

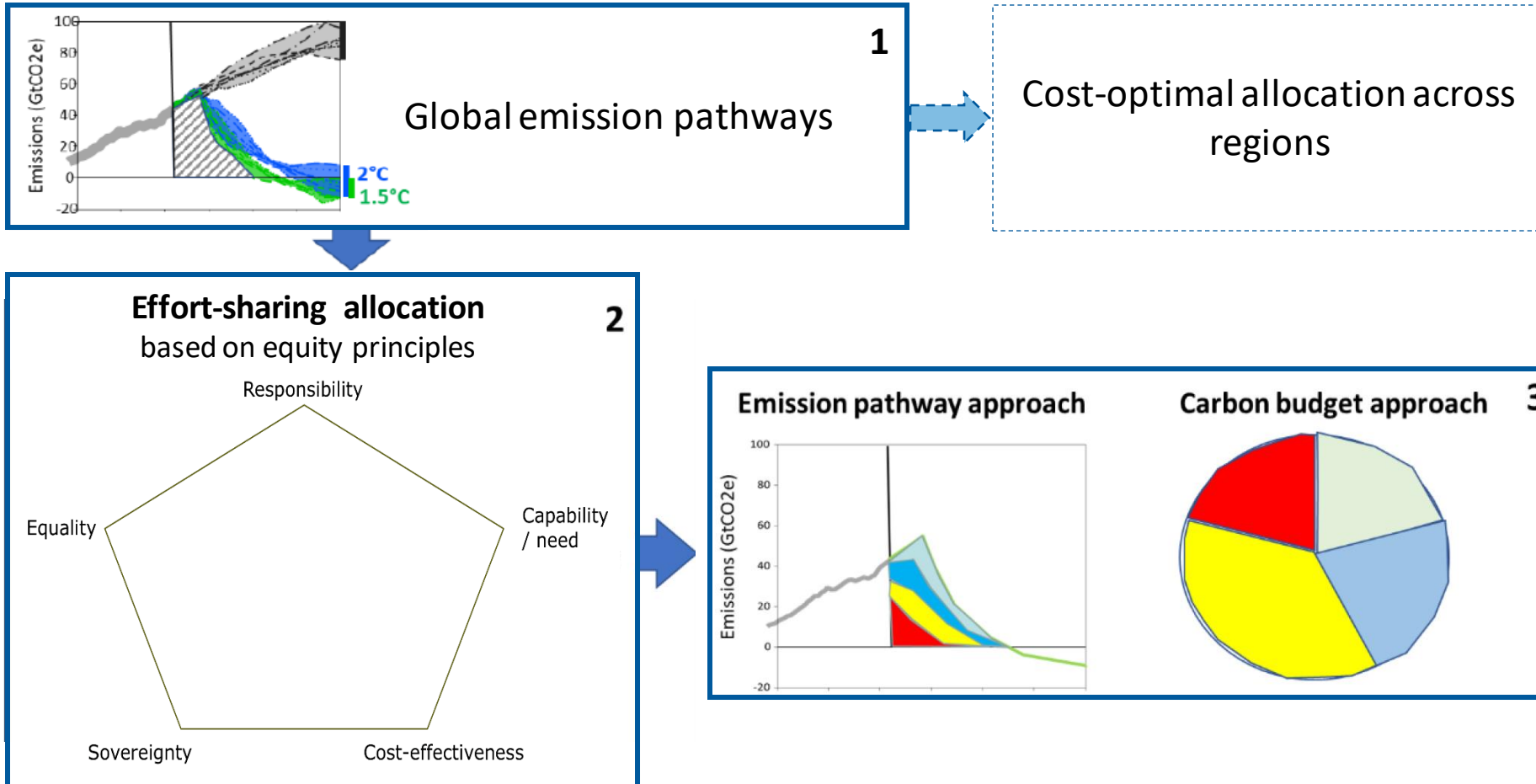
# ENGAGE

Exploring **N**ational and **G**lobal **A**ctions to reduce **G**reenhouse gas **E**missions

## **Equity principles - how do we share the challenges of decarbonization in a fair way?**

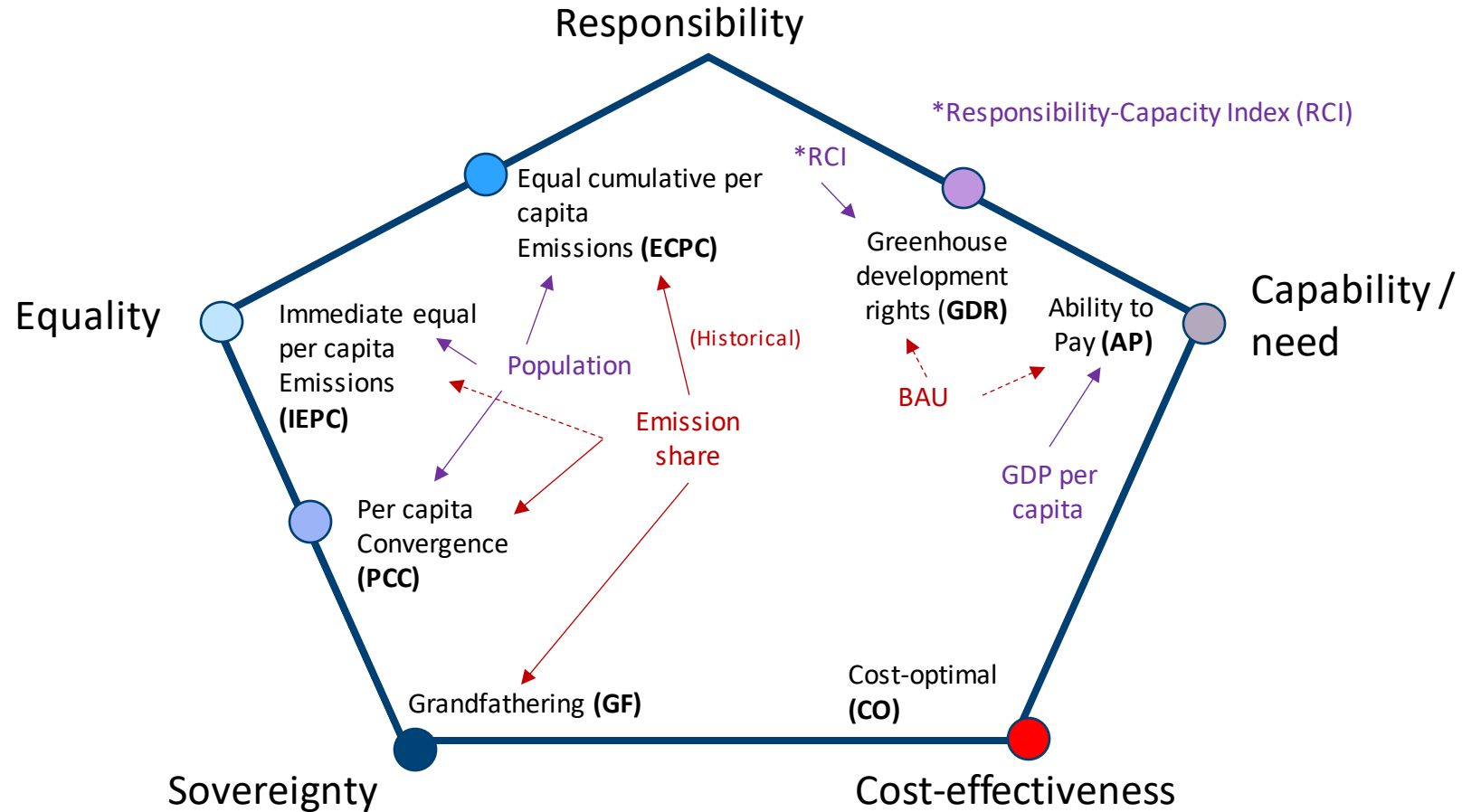
Heleen van Soest (PBL) and Vrontisi Zoi (E3Modelling)

# Approaches for achieving decarbonization pathways



(source: van den Berg, 2019)

# Equity principles and effort-sharing approaches

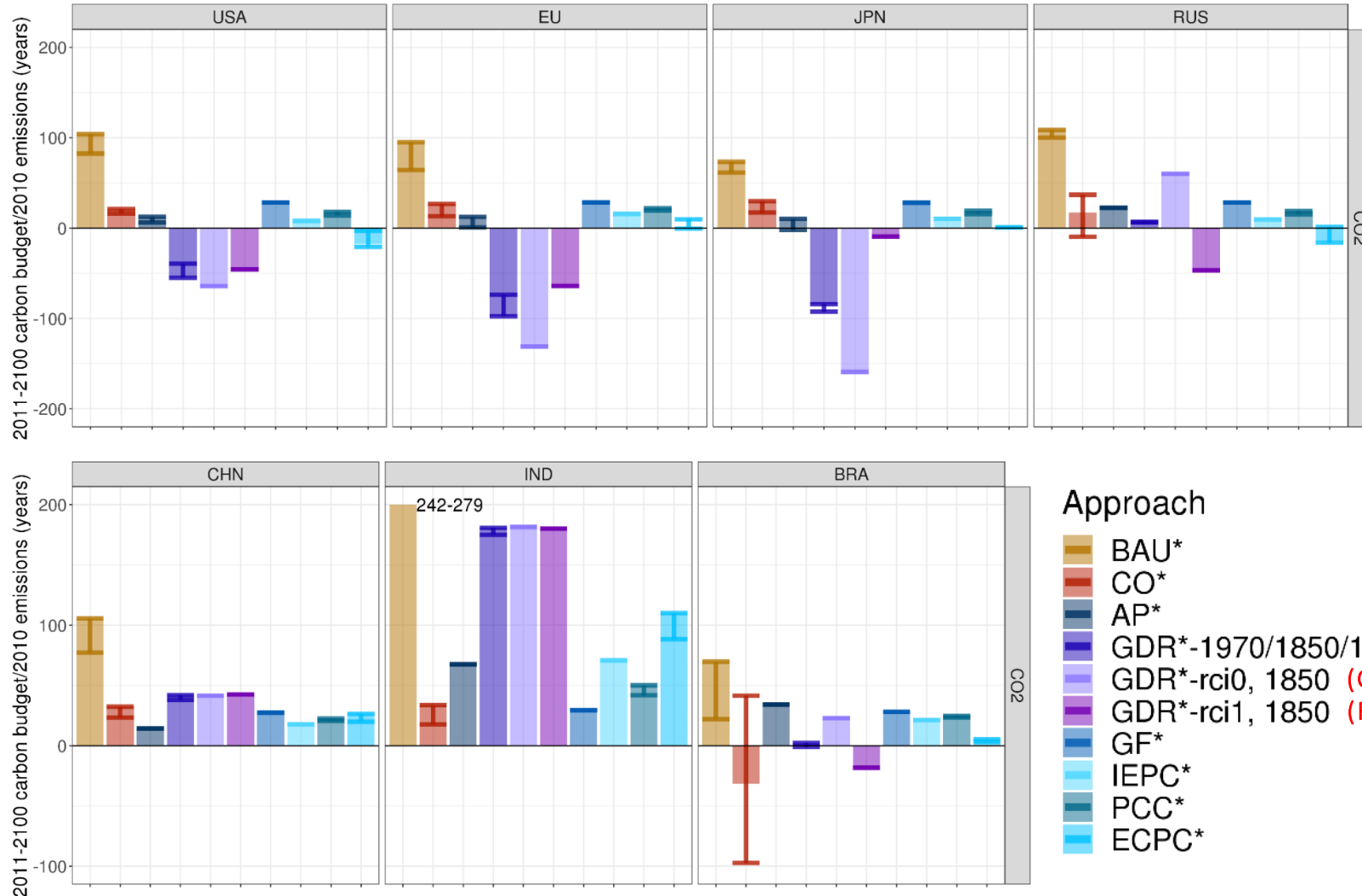


Adapted from (Höhne et al. 2013)

(source: van den Berg, 2019)

# Carbon budget approach

2011-2100/2010 emissions (in years)

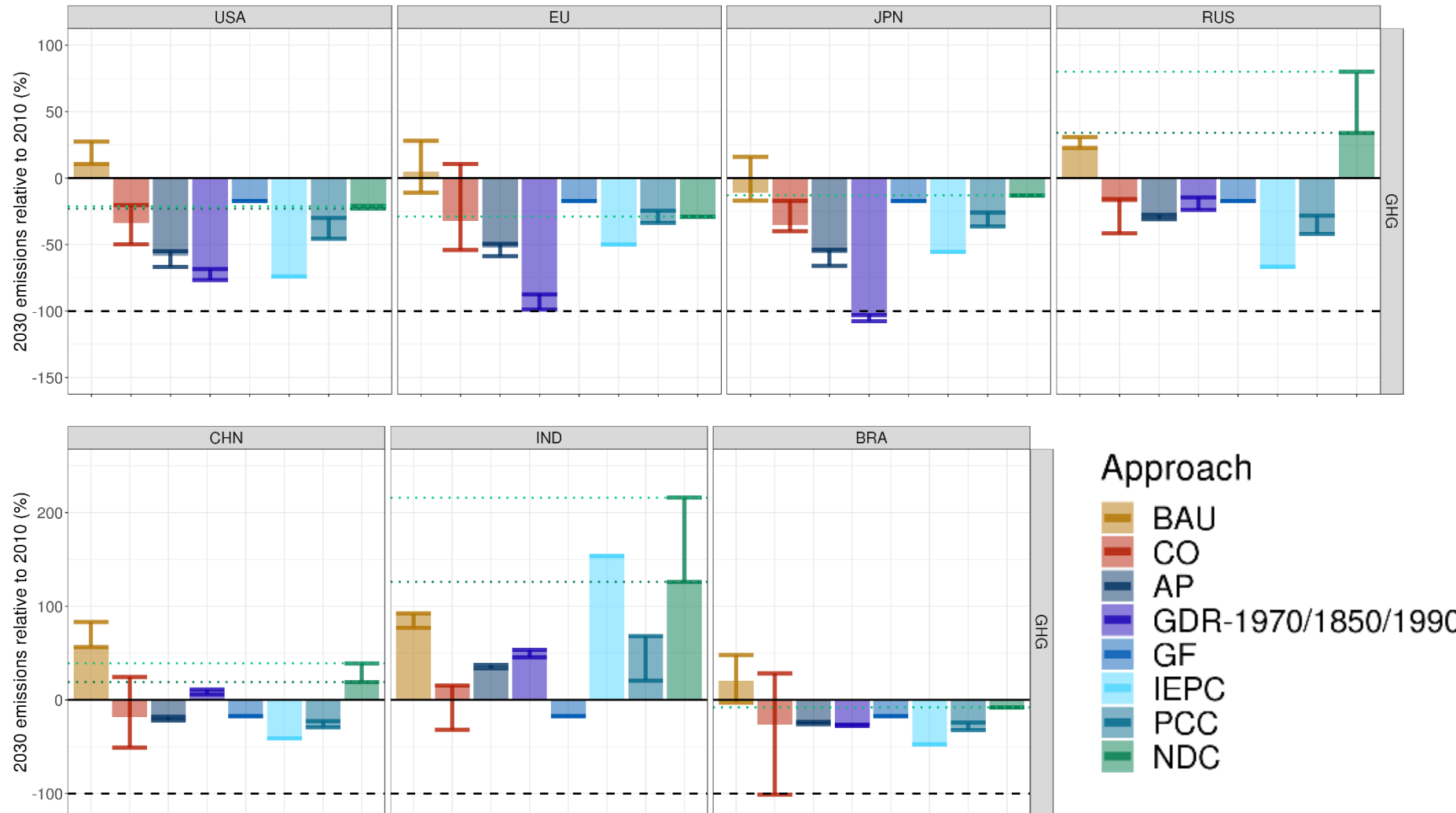


Majority of equity principles imply lower carbon budgets for developed countries compared to cost-optimal budgets

(source: van den Berg, 2019)

# Emission pathways approach

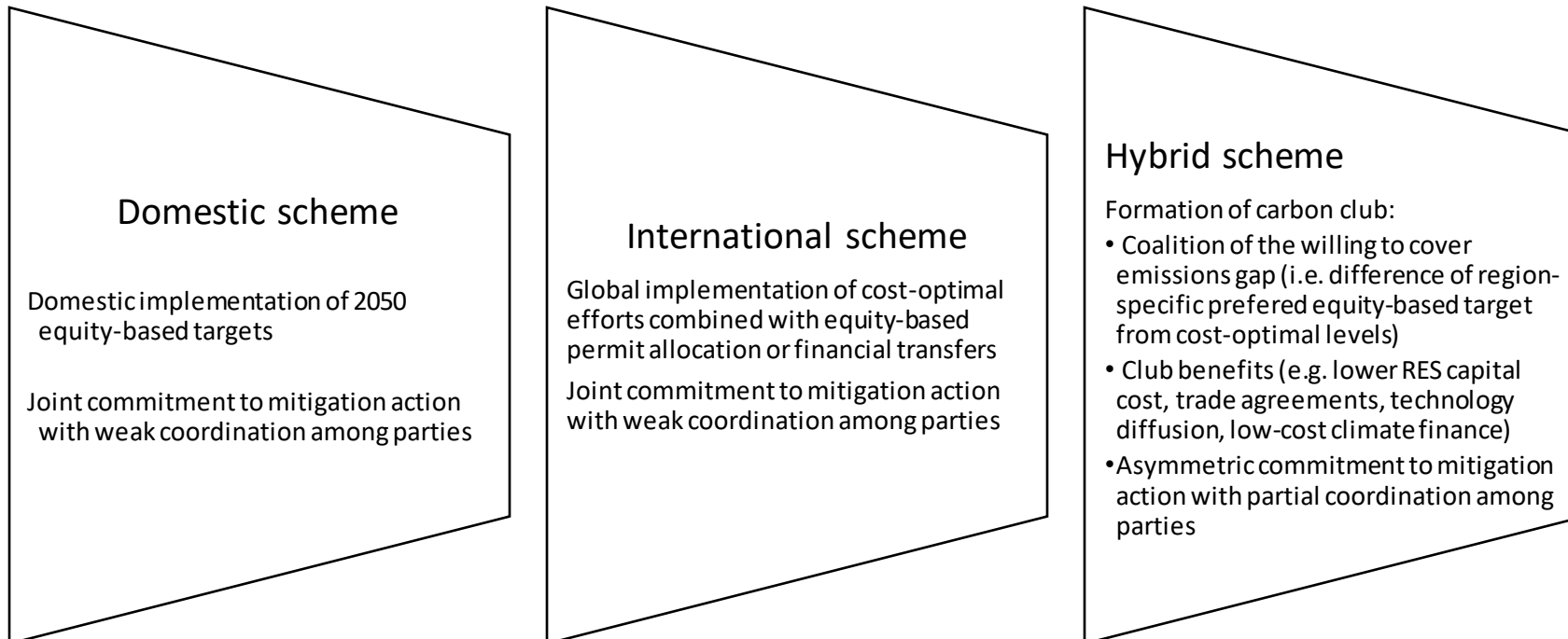
## 2030/2010 (as %)



Majority of equity principles allocate less emission allowances to developed countries compared to cost-optimal budgets

# Towards equitable mid-century strategies

- Expand effort sharing analysis to inform long-term strategies consistent with 1.5/2 °C global targets
- Provide evidence for an equity-based strengthening of NDCs
- Explore different effort-sharing schemes according to stakeholder stated preferences
- Explore different governance archetypes that formulate the equity-based policy regimes



# Thank you for your attention

