



POTSDAM INSTITUTE FOR
CLIMATE IMPACT RESEARCH

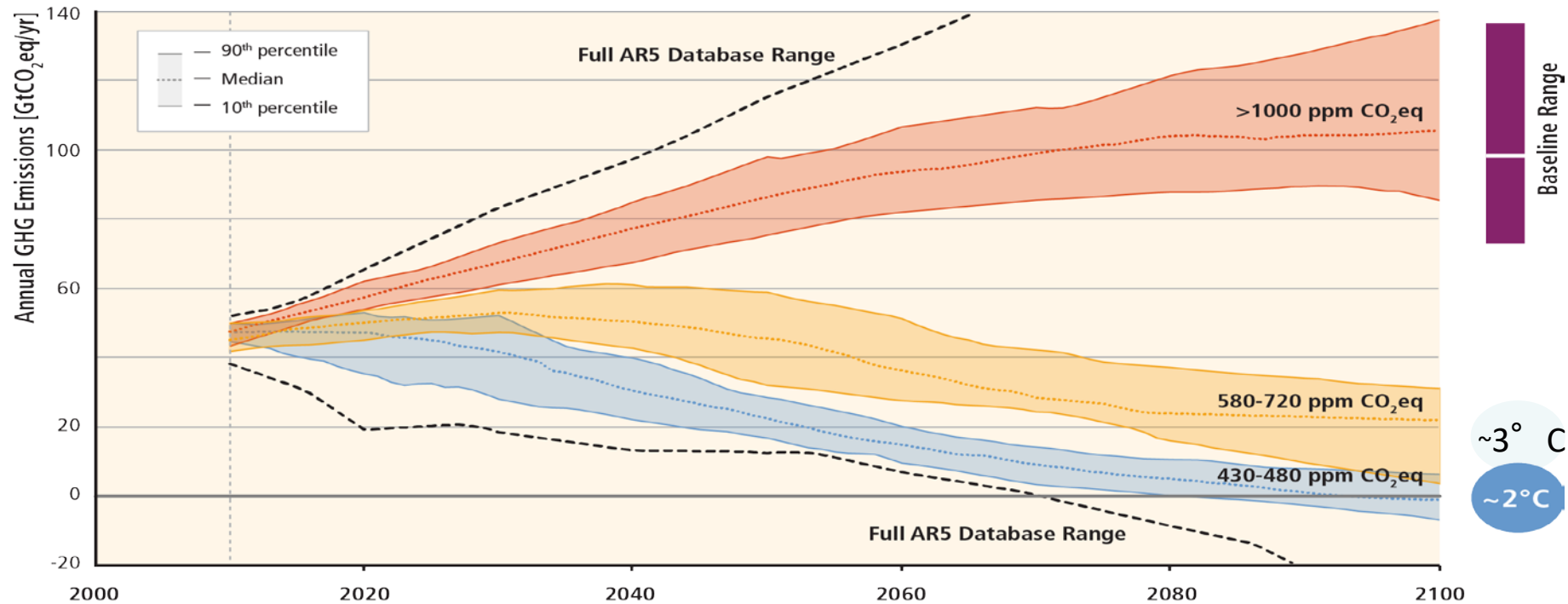
HUMBOLDT-UNIVERSITÄT ZU BERLIN



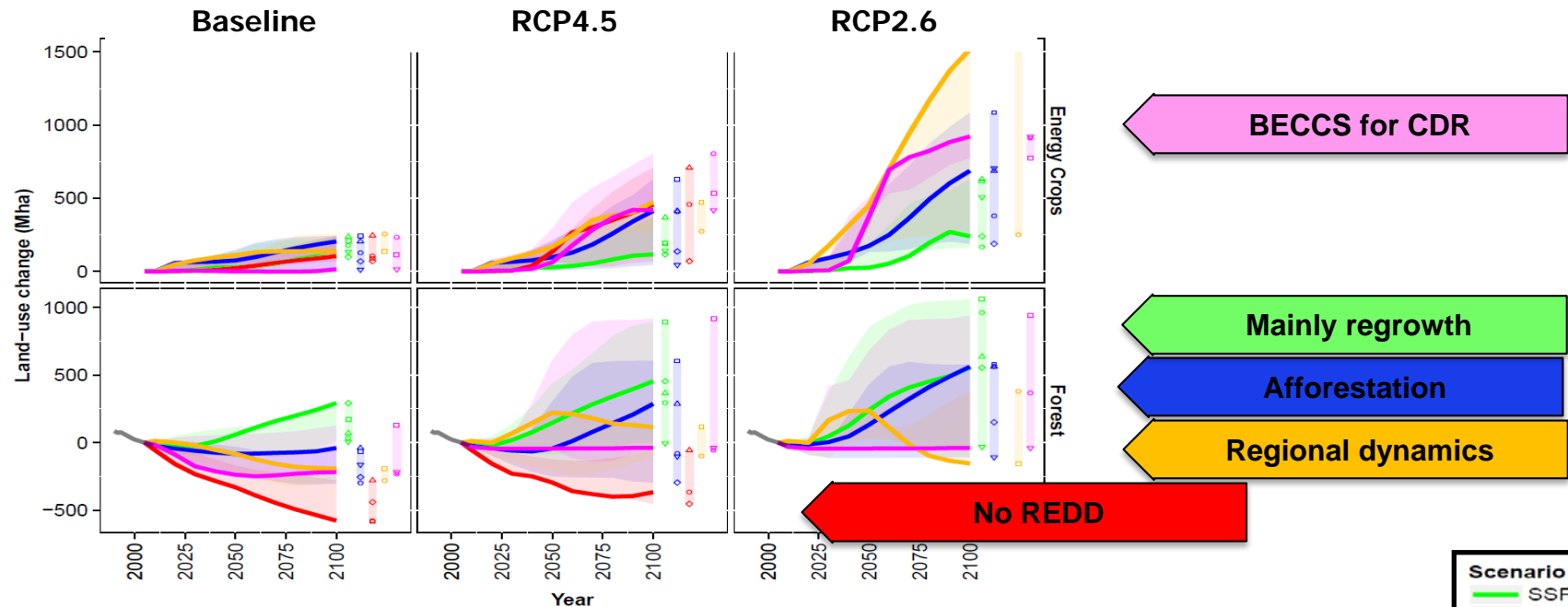
Policies and interventions for land-based mitigation options

Hermann Lotze-Campen

Stabilization of atmospheric GHG concentration requires deviation from the baseline – independent of mitigation target



Land demand for land based mitigation



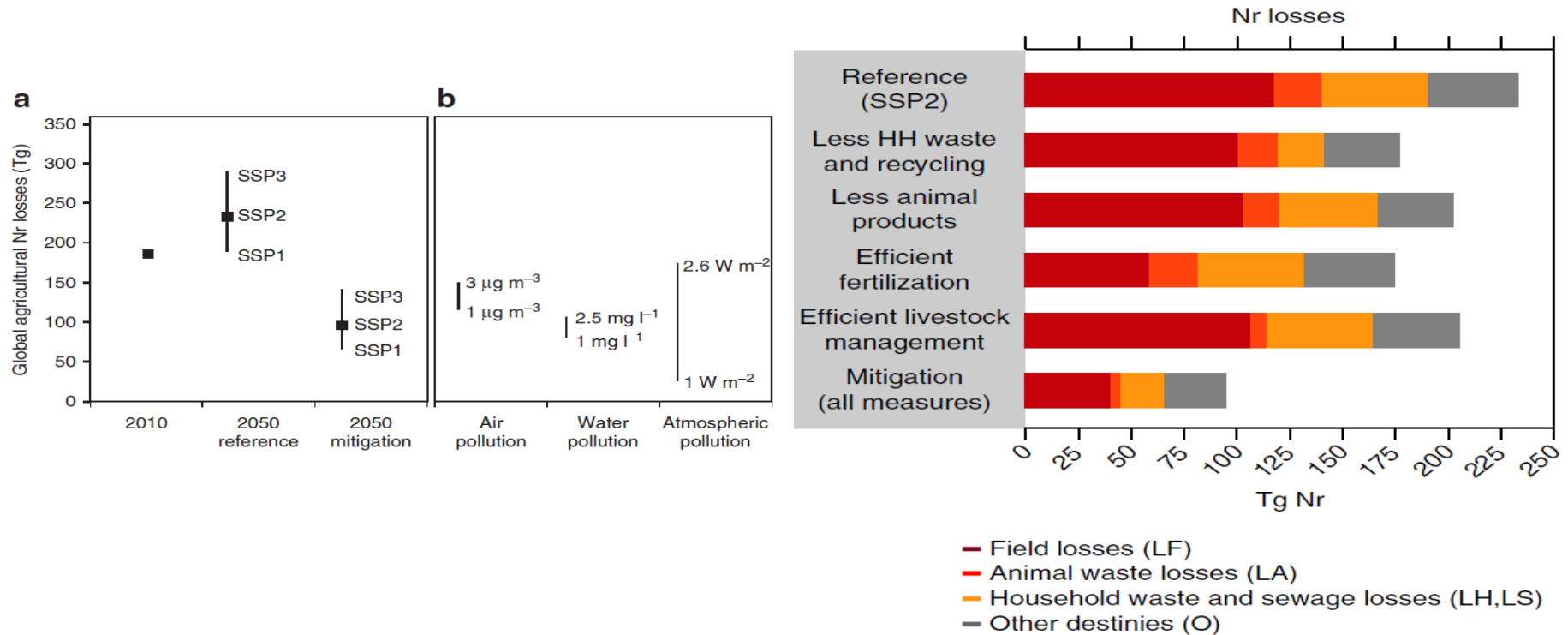
Model ◇ IMAGE △ MESSAGE-GLOBIOM ○ AIM-CGE □ GCAM ▽ REMIND-MAGPIE

Scenario
 — SSP1
 — SSP2
 — SSP3
 — SSP4
 — SSP5

History
 — FAO



Nitrogen losses by 2050



Bodirsky, Lotze-Campen et al., Nature Comm. 2014

Policy challenges

- Linking to **current policy instruments**
- Coordinating across different **governance levels**
- Assuring **policy coherence** across policy domains

Social safety nets,
insurances



Ag. R&D, food aid



Nutrition
education



Nitrogen taxation?

Water pricing



Infrastructure
investment



Education,
training, R&D



**Policy
coherence -
towards linked
policy
instruments**

Emission pricing



Marine protected
areas



Nature
conservation,
REDD



Trade policy

