



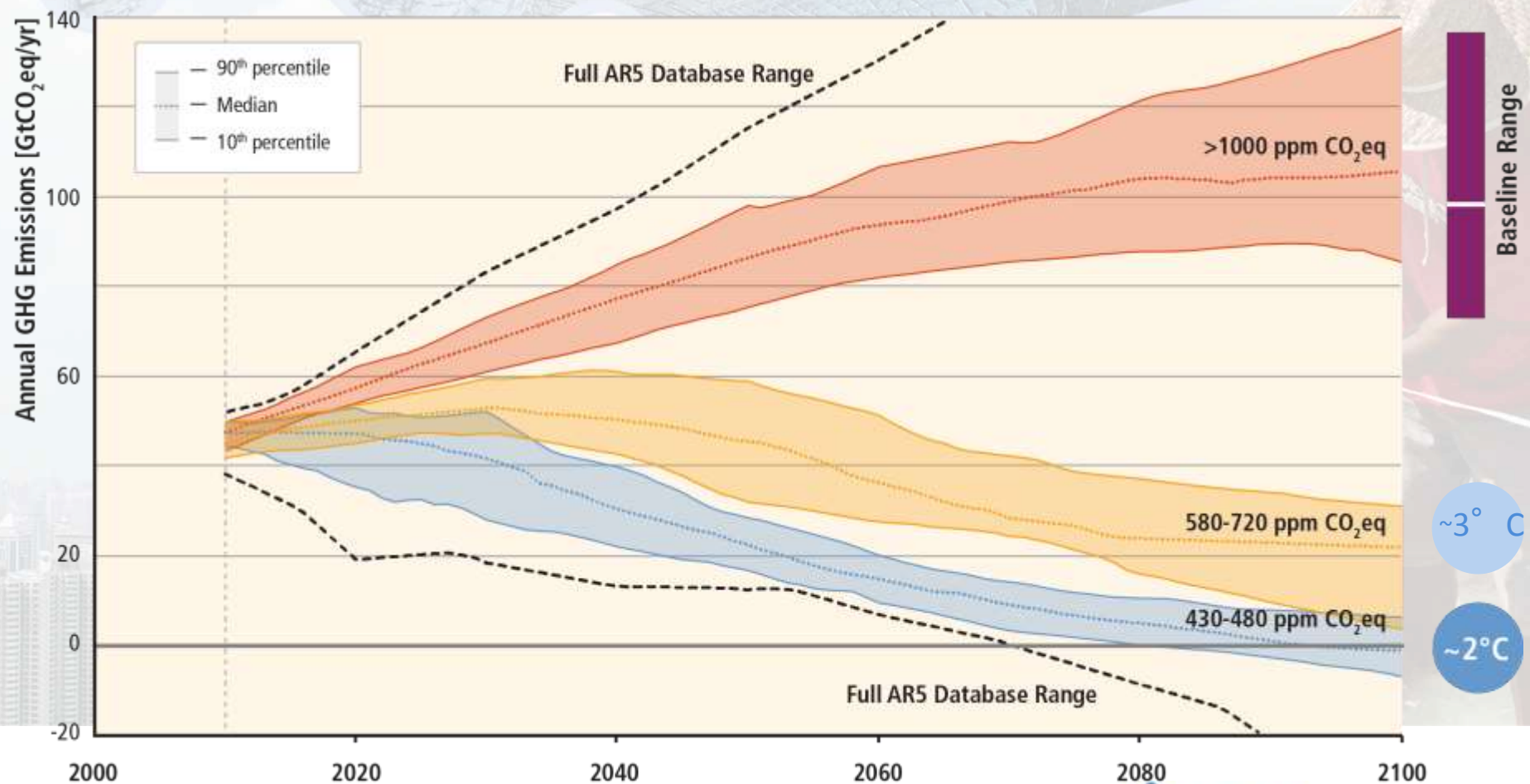
Key messages on Climate Change Mitigation

Workshop for Policymakers on the Activities and Findings of
the Intergovernmental Panel on Climate Change

Hosted by APCA, UNECA, 30 April 2017

Jim Skea and PR Shukla
Co-Chairs IPCC WG-III

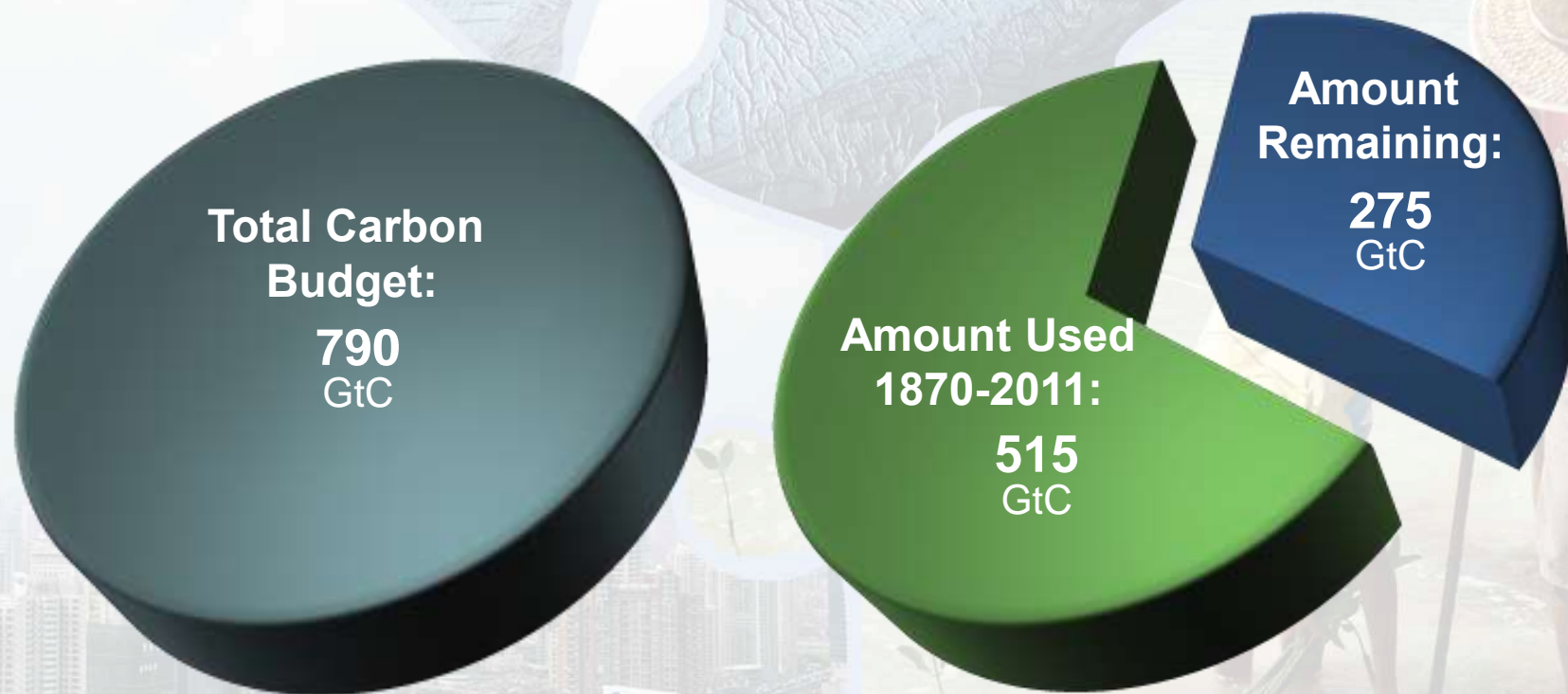
Stabilization of atmospheric concentrations requires moving away from the baseline – regardless of the mitigation goal



Based on Figure 6.7

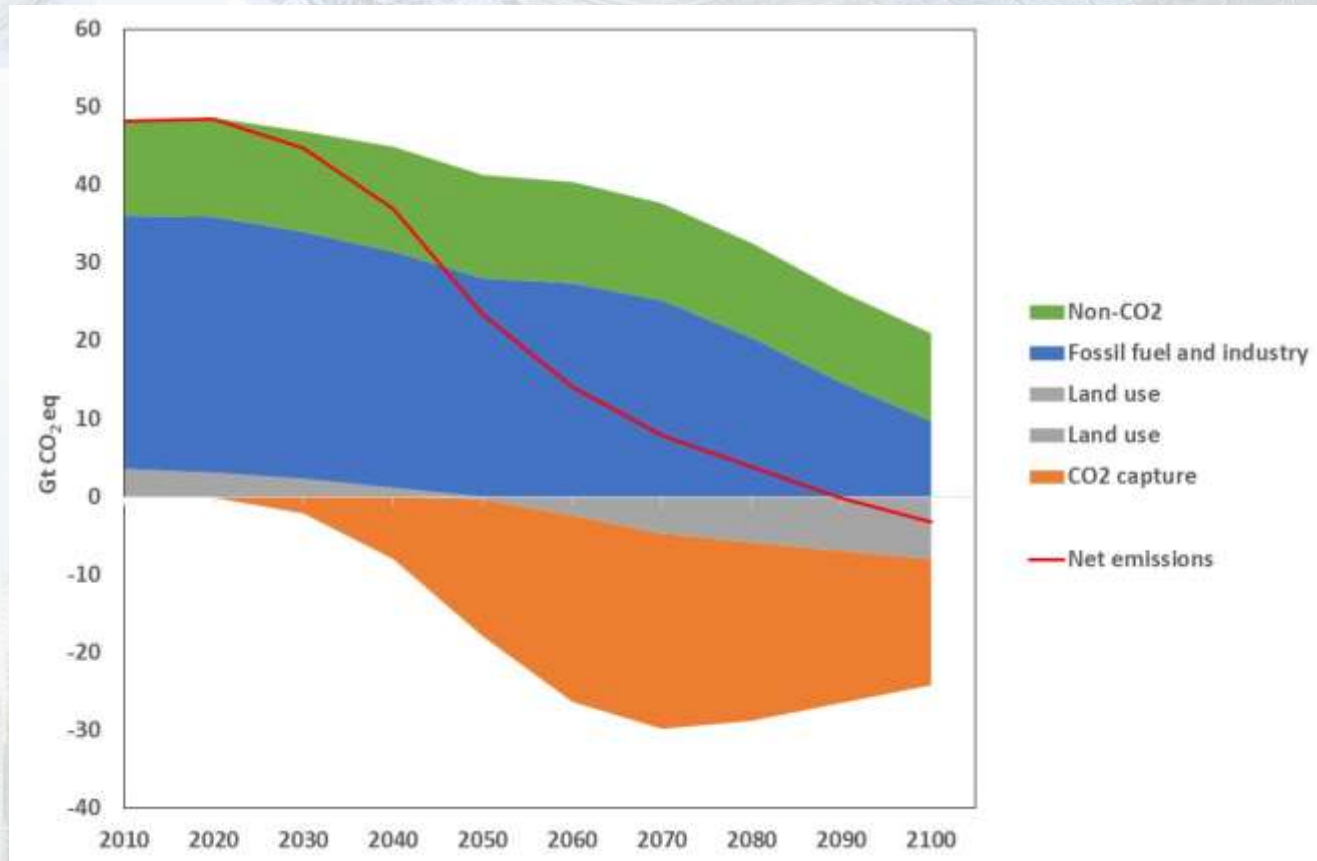
The window for action is rapidly closing

65% of our carbon budget compatible with a 2° C goal already used



AR5 WGI SPM

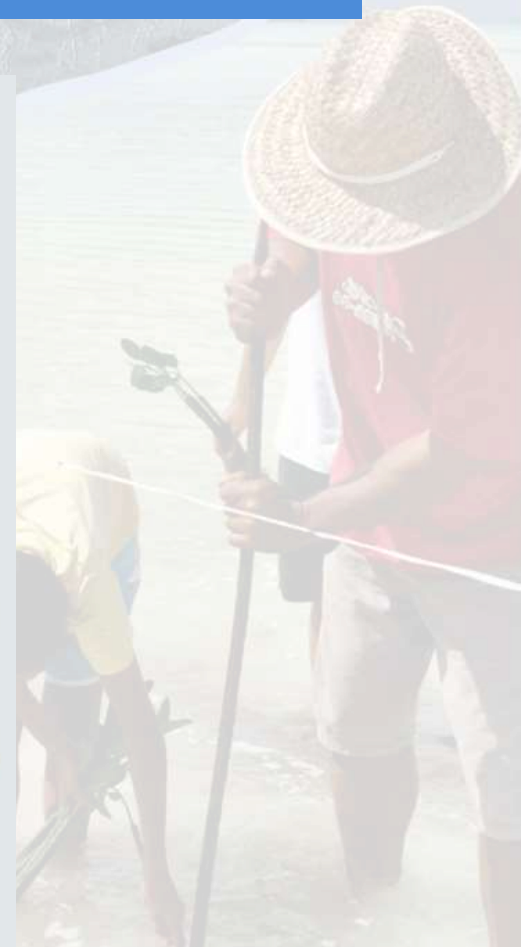
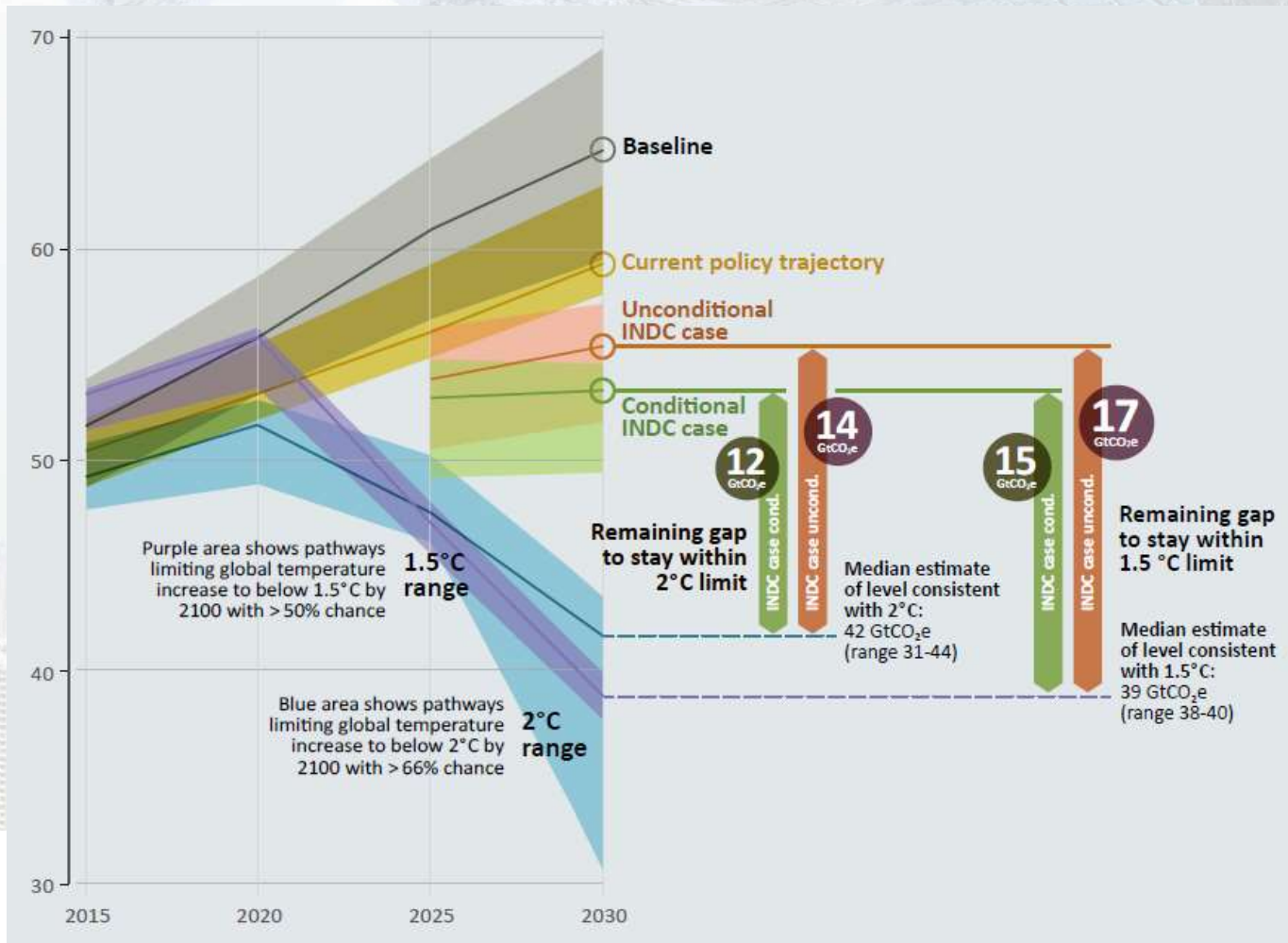
Balancing sinks and sources means a move away from fossil fuels and capturing large volumes of CO₂ (Article 4)



Note: one illustrative scenario with a 65% probability of getting below 2° C warming

Source: derived from AR5 database

Nationally determined contributions have moved us away from the baseline but are not sufficient to meet long-term goals

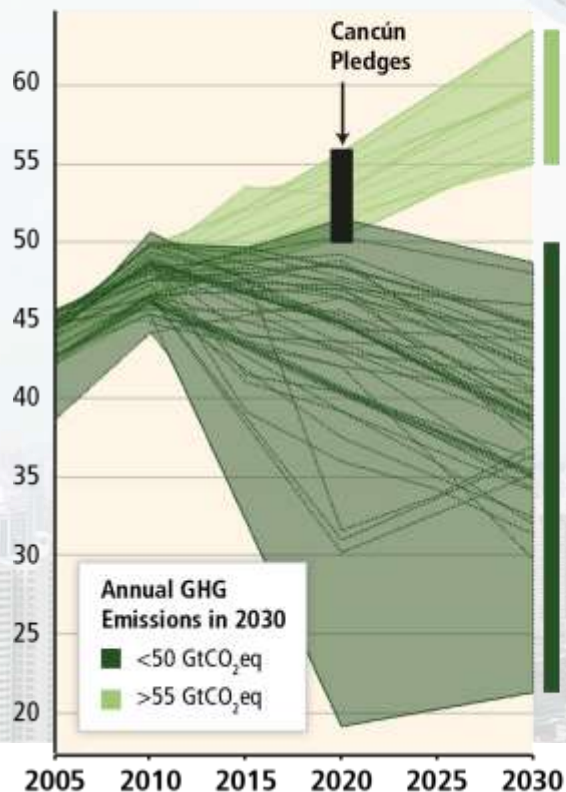


Source: UNEP

The sooner we act, the easier and the cheaper it will be to reach a given temperature goal

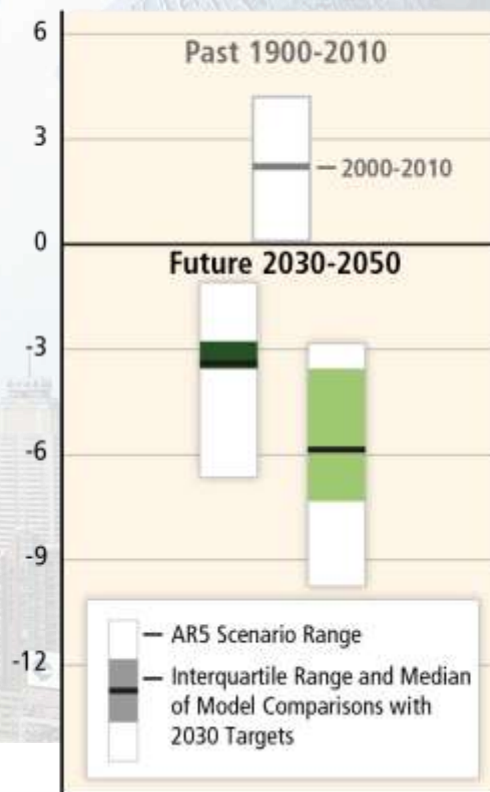
Before 2030

GHG Emissions Pathways [GtCO₂eq/yr]

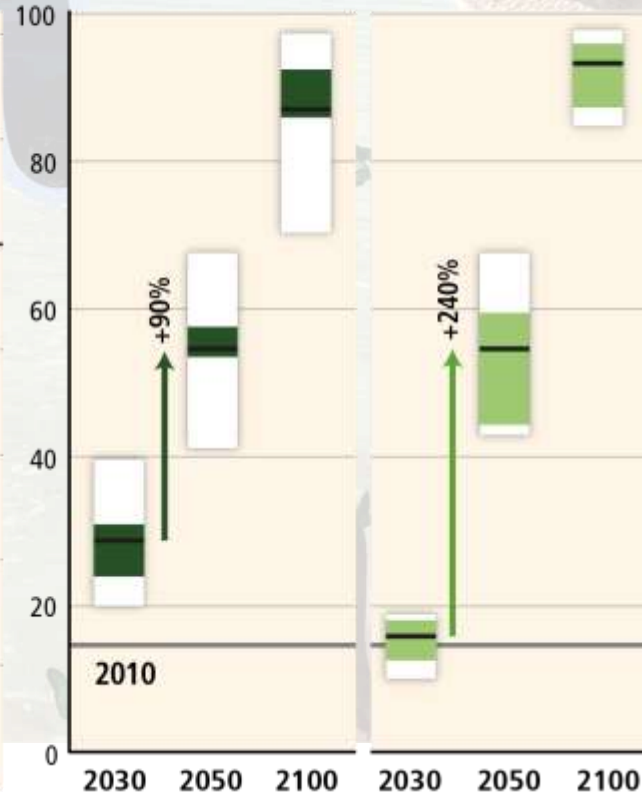


After 2030

Rate of CO₂ Emission Change [%/yr]



Share of Low-Carbon Energy [%]



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We need to deploy a range of mitigation measures



More efficient use of energy



Greater use of low-carbon and no-carbon energy

- Many of these technologies exist today



Improved carbon sinks

- Reduced deforestation and improved forest management and planting of new forests
- Bio-energy with carbon capture and storage

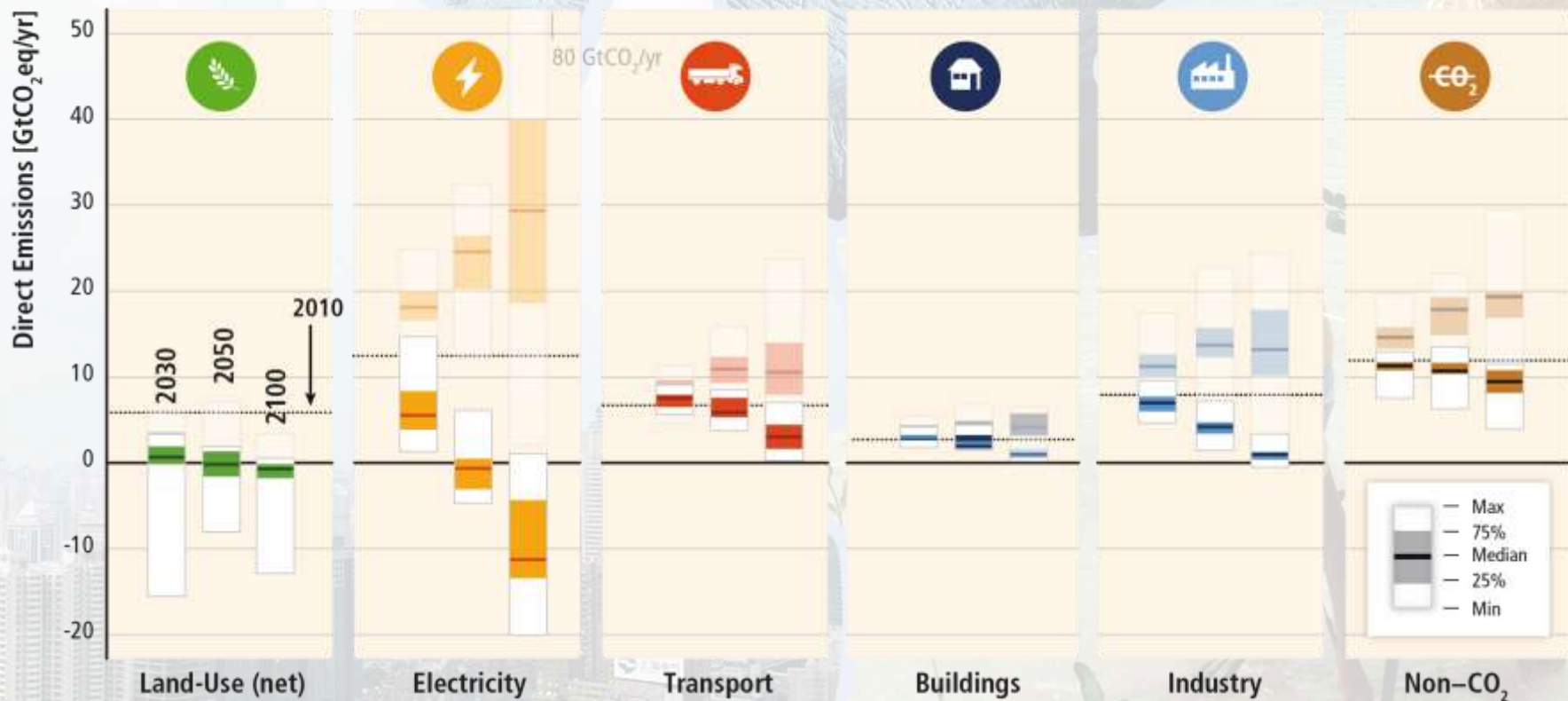


Lifestyle and behavioural changes

AR5 WGIII SPM

Emission patterns would need to change throughout the economy

450 ppm CO₂eq with Carbon Dioxide Capture & Storage



Ambitious mitigation is affordable

- Economic growth reduced by $\sim 0.06\%$ (BAU growth 1.6 - 3%)
- This translates into delayed and not forgone growth
- Estimated cost does not account for the benefits of reduced climate change
- Unmitigated climate change would create increasing risks to economic growth

AR5 WGI SPM, AR5 WGII SPM

WG III Co-chairs' ambitions for the AR6 cycle

- to achieve a better synthesis between higher-level “whole system” perspectives derived from, for example, global integrated assessment models (IAMs) and grounded, bottom-up insights into technologies and other approaches for reducing emissions.
- to make greater use of social science disciplines, in addition to economics, especially for gaining insight into issues related to lifestyle, behaviour, consumption, technological choices and socio-technical transitions.
- To link climate change mitigation better to other agreed policy goals nationally and internationally (sustainable development goals)



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