



**Socio-technical transitions associated with the  
integration of adaptation and mitigation  
(insights from multiple branches of social science)**

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**Track 2: : Global warming of 1.5°C above pre-industrial levels  
in the context of strengthening the global response to the  
threat of climate change**

# New Literature Beyond AR5

- Growth: Mainstream, Low Carbon Growth  
Green Growth, Ecomodernist, De growth,  
Environmental Justice..
- Sustainability: SDG, Sustainable production,  
consumption, Systems Approach..
- Environmental Development: Augmented  
Growth Accounting framework..,
- New Economics: Environmental, Ecological,  
Institutional, Policy, Politics and Governance..



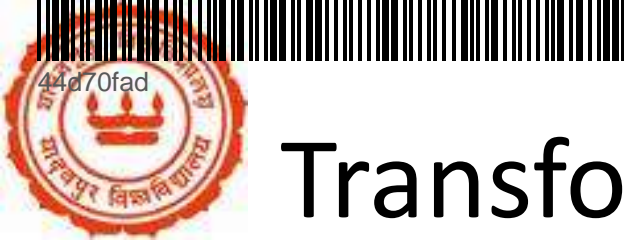
# Paris action

- Strengthen Global Response
  - Identify new potentials
  - National autonomy: Role of Multi level Climate Governance Architecture
  - Global Governance : Global Carbon price
- Peaking of emission ASAP
  - Re-carbonisation to de-carbonisation
  - Technology Diffusion to Technology Acceptance
  - Technology Catch up to Technology Leapfrog
- Balancing Anthropogenic Emission by sequestration
  - Resource and Environmental Accounting system/practice
  - Rural-Urban Link
  - Mountain Ecosystem

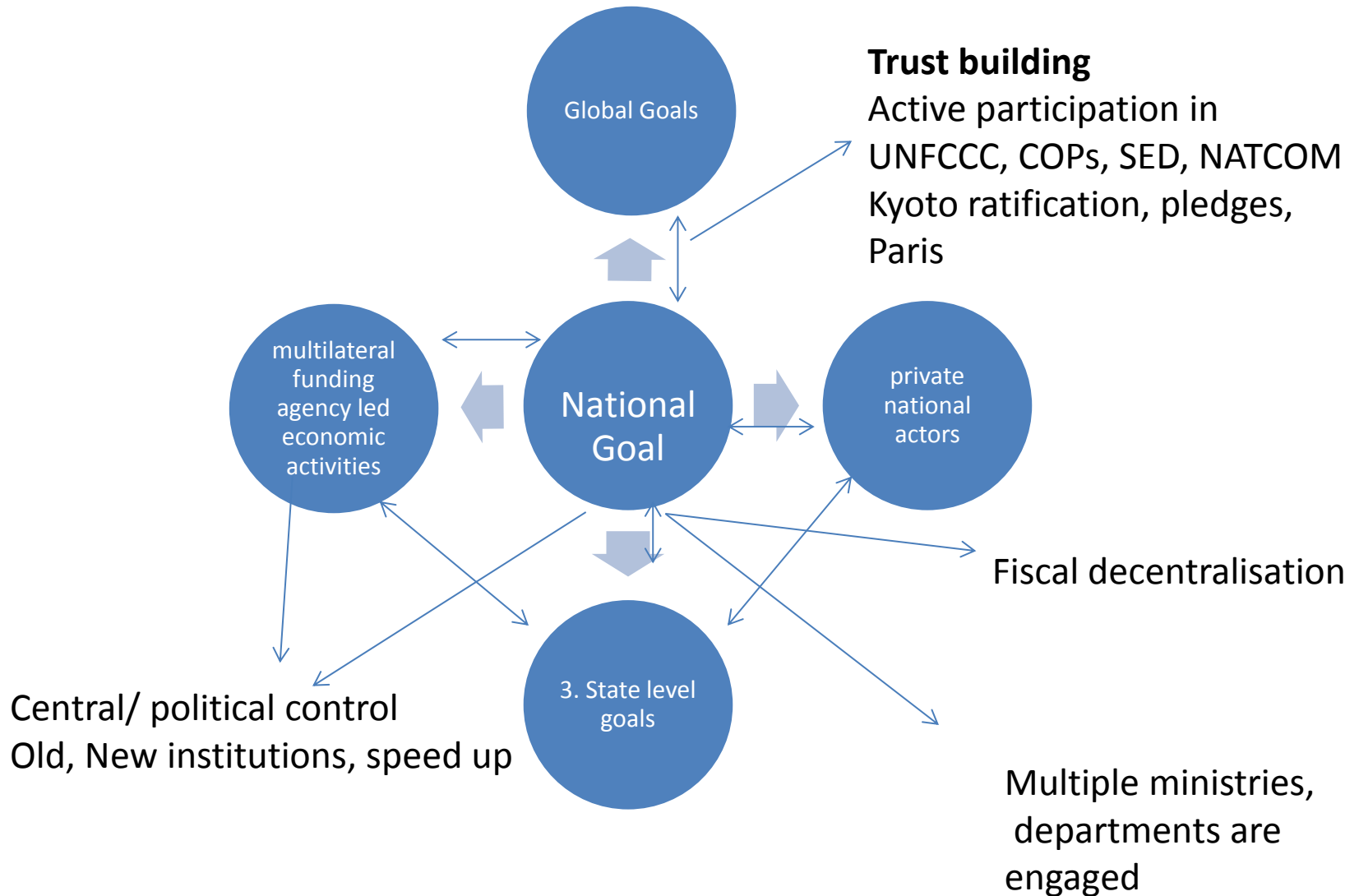


# AR5, New Literature and Special report

- Various Carbon Prices are emerging so inclusion of those in deriving 1.5 implication
  - Realities are changing (New literature)
- Adaptation-Mitigation tradeoff
  - Cross sector implications (e.g., hydro power and agriculture in mountain systems)
- Public acceptance
  - Zero carbon/negative carbon technologies
  - Cross Institutional dynamics
  - Role of non market instruments
  - New market and Practice change



# Transformation: Governance





# **Aligning Global and National Goals with Sub-National Actions is crucial How is this Process Emerging?**



# examples

- Vertical Integration?
- **New technology with Missing new routines and new regulations**
  - Mobility sector: Intermediate Mobility/Last mile connectivity
  - Power sector: Polygeneration
- Vertical Integration?
- **Pre conceived new technology with new routines and new regulators**
  - Industry
  - Global Finance: CDM/Adaptation fund



Transformation:  
Societal Practice Takes Time  
Early Action, Simultaneous Action





Scientific measurement  
and a/c

Technology research,  
development,  
maturation and  
upgradation

Financing, infrastructure,  
institution

**The System  
Transformation**

supply chain

Co benefit , Co cost

Assessing user readiness  
for selection and adoption  
of new technology,  
integration in current  
practice

Regulations,market



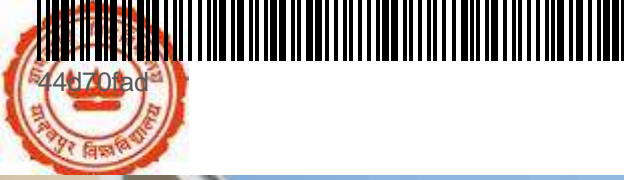
# Regional Aspects

- Clear definition of regions for special report and main report
- If social practices are in focus important to rethink of parallel categories
- Mountain systems as separate category
- Coastal system
- Rural – Urban better represented



# Implication and Sensitivity of assumptions

- Model
    - SDG pathway
    - Regional characteristics for regional pathway
    - New Literature
      - In defining Uncertainty spread
      - Parallel Qualitative analysis of visioning and scenario
  - Mitigation
  - Adaptation
- } Tradeoff



*Thank you*