Is a breakthrough on climate

change governance on the horizon?

From Knowledge to Governance of Climate action:

Maria Josefina Figueroa Copenhagen Business School International Conference Climate Change in Transport KIT-Ostendorfhaus, Weberstraße 5, 76133 Karlsruhe, Germany

Outline

- Is a Climate Governance breakthrough in horizon: cautionary optimism!
- From Knowledge to Governance
- States central actors "power and puzzle"
- Climate policy as Social Learning Subnational actors leading action.



From Knowledge to Governance: Completed IPCC work

5 Assessment Reports (1990,1995, 2001, 2007, 2013-14)

1992 Supplementary Report and 1994 Special Report

8 Special Reports (1997, 1999, 2000, 2005, 2011)

Guidelines for National GHG Inventories, Good Practice Guidanc (1995-2006)





From Knowledge to Governance: Big expectations – slow transformation

- Numerous Other Assessments e.g:
- IPCC Report Fifth Assessment
- IEA World Energy Outlook
- Energy Technology Perspectives
- Global Energy Assessment
- Pathways to Deep decarbonization

Climate policy is complex and the **real world goal setting** doesn't start with single numbers and work backwards.



WGIII-Mitigation of Climate Change: Governance Knowledge

Content Third IPCC Mitigation Report **2001**:

- 1. Seeting Stage: Climate Change and Sustainable Development
- 2. GHG Mitigation Scenarios and Implications
- 3. Technological and Economic Potential of GHGs reductions
- 4. Technological and Economic Potential of Options to Enhance and Magnage BiologicalCarbon Reservoirs And Geo-engineering
- 5. Barriers, Opportunities and **Market Potentia**l of Technologies and Practices
- 6. Policies, Measures and Instruments
- 7. Costing Methodologies
- 8. Global Regional and National Cost and Ancilliary Benefits of Mitigation
- 9. Sector Cost and Ancilliary Benefits of Mitigaion
- **10. Decision-making Frameworks**

WGIII-Mitigation of Climate Change: Governance Knowledge

Content Fourth IPCC Mitigation Report **2007**:

- 1. Introduction
- 2. Framing Issues
- 3. Issues related to mitigation in the long-term context
- 4. Energy Supply
- 5. Transport and its infrastructure
- 6. Residential and commercial buildings
- 7. Industry
- 8. Agriculture
- 9. Forestry
- 10. Waste Management
- 11. Mitigation from a cross-sectoral perspective
- 12. Sustainable development and Mitigation
- **13.** Policies instruments and co-operative arrangements

WGIII-Mitigation of Climate Change: Governance Knowledge

Content Fifth IPCC Mitigation Report **2014**:

- 1. Introduction
- 2. Integrated Risk and Uncertainty Assessment of Climate Responses and Policies
- 3. Social, Economic and **Ethical Concepts** and Methods
- 4. Sustainable Development and Equity
- 5. Drivers, Trends and Mitigation
- 6. Assessing Transformation Pathways
- 7. Energy Systems
- 8. Transport
- 9. Buildings
- 10. Industry
- 11. Agriculture
- 12. Human Settlements, Infrastructure and Spatial Planning
- 13. International Cooperation: Agreements and Instruments
- 14. Regional Development and Cooperation
- 15. National and Subnational Policies and Institutions
- 16. Cross-cutting Investments and Finance Issues

What Then?

INTERGOVERNMENTAL PANEL ON CLIMATE CHANEE

Has the IPCC Power to set tone for Transition?

Mapping out "levers" Solution Space
Cartographers a map to navigate
Providing policy relevant not policy prescriptive knowledge.

Wide Variety of agreements and institutions on climate change

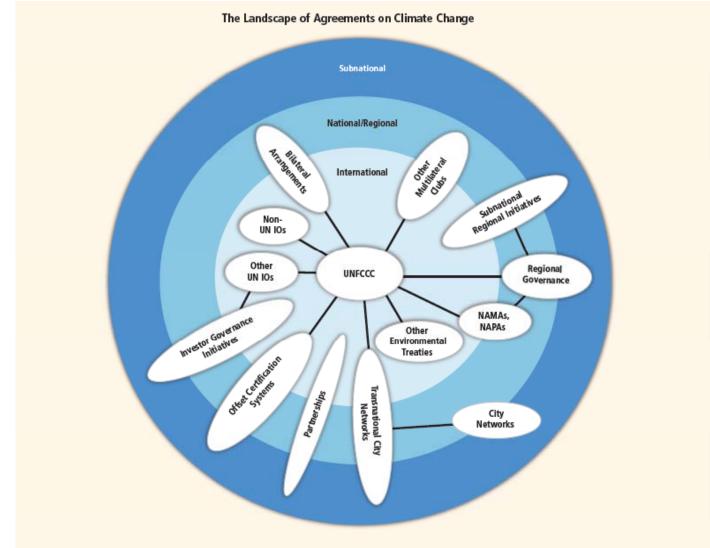
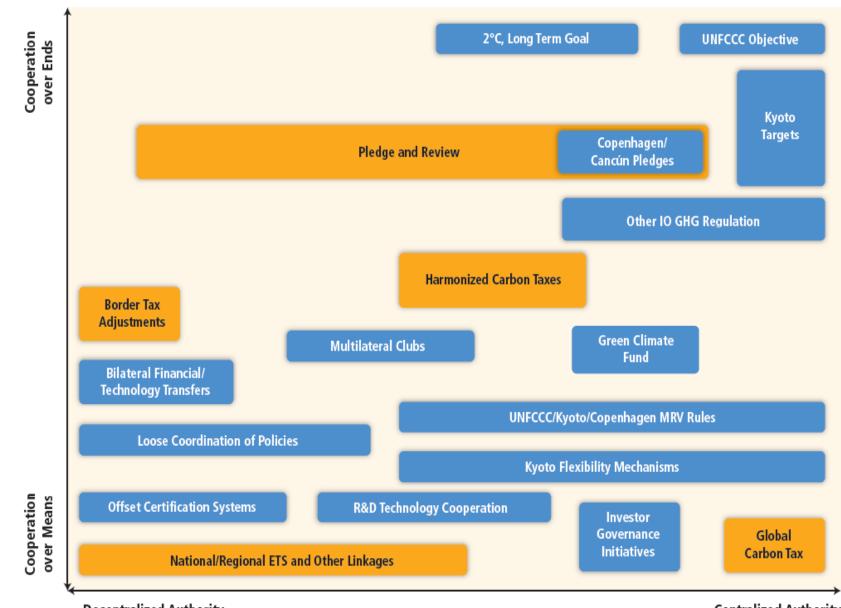


Figure 13.1 Chapter 13 IPCC 2014. Climate Change 2014- Mitigation O Climate Change, 5th Assessment Report. Intergovernmental Panel on Climate Change, Working Group III. Cambridge University Press, 2014. <u>http://www.ipcc-wg3.de/assessment-reports/fifth-assessment-reports</u>.

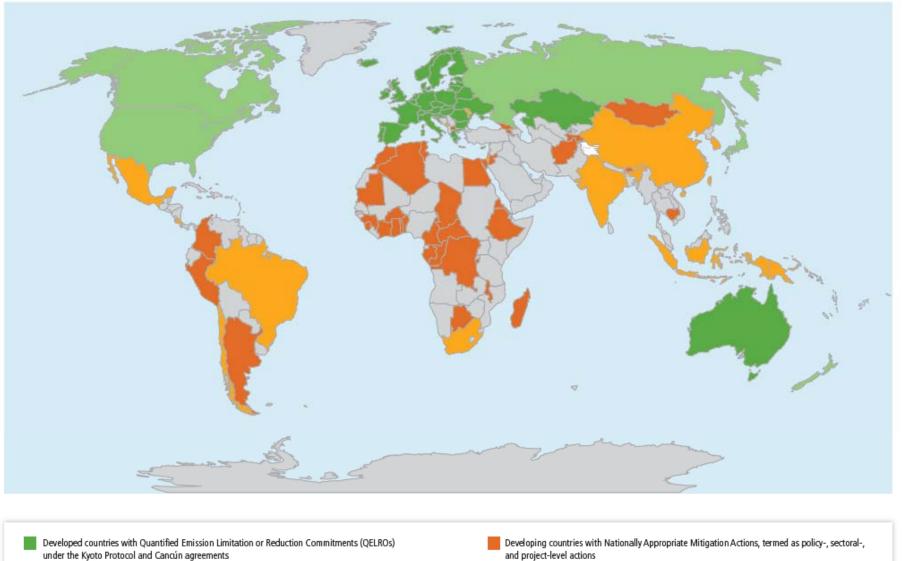




Decentralized Authority

Centralized Authority

Figure 13.2. International cooperation over ends/means and degrees of centralized authority. Blue- existing/Orange Proposed IPCC 2014t Climate Change 2014-Mitigation O Climate Change, 5th Assessment Report. Intergovernmental Panel on Climate Change, Working Group III Cambridge University http://www.ipcc-wg3.de/assessment-reports/fifth-assessment-report.



Developed countries with Quantified Economy-Wide Emission Reduction Targets (QEERTs) under Cancún agreements

- and project-level actions
- Countries with no pledges

Developing countries with Nationally Appropriate Mitigation Actions stating their impact on greenhouse gas emissions (Reduction relative to BAU; Reduction in carbon intensity of GDP, compared to 2005 levels)

Figure 13.3. Global map showing the different categories of reduction proposals or commitments for 2020 under the Cancún Agreements and Kyoto Protocol, IPCC 2014. Climate Change 2014- Mitigation O Climate Change, 5th Assessment Report. Intergovernmental Panel on Climate Change, 10 UNEP Working Group III. Cambridge University Press, 2014. http://www.ipcc-wg3.de/assessment-reports/fifth-assessment-report.

States Central Actors to global governance: policy making as "powering" &"

Nations could not agree on who is to blame or how to allocate emissions

Nations disagree on projections for the future,

Nations perceive fossil fuel development as the only route out of extreme pov

Nations argue that emissions limits are inimical to their short-term economic interests

Nations argue that they depend on fossil fuel production



Working Group III contribution to the IPCC Fifth Assessment Report

States Central Actors to global governance: policy making as "....puzzling" or "social learning": Three pillars for policy:

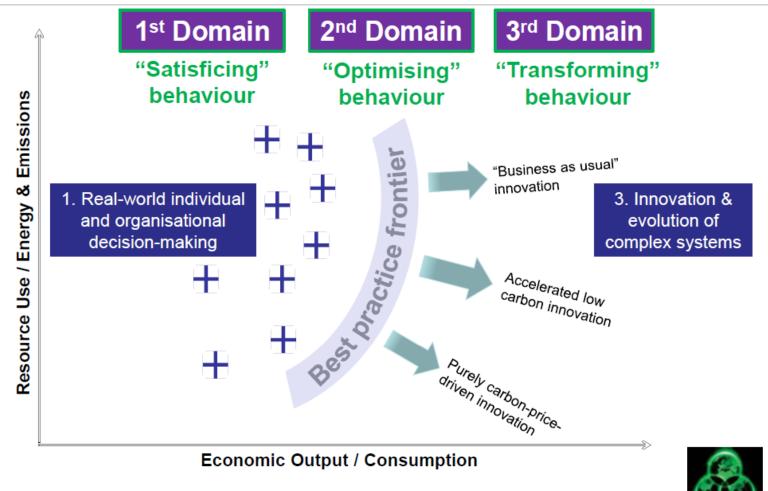


Fig. 2 -3 b Resource trade-offs with the other two domains

Source: Grubb, Hourcade, and Neuhoff. (2014): Planetary Economics: energy, climate change and the three domains of sustainable development. Routledge

SIGNIFICANT ROLE PLAY SUBNATIONAL ACTORS IMPACTING "PUZZLING" "LEARNING"



Learning, puzzling and powering

- C40
- Clinton Initiative
- ICLEI
- SLoCat
- BID-City Inicitive
- Asian Cities Climate Init
- UNEP- WB
- Partnerships
- The Climate Group





I VERAILUM

UN Climate Summit NY

Opportunities for further learning Governance?

- **Deep learning** in comprehensive and durable strategies linked to global sustainability efforts.
- Engaging actors that wield power!! UNFCC- Regions etc.
- **Consolidating Bottom-up** and policy making as Social Learning:
- Partnering of Cities, communities, businesses, research and educational actors and governments.
- Emissions Accounting Tools and Transparency is key.(e.g

Cool Cities Challenge joining Standford – Berkeley-UC Davis: Davis, Palo Alto, SF).

• Accounting and further Research knowledge that feedback sustaining paradigmatic change.



Variety of agreements, institutions, actions on climate change ultimately can press states and the process....

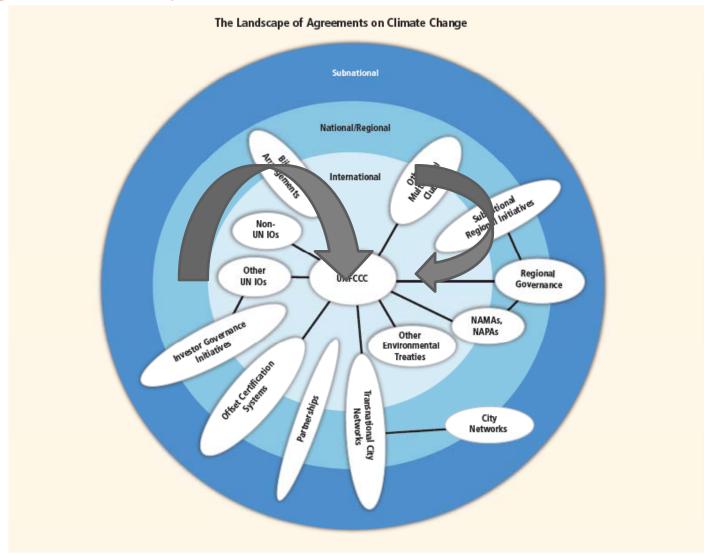


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Conclusions

- IPCC maintains record of Knowledge and Accountability for global action and laid framework conditions required to engage global actors ex: equity effort sharing.
- IPCC & others Knowledge creates Maps identifying "levers" solution space.
- Knowledge relevant to global governance UNFCC 2015 Paris - but also builds up playfield where local action become relevant.
- A Cautious optimisms is justified in terms of state policy making as intertwine social learning & power struggle.
- Action at subnational level offers further reasons for cautionary optimisms that we are moving from a question of "how to do it" not anymore "whether" among key actors.



Thank you for your attention mf.dbp@cbs.dk







Mitigation of Climate Change

