



Sixth Assessment Report

Fourth Global Climate and SDG Synergy Conference
Youba Sokona, IPCC Vice-Chair

16 July 2023

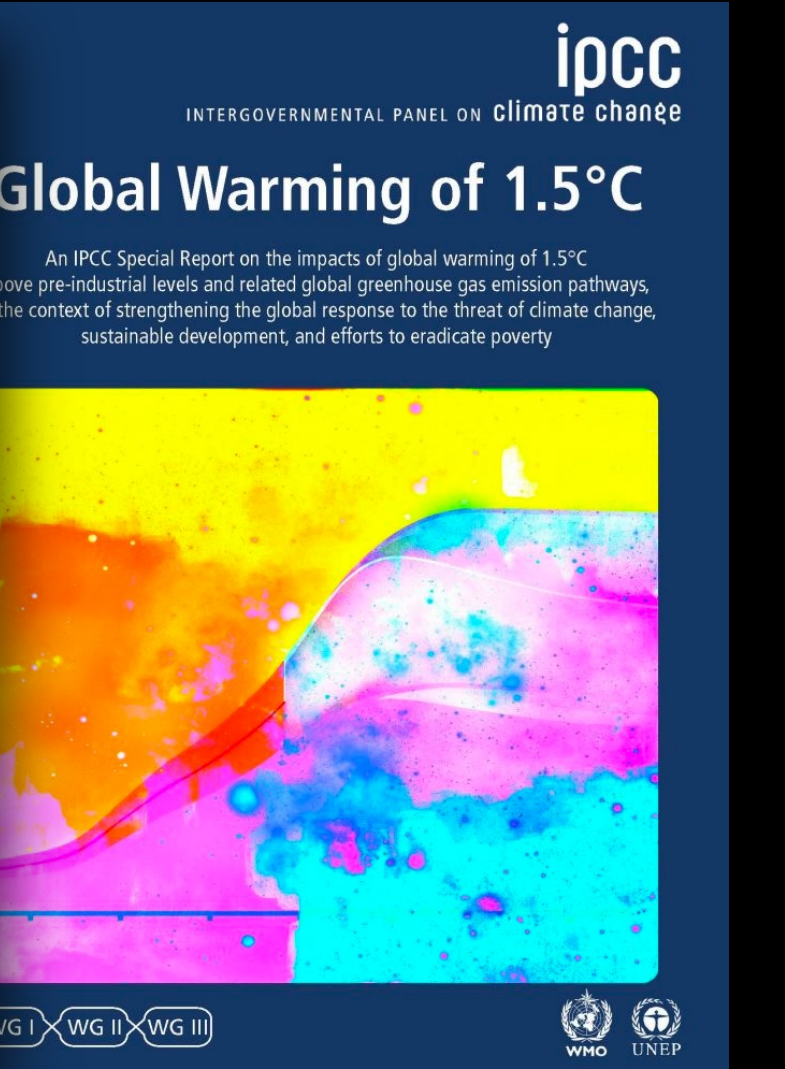
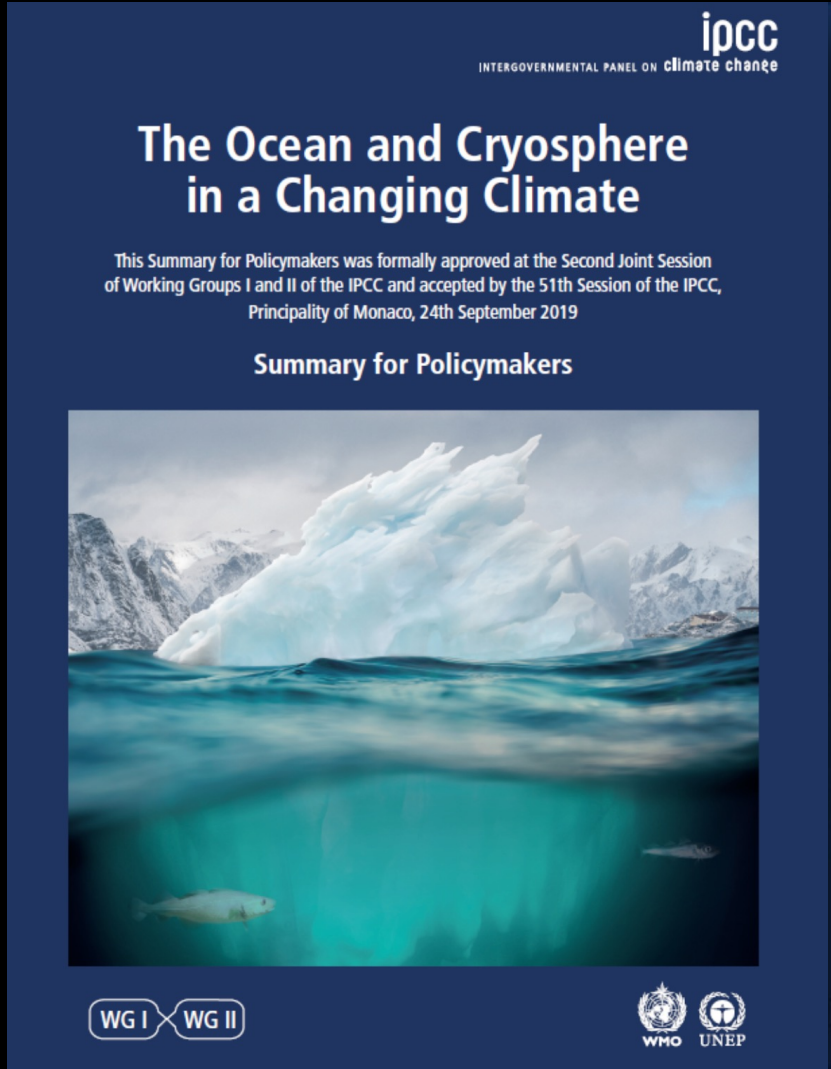
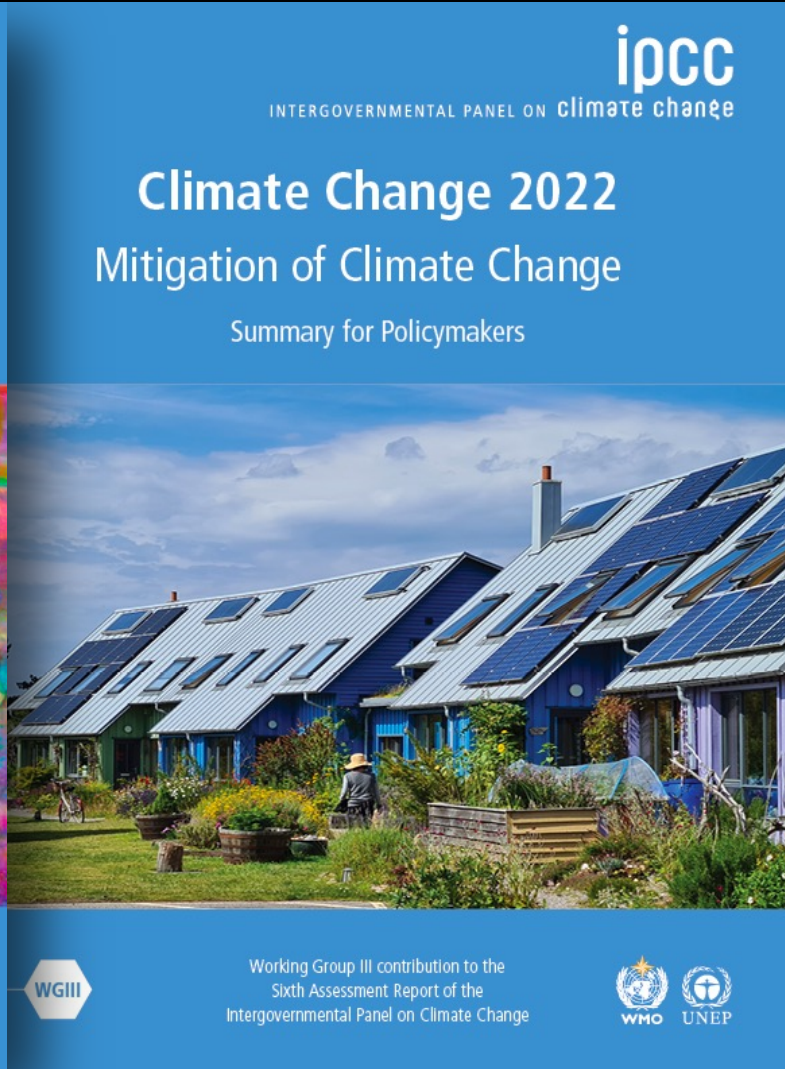
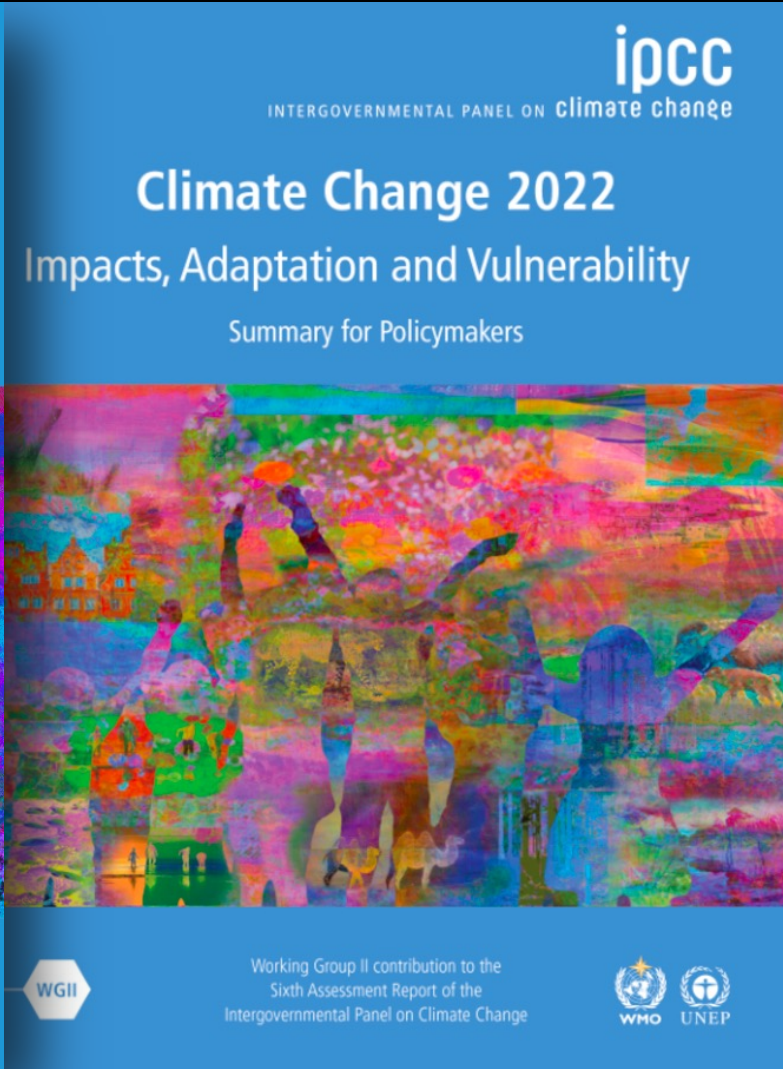
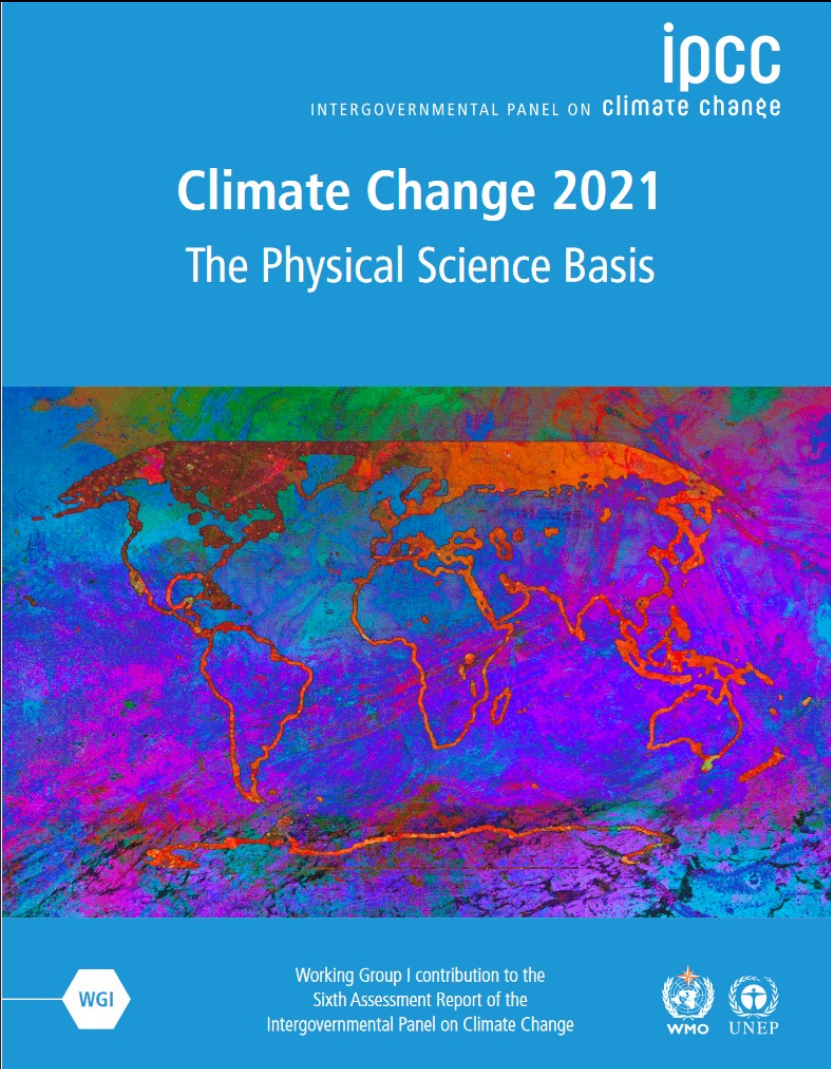
The State of Knowledge about Climate Change and how we can act?

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

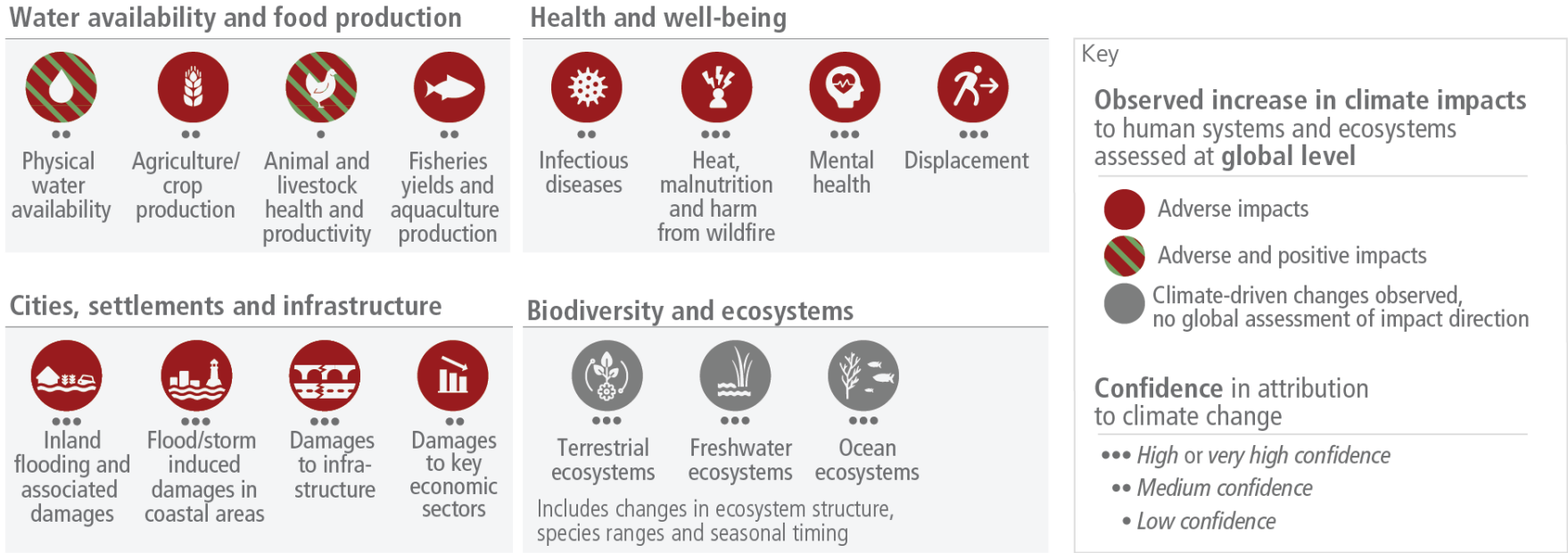
Global Warming of 1.5 °C

The warning

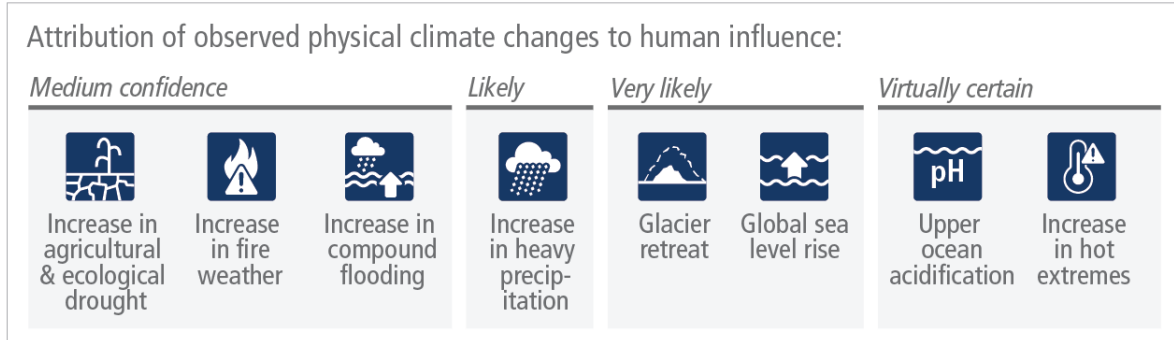
Pace and scale of climate action are
insufficient to tackle climate change

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

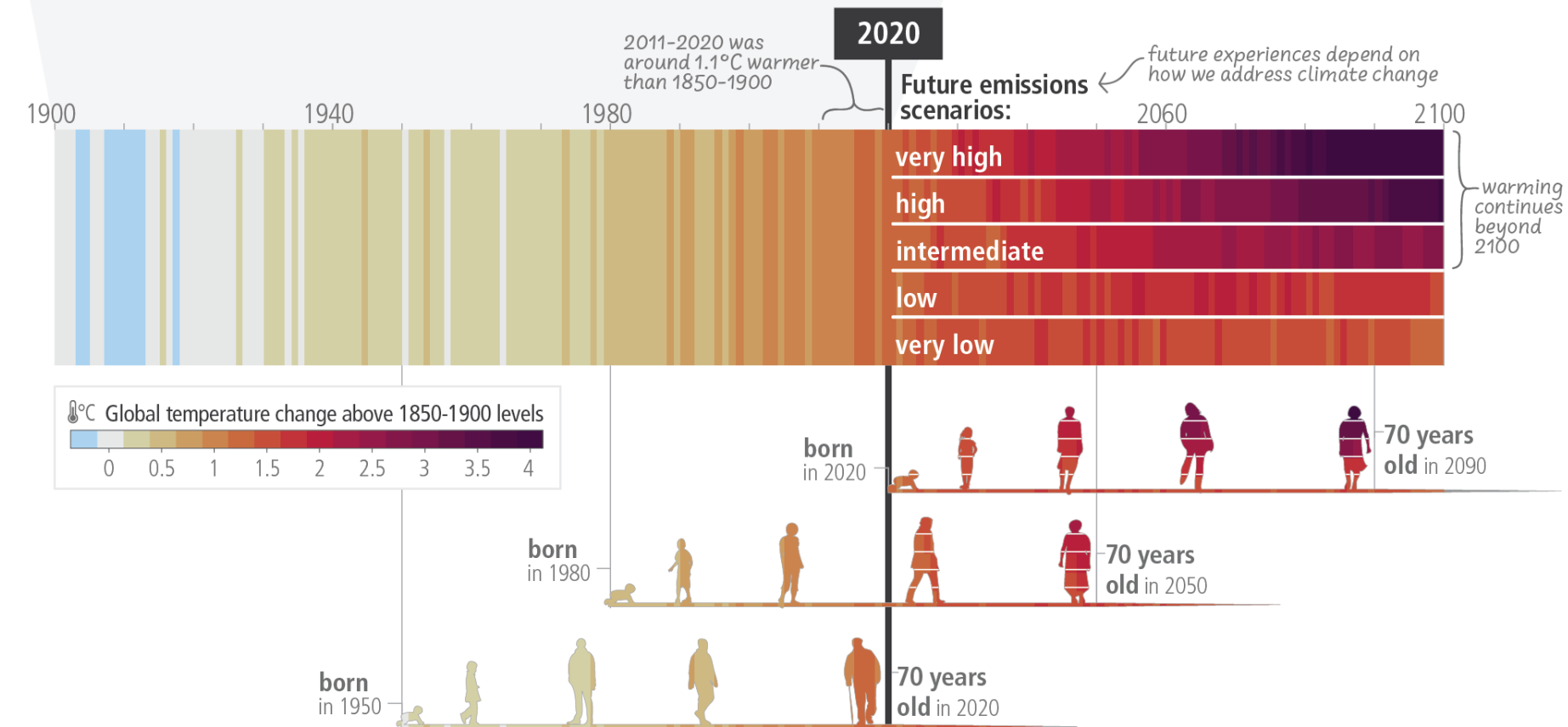
a) Observed widespread and substantial impacts and related losses and damages attributed to climate change



b) Impacts are driven by changes in multiple physical climate conditions, which are increasingly attributed to human influence

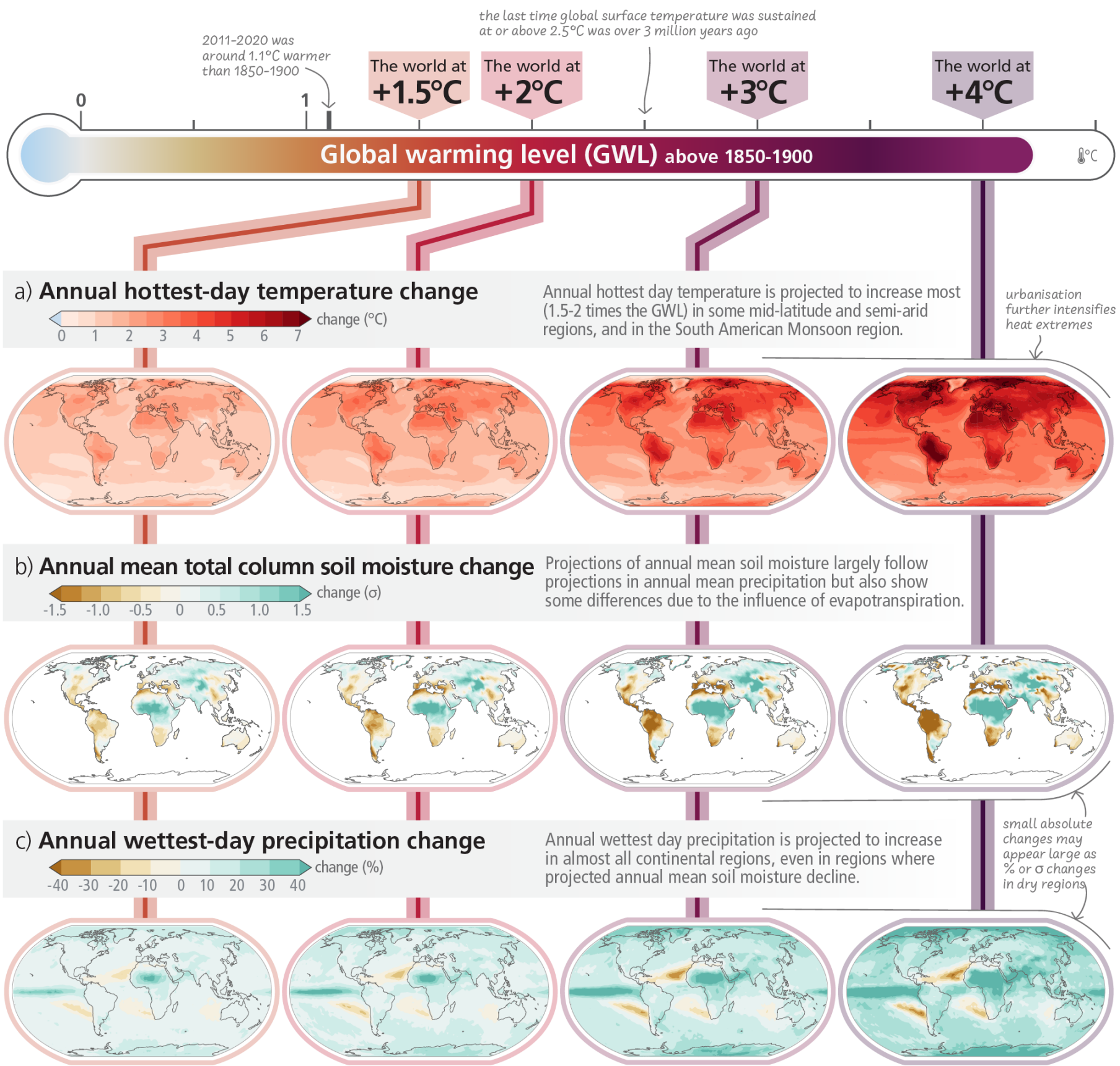


c) The extent to which current and future generations will experience a hotter and different world depends on choices now and in the near-term



Climate change has already caused widespread and substantial losses to almost every aspect of human life on this planet and the impacts on future generations depend on the choices we make now

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



Every bit of warming matters. The warmer the planet gets, the more widespread and pronounced the changes in both average climate and weather extremes become

The hope

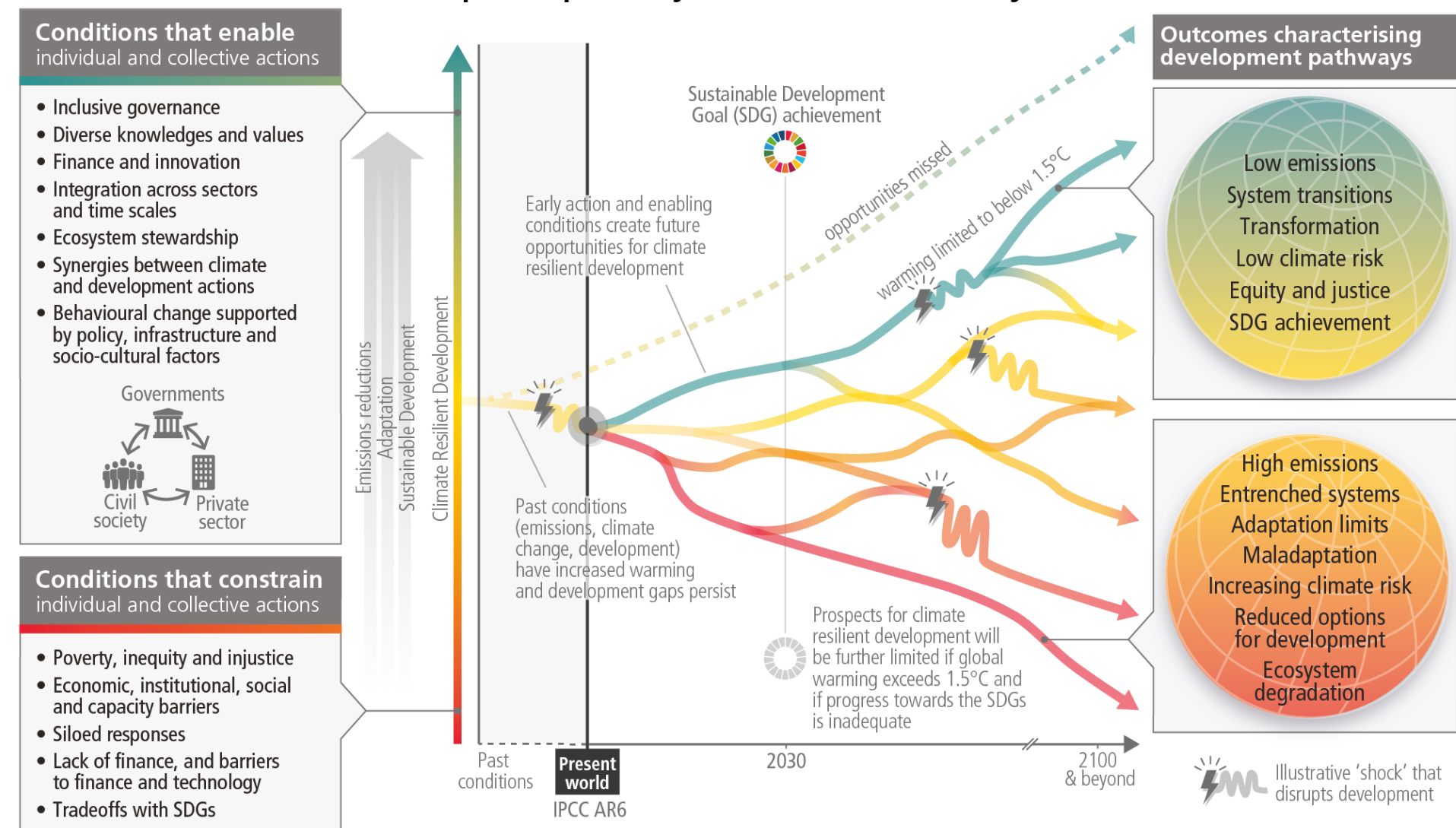
Mainstreaming effective and equitable climate action now will reduce losses and damages for nature and people.

Climate action provides co-benefits.

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

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

Multiple interacting choices and actions can shift development pathways towards sustainability



Our choices matter and the faster we act, the better off we will all be – all of us who call this planet home

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

Multiple interacting choices and actions can shift development pathways towards sustainability

Conditions that enable individual and collective actions

- Inclusive governance
- Diverse knowledges and values
- Finance and innovation
- Integration across sectors and time scales
- Ecosystem stewardship
- Synergies between climate and development actions
- Behavioural change supported by policy, infrastructure and socio-cultural factors



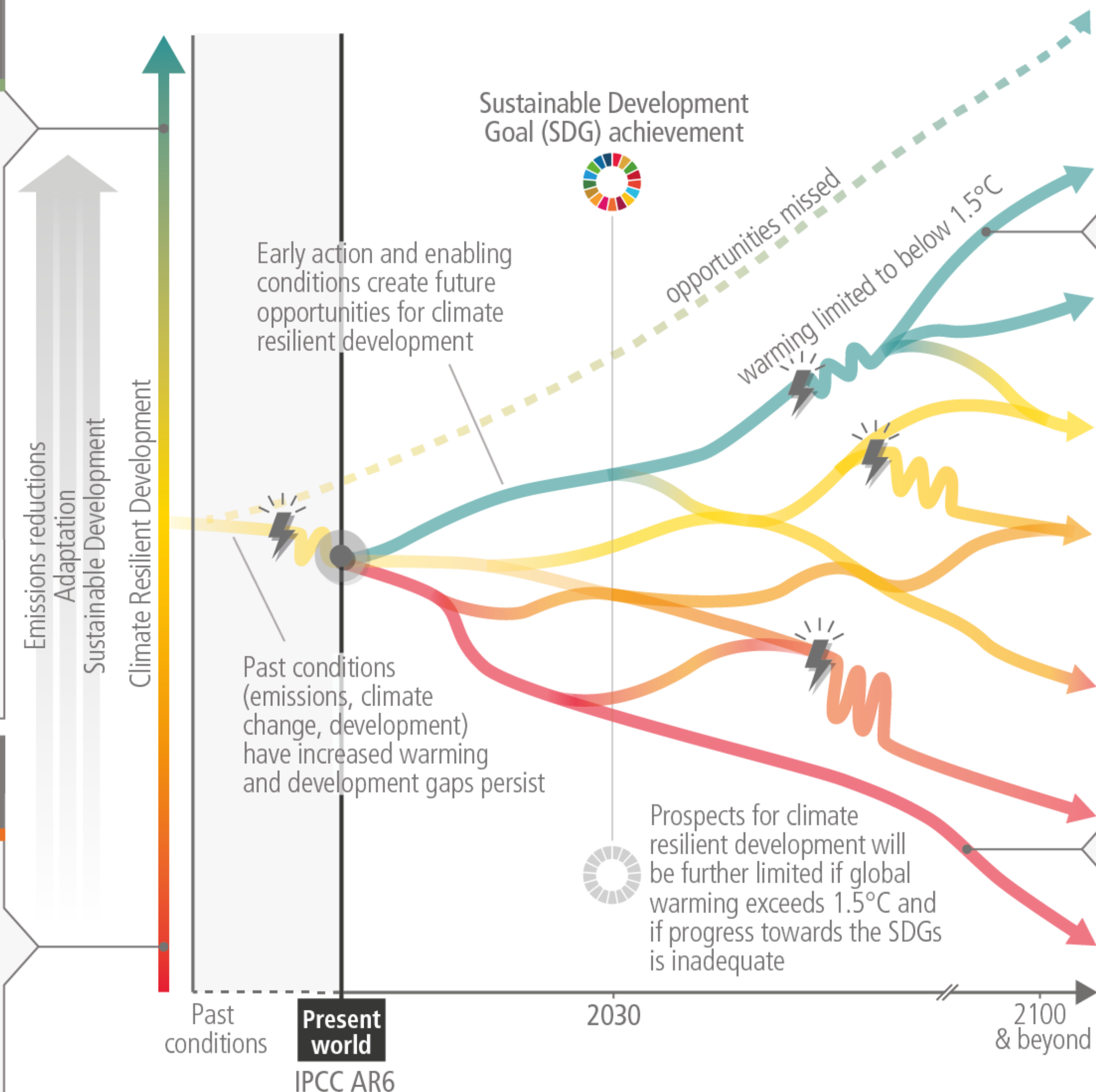
Conditions that constrain individual and collective actions

- Poverty, inequity and injustice
- Economic, institutional, social and capacity barriers
- Siloed responses
- Lack of finance, and barriers to finance and technology
- Tradeoffs with SDGs

Outcomes characterising development pathways

Low emissions
System transitions
Transformation
Low climate risk
Equity and justice
SDG achievement

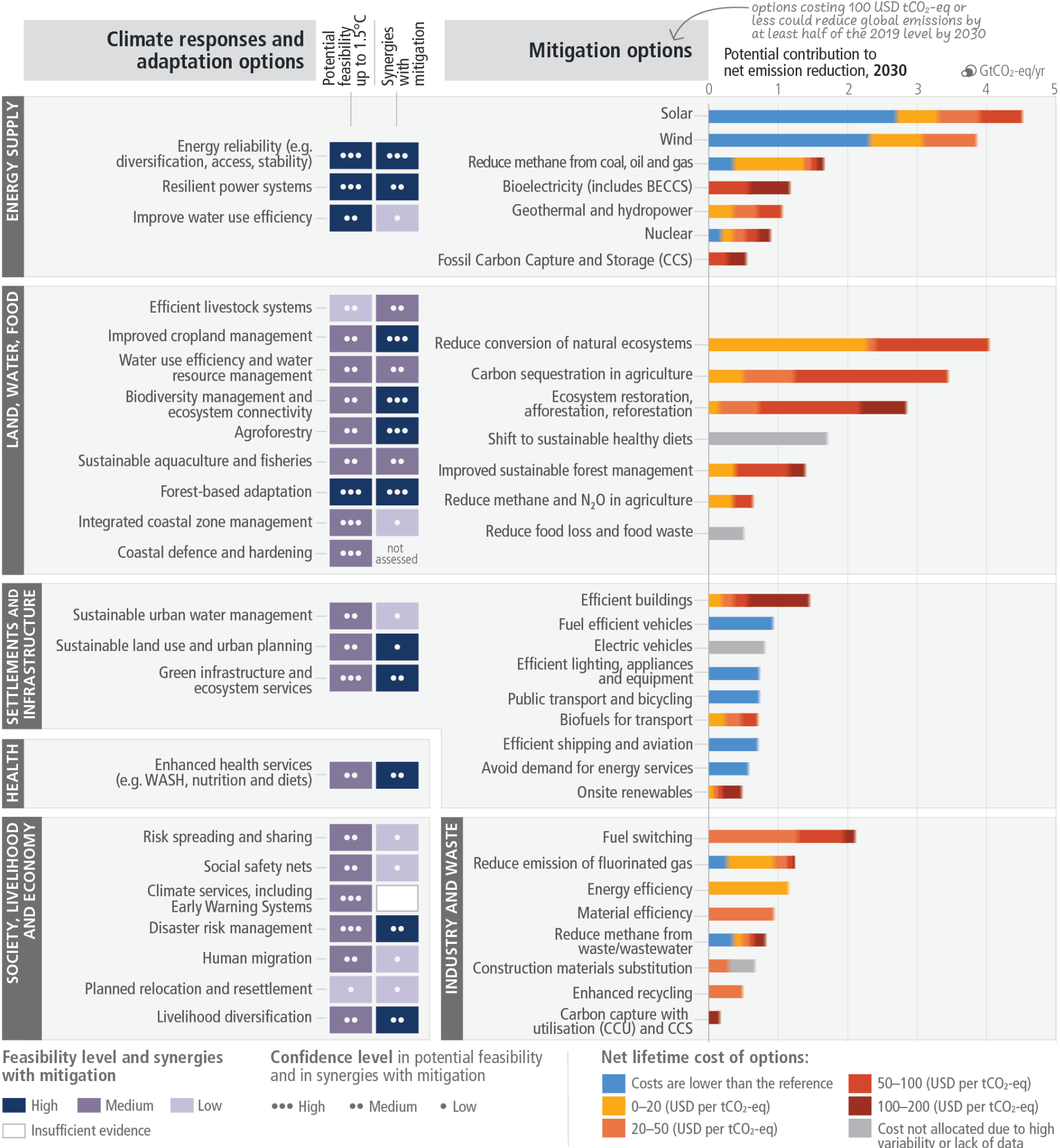
High emissions
Entrenched systems
Adaptation limits
Maladaptation
Increasing climate risk
Reduced options for development
Ecosystem degradation



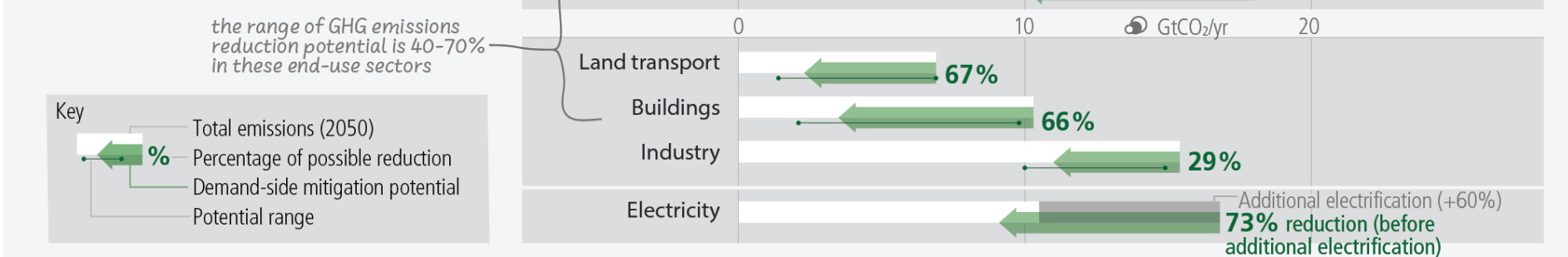
Illustrative 'shock' that disrupts development

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



b) Potential of demand-side mitigation options by 2050



So many of the solutions are :

a) already available today, and

b) benefits us in so many ways addressing health, equity, justice and even economic concerns while increasing resilience and accelerating the transition to a clean energy future

Mitigation and development pathways in the near- to mid-term

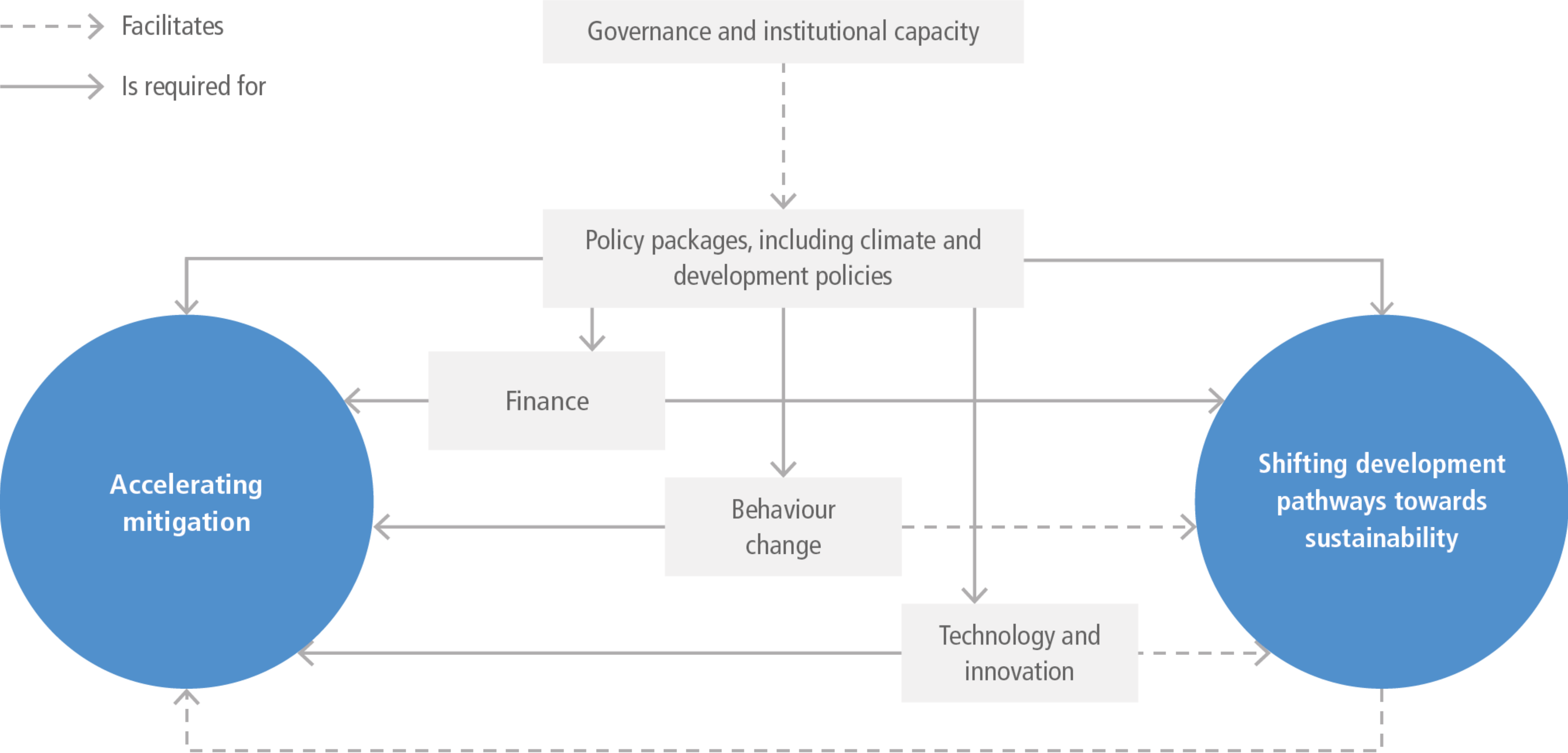
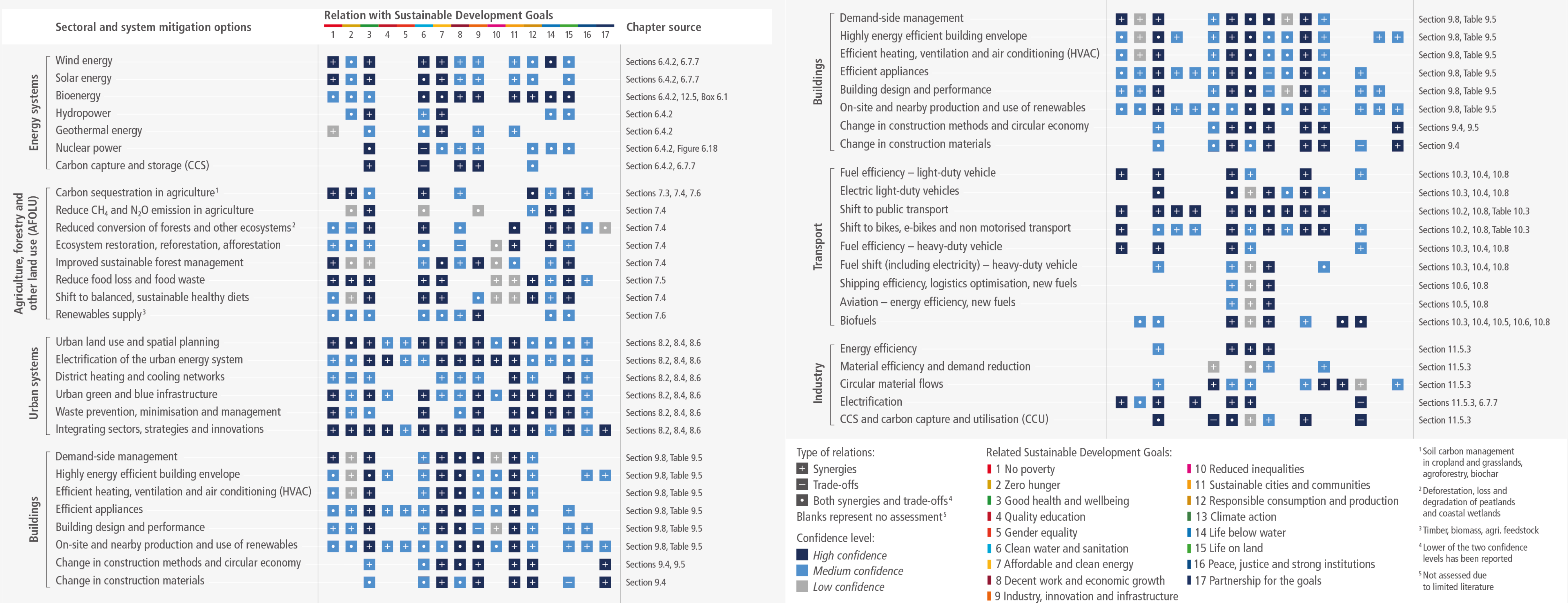


Figure 4.8 | Enabling conditions for accelerating mitigation and shifting development pathways towards sustainability

SUSTAINABLE DEVELOPMENT GOALS

<div>1 NO POVERTY</div> 	<div>2 ZERO HUNGER</div> 	<div>3 GOOD HEALTH AND WELL-BEING</div> 	<div>4 QUALITY EDUCATION</div> 	<div>5 GENDER EQUALITY</div> 	<div>6 CLEAN WATER AND SANITATION</div> 
<div>7 AFFORDABLE AND CLEAN ENERGY</div> 	<div>8 DECENT WORK AND ECONOMIC GROWTH</div> 	<div>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</div> 	<div>10 REDUCED INEQUALITIES</div> 	<div>11 SUSTAINABLE CITIES AND COMMUNITIES</div> 	<div>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</div> 
<div>13 CLIMATE ACTION</div> 	<div>14 LIFE BELOW WATER</div> 	<div>15 LIFE ON LAND</div> 	<div>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</div> 	<div>17 PARTNERSHIPS FOR THE GOALS</div> 	

Accelerating the Transition in the Context of Sustainable Development



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

Enablers for effective climate action

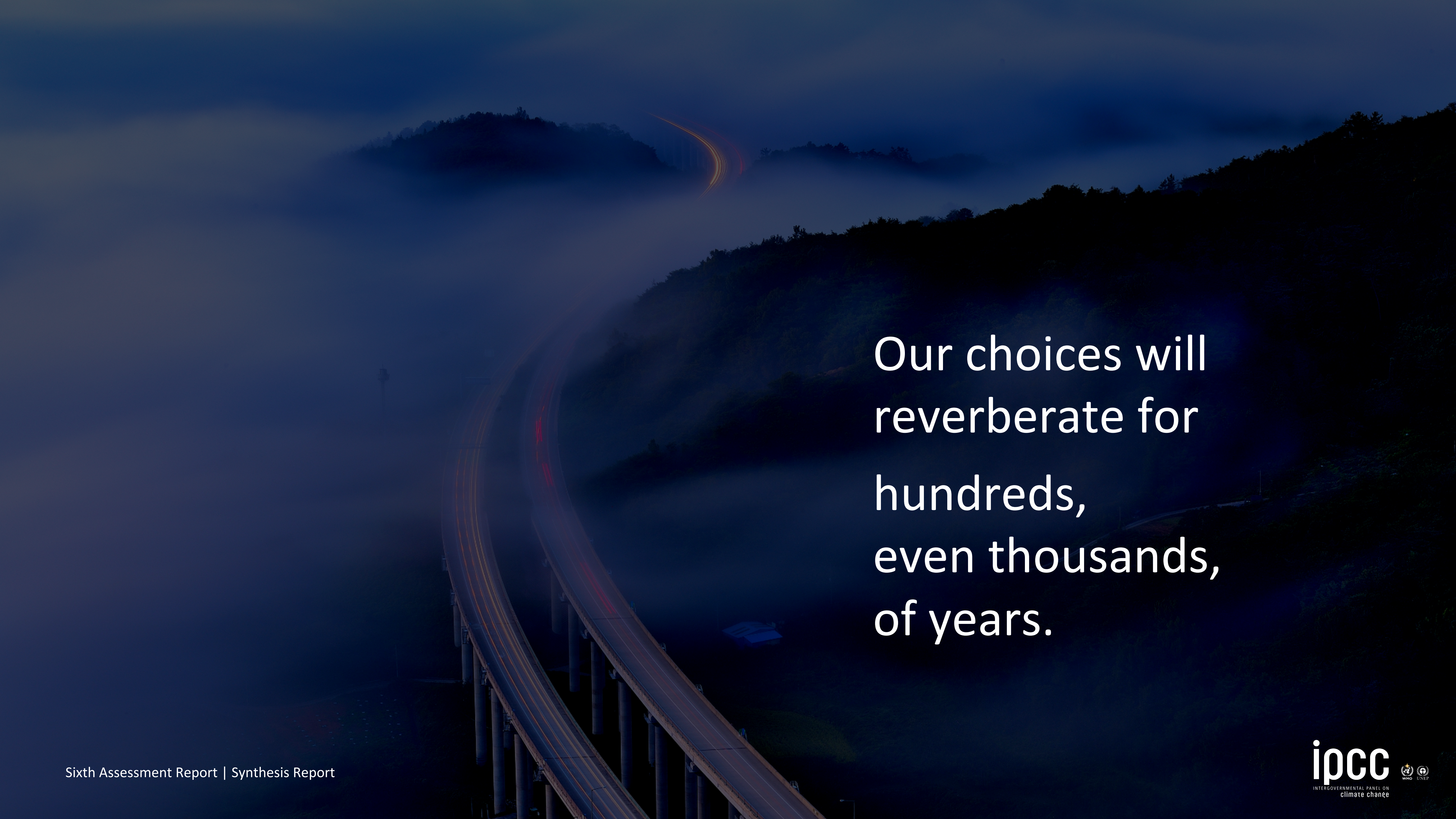
Political
commitment

Inclusive
governance

International
cooperation

Effective
ecosystem
stewardship

Sharing of
diverse
knowledge



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

Thank you for your attention