

16:15-17:30 - Panel 3 - Etoile

“Carbon Trading: A Market Mechanism to Fight Climate Change”



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Carbon Trading: A Market Mechanism to Fight Climate Change

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Agenda

- 1. Introduction to Climate Change Capital**
- 2. Carbon trading as an abatement tool**
- 3. Current state of the carbon market**
- 4. Post-2012 market continuity**

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1. Introduction to Climate Change Capital

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Climate Change Capital

Climate Change Capital (CCC) is a UK specialist merchant banking group focused on companies and financial institutions affected by the policy and capital market responses to climate change.

CCC is the leader in the provision of policy, financial and market-related advisory services and financing for clean power, clean technology, clean fuels and carbon markets.

CCC currently has over 80 people located in London (headquarter), Madrid, Paris, Washington DC.

Three distinct, but complementary, units

Advisory

Corporate Finance
Financial Advisory services
Policy

Asset Management

Develops and manages
funds facilitating the
transition to a low carbon
economy

Carbon Markets

Invests in projects and
companies generating
carbon emission credits

CCC staff shape the policy agenda

United Nations

Negotiated the 1992 UN Framework Convention on Climate Change (UNFCCC):

Championed the 'flexibility mechanisms' enshrined in the Kyoto protocol.
Provided legal representation to the Alliance of Small Island States (AOSIS) throughout the negotiations and at the Rio UN Conference on Environment and Development

World Bank

Created and lead the world's first global carbon fund (the Prototype Carbon Fund):

Oversaw the design and launch of eight carbon funds leading to funds under management of \$1 billion.
Co-managed the development of the G8 Investment Framework for Clean Energy, Energy Efficiency and Sustainable Development arising from the 2005 G8 summit

European Commission

Advisor to European Commission on EU – Russia co-ordination:

During the 6th and 7th Conference of the Parties to the Climate Change Convention, CCC personnel acted as advisor to the European Commission on EU - Russia co-ordination.

European Commission

Design of the EU ETS registry system:

CCC personnel led the legal team to design the European Union Emissions Trading Scheme registry system and draft registry regulations

UK Government

Advisors to the UK Prime Minister's office and UK government departments:

During the UK Government's presidency of the European Union and G8, CCC personnel were mandated to act as advisors on Climate Change policy.

European Commission

EU High Level Group on Competitiveness, Energy and Environment:

CCC personnel act as Sherpa to the High Level Group, advising the Commission on the future of energy and environment policy

Climate Change Capital Carbon Fund – C4F

CCC, through the Climate Change Capital Carbon fund (“C4F”) has over \$100 million under management to procure emission reduction credits around the world

- Since launch (July 2005) the fund has built up a substantial portfolio of emission reduction credits and has invested in a multitude of projects through the CDM and JI that range from wind farms in China to land fill gas capture in Hungary to the destruction of industrial gases in India.
- The fund acts as a long term partner with host countries to ensure the projects that we finance fit with the development needs and priorities of those countries; making sure projects achieve the underlying technology transfer rational which gave rise to the Clean Development Mechanism.
- The fund is moving upstream, developing projects with technology partners and local specialist carbon development companies in target markets.
- The fund is evaluating investment opportunities with a number of proven technology providers to develop carbon assets from a range of methodologies including landfill gas, CMM, destruction of industrial gases and agricultural waste.

The fund’s investment strategy gives a greater degree of flexibility and speed than the majority of carbon buyers. Depending on the situation, we are able to offer down payments, a variety of pricing structures, and project development finance.

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2. Carbon trading as an abatement tool

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Carbon trading and the future energy economy

- From CCC's perspective, this is not just about carbon trading
- One of the most important features of human development in the first half of the 21st century will be the transformation of energy economies – the ways we produce and consume energy
- Three main drivers of this transformation:
 - Climate change and other environmental impacts caused by the extraction and consumption of fossil fuels
 - The depletion of cheaply extractable oil
 - Energy security concerns of developed and developing countries
- The transformation of the global energy economy has begun and will be a 50-year process, representing a long-term opportunity for investors who become familiar with the space
- The market-based approach to climate policy has triggered a global search for investment opportunities in low-carbon energy generation, and those involved in this process will gain first mover advantage as the energy revolution continues
- CCC is committed to playing a leadership role throughout this process

3. Current state of the carbon market

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Current view of the EU ETS in Phase 1

- The price of Phase 1 EUAs has fallen from ~€31/tCO₂e to ~€9/tCO₂e between April and mid-May but has since recovered to €16.15/t CO₂e (3 July). Phase 2 EUAs have fallen in concert from ~€32/tCO₂e to ~€20/tCO₂e.
- The falls were triggered by the premature announcement in May of 2005 verified emissions, indicating that against initial expectations, the market was long.
- 2005 market is estimated to be long at ~65Mt CO₂e for EU23 (Poland, Malta emissions still missing). Poland is expected to be 10-20Mt long (verification data due this week).
- A short at the end of Phase 1 could still be created by:
 - Weather
 - Banking across phases by France and Poland
 - Policies on unused NERs

What have we learnt from EU ETS so far?

- Very good at optimising short-term behaviors (fuel-switching)
- No investment
- Windfall profits
- Very little change of behaviors (compliance more than strategic question for many industrial players)
- But large-scale investments in China, India and Brazil mostly through flexible mechanism (>1bil.t CERs in pipeline through 2012)

Views on Phase 2 NAPs

- UK and Germany took the lead in setting up stricter Phase 2 NAPs, weak national cap setting elsewhere so far (drafts).
- The Commission will have to create a short in the market
 - Took almost 100Mt out of the system in Phase 1
 - Should be more accurate this time around due to actual 2005 data availability
 - Will have most influence on countries distant to their Kyoto target (e.g. Spain, Italy) as NAPs and additional measures must be compatible with meeting Kyoto target
- But question is: how big will be the short?
 - The final number may not become available until 2007, especially as all countries but one missed the June 30 deadline in submitting Phase 2 NAPs

Price drivers for Phase 2

- **EUA prices will be affected by:**
 - **Gas and coal prices**
 - **Final Phase 2 EUAs allocations**
 - **New Entrant and Closure rules**
 - **The weather**
 - **Supply of CERs/ERUs through the Linking Directive**
- **But EU Member States have other options...**
 - **Supply of CERs/ERUs through public procurement**
 - **Use of AAUs:**
 - **The equilibrium price for AAUs is zero. Russia and Ukraine have, in theory, a big surplus.**
 - **But greening and complementarity will mean AAUs are used as a safety valve.**
- **Given that CERs at least will probably be bankable into Phase 3, and clarity on the post-2012 framework is expected in 2009-2010, the EUA price may end up being higher than anticipated at the end of Phase 2 as companies hold on to their CERs for use in Phase 3.**

Flexible Mechanisms

- Flexible Mechanisms will have a limited or most likely no effect in Phase 1.
- But for Phase 2, assumptions about use by governments of CERs and ERUs will be a key determinant of NAP.
- As will assumptions of use by governments of AAUs from EU-10 and Russia, Ukraine, Bulgaria and Romania.
- Then once the NAPS have been set, supply of CERs and ERUs to ETS operators will be critical.
- So Phase 2 NAP may be tighter but not that much tighter for fear of hurting industry with high prices. This will limit the effectiveness of EU ETS in investment decisions unless there is clarity about post 2012.
- Fuel prices likely to remain critical with high gas prices leading to high EUA prices.
- But supply of CERs and ERUs from China and elsewhere could be huge and might be bought by ETS operators as well as governments leading to low EUA prices even if gas prices stay high.
- Volatility will remain very high as there is considerable uncertainty about all of these dynamics. It is prudent to manage risk dynamically.

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4. Market continuity

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Ensuring carbon trading leads to decarbonisation

- The EU ETS will only deliver short-run changes in the energy sector if carbon value is not available post-2012, on a timescale comparable to infrastructure investment horizons (at least 15 years)
- New greenfield projects (mostly CO₂) are already unlikely to be financed under CDM (e.g. renewables) because project design and construction times exceed 5 years
- Carbon trading will always have to be complemented with energy/technology policy to help accelerate the commercialisation of key technologies and drive the deployment of capital at scale
- Governments must provide continuity in the carbon market and need to work with business to identify signals that work and build confidence gradually

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