



Sixth Assessment Report

Synthesis Report

20 March 2023



Fog Opening the Dawn

Chung Jin Sil

Weather and Climate Photography & Video Contest 2021

Korea Meteorological Administration

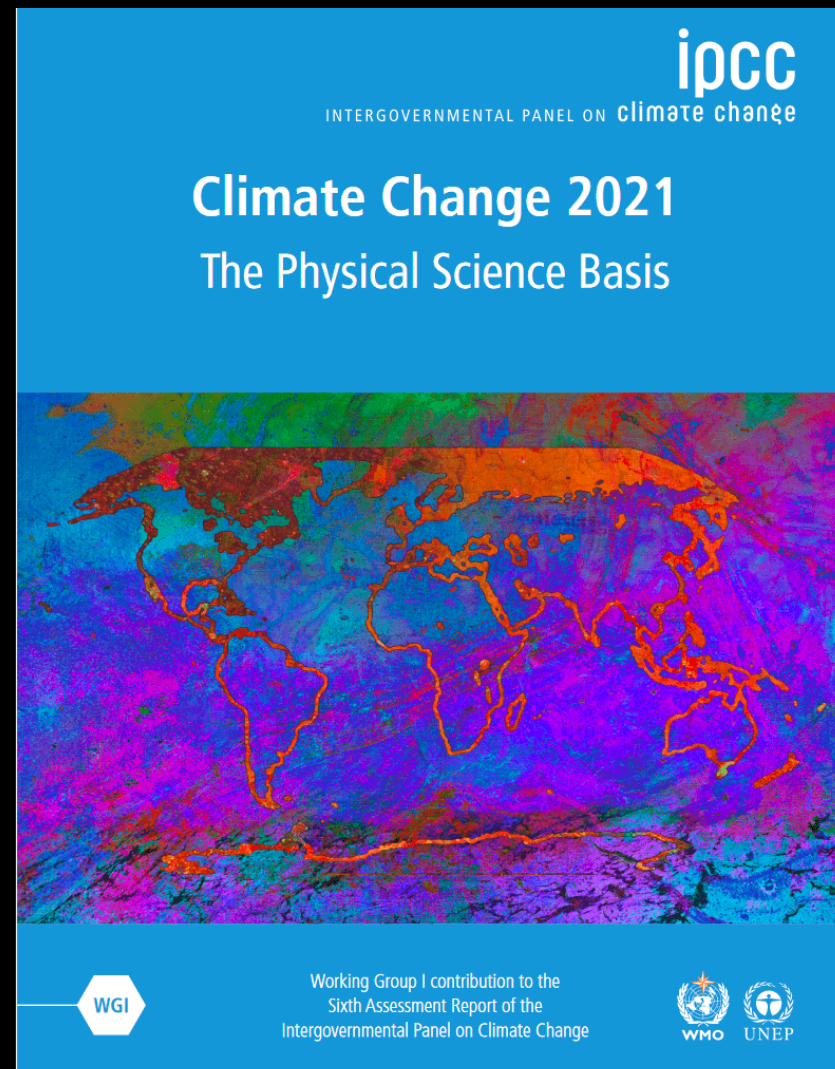
The State of Knowledge about Climate Change

WGI

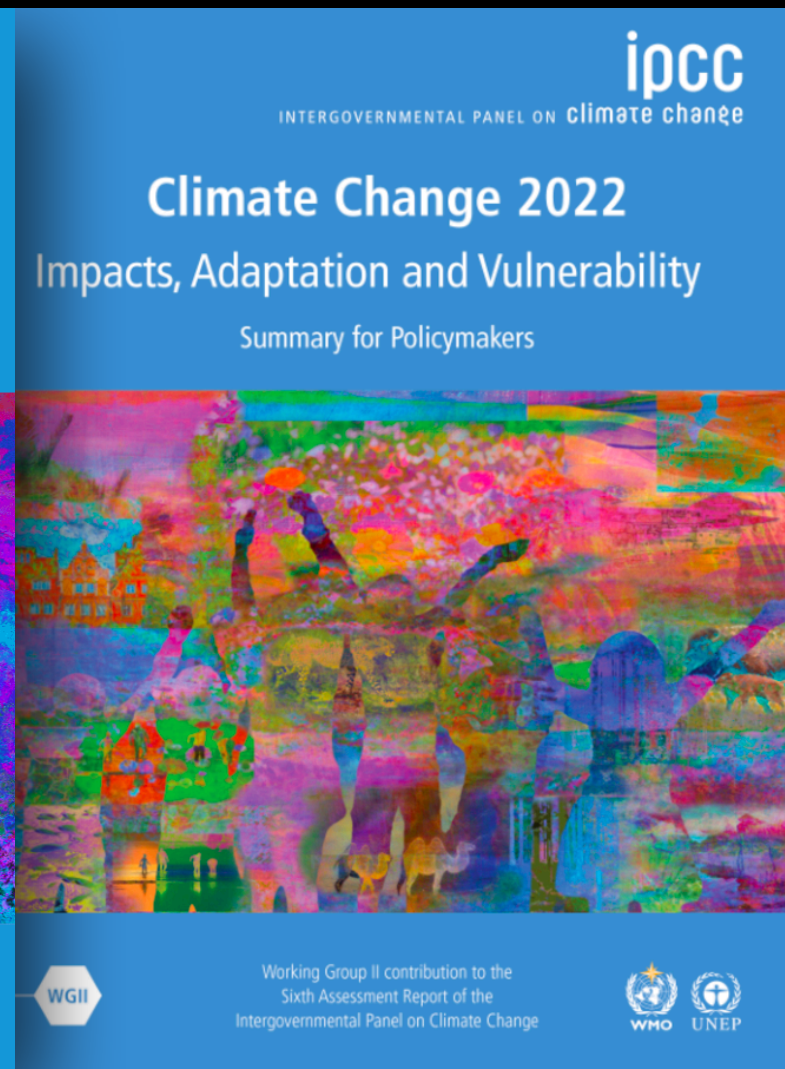
WGII

WGIII

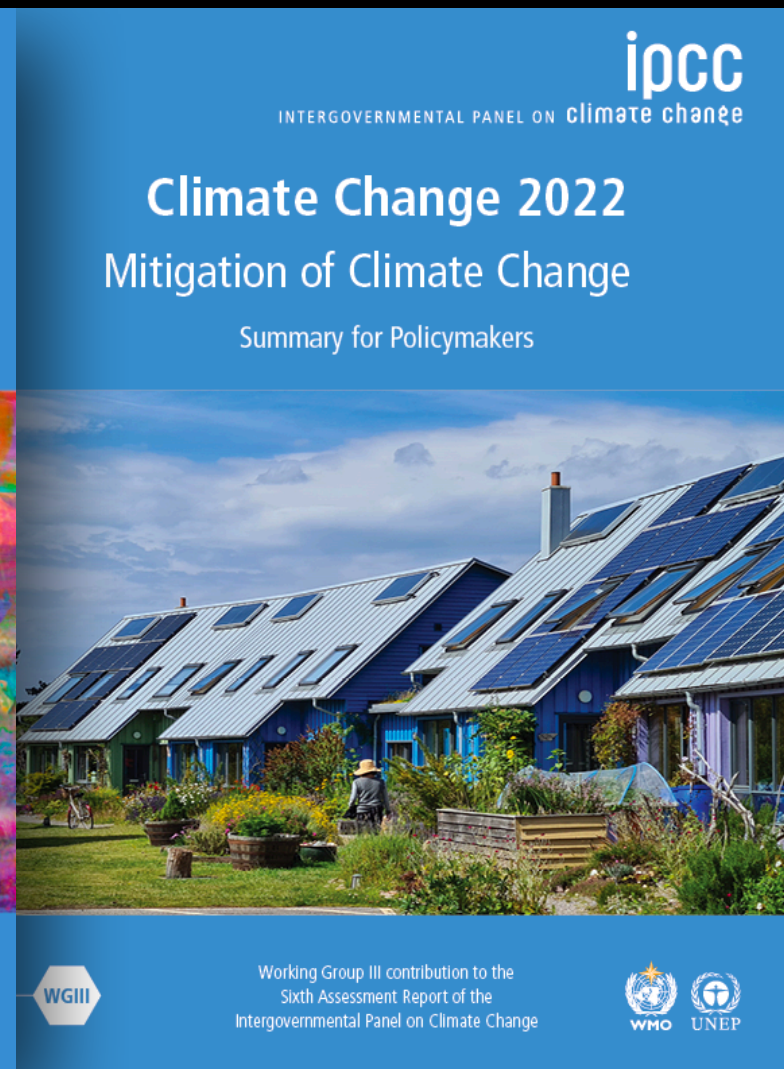
Special Report



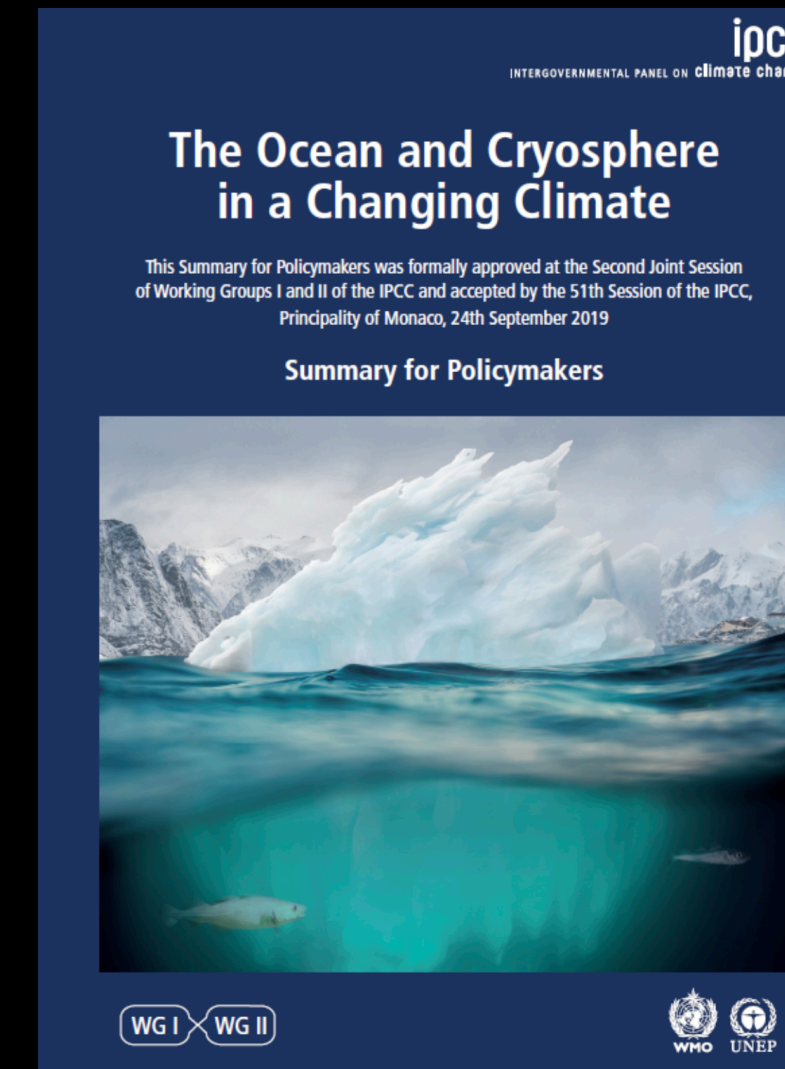
AR6 Climate Change 2021: The Physical Science Basis



Climate Change 2022: Impacts, Adaptation and Vulnerability



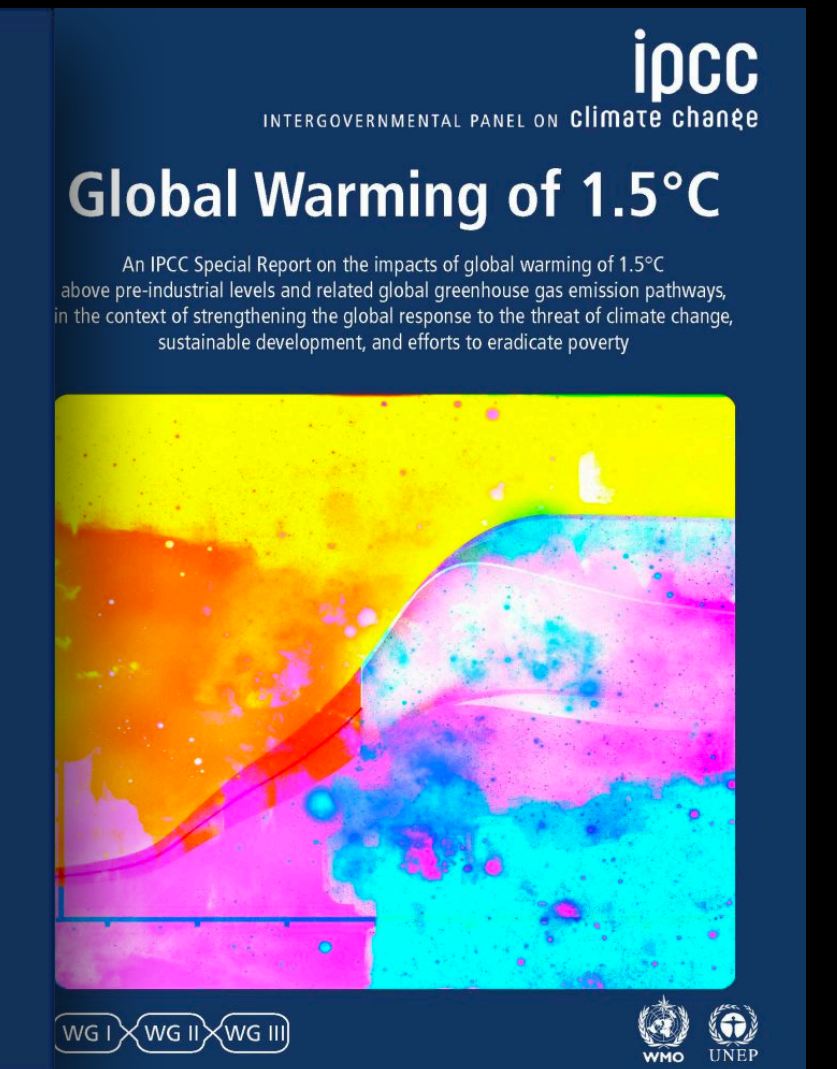
Climate Change 2022: Mitigation of Climate Change



Ocean and Cryosphere in a Changing Climate



Climate Change and Land



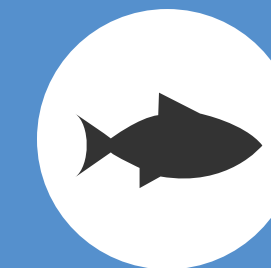
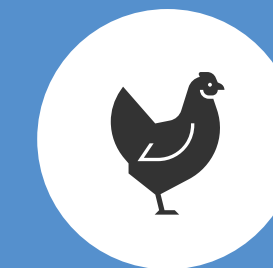
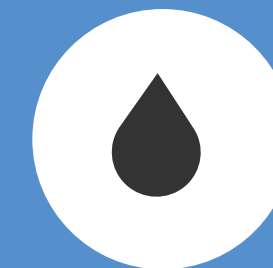
Global Warming of 1.5 °C

The warning

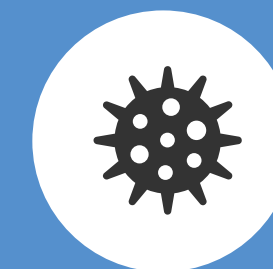
Pace and scale of climate action are insufficient to tackle climate change

Adverse impacts from human-caused change will intensify

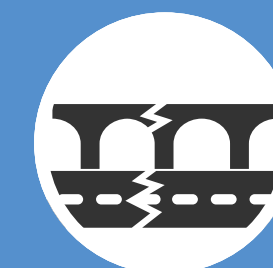
Water scarcity and food production



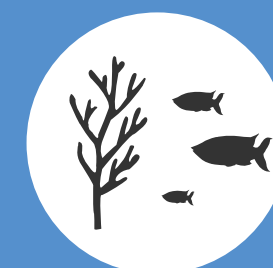
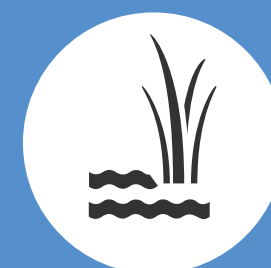
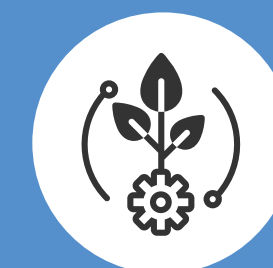
Health and wellbeing



Cities, settlements and infrastructure

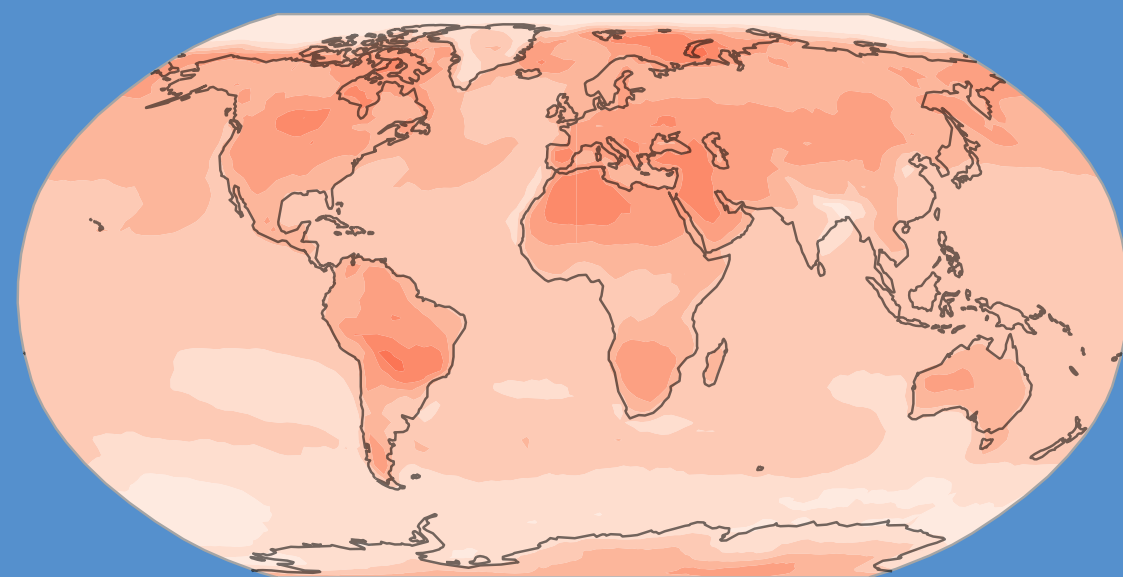


Ecosystem structure, species range shifts and changes in timing

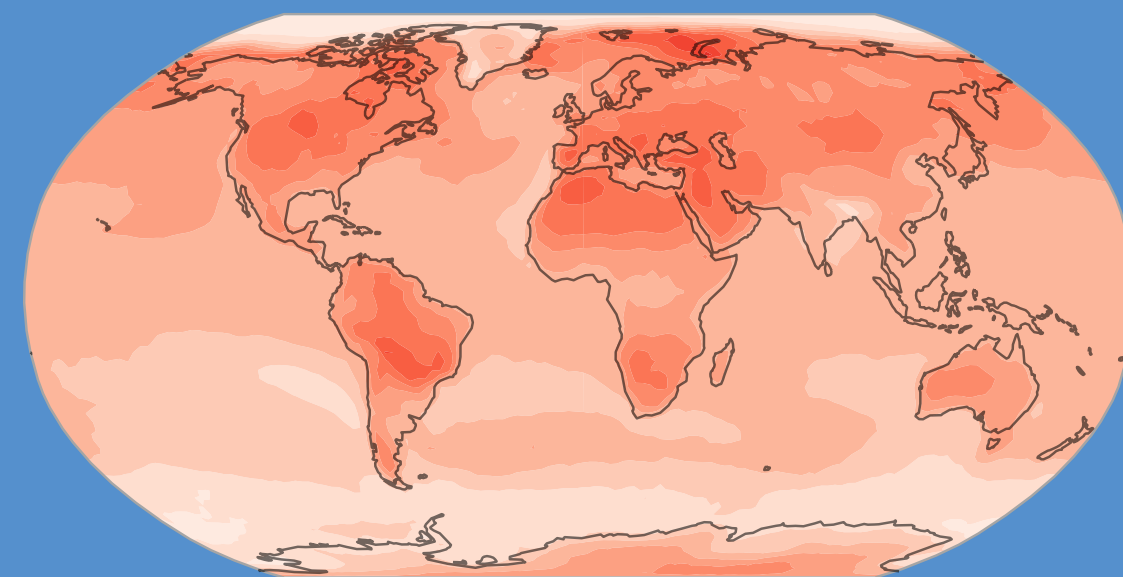


Extremes become more widespread and pronounced with every increment of warming

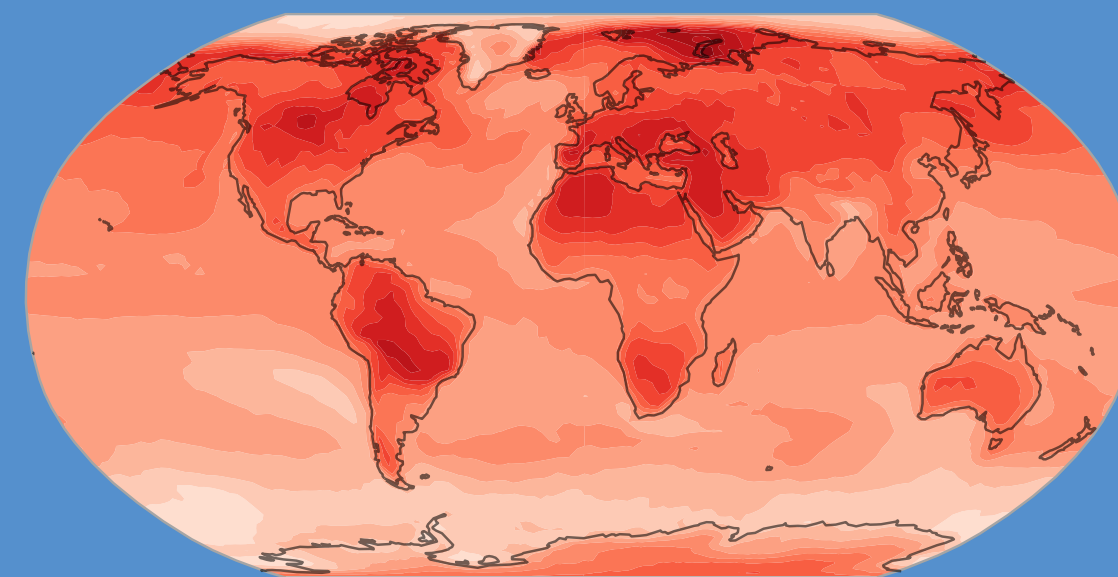
+1.5°C



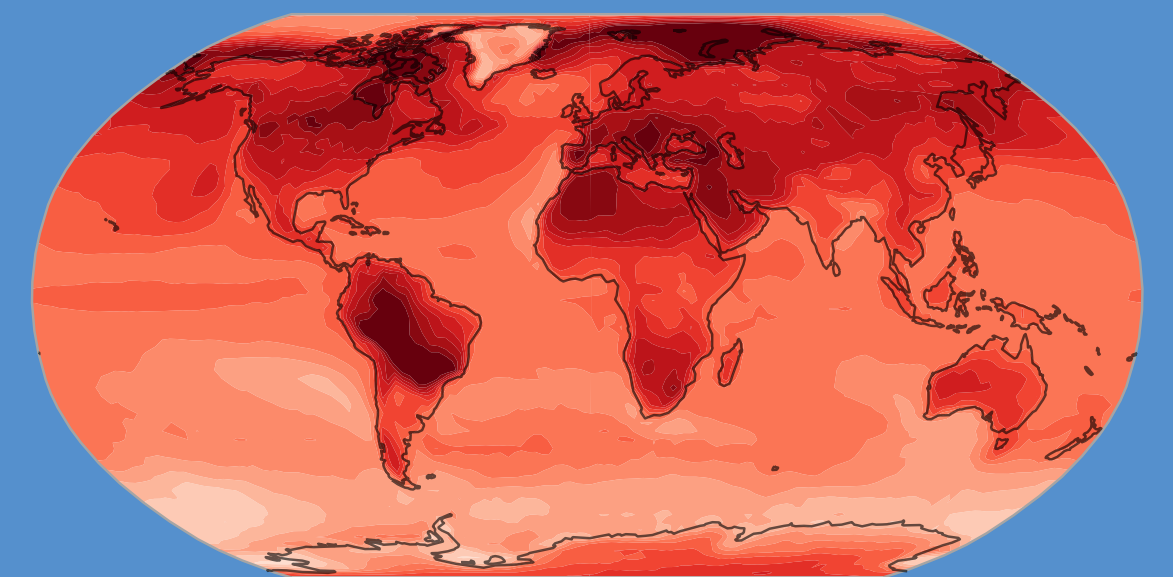
+2°C



+3°C



+4°C



The hope

The hope

Mainstreaming effective and equitable climate action now will reduce losses and damages **for nature and people.**

Climate action provides co-benefits.

Multiple, feasible and effective options are available **to reduce GHG emissions and adapt to human-caused climate change.**

The challenge

- Cut emissions quickly, sharply to create a safer, sustainable world
- Scale up practices and infrastructure to enhance resilience
- Cut global GHG emissions by nearly half by 2030
- Action required along numerous dimensions

The path **forward** is clear

Tried and tested
options available now

Need to be designed
for diverse contexts

Need to be scaled up
and applied widely

Fairness is one of the solutions

- Those who contributed the least to climate change are often the most vulnerable to its impacts.
- Millions exposed to acute food insecurity, reduced water security.
- Biggest impacts in parts of Africa, Asia, Central/South America, LDCs, Small Islands, Arctic.
- People in highly vulnerable areas up to 15x more likely to die in floods, droughts, storms (compared to those in in most resilient areas)

Increased **financing** for climate action

- 3-6 times the current climate investment
- But there is enough global financing to rapidly reduce emissions
- Developing countries require external funding to meet adaptation needs
- Options are available to scale up financing

The way forward:

Climate-resilient development

Integrating measures to adapt to climate change with actions to reduce emissions in ways that provide wider benefits:

- Improving peoples' health and livelihoods
- Reducing poverty and hunger
- Clean energy, water and air

Enablers for effective climate action

Political
commitment

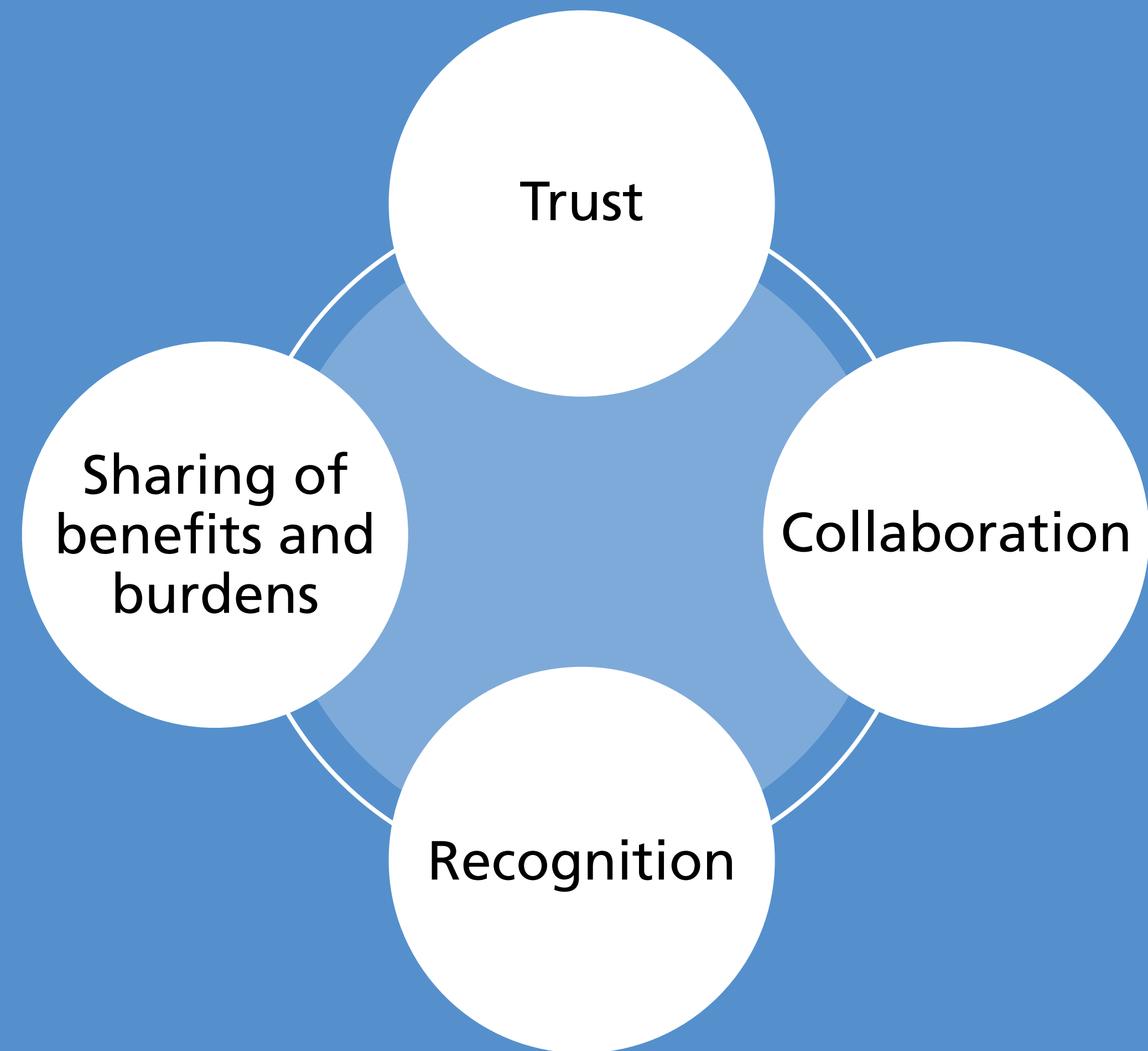
Inclusive
governance

International
cooperation

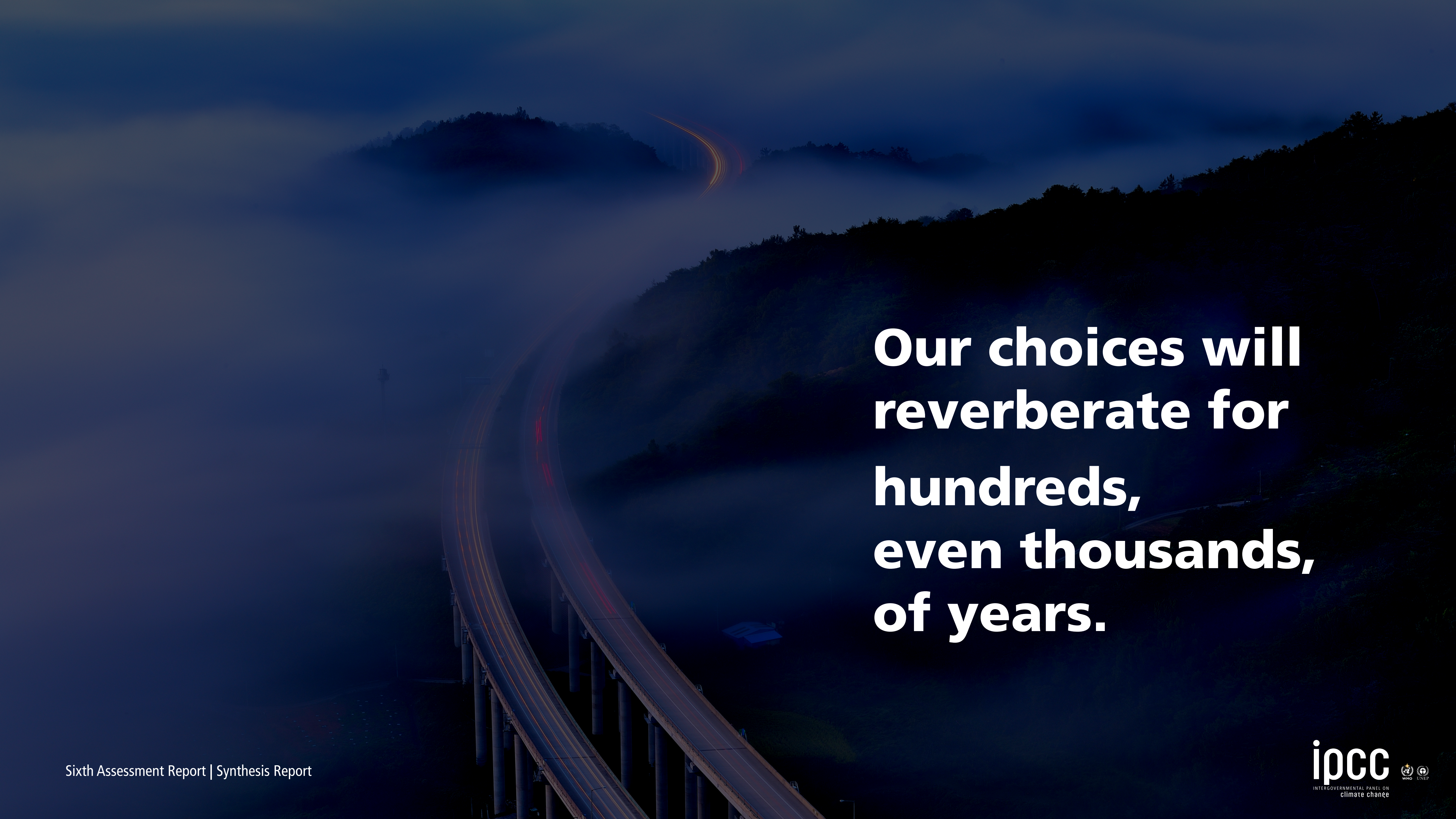
Effective
ecosystem
stewardship

Sharing of
diverse
knowledge

Human factors also enable action



that some can contribute more than others



**Our choices will
reverberate for
hundreds,
even thousands,
of years.**