EMISSIONS TRADING
What Lessons have been learned?

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Practical issues in developing Emissions Trading in Europe

- The UK perspective and the UK Emissions Trading System 2002-2006
- The EU Emissions Trading System – 2005 onwards
- Unintended consequences
- The changing responses of government and industries across Europe
- With the benefit of hindsight....
THE UK PERSPECTIVE AND
THE UK EMISSIONS TRADING
SYSTEM 2002-2006
Why the UK likes carbon markets

- Large financial sector – creates new opportunities for the city of London
- The environmental certainty of the cap on allowances - can’t get this with a tax
- The continuing incentive created by tradable allowance market - more abatement than with regulation at the same price
- At least cost – expensive abatement can be put off until the price rises (and this ideological aspect continues to be important for some)
- Not a tax – more politically acceptable
- Auctioning allowances can create substantial revenues – if the price is high enough
Climate change not particularly well understood nor a priority for much of the UK government

But support in high places – Prime Ministerial – and no real political divide

Trading rather than tax attractive in the UK because of the large financial sector (the City of London)

But taxes were tried to (and are still in place)
Responsibility for climate change action and the development of emissions trading was led by the environment ministry (Department for Environment, Food and Rural Affairs).

Significant opposition from industry but support from ‘progressive’ business – led to a divergence of views within the government ministry at that time for energy and industry (Department for Trade and Industry).

Support for action on climate change from the UK Foreign and Commonwealth Office.
• Design
  - Six greenhouse gases
  - Voluntary - participation
  - Descending clock auction
  - Direct participants and Climate Change Agreement holders
Objectives

- Cost effective emissions reductions
- Learning by doing for government, industry and the UK financial sector
- Intention to influence the design of a trading system in Europe
- BUT
- Overlapping and policies and regulation
- Nervousness on targets
- Nervousness amongst industry on consequences for competitiveness
The experience of the UK ETS

- Around 50 participants
- Rules fairly lax as government was nervous that no one would join
- 5 year target exceeded in the first year of operation
- Huge overestimation of the cost of reductions – companies given around 50 pounds per tonne reduced by government but the market value of allowances was around 2 pounds
Lessons of UK ETS

• Voluntary basis did not drive emissions reductions beyond Business As Usual
• Cost of emissions reductions was very low
• Descending clock auction was not an effective mechanism for price discovery
• Government did not have sufficient information for effective rules and targets

However

• Did prepare UK government, industry and financial sector for EU ETS
THE EU EMISSIONS TRADING SYSTEM – 2005 ONWARDS
January 2005 - EU ETS commenced

- Phase 1 EU ETS– 2005-2007 ‘learning phase’
- Phase 2 EU ETS– 2008-2012 ‘Kyoto Commitment Period’
- Phase 3 and beyond…..
UNINTENDED CONSEQUENCES
What happened in the pilot phase of the EU ETS

- Market Sensitive Information breaches - Responsibility in a number of member states was with environment ministries who did not have a full understanding of the impacts of the information they held
- Industry nervousness and lobbying led to government overestimating the difficulty of emissions reductions
- The cap was too generous
- The price fell to zero (though only slightly overallocated)
Free allocation encourages industry to lobby for the maximum allocation per installation

Governments do not have detailed information on emissions

Industry over reacts to the new system – abates even when not cost effective!

Government tendency is not to disadvantage their own industries – so they are susceptible to lobbying
Some member states and the European Commission worked hard to ensure ‘real scarcity’ for phase II of the EU ETS.

23 of 28 member states’ allocation plans for 2008-2012 were rejected as being too generous.

Commission worked hard to ensure that their was ‘real ambition’ for Phase III of the ETS.

Member states accepted voluntary compromises to the rules for Phase II to create a level playing field and retain trading as a cornerstone of emissions reduction policy and agreed major legal changes for Phase III.
Recession in Europe

In 2008 demand for allowances dropped dramatically

The price fell from a fairly stable 20-25 euros a tonne to around 8 euros

Companies realised their assets by selling surplus holdings of allowances

Demand for allowances dropped as industry contracted

The price dropped further
Consequences of the Phase II price drop

- Revenues that should have provided an income stream for new technologies were severely diminished
- Credibility of trading was questioned
- Incentives for abatement were reduced – and along with reduced carbon prices, coal emissions went up
- Member states started to introduce national measures to create the framework investment they required
Some measures in the legislation have compounded the problems.

For example, 300 million EU allowances were auctioned for the revenue raised to support new low carbon technologies.

In fact, auctioning rules meant these allowances were sold at very low prices – increasing supply in the market and failing to raise the funds envisaged.

Member states like their own national measures to be adopted at a European level – so a lot of initiatives at country level often hinder agreement at European level.
THE CHANGING RESPONSES OF GOVERNMENT AND INDUSTRIES ACROSS EUROPE
Apart from progressive industry great nervousness
Concerned about a new regulation and what the costs would be
Lobbied hard for highest free allocation
Worried about carbon leakage
Concern demonstrated by the numbers turning up for a public consultation on the first draft allocation plan – government had to use the National Exhibition Centre
Most of the anxiety dissipated

The second draft allocation plan public consultation event attracted only around 200 people – mostly traders not industry

Industry began to work with the scheme

Preferred to some other regulation

But still worried about carbon leakage and competitiveness
Most prefer ETS to other measures
They like its flexibility and they see it is cheaper for them
They do not like new legislation
But low carbon price has generated a lot of UK legislation to create low carbon investment in place of the ETS
The UK has a carbon floor price/tax that disadvantages UK industry relative to the rest of the EU
Energy Bill will introduce other mechanisms to encourage low carbon generation which would not be necessary if there was a high carbon price
Other European Industry Responses

- Very much more mixed than the UK
- Less support for a market in some parts of Europe – more used to regulation and support
- Different political climate in different countries engenders different responses – depending on relationship with government
- The debate on ‘backloading’ (taking some allowances out of the market to deal with the low price) has highlighted differences in response
What does the ETS in Europe offer industry

- Level playing field across Europe – same regulation, same carbon price across the whole free trade area
- Flexibility – companies decide their own abatement or carbon strategies – allows them to be creative and sometimes improves their profitability
- Responsiveness – the price dropped during the recession in 3rd quarter of 2008 – but it dropped quickly across the whole of Europe – made it cheaper to comply with the ETS regulation at a time of difficulty
Proposals to revise

- Temporary removal of allowances from the market
- Structural changes proposed
- Strategic reserve mooted
WITH THE BENEFIT OF HINDSIGHT....
How could industry support be improved?

- Hypothecating revenues effectively would engage industry

- Strategic reserve to prevent low prices
  - Ensuring a carbon price at the right level – particularly if it helped reduce the overall regulatory burden would provide stability

- Policies to encourage reciprocal behaviour – and reduce carbon leakage and competitive distortions – linking trading systems
Low prices are the biggest risk – and the most common failing of carbon markets to date. Political confidence and ambition is difficult with a new mechanism but linking may help. Expecting the worst (prolonged low prices) and creating some mechanism for dealing with them. Making sure auctions can be put off if the price is too low.
### Potential Maximum Gross Value Added (MVAS) and Net Gross Value Added (NVAS)

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**Price increase assumption:** $CO_2 = €20/\text{t CO}_2; \text{Electricity} = €10/\text{MWh}$
Comparative price volatility

Chart 6. Comparing the price volatility of EUAs to the volatility of coal, oil and gas

Coefficient of variance

EUA  NBP Gas  DES ARA Coal  Oil

Jan-09  Feb-09  Mar-09  Apr-09  May-09  Jun-09  Jul-09  Aug-09  Sep-09  Oct-09
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