

# Out of control?

# Dynamics and dimensions of CE Governance

This project focuses on the governance challenges of the multiple techniques proposed under Climate Engineering (or Geoengineering). It builds on the following:

**1. An analysis of the evolution of governance is being utilised - based on its history, directions and dynamics of development, and challenges as it has evolved over the broad span of human history. (See Joseph Camilleri and Jim Falk, *Worlds in Transition: Evolving governance across a stressed planet*, Edward Elgar, London, 2009, 690 pp. [Fig 1]) Governance is evolving to increased complexity cutting across jurisdictions from the local to global in three overlapping governance arenas [Fig 2].**



Fig 1. Governance analysis framework

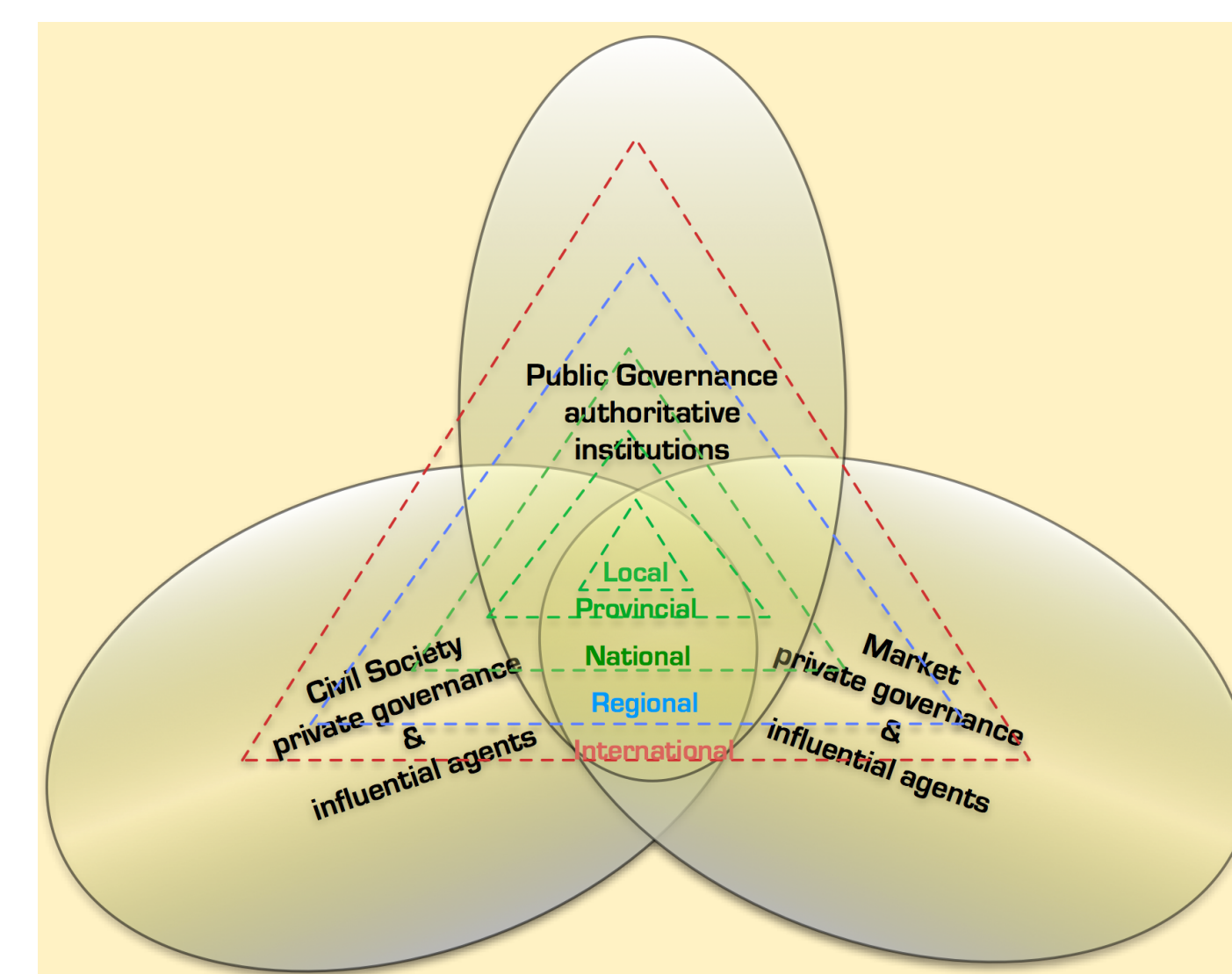


Fig 2. Governance arenas

**3. “Footprints” are being developed for each proposed CE intervention based on their physical and social characteristics and leverage – mapped along multiple dimensions. [eg Figs 5-6]**

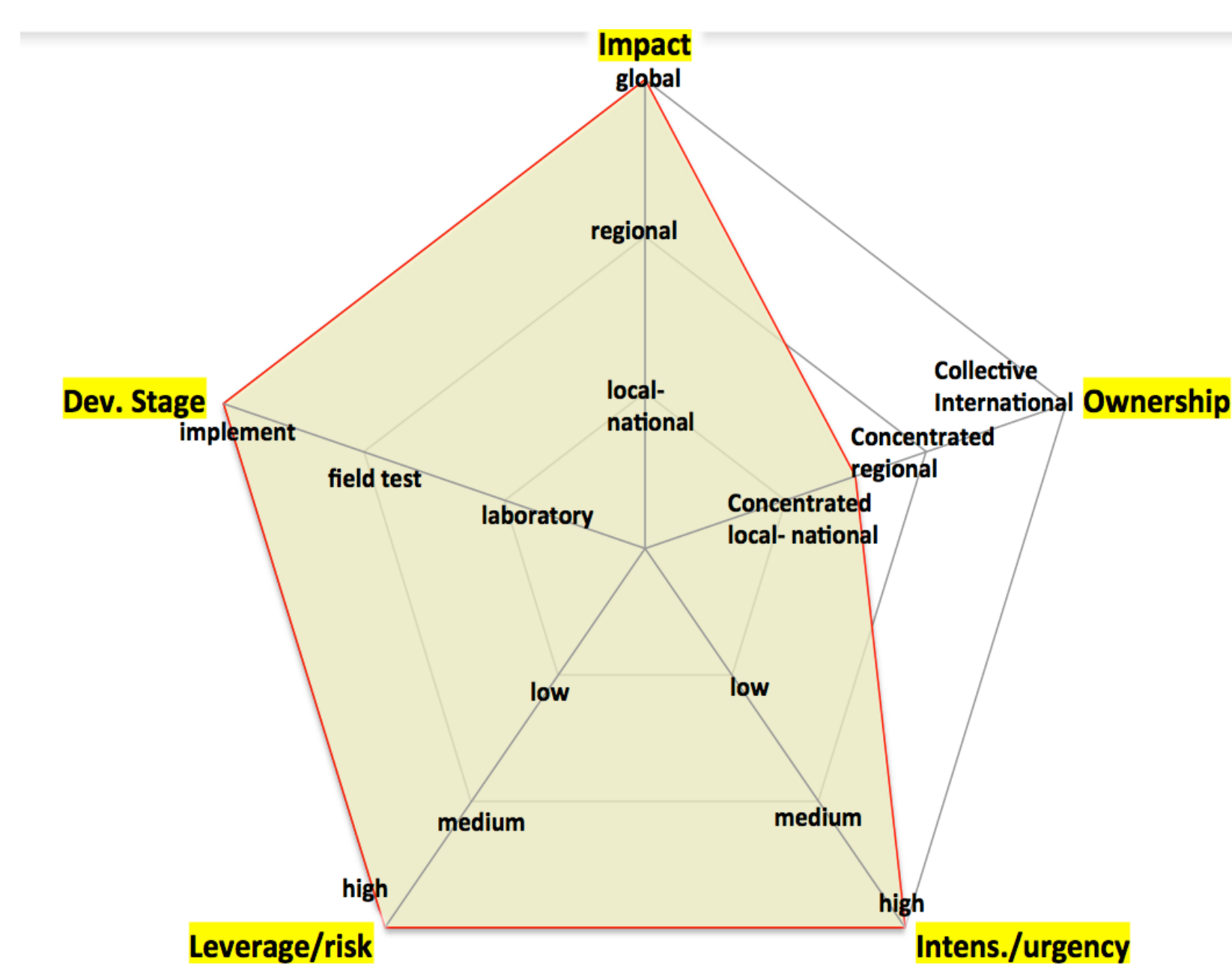


Fig 5. Footprint for notional unilateral SRM emergency intervention

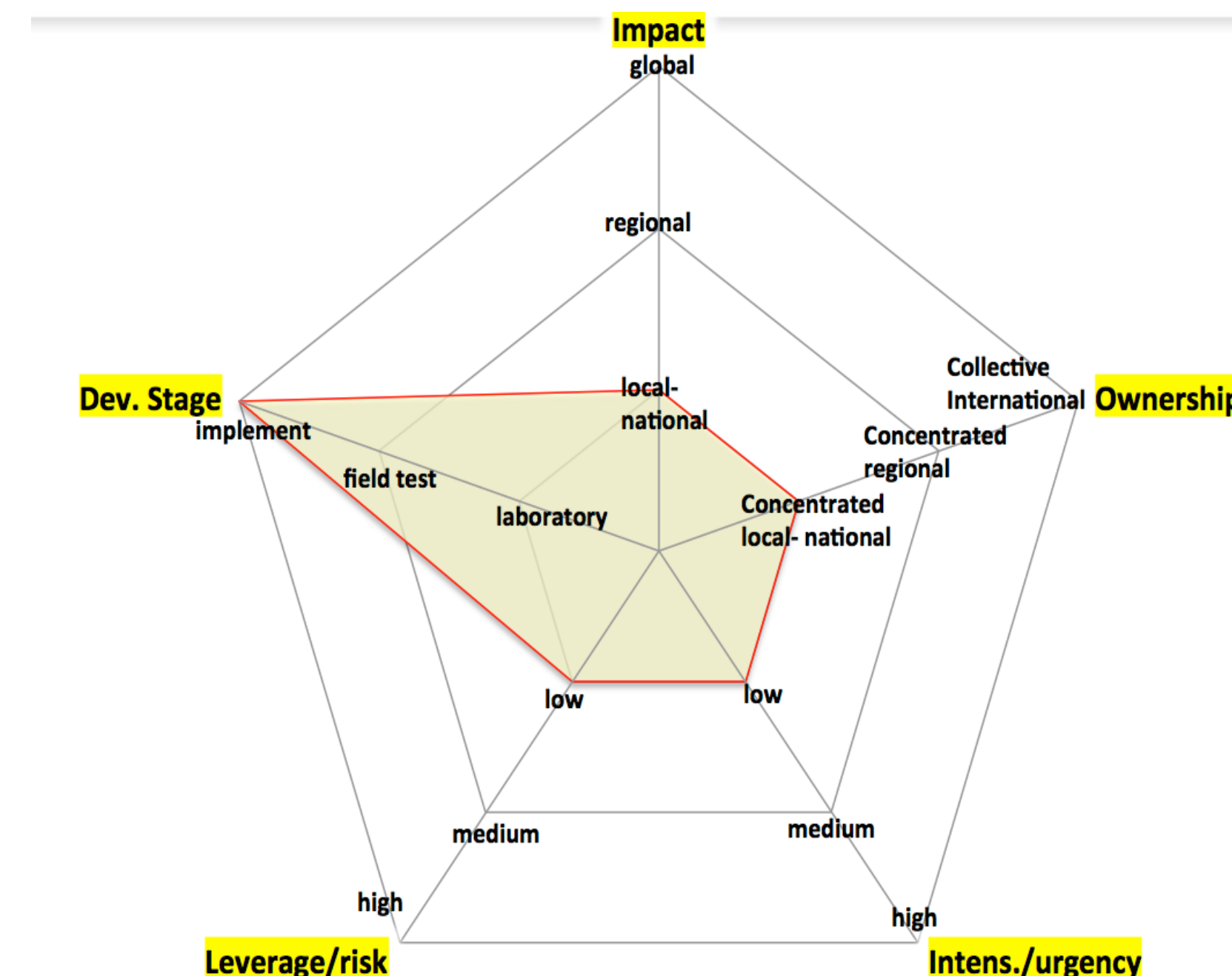


Fig 6. Footprint for notional CDR initiative with local impact and control

**5. The time dynamics of problems to be addressed and corresponding proposed CE responses are being identified. The compatibility of proposed CE interventions with the dynamics of different climate change concerns (including “evolving challenges”, and “emergencies”) is being investigated. Resulting governance requirements help shape the identification of appropriate governance interventions, applicability of governance principles (such as subsidiarity & the international duty to do no harm), use of existing governance structures at different scales and, where necessary, feasible development of new governance structures and agreements.**

The above is one component of a broader study of climate engineering in its social, economic, political, environmental and technical contexts by the author expected to be published in accessible book form by Pluto Press, London, either later in 2015 or early 2016.

**Jim Falk**

Melbourne Sustainable Society Institute  
The University of Melbourne

email: [jfalk@unimelb.edu.au](mailto:jfalk@unimelb.edu.au)  
mobile: +61412290885

**2. Classes of CE interventions are being classified according to the “leverage” (defined in terms of scale of operation, effect, ownership, and associated risk) of different proposals. [Figs 3-4] These different classes can have very different governance implications and requirements (across scales and arenas) within the domain of “atmospheric governance”.**

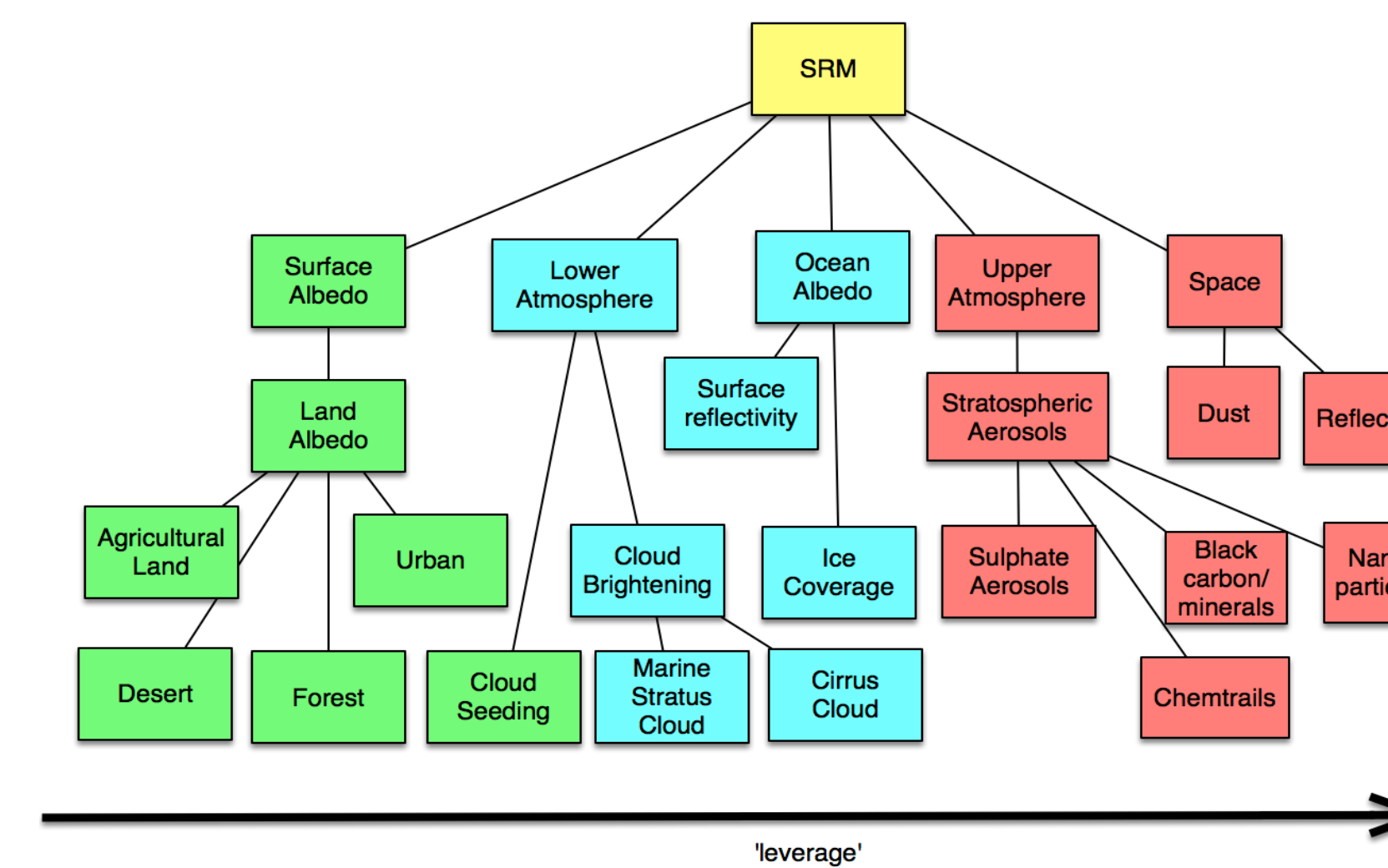


Fig 3. Some SRM classes. Scale and leverage increasing green - blue - red

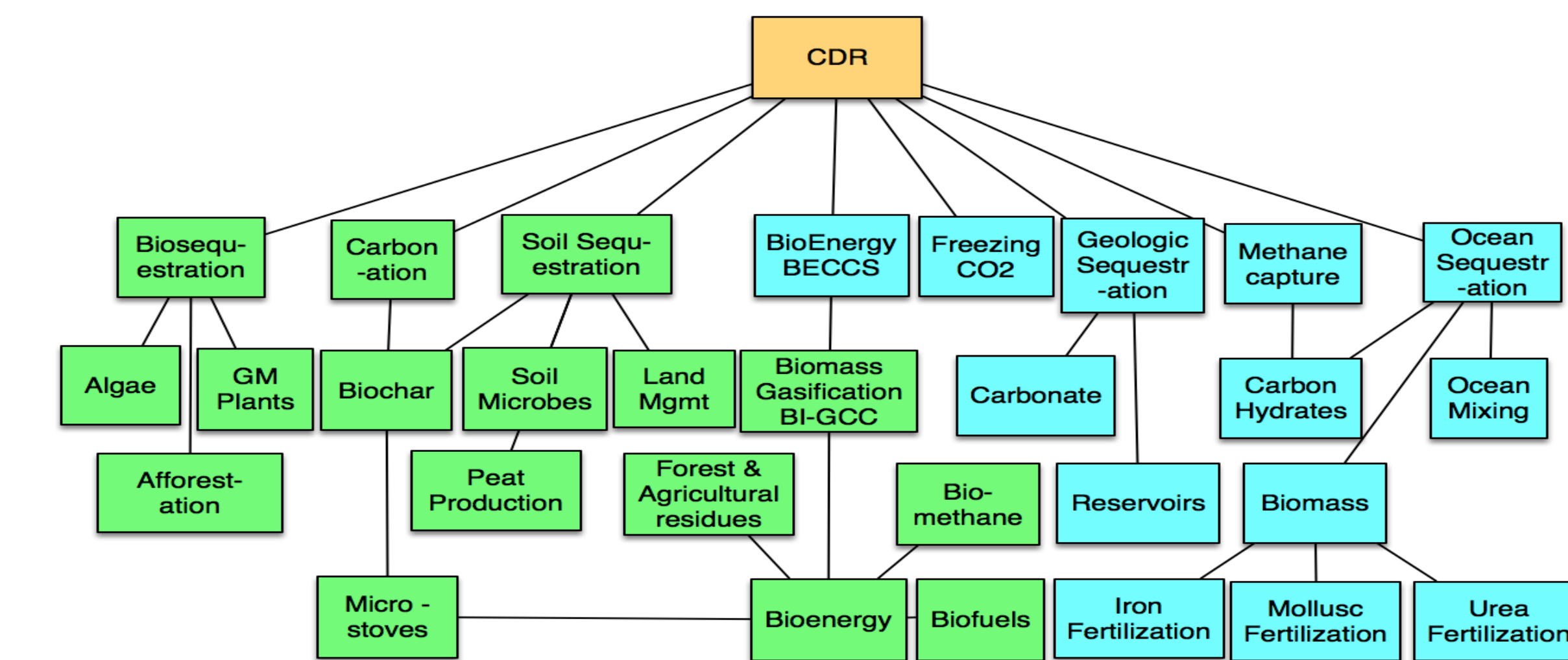


Fig 4. Fig 3. Some CDR classes. Scale and leverage increasing green - blue - red

**4. Governance options are being identified along the same footprint dimensions [Fig 7] and applied to specific cases.**

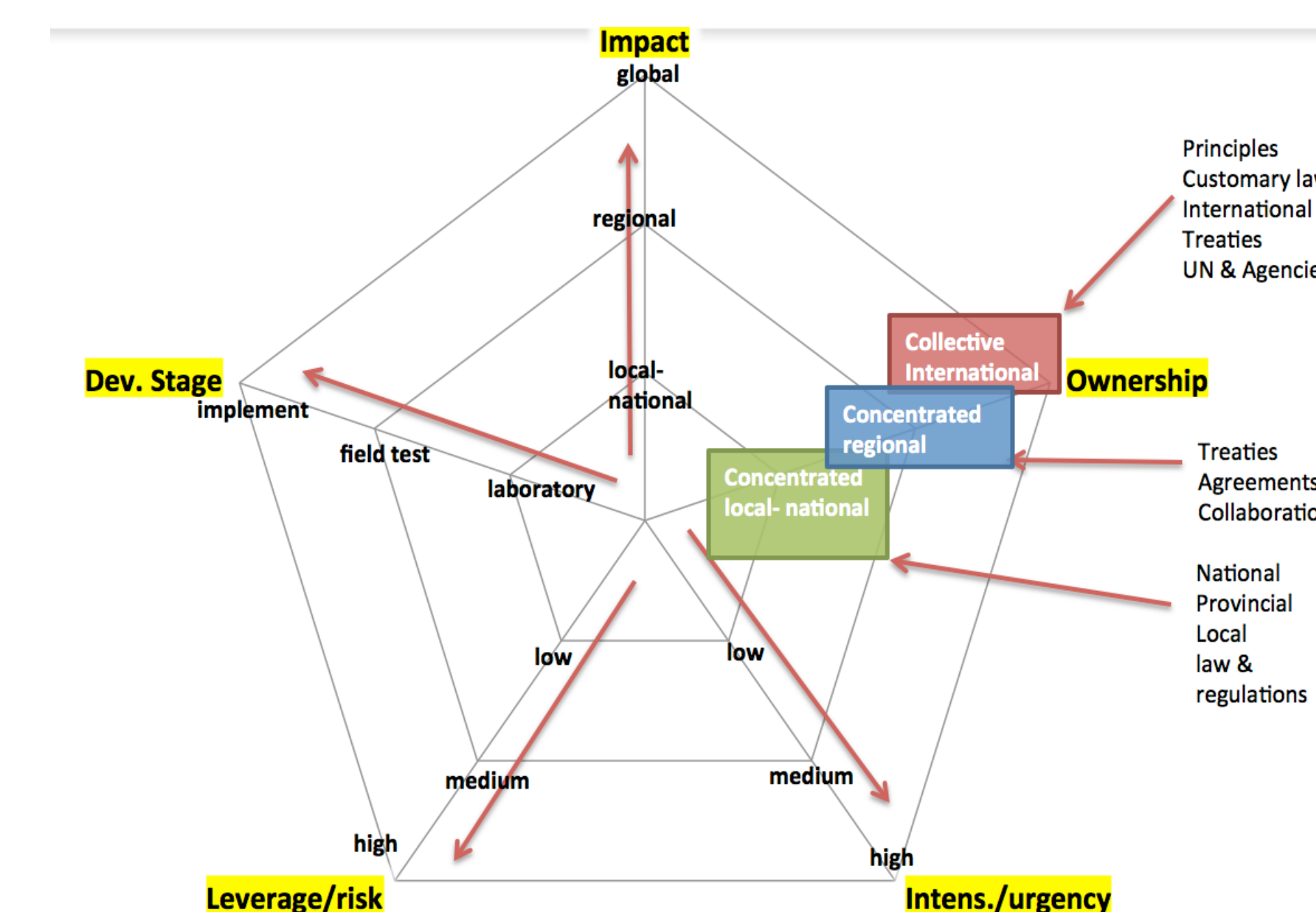


Fig 7. Some governance options shown on footprint dimension axes