United Nations Framework Convention on Climate Change

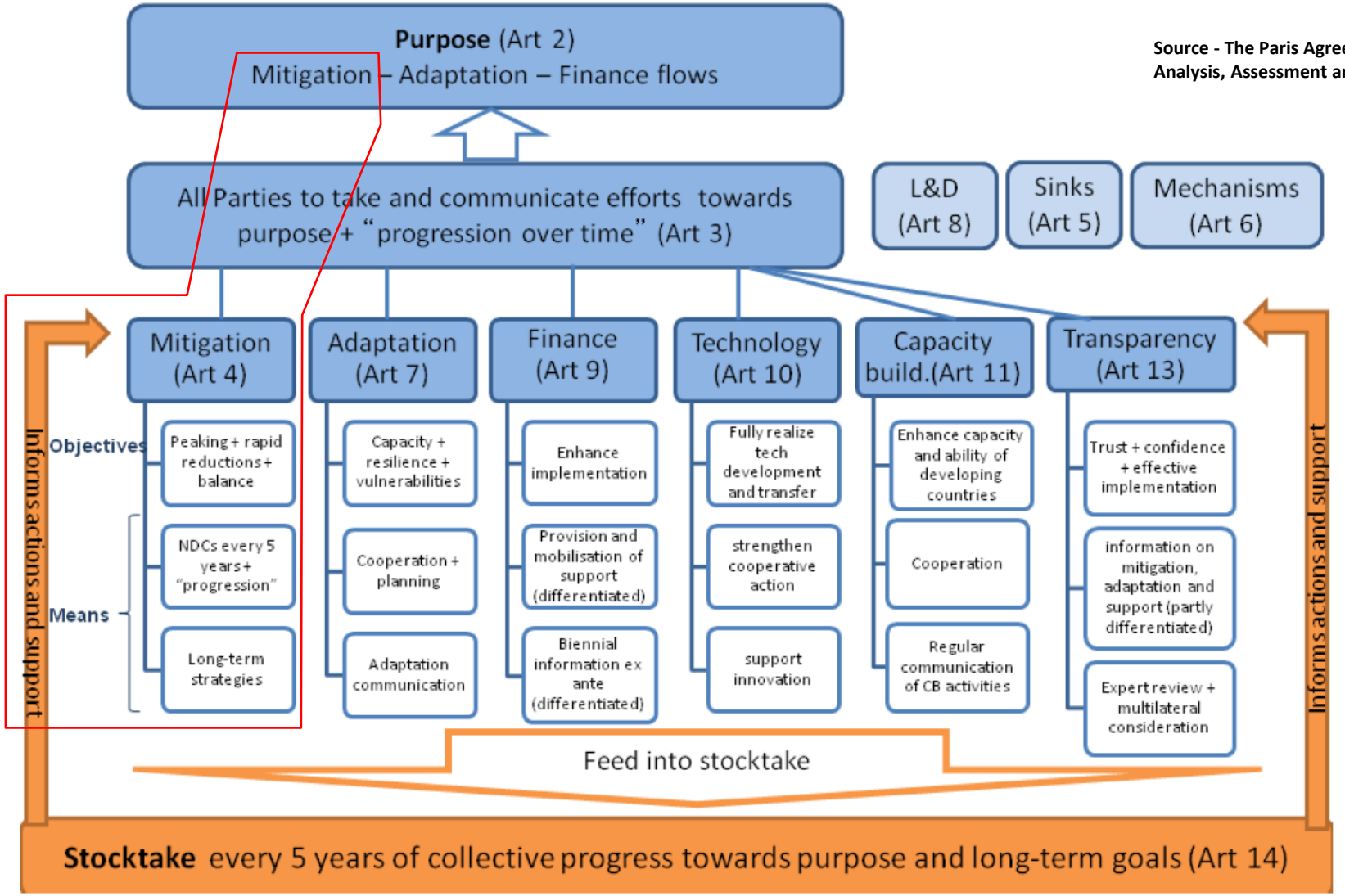
Expert meeting on the science of national mitigation efforts, different gases and 1.5°C:
Paris Agreement perspective

Florin Vladu - Manager, Collective Progress subdivision

22 June 2021

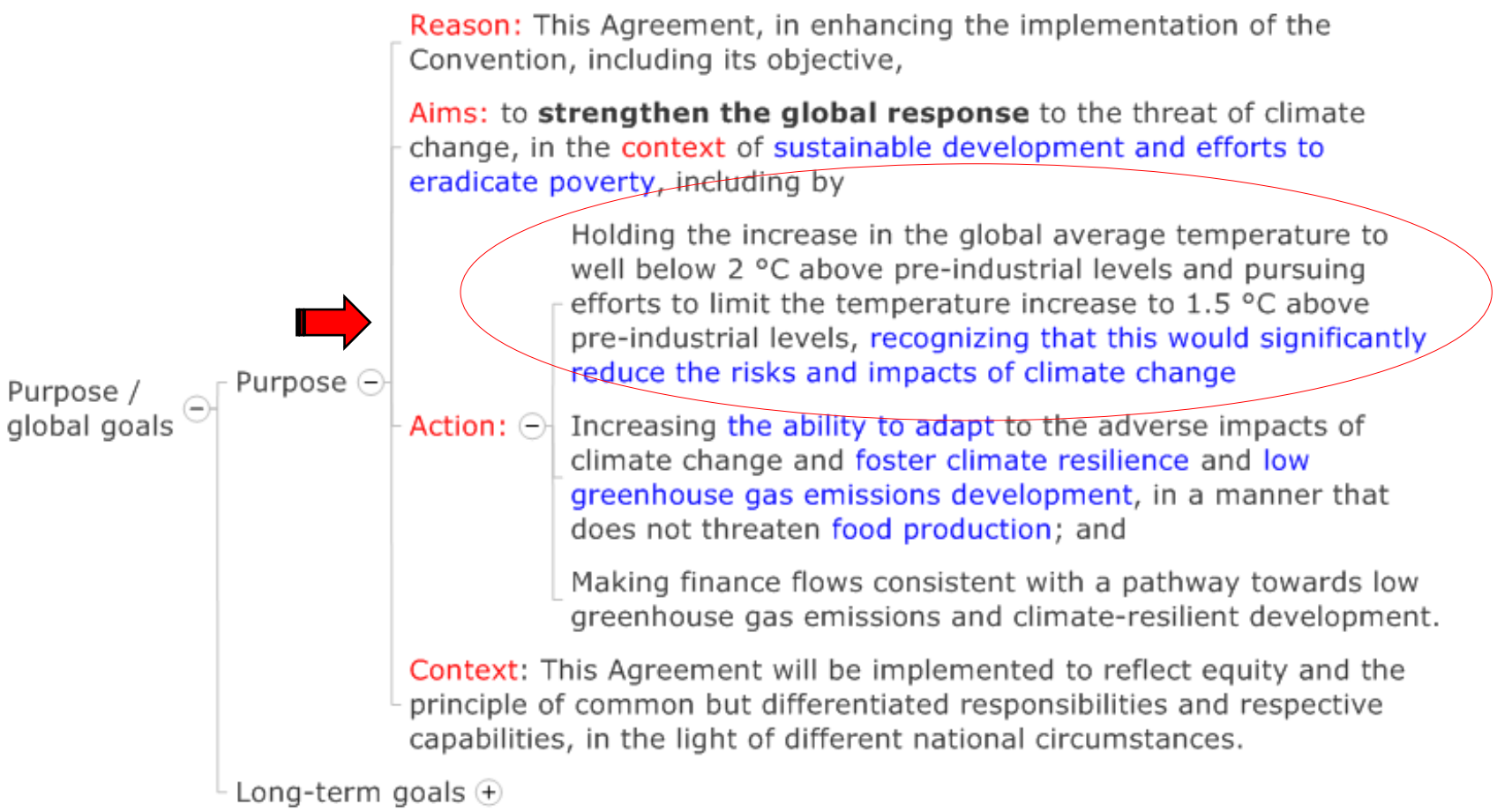
- **Foundation of global efforts to combat climate change**. Entered into force on 21 March 1994. Currently has 197 Parties
- **Ultimate objective** (Article 2) - " . . . to achieve . . . stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system . . ."
- **Mitigating climate change** and its impacts lies at the heart of the Convention's objective:
  - Limiting, or as appropriate, reducing, **anthropogenic greenhouse gas** (GHG) emissions by sources
  - Preserving or, as appropriate, enhancing **sinks and reservoirs of GHGs**
- **Principles** guiding Parties to the Convention (Article 3): equity - common but differentiated responsibilities and respective capabilities (CBDR/RC); precautionary principle; full consideration for developing country needs and circumstances; right to sustainable development and supportive and open economic system
- **Groups of Parties** under the Convention: Annex I - take the lead (Annex II, EITs); and non-Annex I - needs and special circumstances of developing country Parties to be given full consideration

1. **The ultimate objective of the Convention apples to any related legal instruments that the Conference of the Parties may adopt (e.g., the Paris Agreement and its a comprehensive purpose and long-term global goals an enhanced transparency framework and a global stocktake to assess progress)**



Source - The Paris Agreement: Analysis, Assessment and Outlook

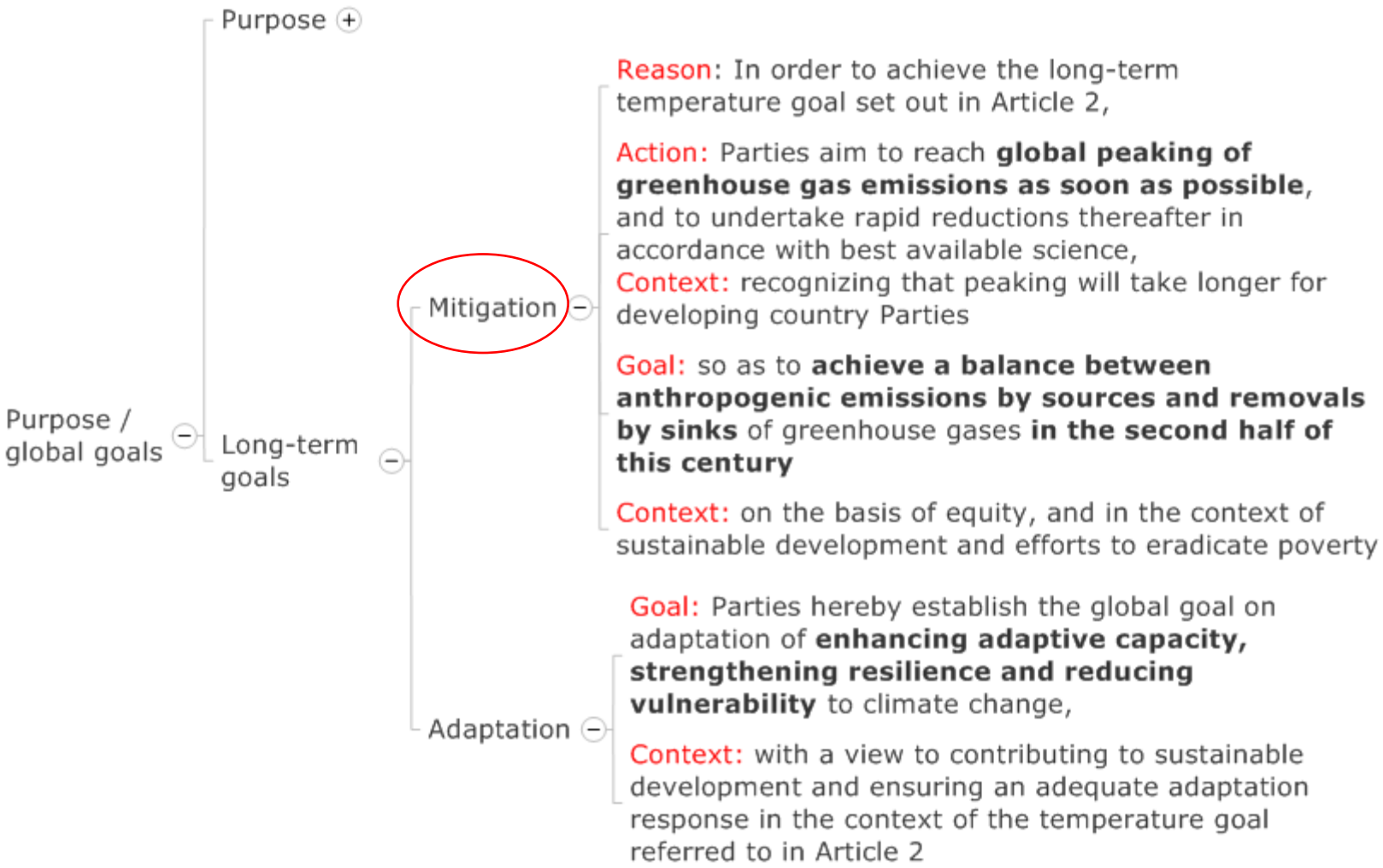
2. The bottom-up, pledge and review, architecture as opposed to Kyoto Protocol top-down architecture: how much we need to mitigate collectively is dictated by the upper limit of global warming



No provision to be informed by best available science:

- What is the definition of "global average temperature"?
- What happens if the global average temperature is in the interval: cooling or stabilization?

- An upper limit on acceptable global warming at **well below 2 °C** warming above preindustrial levels **by the end of this century** and **as close to 1.5 °C** as possible



4. The Paris Agreement refers to a balance between emissions and removals in the second half of the century, based on AR5. However, it is unclear if Parties understood at that time the meaning this balance.

Take action to implement Paris Agreement

- At national and international level

***Communicate* individual efforts (forward looking)**

- **NDCs:** 2020, 2025, 2030 …
- **Adaptation Communication:** …
- Long-term low GHG development strategies: 2020

***Report* individual efforts (backward looking)**

- Biennial transparency reports (BTRs): 2024, every 2 years after
- Includes information necessary to track progress made in implementing and achieving NDCs

Parties to the Paris Agreement

1 2 3 4

Take stock of implementation of the Paris Agreement and assess collective progress towards its purpose and long-term global goals

- Global stocktake (GST) (2023, 2028, 2033)
- Comprehensive: mitigation, adaptation and means of implementation and support

5 years cycle

Informs Parties in:

- Updating NDCs in a nationally determined manner (progression clause)
- Enhancing international cooperation for climate action

→ **Key to catalyze progress**

- IPCC assessments
- Constituted Bodies and forums
- UN agencies
- …

5. The global stocktake is an anchor for the ambition cycle, which brings it all together!

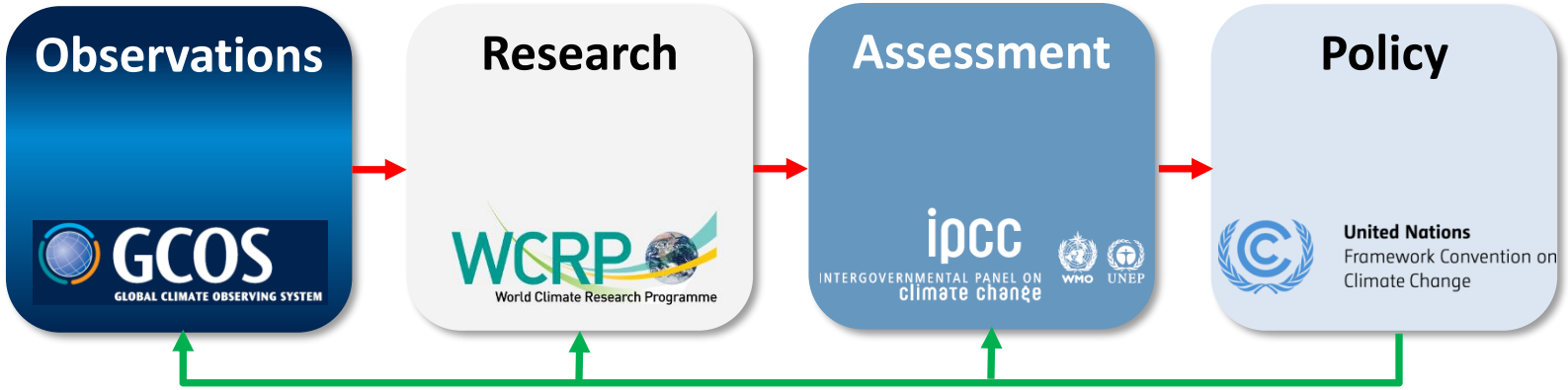
Dynamic between science and policy

- **Observation** of the climate system – GCOS: cycles (status, implementation, progress), mechanism (fund, regional needs), Parties: actions and reporting, space agencies and others

- **Research** to understand and predict changes – Research Dialogue and guidance on priority research (e.g., for implementing the Paris Agreement, for filling in the gap for 1.5°C)

- **Assessment** of the current state of knowledge in climate change and its potential environmental and socio-economic impacts – IPCC: status of the "problem" and its potential "solutions" (mitigation and adaptation) – inform the implementation of the Paris Agreement (e.g., the global stocktake)

- **Policy** – SBSTA, COP, CMA: stocktake, formulate policy and provide guidance (e.g., the 2013-2015 review, the purpose and long-term goals of the Paris Agreement, guidance on research for 1.5°C, **the second periodic review**, **the first global stocktake**)



- **The periodic review to assess**
  a) The **adequacy of the long-term global goal** (hold the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C) in the light of the ultimate objective of the Convention
  b) Overall **progress made towards achieving the long-term global goal**, including a consideration of the implementation of the commitments under the Convention

- **The second periodic review should**
  a) **Enhance Parties' understanding** of the long-term global goal and scenarios towards achieving it; progress made in relation to addressing information and knowledge gaps, including on and the range of associated impacts; and challenges and opportunities
  b) **Assess the overall aggregated effect of the steps taken by Parties** in order to achieve the long-term global goal

- Outcome of the second periodic review will **not result in an alteration or redefinition of the long-term global goal**

- The **global stocktake** will periodically take stock of the implementation of this Agreement to assess the collective progress towards achieving the purpose of this Agreement and its long-term goals

COP24·KATOWICE 2018
UNITED NATIONS CLIMATE CHANGE CONFERENCE

Mitigation

- Overall effect of NDCs
- State of GHG emissions and removals and mitigation efforts undertaken by Parties

Adaptation

- State of adaptation efforts, support, experiences and priorities

Finance flows and means of Implementation and support:

- Finance flows and financial support
- Technology
- Capacity-Building

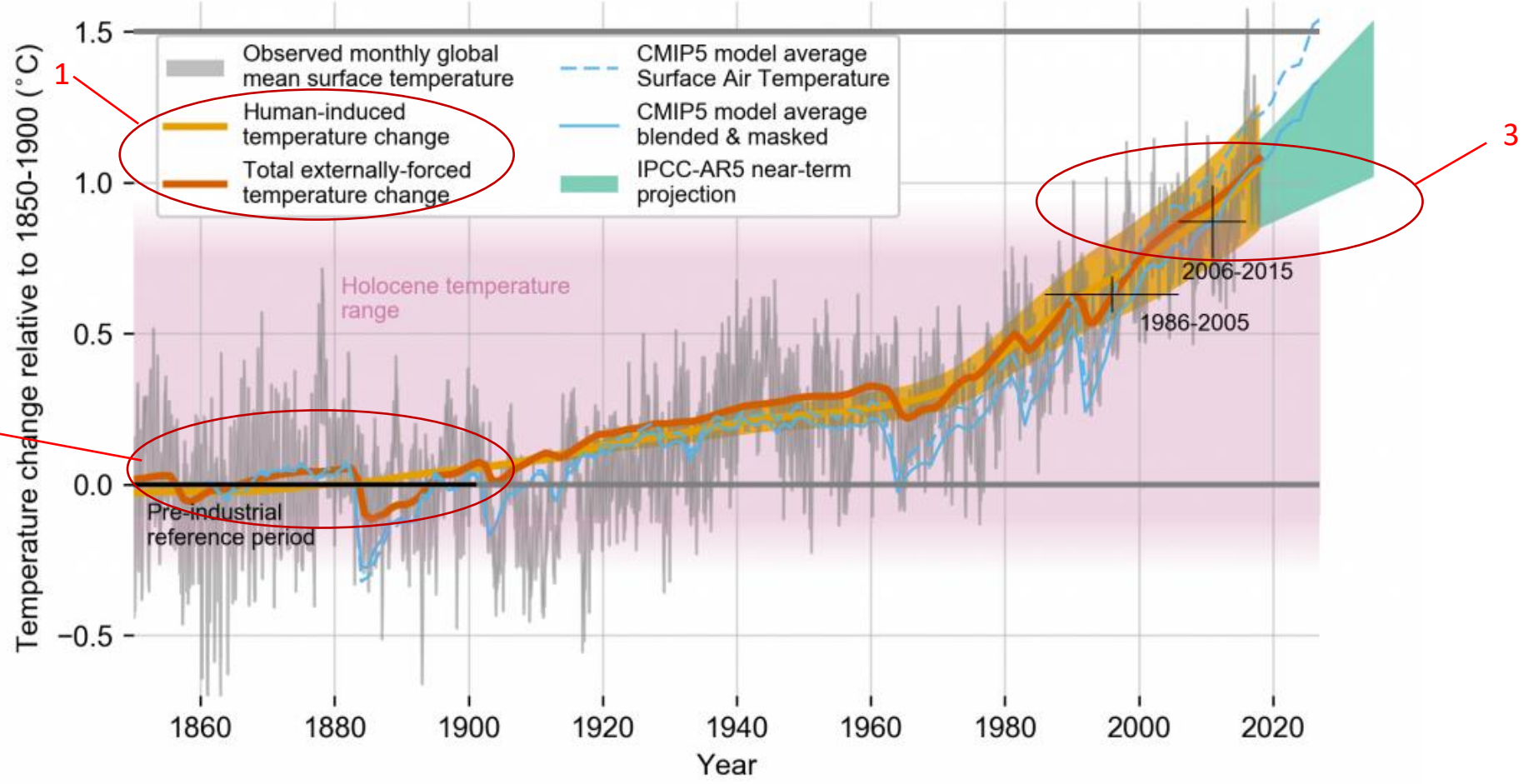
Efforts on:

- Social and economic consequences of response measures (under mitigation)
- Adverting, minimizing and addressing loss and damage (under adaptation?)

Inputs on equity

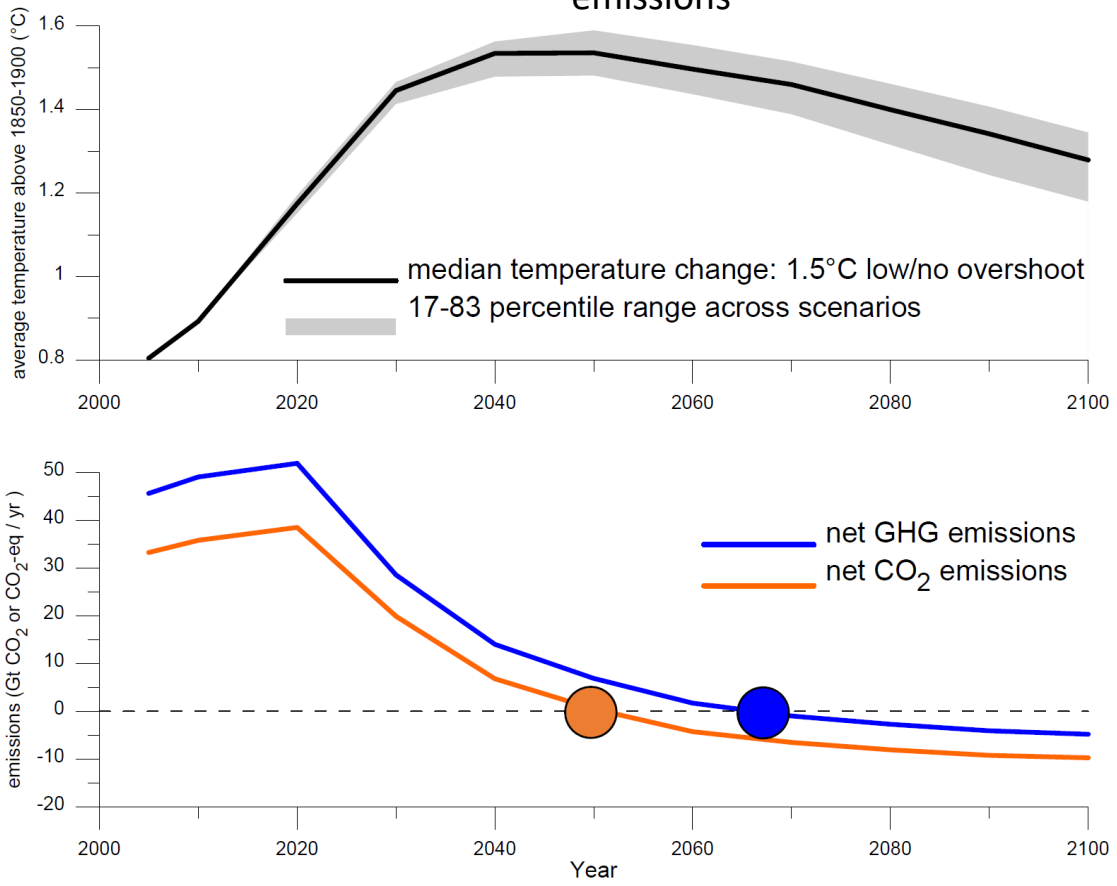
- Fairness consideration including equity as communicated by Parties in their NDCs

AR5: over the period 1901–2012; and over 10 years (GMST)
SER1.5: averaged over a 30-year period that span past and future years (GMST+GSAT); and 10 years (GMST)
AR6 – over 10 years (GMST); and provides both human induced and total externally forced values

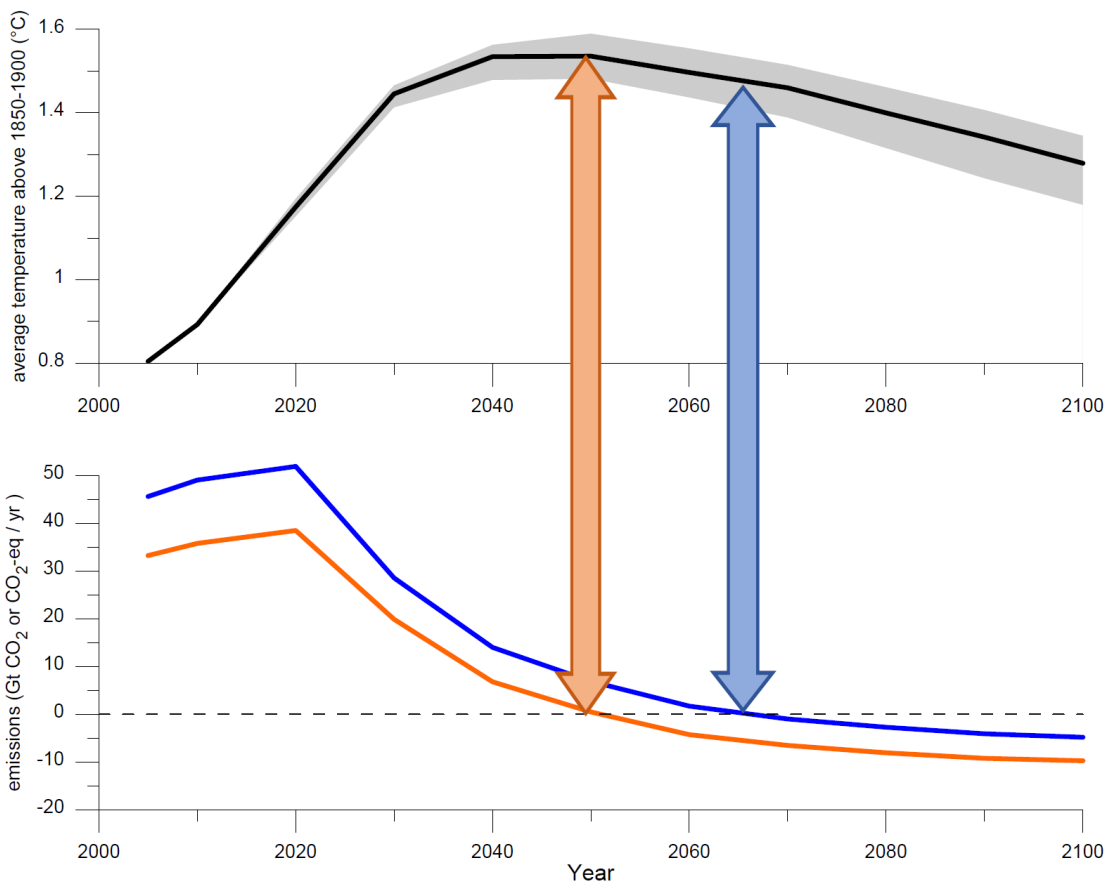


7. **This definition of “global average temperature” can change the level of mitigation needed. However, it will not change the imperatives for mitigation: peaking as soon as possible, reducing emissions and removing CO_2 from the atmosphere to reach net-zero**

The timing and the temperature outcome for net zero CO_2 emissions



The timing and the temperature outcome for net zero total greenhouse gas (GHG) emissions



8. Net-zero CO_2 emissions result in stabilizing global temperatures and coincide with peaking temperatures (stabilization), and net-zero GHG emissions implies that temperatures have peaked and are on a gradual declining path (cooling)

Thank you!