

**IPCC Special Report on Global Warming of 1.5 °C**

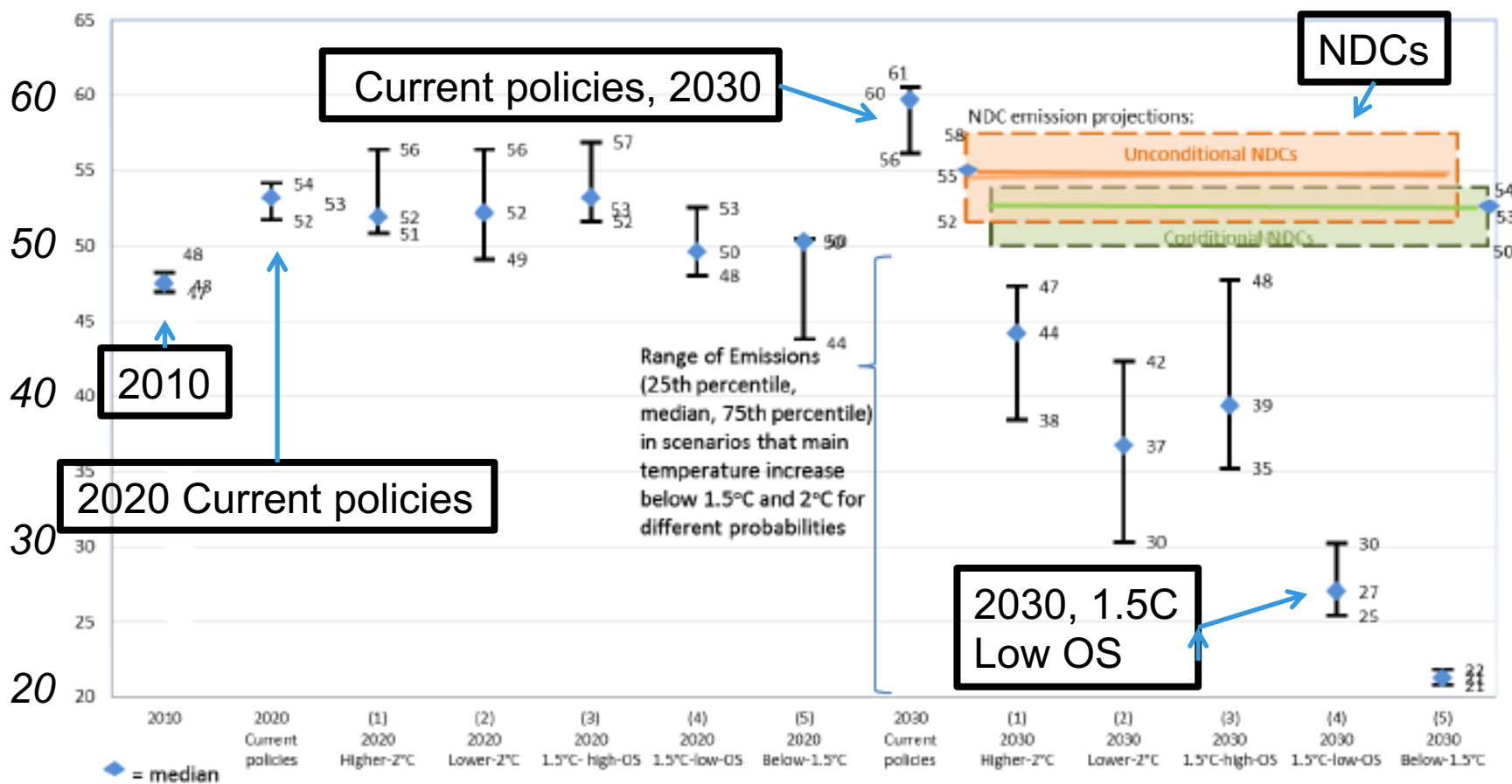
**Chapter 4: Strengthening and  
implementing the global response  
– highlights on mitigation**

## Setting the scene

- Current national pledges not enough
- Need to significantly raise the level of ambition - a greater scale (unprecedented!) and pace of change
- Feasible?

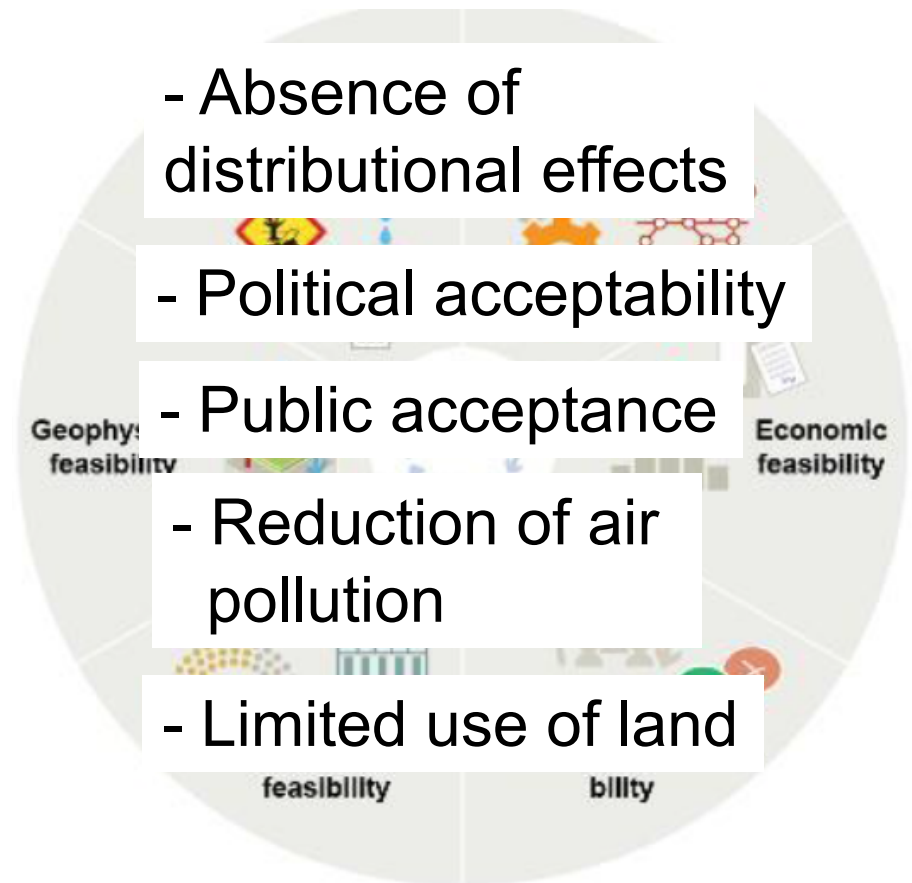


# Emission reduction levels 2030 (GtCO<sub>2</sub>e/yr)



# Feasibility indicators

- Economic and technological
- Institutional
- Socio-cultural
- Environmental/ecological
- Geophysical

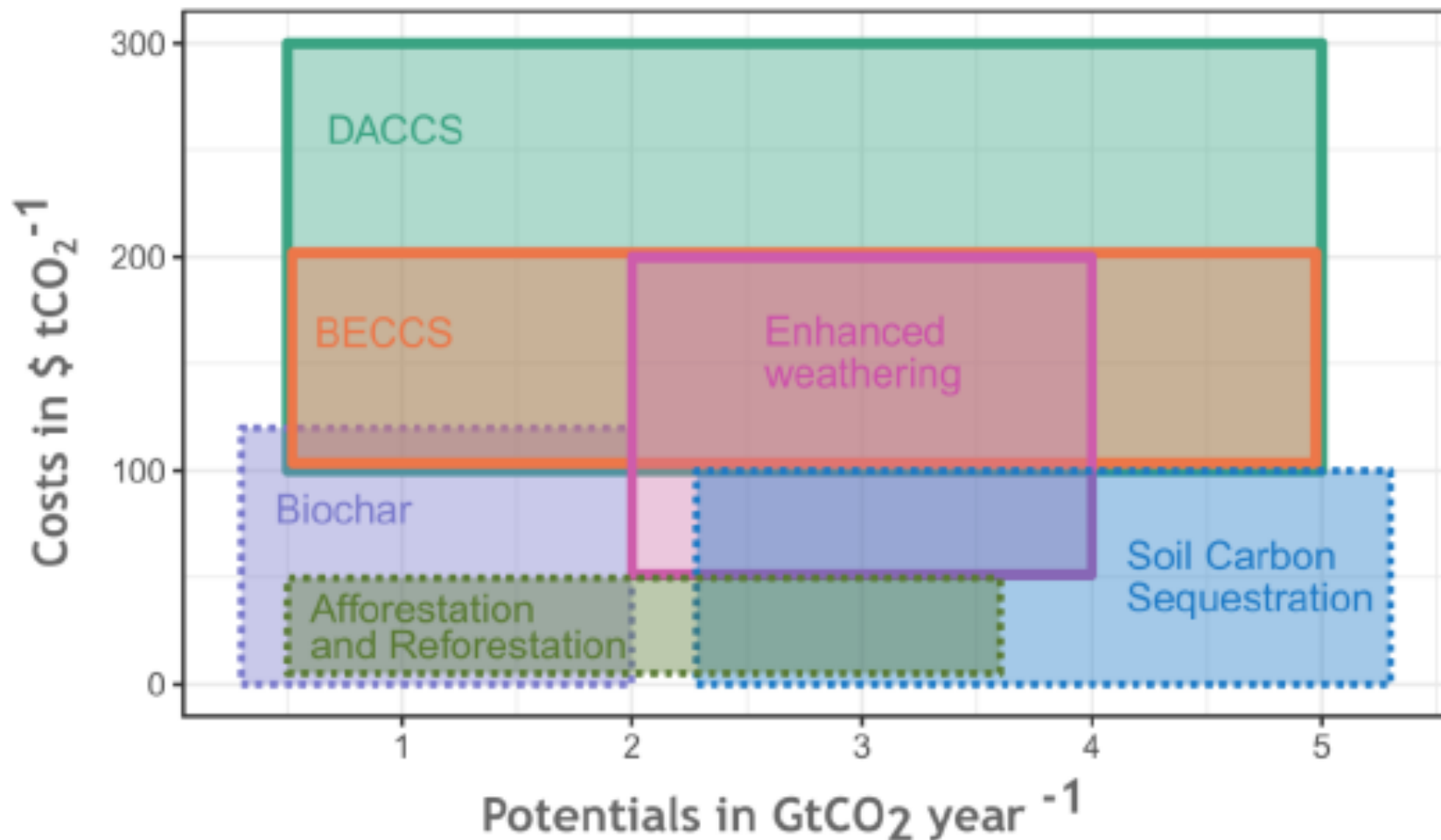


# **System transitions, feasibility**

- Energy systems
  - Partially started (cf. solar, wind, electricity storage)
- Land and Ecosystems
  - Dietary shifts, sustainable intensification
- Urban and Infrastructure
  - Electrification (transport)
  - Urban design: compact/smart/green/inclusive cities
  - Building codes and standards
- Industrial
  - Energy & materials efficiency. Substitution/bio-based feedstocks. Electrification/hydrogen/CC(U)S

# CDR (and SRM)

Offset residual, compensate for emissions over budget



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# **Enabling conditions, and barriers**

## **Policy, Finance, Institutions, Governance, ...**

- Systemic change
- Multi-level governance
- Costs not the only barrier, or enabler
  - Redirection of financial flows, but also scale up investments
  - Evolution of financial systems, de-risk investments
  - Carbon pricing & consistent policy-packages
- Address distributional effects, Co-benefits
- Institutions, Acceptability, Trust
- Align with Sustainable Development
- Mitigation & Adaptation