«Transition to Low Carbon Societies in Europe – Limits and opportunities of energy scenarios»

«Piloting the transition - On the importance of unlocking from current technological and consumption pathways»

Brussels, April 29th, 2010

By K. MARECHAL
General perspective

The economics of climate change and the change of climate in economics
Central notion: the process of ‘lock-in’

- Increasing returns to adoption
- Initial lead
- Technological lock-in to the detriment of alternatives
- Persistence of obsolete elements (designs, features, technologies)
The importance of the systemic perspective

- Technological lock-in
- Systemic approach

What get locked-in are socio-technical systems (STS)

- Infrastructures
- Related sectors
- Institutions
- Changes of norms
The crucial role of habits

presence of non-economics barriers neglected in analyses

BARRIERS

STRUCTURAL

The current carbon-based STS both shapes and constraints consumers choices

COGNITIVE/PSYCHOLOGICAL

Rationality of economic agents is bounded and biased

Consumers are neither perfectly rational nor omnipotent but resort to habits

Behavioural lock-in partly explains the A-B gap
ENDENWAT ?
Other diagnosis → other potential remedies

measures should target both sources of inertia

STRUCTURAL

Hybridisation or Strategic Niche Management (i.e. beyond the mere technology push with massive subsidies)

COGNITIVE/PSYCHOLOGICAL

Commitment strategies (+ comparative feedbacks, community-based social marketing), downstream+context-change and complementary currencies

Promote “distributed generation” + Eco-design
Conclusions

To deal with the issue of global warming in a fair, effective and appropriate way, there must be

a change of climate in Economics

Economists should break their habit of not taking habits into account

« You cannot solve a problem using the same thought process that created it »
Albert Einstein

« The truth lies, not with the new ideas, but in escaping the old ones »
John M. Keynes
Further reading


- Maréchal, K., 2010. *Not irrational but habitual: the importance of “behavioural lock-in” in energy consumption*. Ecological Economics 69/5, 1104-1114


*All publications are available upon request to author (kevin.marechal@ulb.ac.be)*

*See also the website for the project: “Habitudes et mobilité : étude de deux mesures innovantes pour faire évoluer les comportements de déplacements” on www.ulb.ac.be/ceese*