

Triggering innovation for decarbonisation

Joint Side-Event, EU Pavilion, room “Brussels”, 10:30 - 12:30,
COP 19, Warsaw, Poland, November 20, 2013

Climate policy has to work in complex real world

- Goal to mitigate GHG is one of many policy goals
 - Reduce air pollution
 - Energy security
 - Create jobs, secure competitiveness
- Tinbergen Rule:
Policy Target = # Policy Instruments
- But also additional market failures beyond climate ext.
 - Spillovers from knowledge generation
 - Distorted incentives for energy efficiency measures



Climate policy has to work in complex real world

with:

- Significant transaction and enforcement costs
- Complicated innovation and diffusion processes (path dependency, lock-in, long-lasting nature of investments)
- Political and legal constraints. Policies have to be embedded in existing frameworks



The policy challenge: how to manage the transformation?

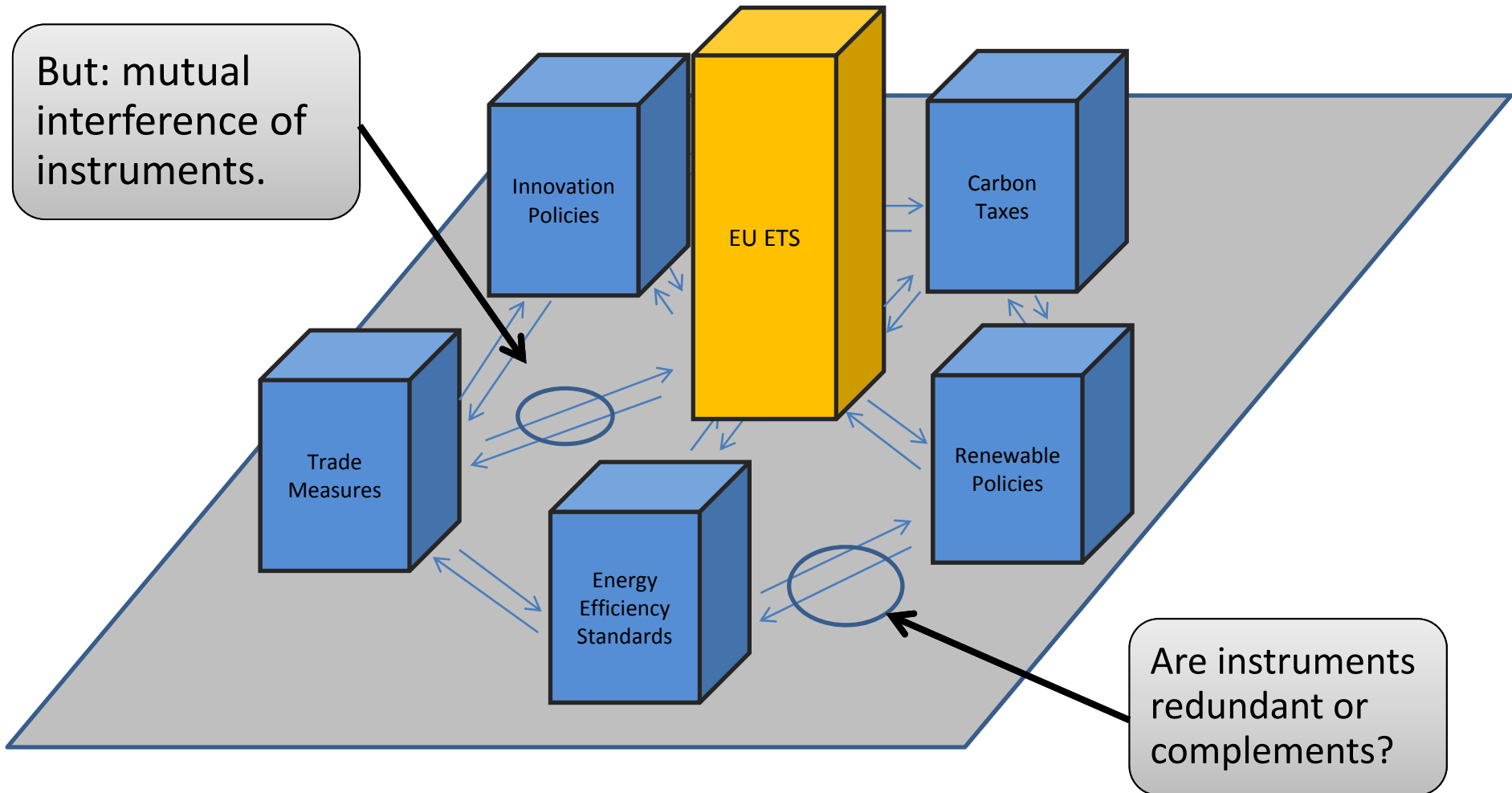
- EU and MS already employ a variety of climate policy instruments – but current instruments are not sufficient to reach the 2030 – 2040 – 2050 milestones
- Existing instruments need to be scaled up considerably, and new instruments added to the policy mix
- This raises a number of issues:
 - How is the current policy mix performing, and how far can it be scaled up? What constraints need to be addressed? Which new instruments do we need?
 - How to manage the increasing interactions and overlap of policy instruments?
 - How to deal with uncertainties, where to be rigid and where flexible?
 - What does an “optimal” instrument mix for European climate policy look like – taking into account the real-life constraints and barriers, and the lessons learnt from past successes and failures?
 - What role for economic instruments in this process? How far can they guide the transformation, where do they need to be complemented by other policy instruments?

The CECILIA2050 project: key features

- Three-year European research project, supported by the EU FP7
- Analysing policies that will take the EU towards a low-carbon economy by mid-century, anticipating barriers in this process
- Interdisciplinary and geographically diverse approach
 - Working across disciplines – combining economics, law, political science
 - 10 research teams from 8 EU countries with different socioeconomic & policy backgrounds
- Broad notion of “optimality” – explicit treatment of political, legal and administrative feasibility. How to trade off environmental effectiveness vs. economic efficiency vs. political, legal, administrative feasibility?
- Consider the entire policy mix - focus on interactions of policy instruments
- Combination of different quantitative approaches with qualitative methods
 - Macroeconomic models (GINFORS), energy models (TIAM-UCL), global CGE models (GTAP-E), micro-simulation models, legal analysis, focus groups, household surveys, serious gaming ...
- Involvement of stakeholders in the research



Policy mix necessary to cope with complexity



Objectives of ENTRACTE



- I. Coherently assess climate policy instruments with the full range of economic research methods
- II. Understand interactions between multiple climate policy instruments
- III. Take into account the barriers to implementation
- IV. Identify mixes of instruments that provide an effective, efficient, and feasible overall EU climate policy to achieve legislated and aspirational targets of GHG emission reductions

Coherently assess the EU ETS



Conduct a robust ex-post analysis of EU ETS and explore reform and expansion options

- Analysis of the causal-impacts of the EU ETS on regulated companies
- Assessment of legal implementation and of monitoring, enforcement and verification
- Understand how market imperfections can impair the functioning of EU ETS
- Understand consequences of sectoral and regional expansion

Structural facts about ENTRACTE



- Duration: 36 months (01/09/2012 – 31/08/2015)
- Requested EU Contribution: 2,935,276 €
- 9 Partners from 6 countries:



Triggering Innovation for Carbonisation

Moderation and chair:

Benjamin Görlach (Ecologic Institute), CECILIA2050

Andreas Löschel (ZEW), ENTRACTE

Presentations:

Ralf Martin (Imperial College London) evaluates the current performance of the EU ETS, ENTRACTE

Massimiliano Mazzanti (Univ of Ferrara) analyses how EU climate policy mix stimulates low-carbon innovation, CECILIA2050

Discussion