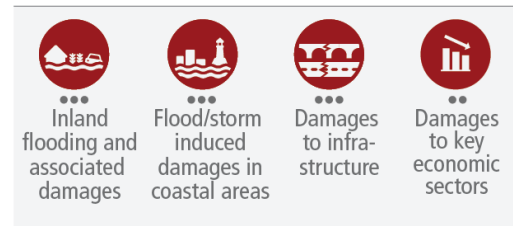
Water availability and food production



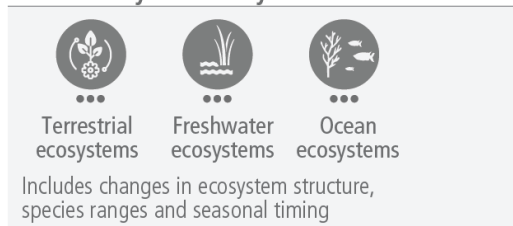
Health and well-being



Cities, settlements and infrastructure



Biodiversity and ecosystems



Key

Observed increase in climate impacts to human systems and ecosystems assessed at **global level**

- Adverse impacts
- Adverse and positive impacts
- Climate-driven changes observed, no global assessment of impact direction

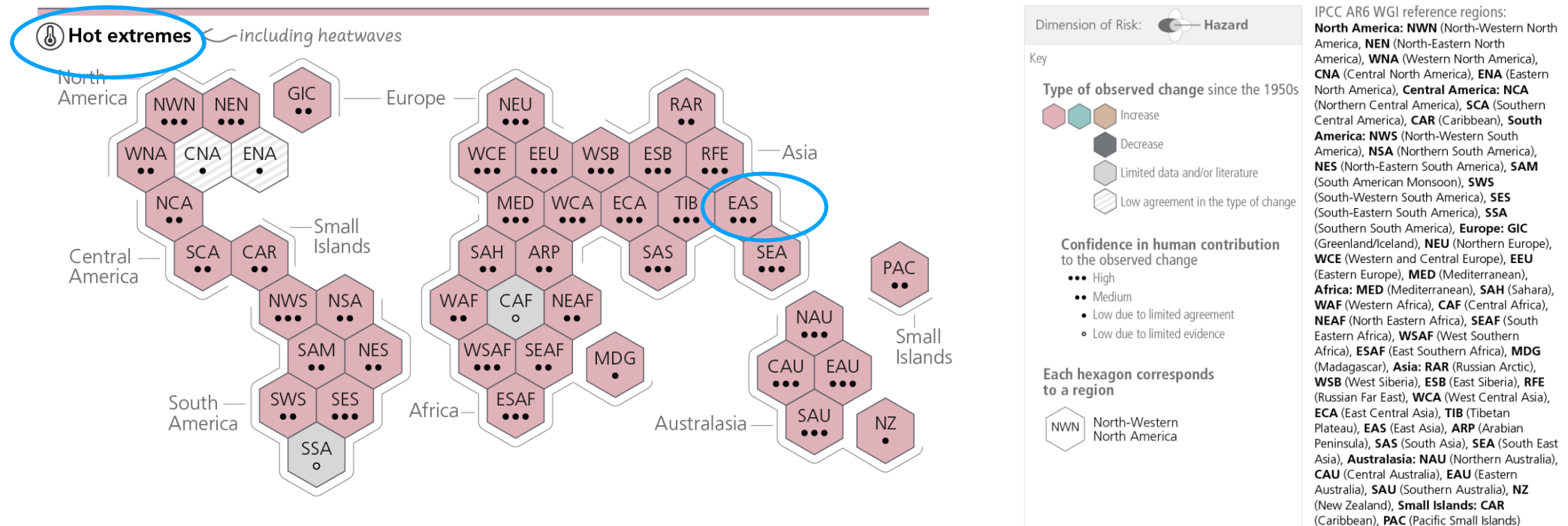
Confidence in attribution to climate change

- High or very high confidence
- Medium confidence
- Low confidence

Source: IPCC AR6 Figure SPM.1 (a), 2023

Climate change has impacted human and natural systems across the world with those who have generally least contributed to climate change being most vulnerable

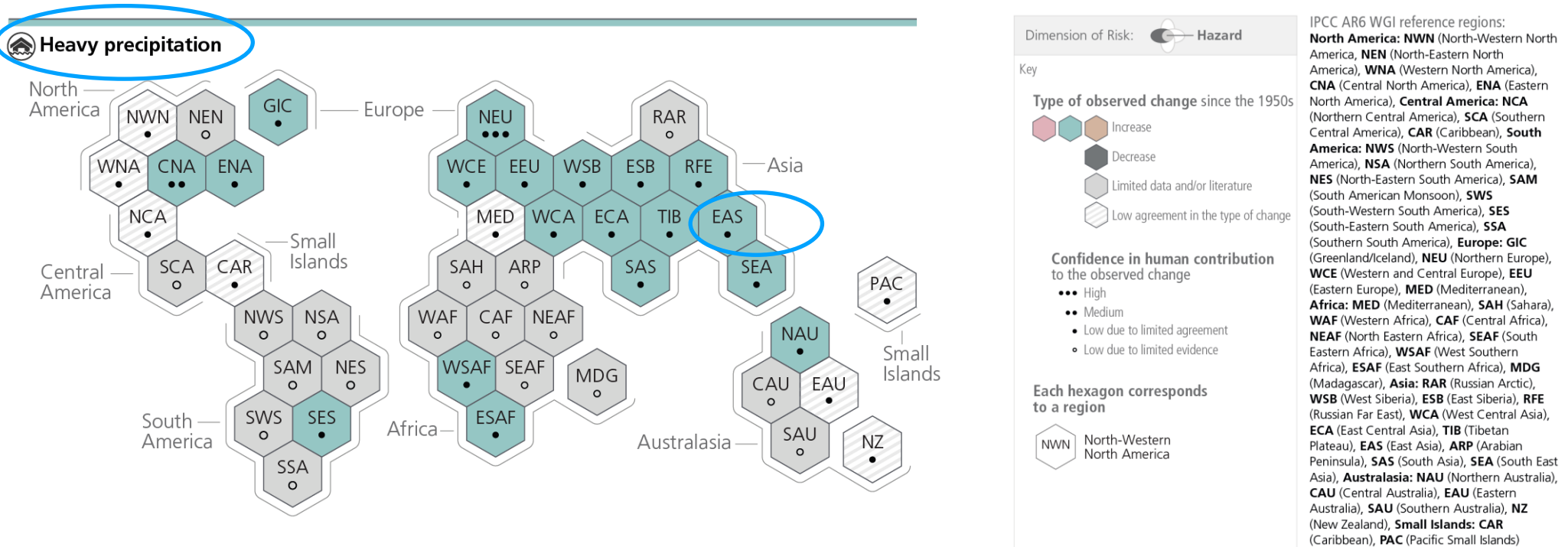
a) Synthesis of assessment of **observed change** in hot extremes, heavy precipitation and drought, and confidence in human contribution to the observed changes in the world's regions



Source: IPCC AR6 Figure 2.3 (a), 2023

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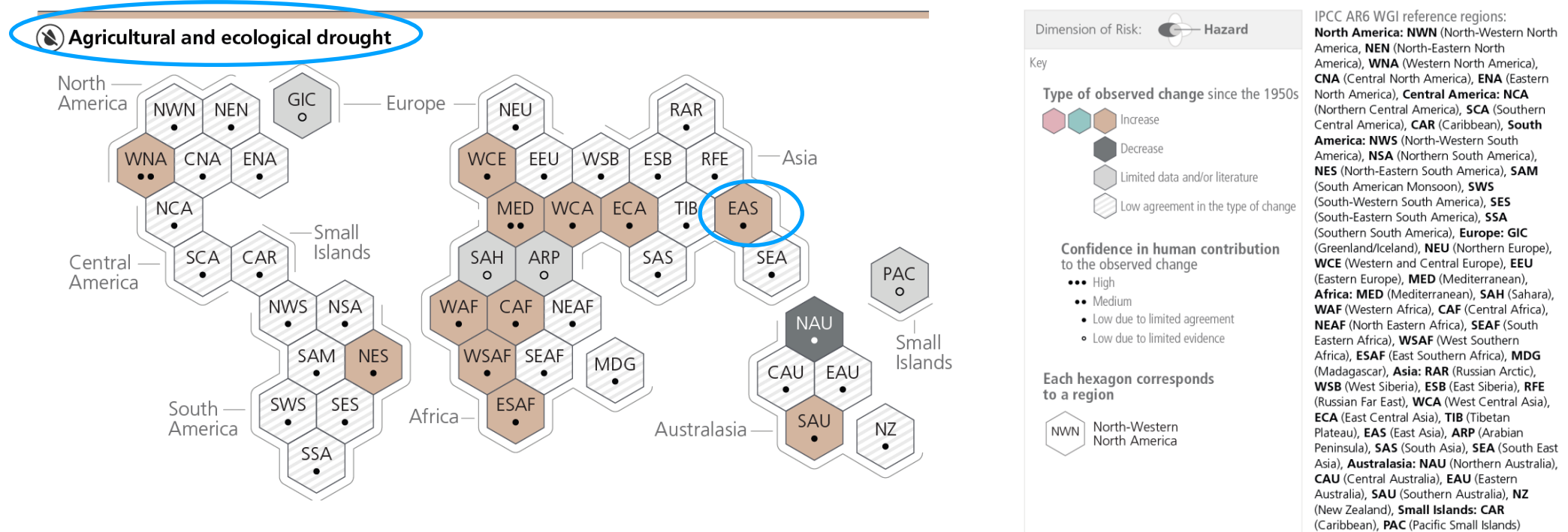
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Source: IPCC AR6 Figure 2.3 (a), 2023

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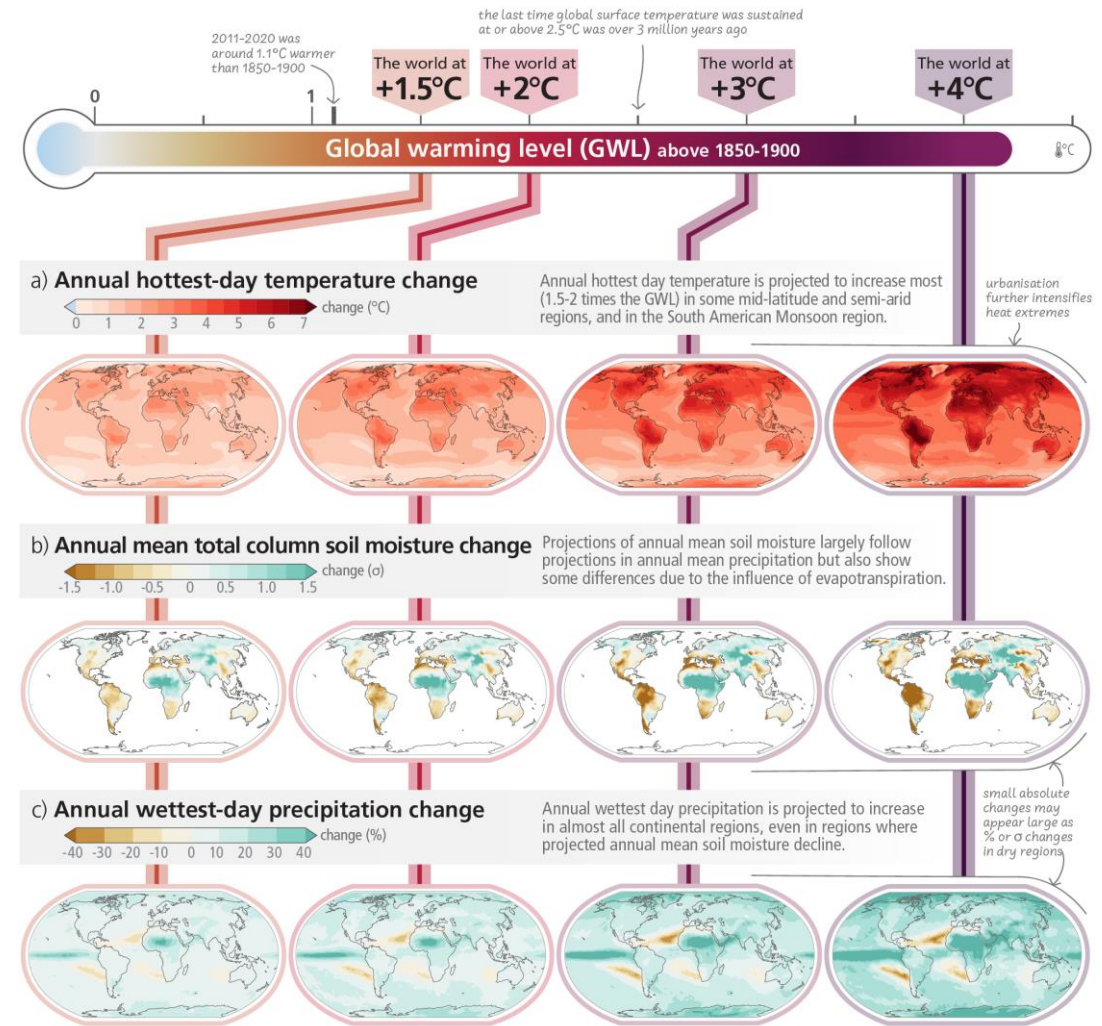


Source: IPCC AR6 Figure 2.3 (a), 2023

With every increment of global warming, regional changes in mean climate and extremes become more widespread and pronounced

IPCC AR6 Figure SPM.2

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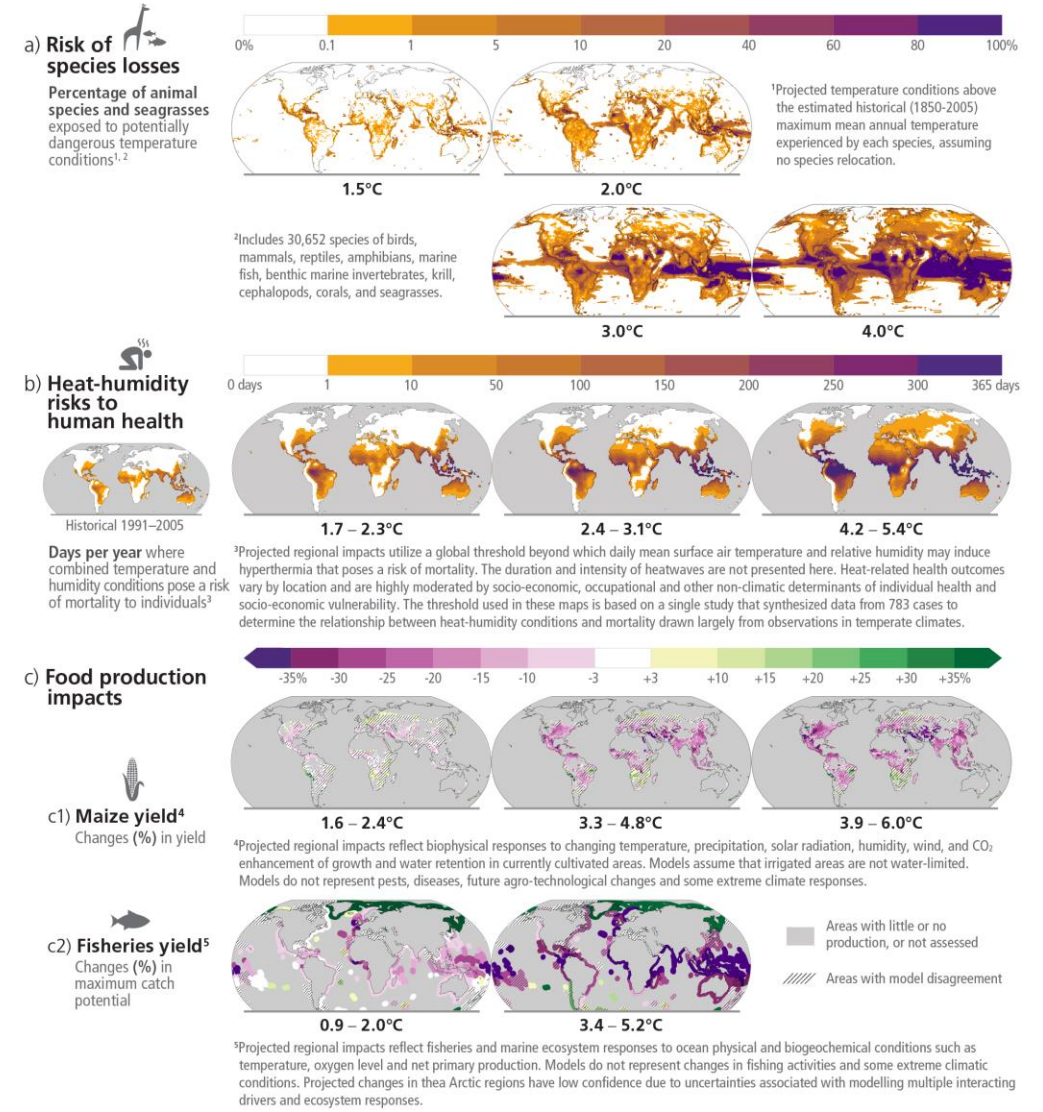


Future climate change is projected to increase the severity of impacts across natural and human systems and will increase regional differences

IPCC AR6 Figure SPM.3

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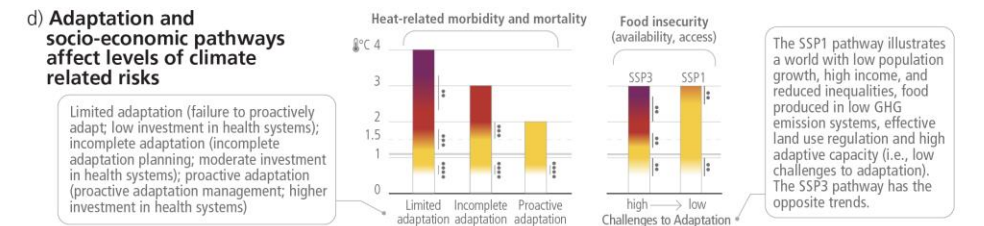
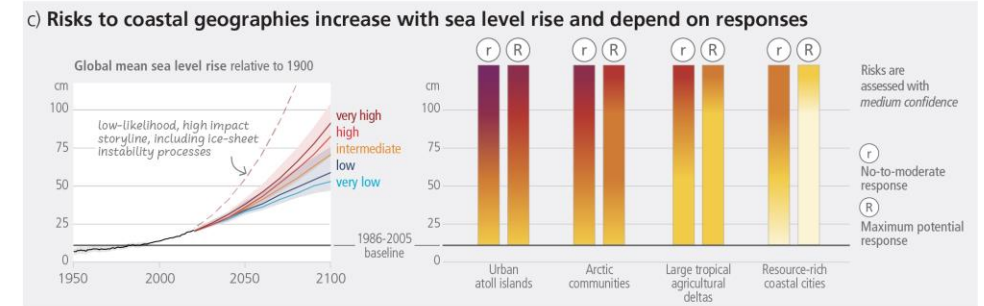
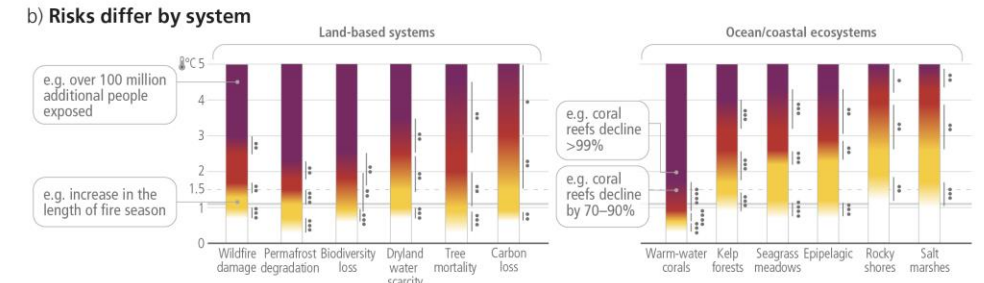
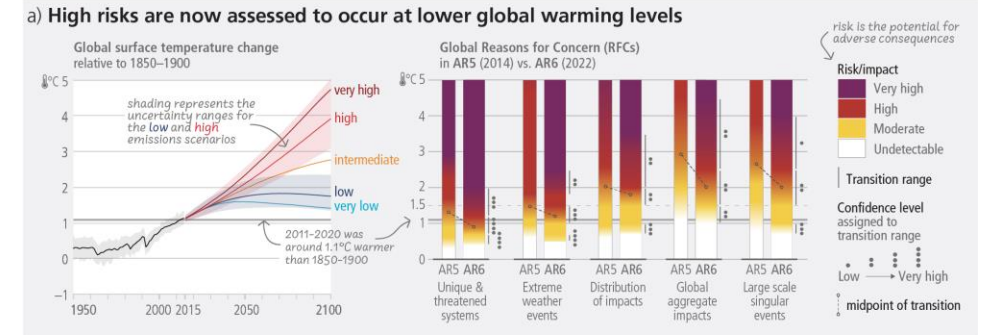
Examples of impacts without additional adaptation



Risks are increasing with every increment of warming

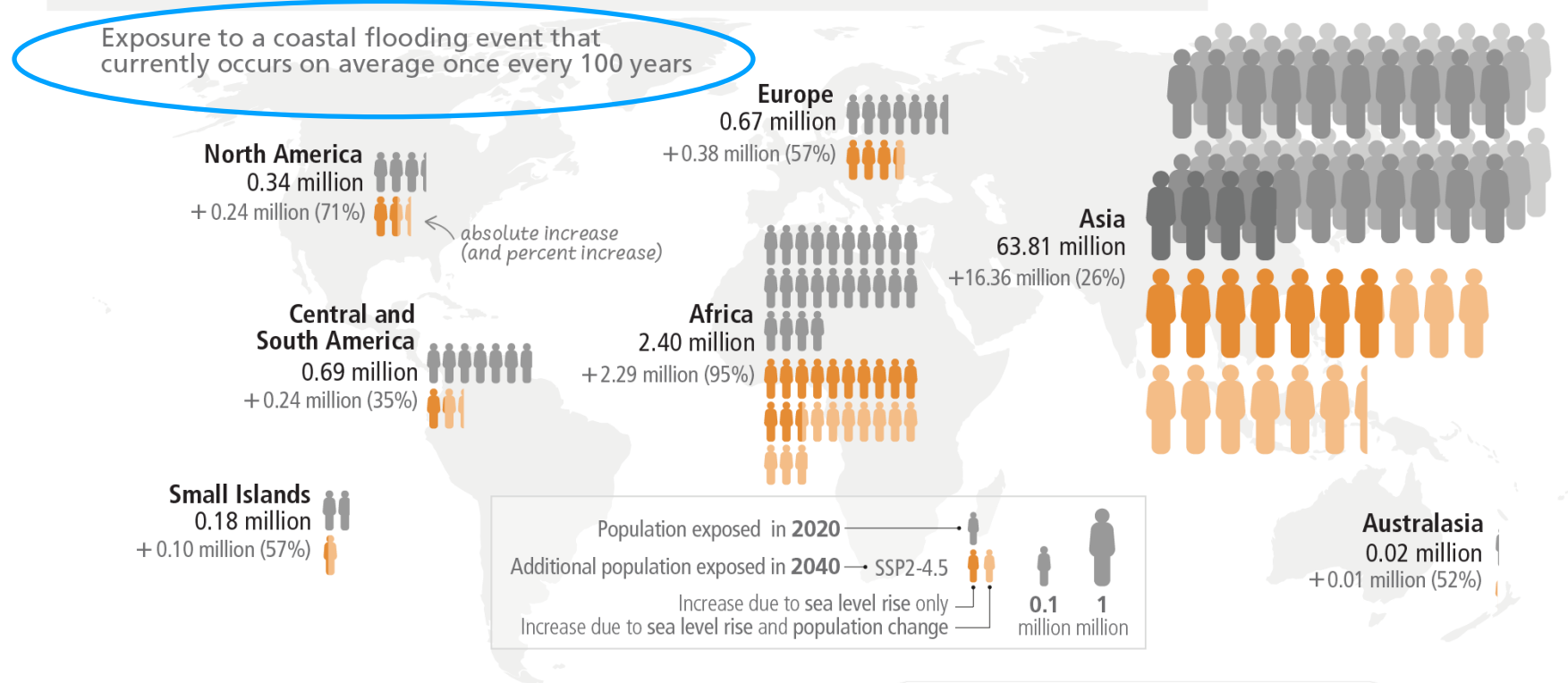
IPCC AR6 Figure SPM.4

Risks are increasing with every increment of warming



Every Region faces more severe and/or frequent compound and cascading climate risks

a) Increase in the population exposed to sea level rise from 2020 to 2040



Source: IPCC AR6 Figure 4.3 (a), 2023

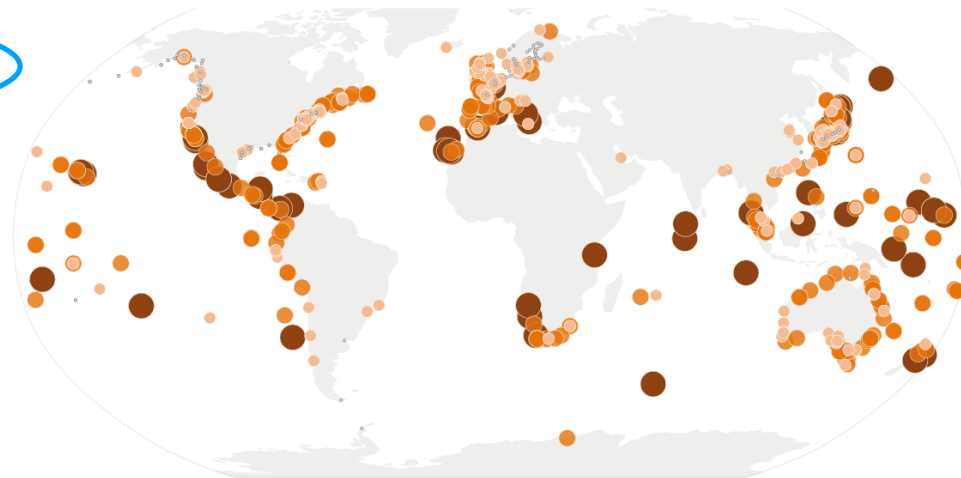
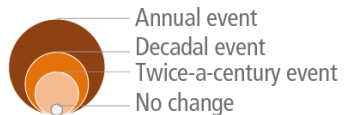
Every Region faces more severe and/or frequent compound and cascading climate risks

b) Increased frequency of extreme sea level events by 2040

Frequency of events that currently occur on average once every 100 years

The absence of a circle indicates an inability to perform an assessment due to a lack of data.

Projected change to 1-in-100 year events under the intermediate SSP2-4.5 scenario

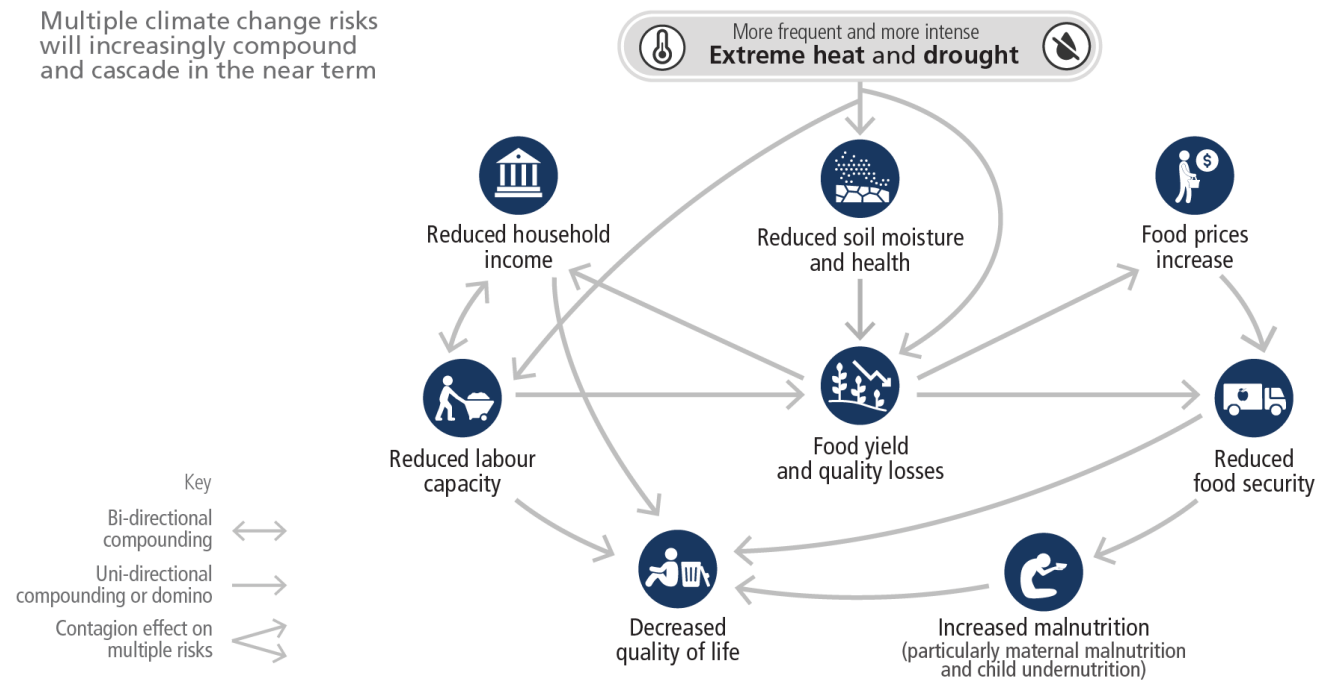


Source: IPCC AR6 Figure 4.3 (b), 2023

Every Region faces more severe and/or frequent compound and cascading climate risks

c) Example of complex risk, where impacts from climate extreme events have cascading effects on food, nutrition, livelihoods and well-being of smallholder farmers

Multiple climate change risks will increasingly compound and cascade in the near term



Source: IPCC AR6 Figure 4.3 (c), 2023

Limiting warming to 1.5°C and 2°C involves rapid, deep, and in most cases immediate greenhouse gas emission reductions

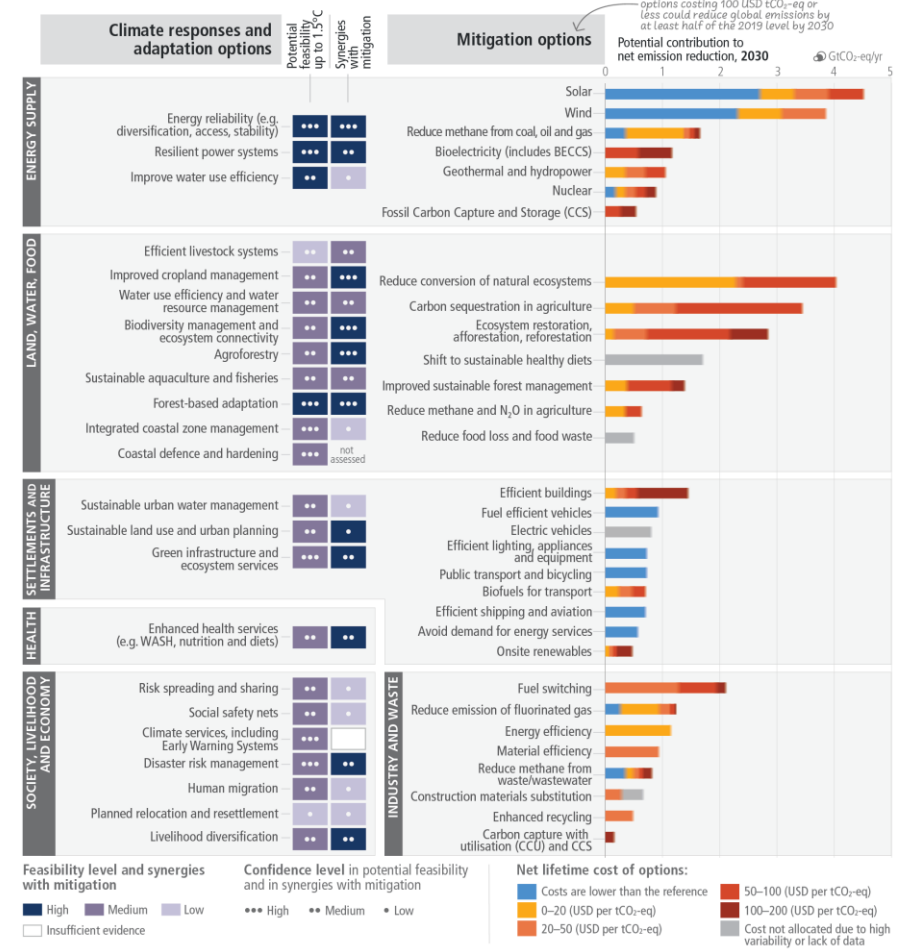
IPCC AR6 Figure SPM.5

There are multiple opportunities for scaling up climate action

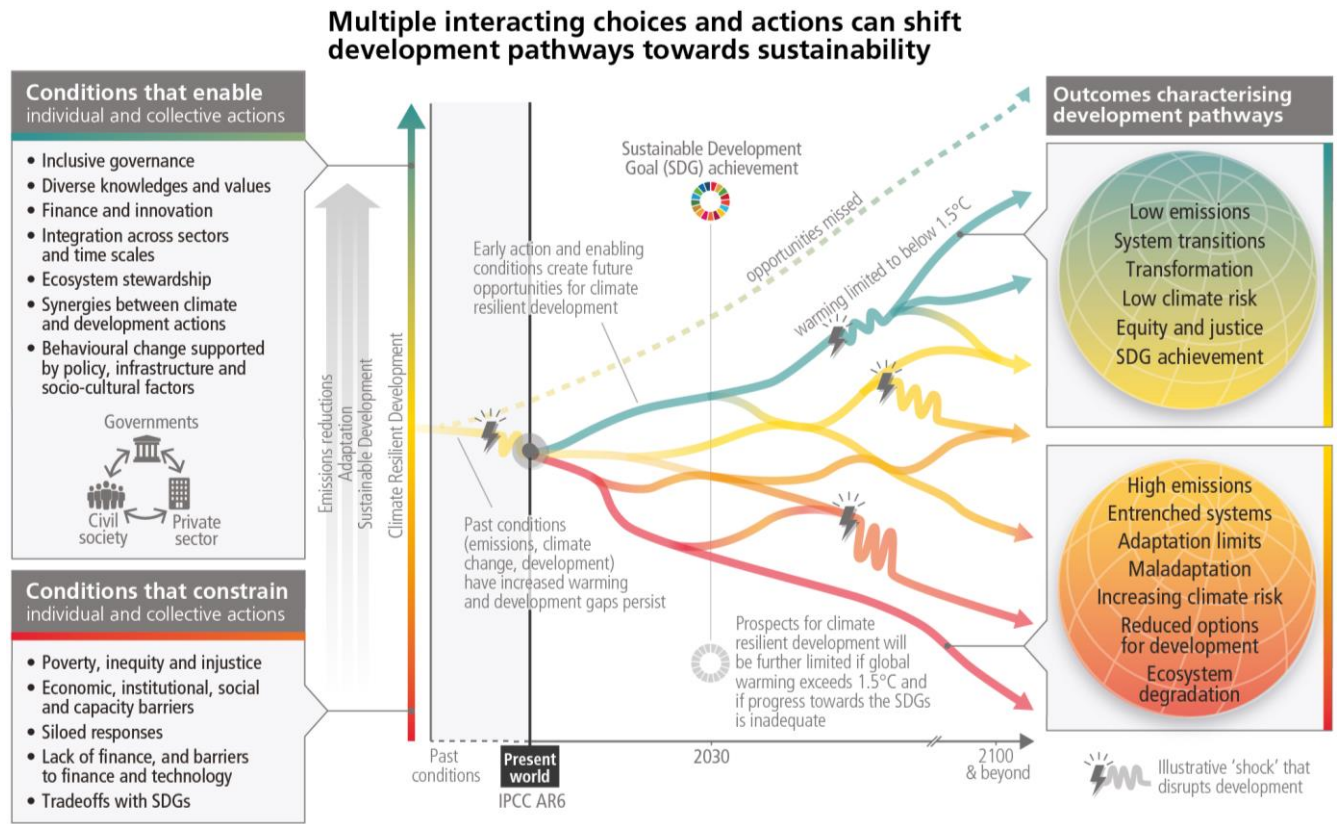
IPCC AR6 Figure SPM.7

There are multiple opportunities for scaling up climate action

a) Feasibility of climate responses and adaptation, and potential of mitigation options in the near-term



There is a rapidly narrowing window of opportunity to enable climate resilient development



Climate Resilient Development:
The process of implementing mitigation and adaptation together in support of sustainable development for all (AR6 WG II)

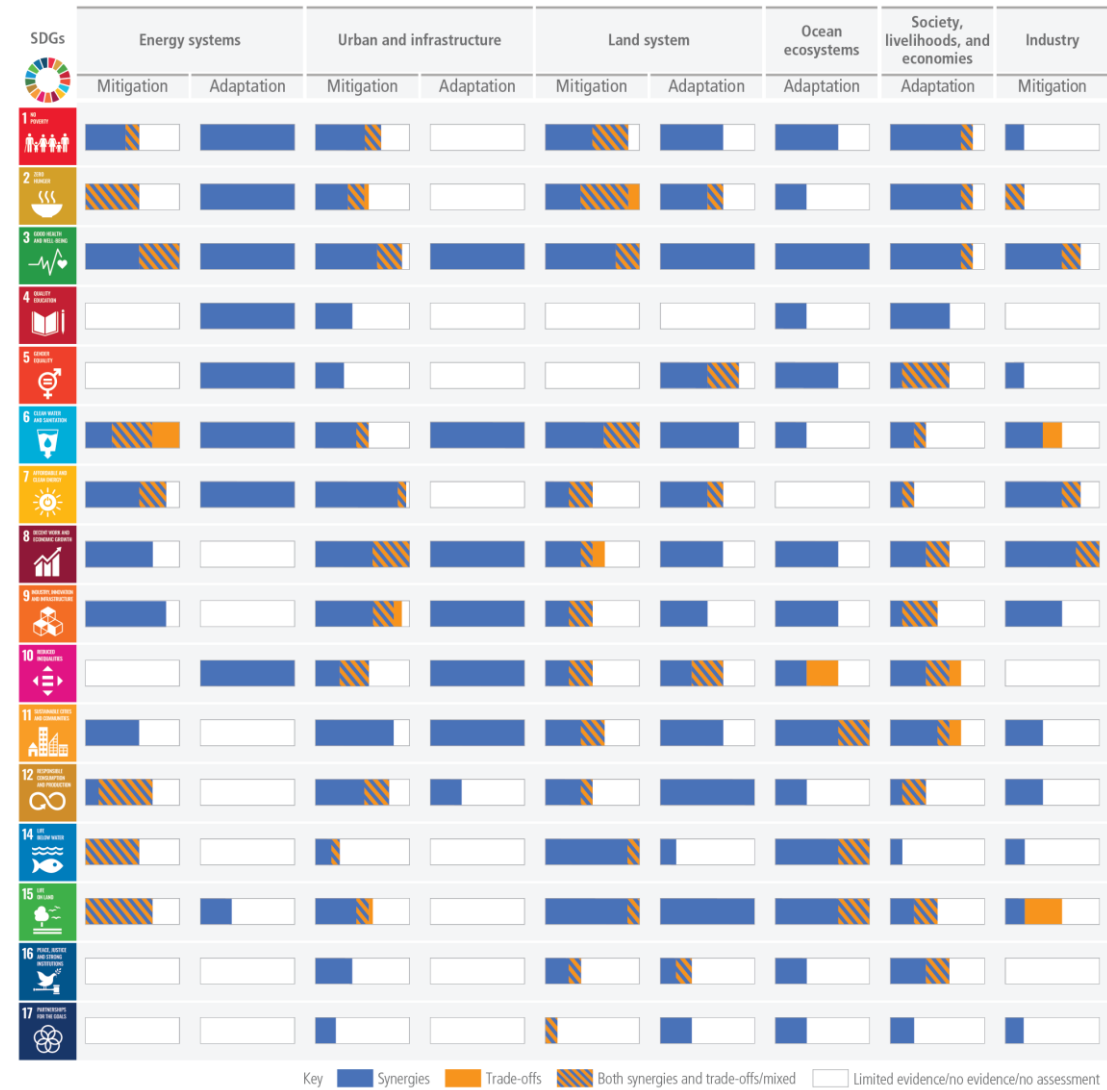
Source: IPCC AR6 Figure SPM. 6, 2023

Near-term adaptation and mitigation actions have more synergies than trade-offs with Sustainable Development Goals (SDGs)

IPCC AR6 Figure 4.5

Near-term adaptation and mitigation actions have more synergies than trade-offs with Sustainable Development Goals (SDGs)

Synergies and trade-offs depend on context and scale



Concluding Remarks

- ❑ IPCC **advocates science** and does not participate in political negotiations.
- ❑ Climate change is a threat to human well-being and planetary health. Transformative actions at an unprecedented scale is required to **limit global warming to 1.5°C**.
- ❑ These include **deep emissions cuts for GHG emissions to peak by 2025 and reduced by 43% by 2030** in all sectors, deployment of a range of technologies, behavioral changes as well as increased investment in low carbon options.
- ❑ There is a rapidly narrowing window of opportunity to enable **climate resilient development**.
- ❑ There are **multiple opportunities for scaling up climate action**, with higher mitigation investment flows required for all sectors and regions to limit global warming.

The science
is clear

The time for
action is now

**Our world needs climate action on all fronts –
everything, everywhere, all at once,”**

UN Secretary-General António Guterres

Thank you very much!