

# **Expert Workshop**

# **Scenarios and Storylines for EU Climate Policy Instrumentation**

Date: Wednesday, October 30, 2013, 10:00 – 16:00

Meeting Room 4, UCL Conference Suite, 188 Tottenham Court Road, London, W1T 7PH; UCL, London

#### **OBJECTIVE**

The CECILIA 2050 project aims to develop climate policy mix pathways to guide the effective transition to a low-carbon economy in Europe by 2050. The objective of this workshop is to discuss the requirements, barriers and implications of such a transition, and 'storylines' for the development of climate policy instruments and instrument mixes in order to achieve it.

The first half of the workshop will present initial results of the modelling of techno-economic scenarios developed for the EU's energy system out to 2050. This will be followed by discussions of the implications of the suggested pathways, along with drivers and barriers to achieving them, including the role of innovation. The second half of the workshop will concentrate on climate policy instrumentation, presenting instrument 'building blocks' for climate policy instrumentation in an EU and international context. A bottom up approach links to the socio-economic scenarios as presented. A top down approach details storylines for developing scenarios for policy instrumentation. A forum discussion will connect these 'stands' and focus on the future development of climate change policy in the EU and beyond.

## Background

In order to retain a reasonable change of remaining below a '2-degrees' increase in average global temperature, global GHG emissions must be reduced by at least 80% by 2050, from 1990 levels. If the EU is to reduce its emissions following this ambition, the Community's energy system must be almost completely decarbonised. UCL is using its newly developed 'European TIMES Model '(ETM-UCL) to model the most cost-optimal pathway to achieving this aim.

However, a transformation of the EU's energy system, along with the reduction and prevention of emissions from other sectors, will only result from effective policy. To this end, LU-CML is using an 'Input-Output' Framework to assess the internal







economic consistency of decarbonisation approaches and to develop top-down 'storylines' for the development of climate policy in the EU, in a manner consistent with potential global developments. These storylines relate to the philosophy behind instrumentation of climate policy, and take into account different possible futures and challenges. This includes regulatory limitations at the national and international level, with different regulatory styles and directions - are we moving more towards a global planning society or will we move towards indirectly market based regulation? Will the world move as a block or can there be frontrunners and laggards? Can national and international tensions be prevented or resolved? Filling in such narratives is a precondition for developing consistent instrument scenarios for climate policy, which in turn will determine socio-economic and emission outcomes.

Where top-down storylines and bottom-up scenarios meet, discussions may become focussed on key questions, such as:

- How to reduce the primary production of coal, oil and gas, also considering CCS?
- Is fossil fuel to be 'pressed out' of the market, or non-fossil energy to be 'pressed in'?
- How to deal with market imperfections, where market-based controls cannot work?
- How to deal with technological 'lock-ins' and prevent new lock-ins from emerging, as through innovation and infrastructure?
- How to deal with political and administrative constraints in instrumentation?

Answering these questions is vital for the development of successful climate policy instruments and instrument mixes.

### **FORMAT**

The workshop will present initial results from the modelling work undertaken in the CECILIA2050 project. These results will be commented on and discussed with the expert participants. Policy implications and priorities will also be discussed to help guide the way forward.







## **AGENDA**

Time	Title	Chair/Speaker
10:00	Opening and Introduction	Benjamin Görlach (Ecologic)
10:10	Development of the EU Energy System in a '2-Degrees' World	Paul Drummond (UCL)
10:30	Global Consistency in a 2-Degrees Input-Output Scenario for 2050	Arjan de Koning (CML)
10:50	Referent Response and Discussion – Technological and Policy Learning	Neil Strachan (UCL)
11:20	Coffee	
11:40	Low-Carbon Innovation – The Role of Government	Mariana Mazzucato (SPRU)
12:00	Respondent & Forum Discussion – The Role of Policy Instruments and Government in Innovation	Dimitri Zenghelis (LSE)
12:30	Lunch	
13:15	Storylines for Climate Scenarios and Policy Instrumentation	Detlef van Vuuren (PBL) (presentation from Japan)
13:35	Storylines in Scenario Development: Shell Lens and 2-Degrees	Maaike Witteveen (Shell)
13:55	Storylines-based Top Down Climate Instrument Building blocks.	Gjalt Huppes (CML)
14:25	Scenario-based Bottom Up Climate Instrument Building Blocks	Paul Ekins (UCL)
14:55	Coffee	
15:15	Forum Discussion – How to Focus Policy Instrument Development?	Chair: Jørgen Henningsen (European Policy Centre)
15:50	Review of the Day – Future Priorities	Benjamin Görlach (Ecologic)
16:00	Close	







#### **AUDIENCE & SIZE**

Around 30-40 specialists in energy systems modelling, scenario-building and climate change policy instrumentation.

## The CECILIA2050 Project

The CECILIA2050 project has been set up as a three-year research project, funded by the European Union's 7<sup>th</sup> Framework Programme for Research. Running until August 2015, it brings together ten leading research institutions from eight EU countries to assess the performance of the existing climate policy mix, and to map pathways towards future climate policy instrumentation for the European Union, with a prime focus on economic instruments.

www.CECILIA2050.eu



