

# Update of the 1994 Technical Guidelines for Assessing Climate Change Impact and Adaptations

**Bonn, 6th June 2024**

Prof. Bart van den Hurk  
Co-chair IPCC WG2

# Process timeline of AR7

Special Report on Cities and Climate Change (SR)

2027



Seventh Assessment Report (AR7)

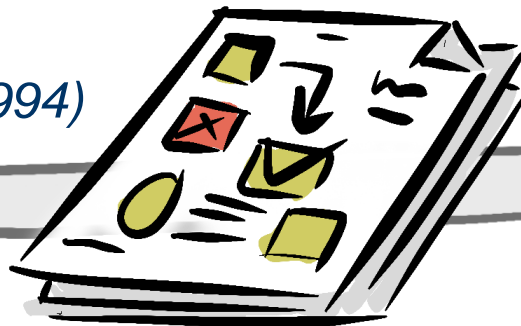
~2028



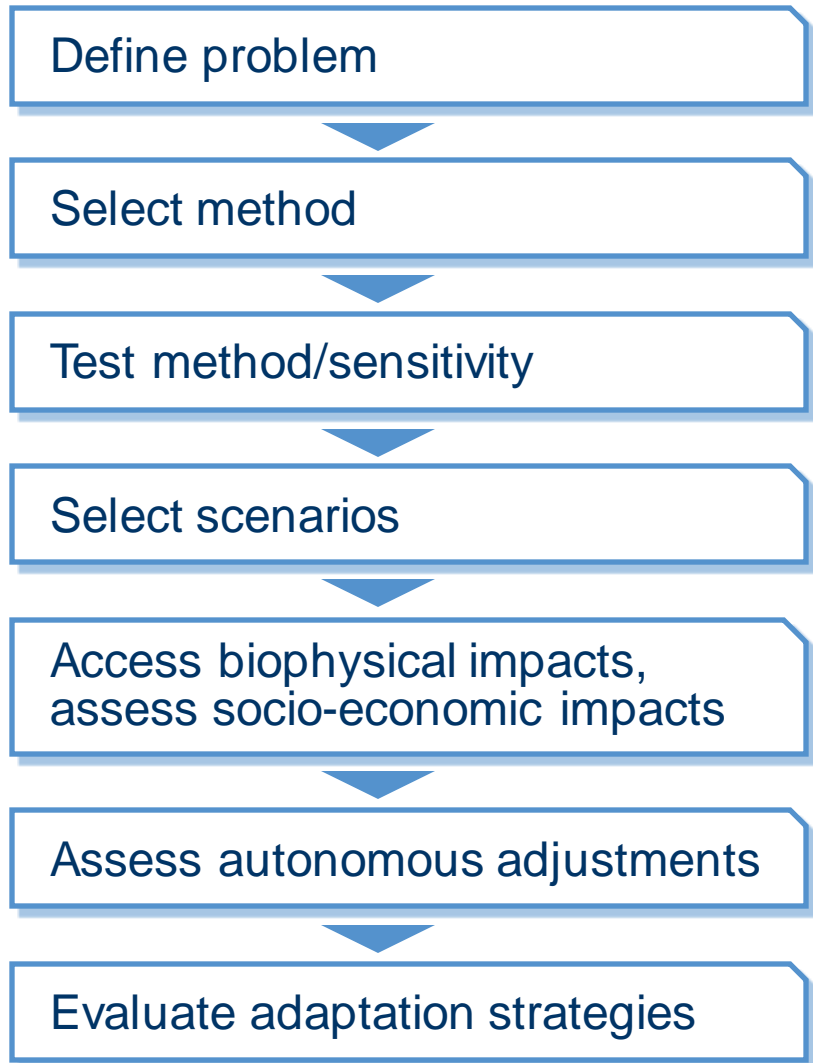
Synthesis Report (SYR)

~2029

Update of the Adaptation Guidelines  
*(current version is from 1994)*



# The 1994 Impacts and Adaptation Guideline



- ❖ What's the climate pressure?
- ❖ What does it do to the nation/region?
- ❖ How will that change?
- ❖ What adaptation is required?

## Update in AR7

- ❖ New climate insights
- ❖ New data and scenarios
- ❖ New adaptation insights
- ❖ New experience from case studies

# What do we know now that we did not in 1994?

## Major conclusions from AR6

- **Climate models and scenarios have advanced**

- **Existing responses are not enough**

- **Incremental adaptation is prevalent, whereas transformative adaptation is infrequent**

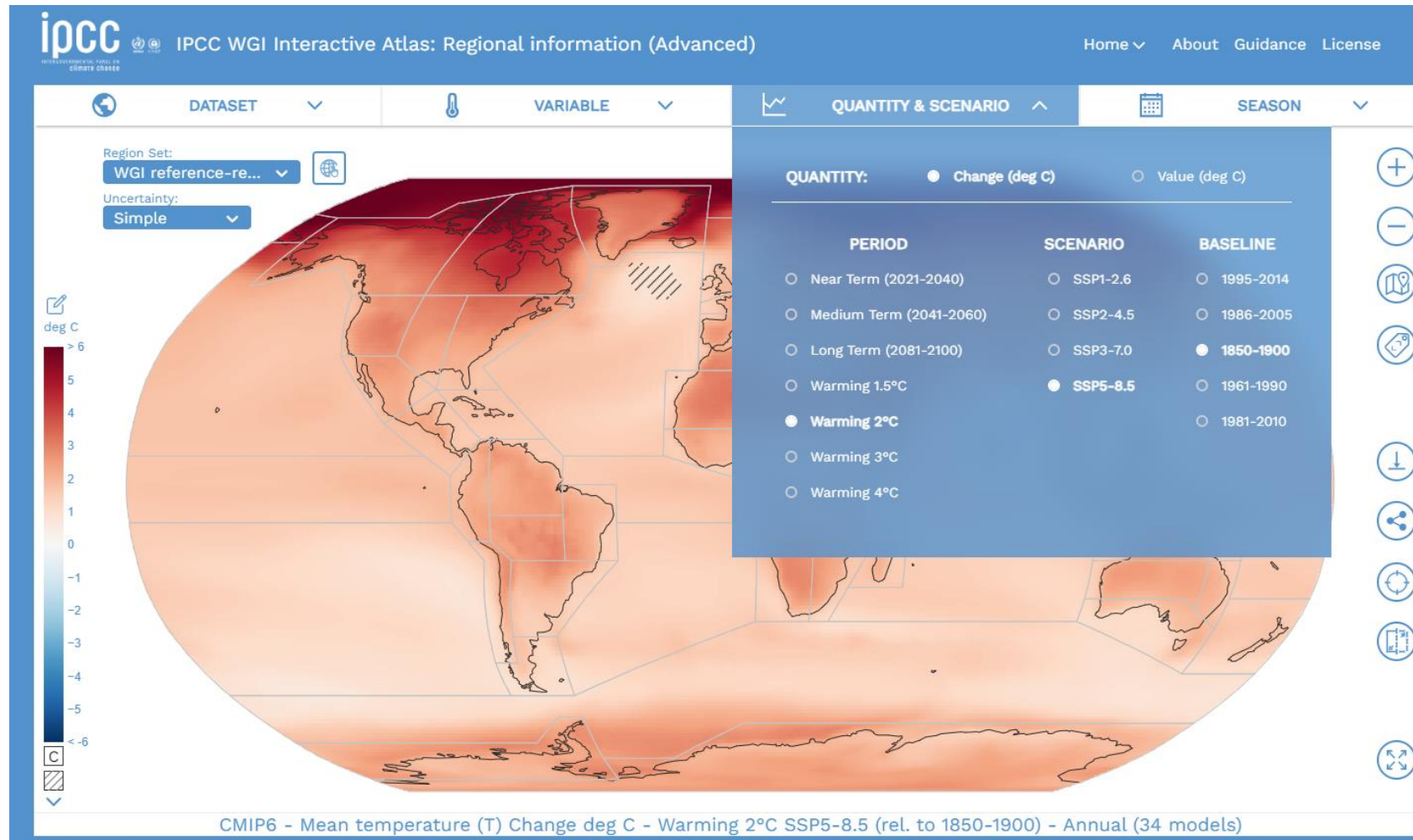
- **Globally applicable adaptation indicators are lacking**

- **M&E are essential for tracking adaptation progress and learning**

- **Adaptation successes can have some degree of maladaptation**

- **Residual impacts, risks and Loss & Damage has become increasingly relevant**

# Progress of Climate Models



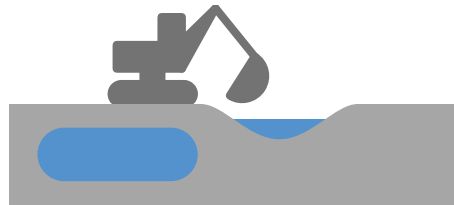
- ❖ Higher resolution
- ❖ Higher complexity
- ❖ Higher accuracy
- ❖ Improved representation of key variables
- ❖ Larger number of models and scenarios

# Approaching Adaptation at Different Scales of Transformation

## Incremental adaptation

Adaptation that maintains the essence and integrity of a system or process at a given scale.

### > Object planning



Improved infrastructure

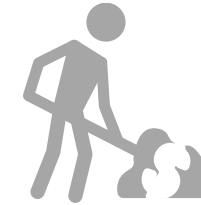


Flood protection

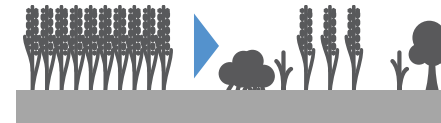
## Transformational adaptation

Adaptation that changes the fundamental attributes of a social-ecological system in anticipation of climate change and its impacts.

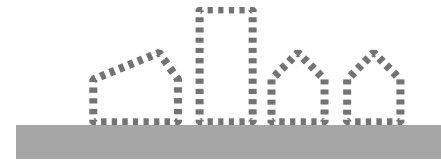
### > City – system planning



Alternative lifestyles and employment



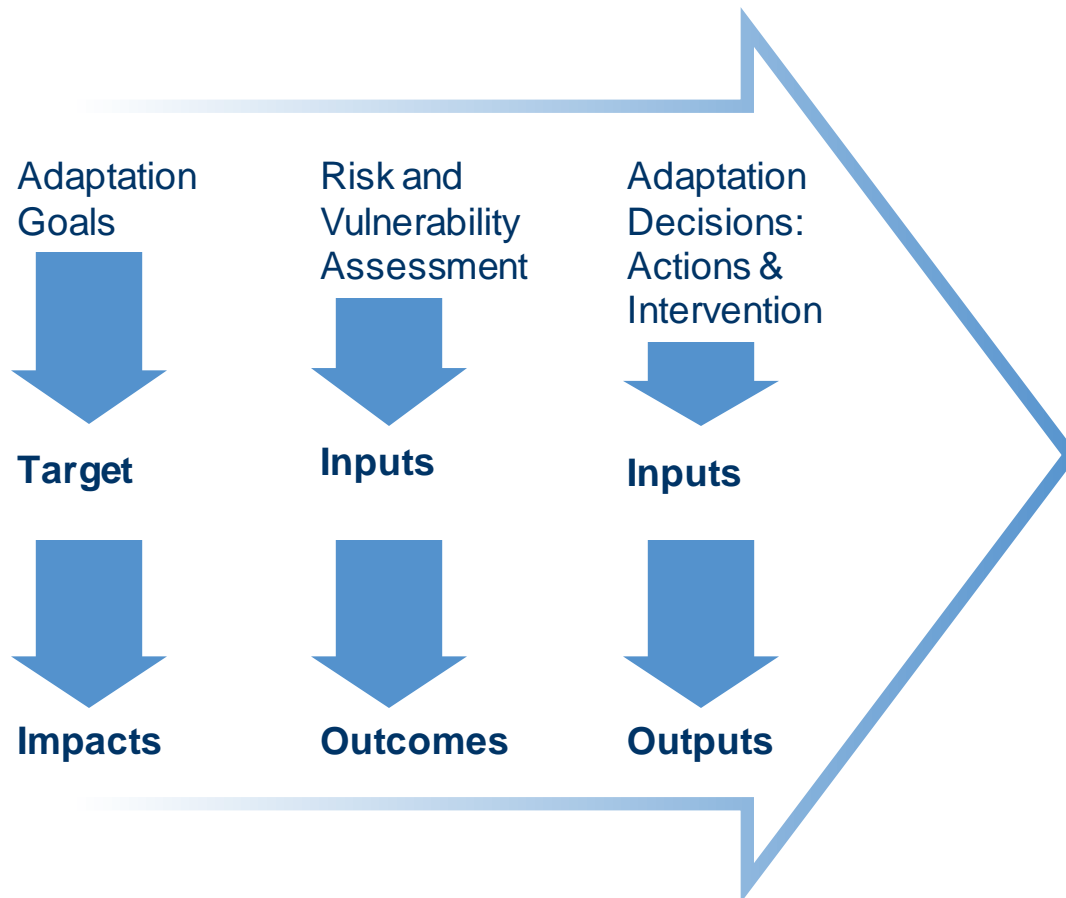
Changes to farming



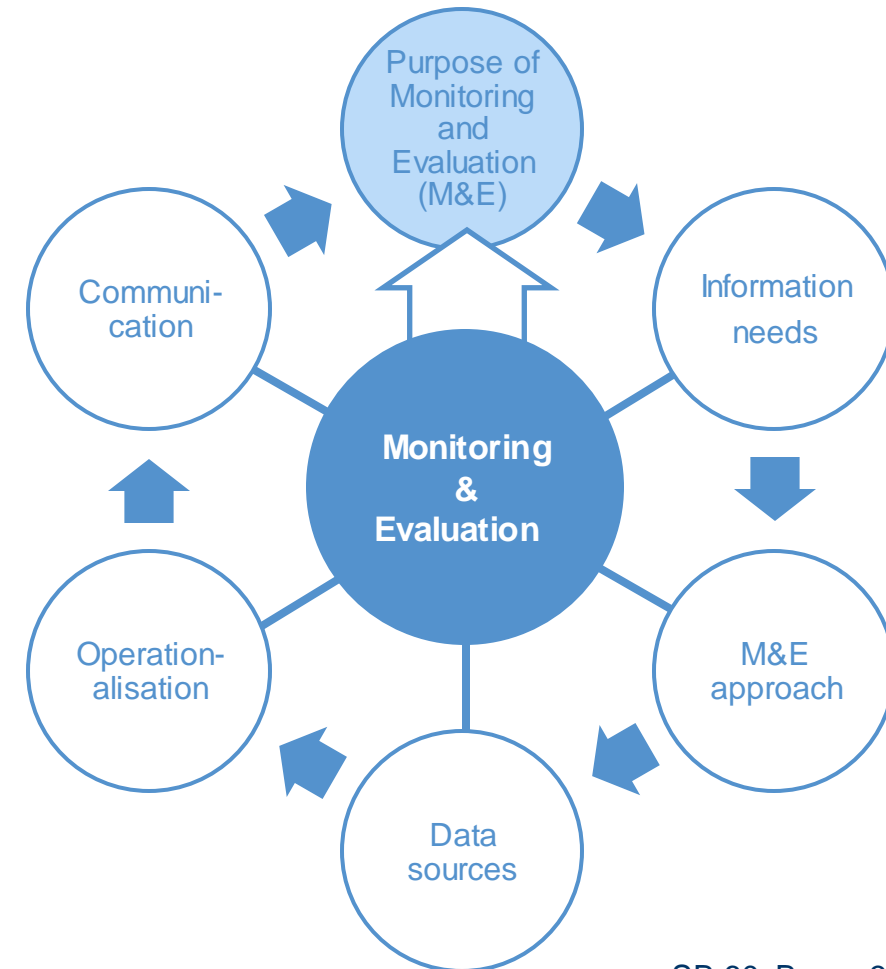
New city planning

# Learning from Adaptation through Monitoring and Evaluation

## WHAT TO MONITOR



## CONTINUOUS UPGRADE



# Policy Attention Changes since 1994

EU Member States revising their adaptation strategies, plans and policy

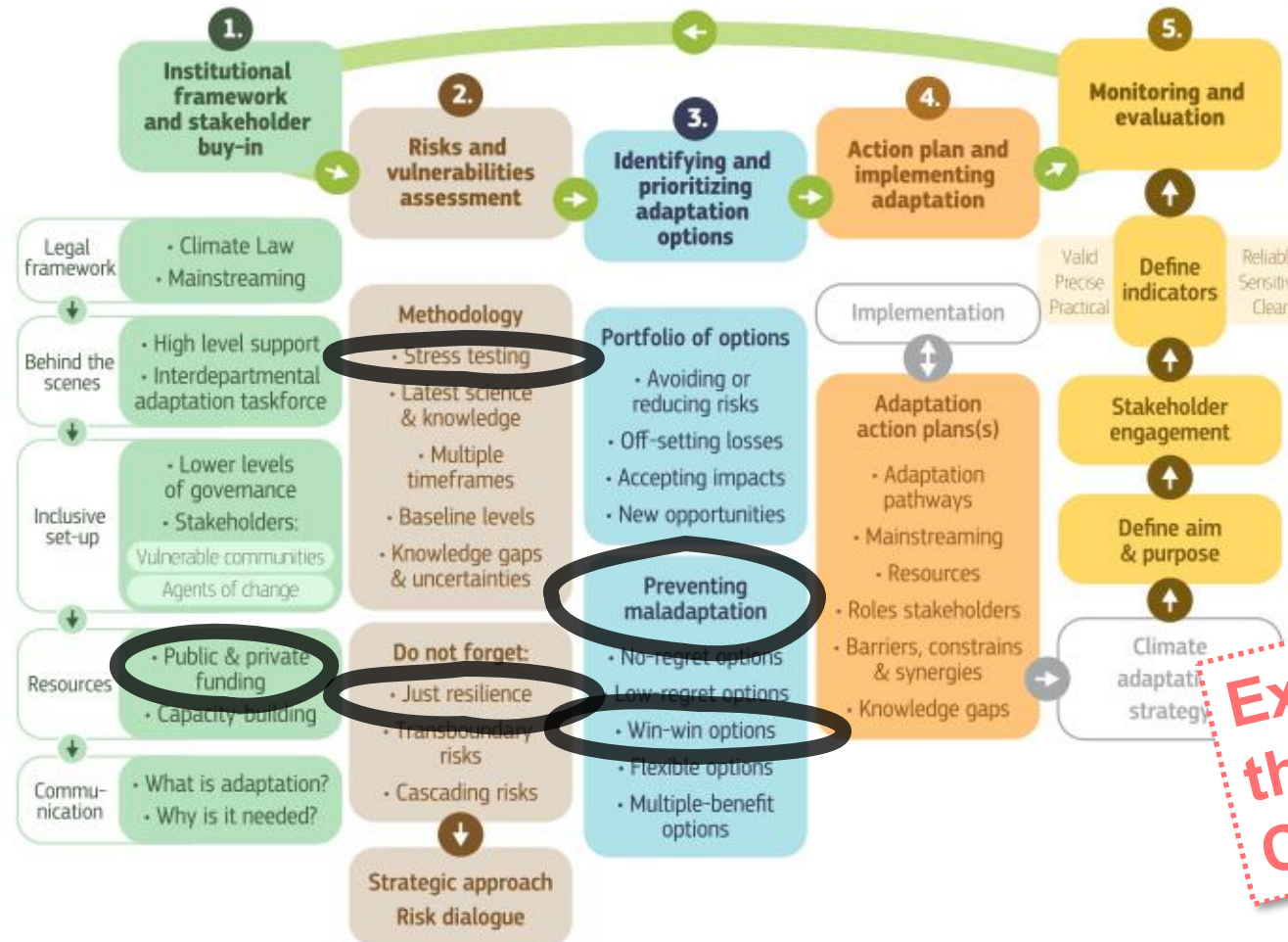
Public & Private funding

Just resilience

Stress testing

Preventing maladaptation

Win-win options





# Multiple Actors are Stepping into the Domain of Adaptation

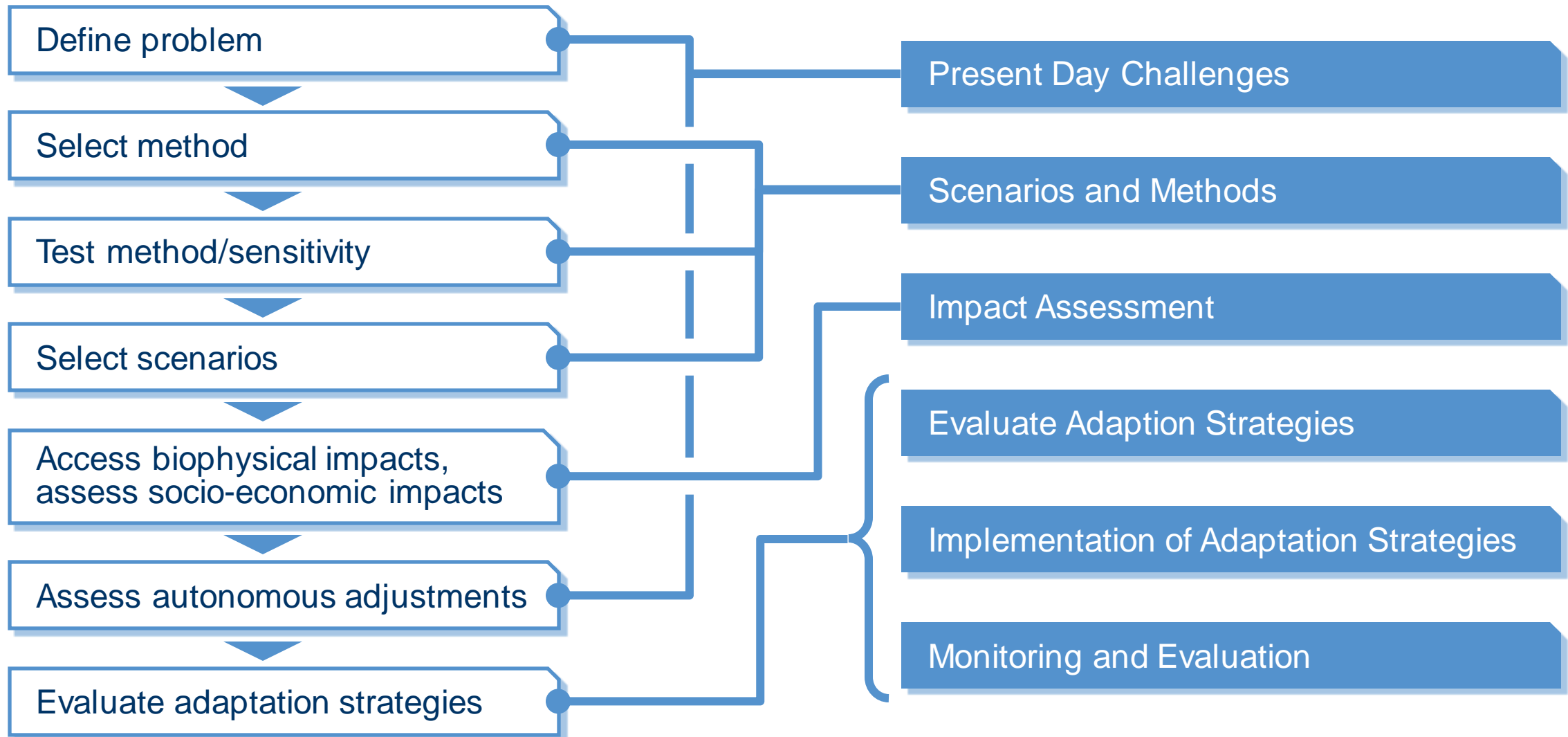
**Foundations:** Rapid, robust and inclusive development is the first priority (increase economic growth)

- **Priority Area 1:** Facilitate the adaptation of people and firms
- **Priority Area 2:** Adapt land use plans and protect critical public assets and services
- **Priority Area 3:** Help firms and people manage residual risks and natural disasters
- **Priority Area 4:** Manage financial and macro fiscal issues

**Example from  
the World  
Bank Group**

**Application:** Prioritization, implementation and monitoring progress

# The 1994 Impacts and Adaptation Guideline



# THANK YOU

## FOR YOUR ATTENTION

### STAY IN TOUCH

 [ipcc.ch](https://ipcc.ch)

 [ipcc-sec@wmo.int](mailto:ipcc-sec@wmo.int)

 [ipcc-media@wmo.int](mailto:ipcc-media@wmo.int)

### STAY CONNECTED

 [ipcc\\_ch](#)

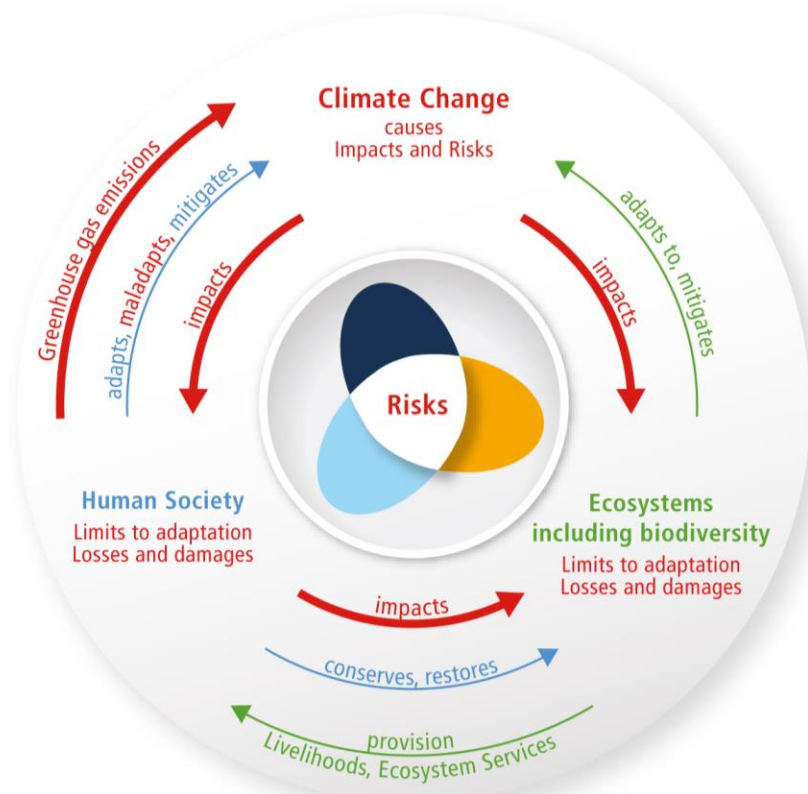
 [ipcc](#)

 [@ipcc](#)

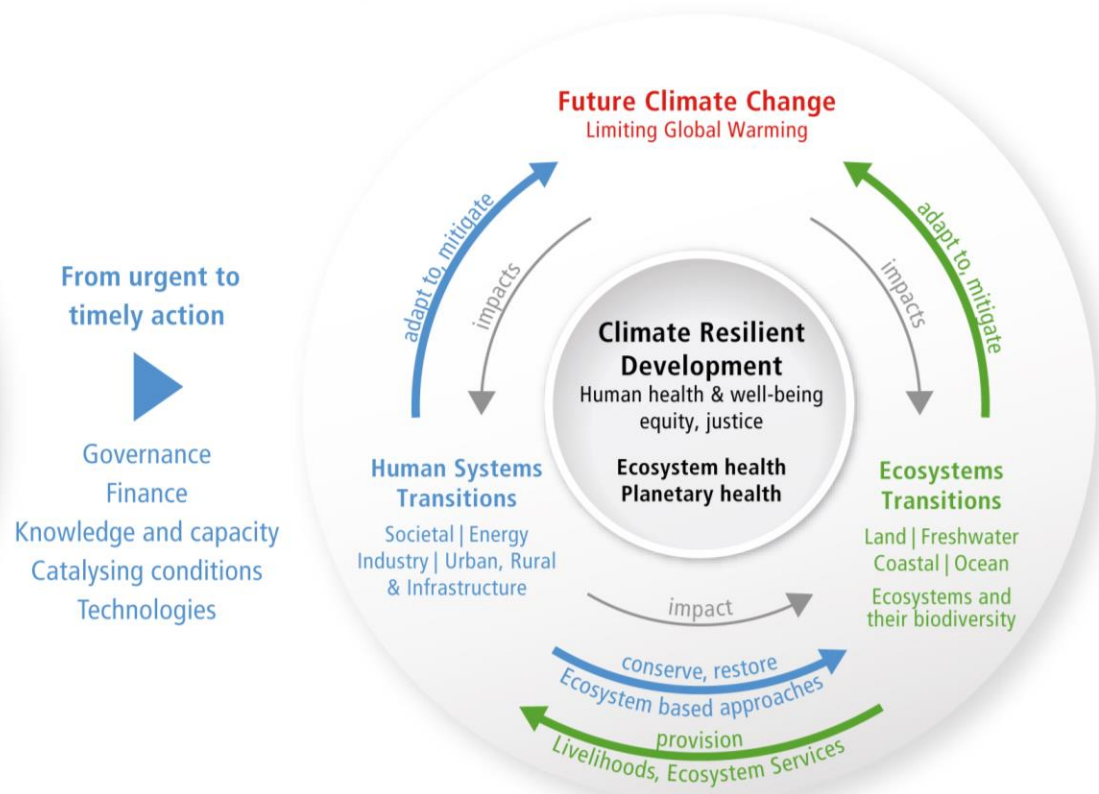
 [ipcc](#)

# From Climate Risk to Climate Resilient Development

(a) Main interactions and trends



(b) Options to reduce climate risks and establish resilience



From urgent to timely action

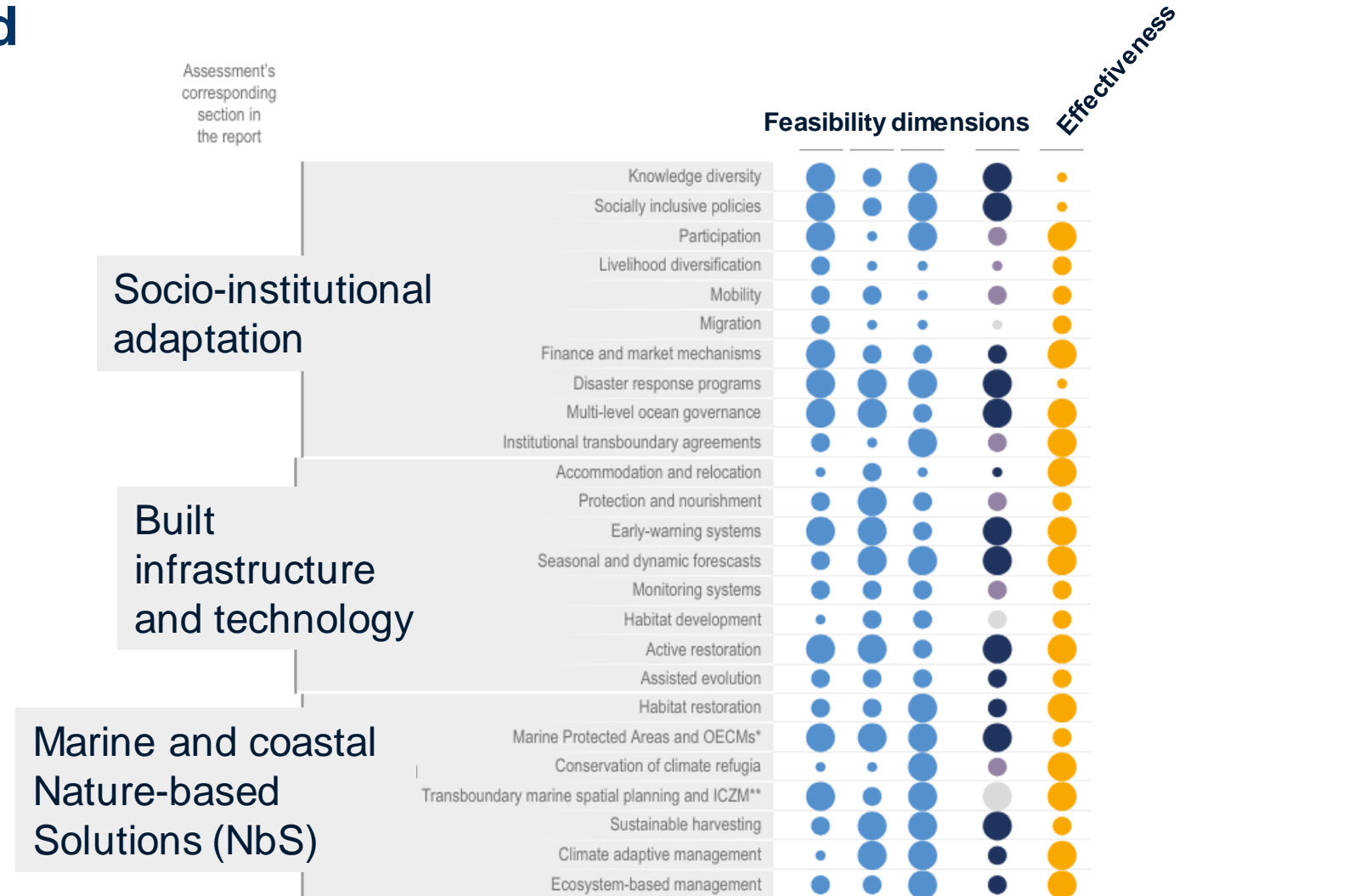
►

Governance  
Finance  
Knowledge and capacity  
Catalysing conditions  
Technologies

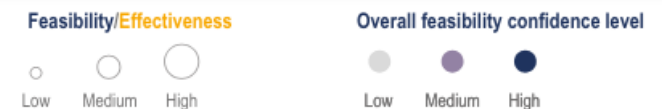
The risk propeller shows that risk emerges from the overlap of:

- Climate hazard(s)
  - Vulnerability
  - Exposure
- ...of human systems, ecosystems and their biodiversity

# Adaptation of feasibility and effectiveness of adaptation solutions for ocean and coastal ecosystems



\*Other effective area-based conservation measures  
 \*\*Integrated coastal zone management



# Sendai Framework for Disaster Risk Reduction

“Integrating adaptation with the SDGs and the Sendai Framework can be very beneficial for building resilience comprehensively across societies. While maintaining the autonomy of each of the post-2015 frameworks, improved coherence of action to implement the three frameworks can save money and time, enhance efficiency and further enable adaptation action” (United Nations Climate Change Secretariat, 2017).

Figure 1  
Integrating adaptation with the Sustainable Development Goals and the Sendai Framework

