



Climate policies in an untimely context

Ten key messages from the Third Meeting of the Low Carbon Society Network (LCS-Rnet)

Paris Oct 13th – 14th 2011

Jean-Charles Hourcade

(On behalf of the LCS R-net Steering Group)



ParisTech
INSTITUT DES SCIENCES ET TECHNOLOGIES
PARIS INSTITUTE OF TECHNOLOGY

C.I.R.E.D. UNITÉ MIXTE DE RECHERCHE
EHESS ET CNRS - UMR 8568

1. What desirable paradigm shift in difficult times?

Instead of being framed in terms of *burden sharing*, the climate policies must be designed so as to:

- respond the **short term demands** for *poverty alleviation, jobs and protection of welfare benefits*
- contribute to an **economic recovery driven by “green growth”** with a view to securing **sustainable development** involving *changes in consumption patterns, technologies and lifestyles.*

2. The risks of a carbon intensive lock-in

Without active climate policies, humanity will be ***locked-in to carbon intensive development paths:***

- *industrialized countries will slow down the turnover of their capital stock*
- *emerging economies will build the bulk of infrastructures in ways that **will be hard to re-shift at a later date.***

As well as accelerating climate change, this could exacerbate future **conflicts** on energy resources.

3. Supply-side responses: decision-making against a background of controversy

Feasible transition pathways compatible with desirable climate objectives, environmental concerns and social requirements are available.

Controversies about the performance, economic viability and environmental soundness of major technical options need to be *managed through public debate* so that the application of a precautionary approach leads to *better targeted innovation* rather than a freeze on low-carbon development

4. Demand-side response: Energy efficiency and beyond

Technological change will not be sufficient by itself for the low-carbon transition. In addition to ***energy efficiency***, key parameters include

- the ***dematerialization of productive processes*** (e.g., recycling or product obsolescence)
- changes in ***lifestyles, behaviors and household consumption patterns***.

5. Energy policies and beyond

Energy policies need to be placed in a broader context encompassing ***urban policies, transportation policies and agricultural policies:***

- Urban dynamics affect mobility needs and gasoline consumption.
- There is a need for ***low-carbon mass transportation systems, energy efficiency projects for public buildings and integrated waste management***
- Land-use policies have to make the provision of ***biomass energy compatible with food production.***

6. Innovation and beyond

Technical change is not *manna from heaven* but depends on the development of *knowledge and human capital* along the chain from fundamental research (R&D and pilot projects) through to industrial diffusion

A *wide range of policy instruments* (carbon taxes, carbon markets, standards, R&D, reforms of electricity markets, urban and land-use policies) are needed to:

- *trigger long-term transformation*, mobilize the best available technologies
- *mitigate short term transition difficulties* such as underemployment, debt and distributional issues.

7. “Green growth” and sustainable development in different contexts

Transforming “*green growth*” from a *slogan* to an *operational concept*

- define the frontier for technical and structural changes towards more sustainable development patterns and lifestyles
 - *developed countries*: trigger the *transformation of existing infrastructures*
 - *developing countries*: form of energy, transportation and building *infrastructure under development*.

Pricing environmental goods and services is essential, but is not a “*magic bullet*”

- *broader reforms of fiscal systems, institutions and capital markets.*

8. Tailoring low-carbon policy packages for sectors and countries

National level packages are essential for the low-carbon transition, but these must be *reinforced* by policy packages which are *local and sector specific*.

- Many programs may be most effectively - and innovatively - delivered at the municipal level.
- Together with the *emergence of a carbon price* there is a need for a differentiated set of financial instruments that *lower risk for industry and local authorities* (e.g. renewable energy, finance or energy efficiency finance).

9. What need for international arrangements?

International arrangements have to complement and leverage domestic climate and development initiatives.

- provide the necessary *financial, technological and capacity building support* to developing countries
- *mitigate concerns about distortions in international competition.*

Such international arrangements can be reached on a *regional scale* but these do not obviate the need for a *comprehensive global architecture.*

10. Upgrading climate finance in the context of the financial crisis

Carbon finance must be **upgraded** if the paradigm shift implied by the Cancun agreement is to occur.

- The emergence of a **recognized carbon value** is needed to ground this upgrading
- **Innovative financial products** are needed to mobilize global capital market players such as **institutional investors**.
- triggering a **wave of climate friendly infrastructure investments** AND make a positive contribution to discussions on the **evolution of the international financial system**.



Venturing into uncharted financial waters

*New avenues for collaborative research
(personal reflections)*

'Financial' crisis: a moment of opportunity?

- Changing context for overseas aid and funding
- Not a problem of capital shortage but a problem of direction of savings (sovereign funds, pension funds ...)
- Risk mitigation instruments and public-private initiatives
- Climate regime and reforms of the international financial system
 - Socialisation of bad debtsin exchange of what?
 - « Social value of carbon » : a way out the risks of the «commerce of promises»
 - Awakening the Buridan' donkeys and re-directing world savings out of the speculative investments

Terms of reference for the wanted device

1. Social Value of Carbon as a surrogate of a « price signal » to avoid the risk of fragmentation of climate finance



2. Politically acceptable in future climate negotiations



3. \searrow risk-adjusted perceived costs of LCPs (= \searrow credit interest rate and leverage global private savings)



Successful scaling up of climate finance

A ventured illustration

1. Let imagine a deal on the « **Social Cost of Carbon** »



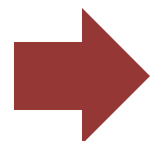
SCC = notional value ≠ carbon tax

2. Issuance by Governments of « **carbon certificates** »

- Delivered to banks // CO₂ abatement pledged by funded LCPs
- **Public guarantee** on LCPs loans
- Face value based on the agreed SCC, creation of attractive financial products
- Credit facilities to **reduce « risk-adjusted costs »** of LCPs

3. Recognition by Central Banks of CC as « **carbon-based reserve assets** »

- After verification of the effectiveness of CO₂ reduction
- Expand lending capacity of the bank



Applied within a coalition of few « **committed** » countries or/and extended at a global level