

**Confidence, Credibility and Authority in Climate Sciences and Politics**

**International Conference, Paris, 20-21 November 2014**

# **Paradigm change in climate policy**

**From mainstream price theory  
to classical production economics**

**Michel Damian  
EDDEN/CNRS, Université de Grenoble**

## **Three points**

**1-The key objectives of the 2015 Paris agreement**

**2-Paradigm change in climate policy**

**3-A new global governance for climate change**

# **1-The key objectives of the 2015 Paris agreement**

## **COP 21 will herald a threefold turning point:**

1) An agreement on climate change will be signed in Paris, coming into force in 2020.

# **1-The key objectives of the 2015 Paris agreement**

2) The agreement will be based on national policies.

# 1-The key objectives of the 2015 Paris agreement

3) To reduce greenhouse gas emissions all States will be expected to make ‘intended nationally determined contributions’ – heterogeneous in nature and with only modest, mid-term ambitions – rather than some making commitments, as in the past.

U.S.A., 2014. *U.S. Submission on Elements of the 2015 Agreement*, United Nations Framework Convention on Climate Change (UNFCCC), Bonn, 12 February.

USIA, 1997. *Confronting Climate Change: The Heart of the U.S. Proposal*, United States Information Agency, *Global Issue*, 2, 2, 13-15 April.

# 1-The key objectives of the 2015 Paris agreement

**The main characteristic of the agreement is that it will be made to last.**

‘The agreement per se should be built to last, [...] so that it does not have to be amended every time there are refinements to the details of reporting.’

U.S.A., 2014. *U.S. Submission on Elements of the 2015 Agreement*, United Nations Framework Convention on Climate Change (UNFCCC), Bonn, February 12.

‘the agreement should be built for the long term’, ‘The Paris agreement should [...] be durable in the long term’, ‘the core agreement should be built to last’ (U.S.A., 2014).

U.S.A., 2014. *U.S. Submission -- September 2014*, United Nations Framework Convention on Climate Change (UNFCCC), Bonn, September 17.

# **1-The key objectives of the 2015 Paris agreement**

## **A return to national policies**

### **United States, 1991-1992: national strategies**

Bodansky, 1993: “The United States opposed targets and timetables for greenhouse gas emissions as premature. It criticized the EC proposal as rigid and inequitable ‘top-down’ approach, given the differences between countries in national circumstances and implementation costs. The United States argued that the Convention should instead adopt a ‘bottom-up’ approach that encourages the development of better information, national strategies, and action plans.”

Bodansky D.,1993. The United Nations Framework Convention on Climate Change: A Commentary, *Yale Journal of International Law*, 18, 514.

# **1-The key objectives of the 2015 Paris agreement**

## **A return to national policies**

### **Japan, 1991: pledge and review**

During the July 1991 talks on drafting the climate convention, Japan proposed a ‘pledge and review’ scheme: each country would state its goals for emissions abatement and how they would be achieved; proposals would then be checked and validated as part of an international appraisal procedure.

The method adopted for the 2015 Paris conference is inspired by this original concept.



# 1-The key objectives of the 2015 Paris agreement

## A return to production

### Climate: emissions versus production

Rayner, 2010: ‘the only game in town’

Rayner, 2010: ‘Interestingly the lesson that has never properly been drawn from the Ozone regime is that it did not address *emissions* of ozone depleting gases at all, but their *production*. It is a fundamental flaw of current climate policy that it focuses on emissions rather on the technologies that produce them.’

Rayner, Steve (2010), ‘How to eat an elephant: a bottom-up approach to climate change’, *Climate Policy*, 10(6), pp.615-621.

## 2-Paradigm change in climate policy

### A ‘science-first’ multilateralism?

Sarewitz, Dan (2011), ‘the plan’: the plan contained two key elements: first, that (consensual) scientific knowledge about global climate change would lead to agreed political action to deal with it and, second, that this political action should consist of multi-laterally negotiated national targets and timetables for reducing greenhouse gas emissions.

Quoted after Hulme, Mike, 2014. Behind the curve: science and the politics of global warming, *Climatic Change*, 126, 3-4, 273-278.

## 2-Paradigm change in climate policy

### A 'science-first' multilateralism?

Meyer-Abich, K.M., 1980. Socioeconomic Impacts of CO<sub>2</sub>-Induced Climatic Changes and the Comparative Chances of Alternative Political Responses: Prevention, Compensation, and Adaptation, *Climatic Change*, 2, 4, 373-385

Schelling, T.C., 1983. *Climatic Change : Implications for Welfare and Policy, Changing Climate: Report of the Carbon Dioxide Assessment Committee*, National Research Council, National Academy Press, Washington, DC, 449-482.

Kellog, W.K., 1987. Mankind's Impact on Climate: The Evolution of an Awareness, *Climatic Change*, 10, 2, 113-136.

Rayner, S., Malone, E.L., 1997. Zen and the art of climate maintenance, *Nature*, 390, 332-334.

Meyer J.W., Franck D. J., Hironaka A., Schofer E. et Tuma N. B.,1997. The Structuring of a World Environmental Regime, 1870-1990, *International Organization*, 51, 45, 623-651

## 2-Paradigm change in climate policy

### Or an economy-first approach?

Haas, 1989: ‘the distribution of costs and benefits from possible global climate change is sufficiently well estimated so as to inhibit the U.S. government from delegating authority to ecologically inclined atmospheric scientists.’

Haas P.M.,1989. Do regime matter? Epistemic communities and Mediterranean pollution control, *International Organization*, 43(3), 403.

Stavins (1988): ‘Our recommendation [...] is for a system of international emissions trading in greenhouse gases.’

Stavins R.N. (dir.),1988. *Project 88: Harnessing Markets Forces to Protect Environment*, Harvard University, 20.

## 2-Paradigm change in climate policy

### Or an economy-first approach?

Council of Economic Advisers (1990): ‘Market-based approaches [a fee, charge, or tradable allowances system] could be implemented at a less draconian level to nudge the economy gently and gradually in the direction of greater energy efficiency. Such an approach would test the flexibility of the economy without betting the current way of life on the outcome.’

Council of Economic Advisers (1990), *Economic Report of the President*, United States Government Printing Office, Washington, D.C., February, 218.

Sun M., 1990. Emissions Trading Goes Global: Spurred on by critics, the Administration is set to propose a world market in emissions of greenhouse gases, *Science*, 242, 4942, 520-521, February 2.

USIA, 1997. Confronting Climate Change: The Heart of the U.S. Proposal, United States Information Agency, *Global Issue*, 2, 2, 13-15, April.

## 2-Paradigm change in climate policy

### **From mainstream price theory to classical production economics**

The new climate governance is testimony to a paradigm change in economic thinking, with a shift from mainstream theory of market prices and incentives to classical production economics, borne out by gradual state action, inevitable *internal* tensions and conflicts in production, social affairs and redistribution, through which emissions abatement (low-carbon technologies and new regulations) will have to find its way.

**‘Cap-and-trade was just one way of skinning the cat’  
(Obama, 2010)**

The return of regulation, emissions and technology standards:  
‘just like we have for other toxins like mercury and  
arsenic’ (Barak Obama, June 2013)

# **The new climate policy: national policies, technology and methods of production**

By new climate policy we mean all the actions – at a national level or likely to take a broader form deployed by ‘clubs’ of nations – concerned with production methods in order to cut emissions, by:

- 1) Regulatory policy (mercury)
- 2) Establishing technology standards (motor vehicles)
- 3) Taking action to support research (CCS)
- 4) Targeting specific pollutants (EPA: CO<sub>2</sub>, methane, HFC), and
- 5) Key industries (electricity generators)



**Recent actions** targeting short-lived GHG emissions, notably hexafluorocarbons (HFC) + methane + black carbon: launch in 2012 of the Climate and Clean Air Coalition at the instigation of the United States.

**Techno-industrial initiatives** already launched in an attempt to decarbonize production methods:

- The Super-efficient Equipment and Appliance Deployment (SEAD),
- The Global Superior Energy Performance (GSEP) Partnership,
- The International Smart Grid Action Network (ISGAN),
- The Electric Vehicles Initiative (EVI),
- The Multilateral Bioenergy Working Group,
- The Clean Energy Solutions Centers,
- The Carbon Capture, Use, and Storage (CCUS) Action Group,
- The Solar and LED Energy Access Program (SLED).

## US and Chinese leadership

- Cooperation agreement in 2013 (emissions abatement and research): energy efficiency, smart grids, motor vehicles, coal, carbon capture and storage, HFCs.
- Joint declaration of intention in early 2014:  
‘China and the United States will put an extra effort into exchanging information and discussing policies that will help both of us to be able to develop and lead on the standards that need to be announced next year for the global climate change agreement’  
John Kerry, 15 February 2014

## **A new global governance for climate change**

The Paris Agreement will represent a turning point, heralding a new climatic governance in the continuity of governance centring on states, but henceforth on a global scale. In other words the agreement will take into account the preferences of the 195 parties to the 1992 Framework Convention on Climate Change, in particular the most powerful among their number.

## Conclusion

Societies, in all their diversity, are engaged in a very long process of transition affecting energy, industry and society as a whole.

Unless brought about by radical revolution, war or large-scale disaster, no change in development methods and ways of life – and fundamentally in the regimes of capital accumulation, because that is the core concern – has ever been achieved in just a few years or indeed several decades.

History lasts a long time, ‘however tragic it may be or remains’ (Badie, B., 2013. *Quand l’histoire commence*, Paris, CNRS Edition, 57).

This will certainly be true of the countless paths to carbon neutrality.

Thank you for your attention