

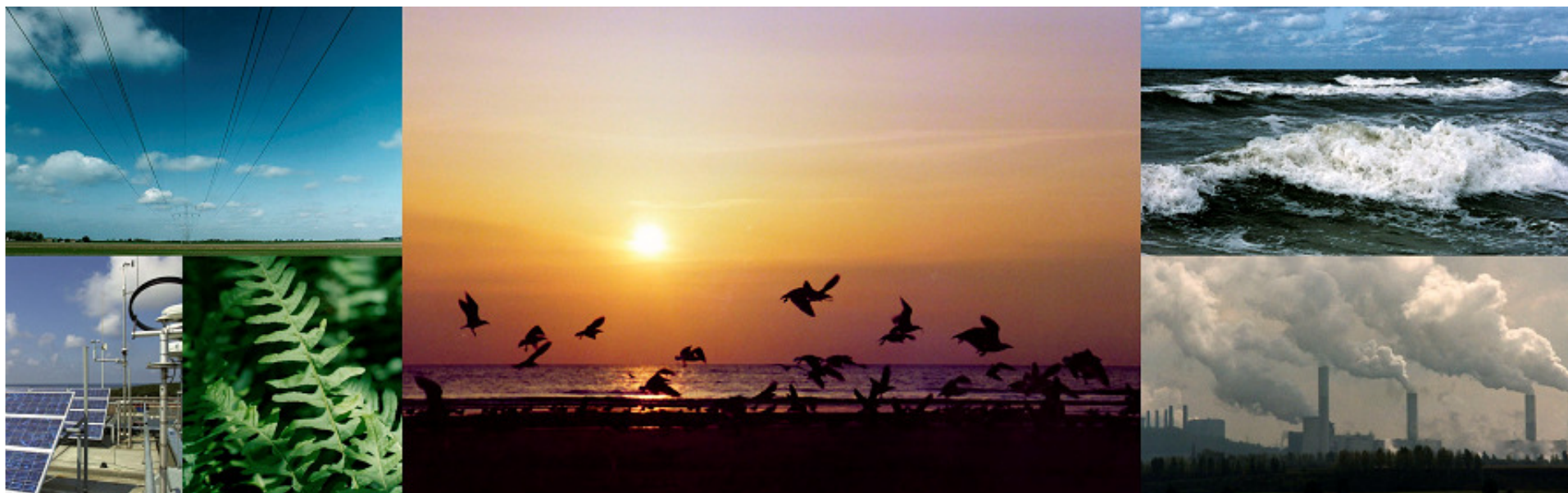


Energy research Centre of the Netherlands

Options for climate technology centres and networks

A paper by UNEP, NREL and ECN

Heleen de Coninck

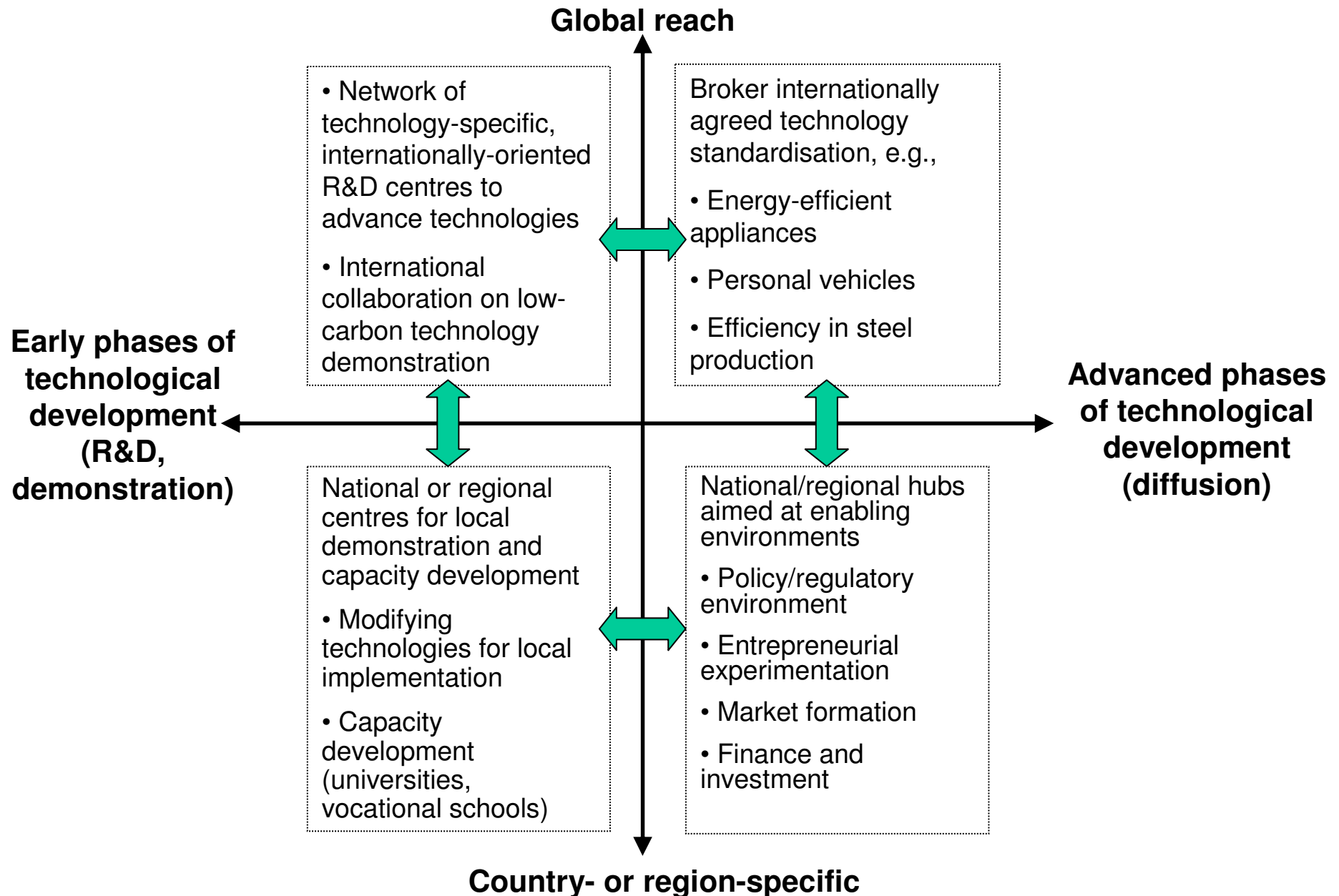


Outline

- Rationale and functions
- Degrees of freedom
- Experiences of existing centres and networks
 - Lessons learned
- Operational modalities
 - Five options
- What the current text brings

Rationale

- Current technology development and transfer provisions inadequate to meet the Convention objectives
- Technology Mechanism provides the possibility of a framework
 - Early-stage *and* advanced-stage progress needed
 - Often technology- or sector-specific
- Technology development and transfer
 - Urgent need for improving R&D and innovation capabilities in developing countries
 - Some mechanisms can be international, others national
 - National context of low-carbon development strategies and national innovation systems
- Climate technology centres and networks could fulfil some needs



“Degrees of freedom”

1. Centre vs. network
2. Establish new vs. build from existing
3. Public vs. private basis
4. Technology/sectoral or country/regional focus
5. Stage of innovation

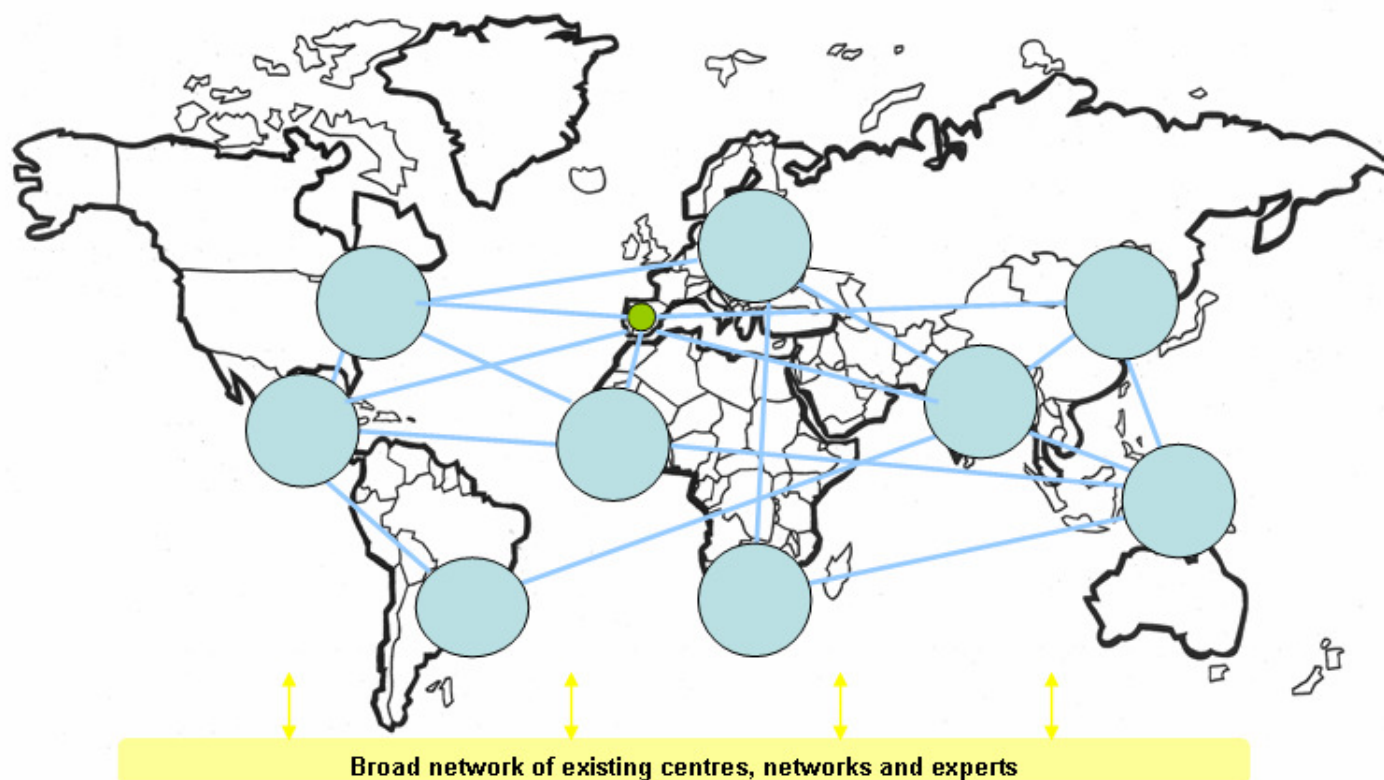
Examples of current centres and networks

- Consultative Group on International Agricultural Research
- Developing country initiatives: Fundacion Chile
Innovation Botswana Innovation Hub
- Developed country research centres: NREL, ECN
- Global Network on Energy and Sustainable Development
- UNIDO Energy Technology Centres

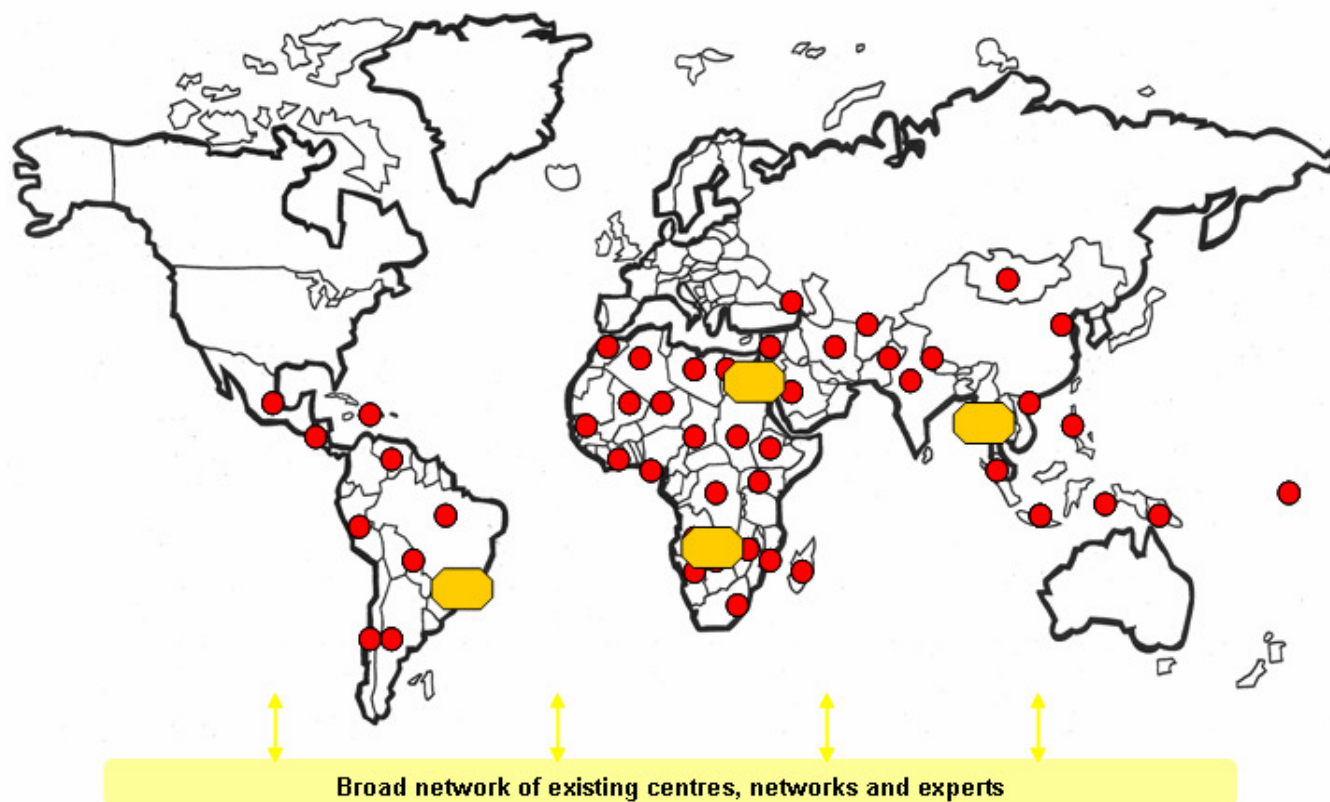
Lessons from existing centres and networks

- Incentives for participation: existing centres cannot make available capacity without compensation and influence
- Location: make use of existing institutions and infrastructure where ever possible
- Funding: long-term and reliable
- Monitoring and refinement: allow for phased evolution and independent evaluation and scrutiny
- Flexibility: respond to new developments

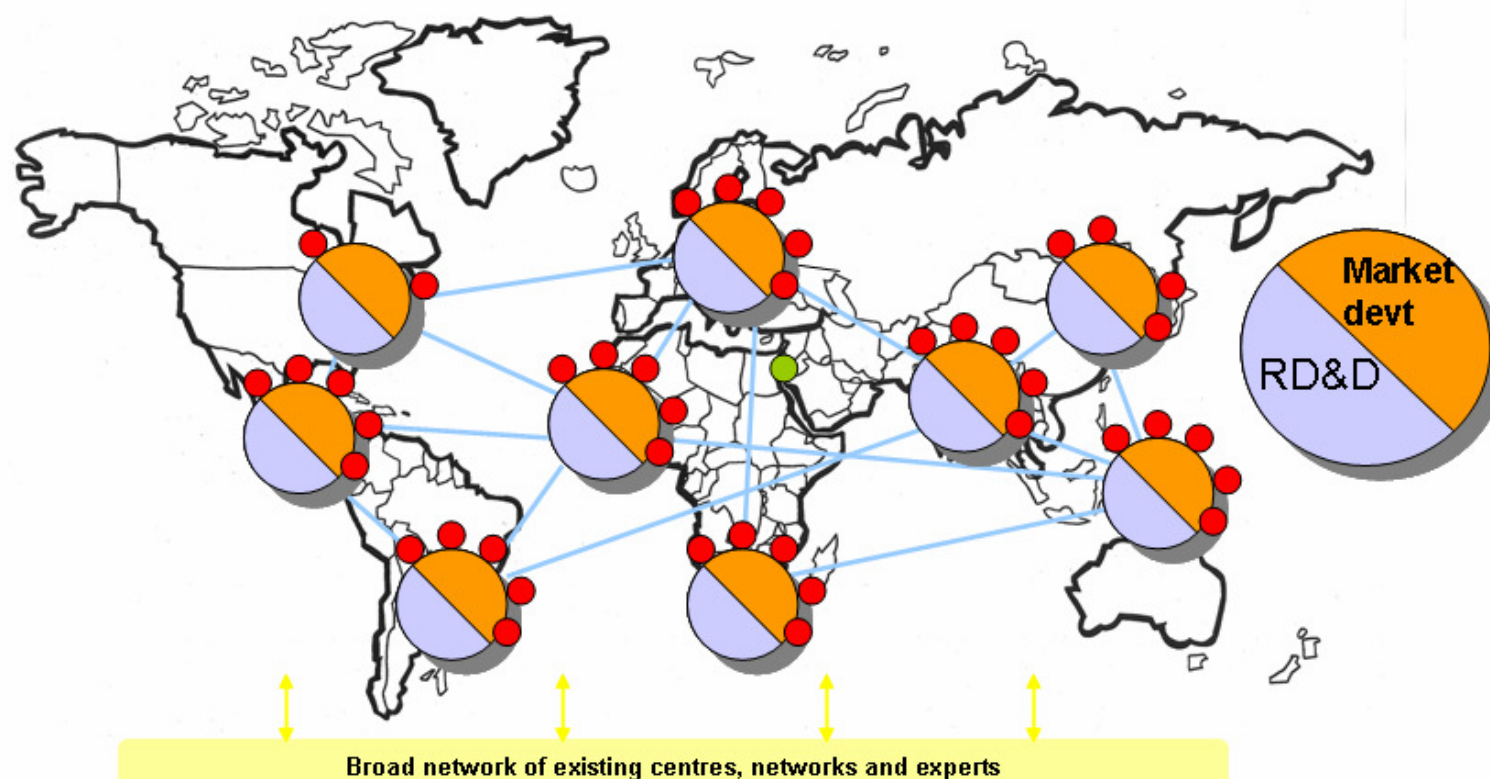
Option 1: Network of climate technology RD&D centres



Option 2: Network of national centres for market development



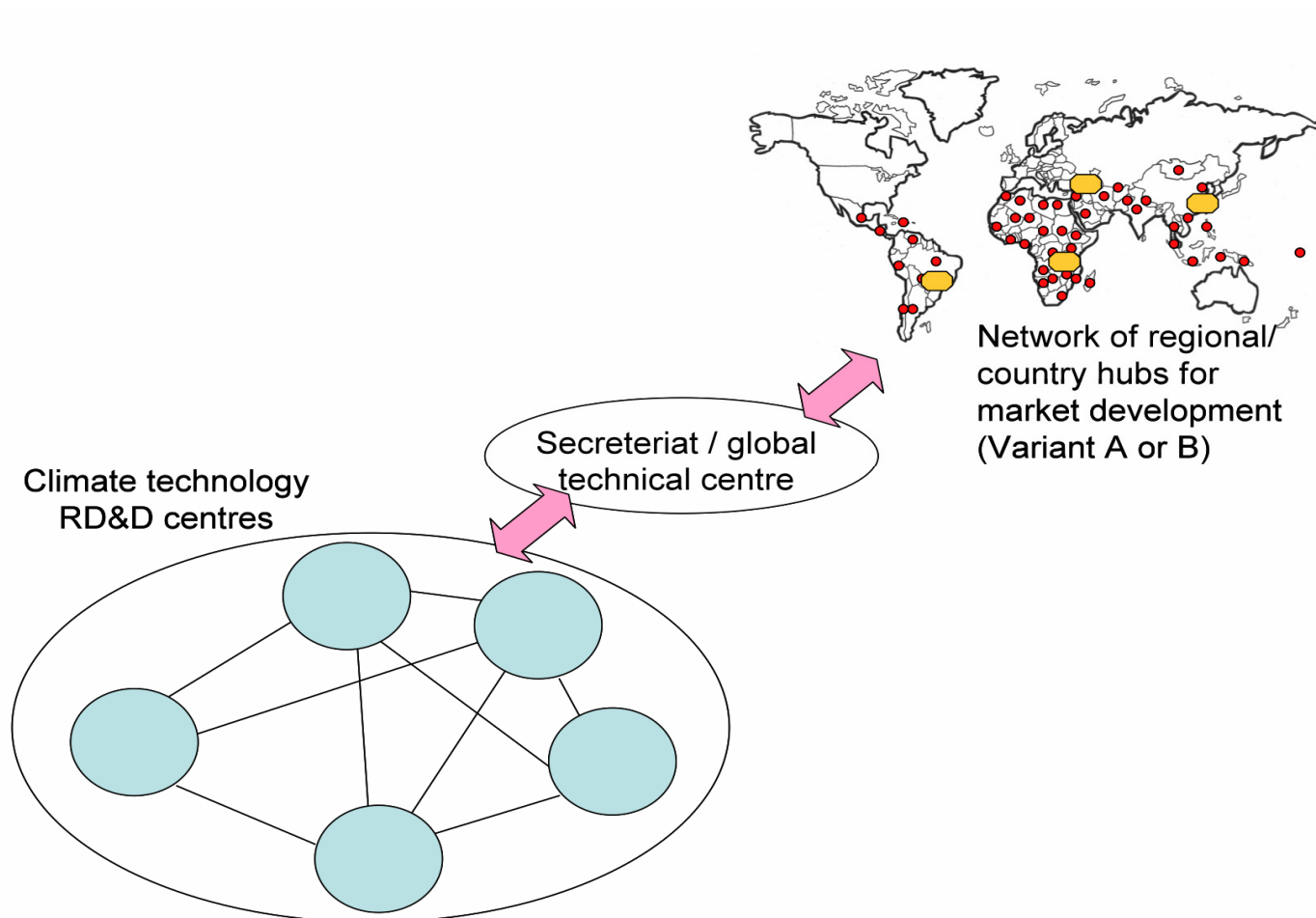
Option 3: Network of hybrid RD&D and market development centres



Option 4: Global technical centre working with multiple (external) networks of centres and experts



Option 5: Interlinked networks of separate RD&D centres and national market development centres with strong secretariat or global centre



What could these centres and networks do?

Depends on the mandate and choices, but they could:

- Provide demand-driven advice and assistance
- Capacity building and training
- Services, such as developing tools and collecting data
- Collaborative Research & Development and demonstration
- Regional/national centres could assist with low-carbon development strategies
- Enable and take part in industry collaborations
- Research and suggest technology standards

Some reflections on the negotiating text

Technology Executive Committee

- Full strategic responsibility
- Flexibility?

Climate Technology Centre and Network

- Unclear why singular
- Mainly broker, not actor
- No strategic mandate
- Funding situation unclear, how will it evolve?

No guarantees that functions will be fulfilled

Your ideas...?

What kind of centre or network do you think would make a difference? What would you recommend?

- Which technology/sector and/or country/region? Or perhaps global?
- Focussed on R&D? Demonstration? Market deployment? Or some combination?

**Conclusions will be offered directly to co-chair
AWG-LCA discussions on technology and finance**

Thank you and further reading

UNEP/NREL/ECN report:

[http://en.openei.org/wiki/An exploration of options and functions of climate technology centres and networks](http://en.openei.org/wiki/An_exploration_of_options_and_functions_of_climate_technology_centres_and_networks)

WAB report on technology cooperation:

<http://pbl.nl/en/publications/2010/Low-carbon-technology-cooperation-in-the-climate-regime.html>

More information:

<http://www.ecn.nl/ps/iec>