Introduction
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If you want an audience, start a fight. Gaelic proverb
Market power and competitiveness

- Definition of competitiveness?
- Number of participants in scheme
- Dilution of market power of EU scheme
  - Not all sectors covered
  - Opt out provision
  - Pooling
  - No opt in provision for sectors not covered

*The intellect of man is forced to choose, perfection of the life or of the work. WB Yeats*

Carbon leakage and competitiveness

- Energy-intensive industries may shift from KP to non-KP countries
- Tax regimes will play a role:
  - ‘many of the efficiency gains from flexible abatement location mechanisms may be lost to inefficient tax shifting’ (Fischer, 2001)

*In England, you could say what you liked as long as you did the right thing, while in Ireland you could do what you liked as long as you said the right thing. Eamon de Valera*
Allocation and competitiveness

- ‘General equilibrium modelling has shown that the most cost-efficient way to allocate permits is to auction them and to use the revenue to cut preexisting distortionary taxes’ (Boemare and Quirion, 2001)
- Tietenberg 2001- same result will occur regardless of allocation method
- Three goals- efficiency, acceptability, equity; can conflict

We’re all special cases. Camus

Equity and competitiveness

- Position on allocation differs at individual firm and industry level
- ‘Grandfathering’ provides benefit to firms, however policy (i.e. tax) could change this to give advantage to auctioning

An economic forecaster is like a cross-eyed javelin-thrower; he doesn’t win many accuracy contests, but he keeps the crowds attention. Arthur O’Sullivan
Baseline and Credit and Competitiveness

- ‘Cap and trade’ generally favoured by economists
- ‘Baseline and credit’ argument for firms exposed to international competition
- Incompatibility between both types of schemes, i.e. Netherlands/ UK with EU
- Could lead to lock-in, double counting, fungibility issues

An Englishman thinks he is moral, when he is only uncomfortable. George Bernard Shaw

Competitiveness and transaction costs

- Transaction costs lessen effectiveness of ETS
- Case studies on Santiago (Borregaard et al, Sancha, 2003), RECLAIM scheme (Harrison, 1999), California water market (Hanneman, 2001)
- Blueprints for international ETS with focus on low transaction costs (Boom and Nentjes, 2002)

The fleas come with the dog Flannery O’Connor
(Quoting Ralph McGill)
Competitiveness and Supply and Demand for Permits

- Supply and demand of permits between ‘existing’ EU countries and accession countries depends on marginal abatement costs, application of opt out and pooling, banking, etc.
- Developing countries and non-KP countries, sequestration/offsets important for equilibrium price of permits

Half the lies our opponents tell about us are not true
Boyle Roach

Issues and implications re US withdrawal from Kyoto

- Strategies to induce engagement of US-three scenarios (Kemfert et al. 2002)
- Importance of permit allocation in hot air countries for equil. price of permits (Klepper and Peterson, 2002)
- EU allowances should be kept separate from KP units so that prices do not drop to zero (Quirion, 2002)

The three doors by which falsehood enters: anger in stating a case, shaky information, evidence from bad memory.
Triads (Ireland, 9th century)
Co-operation and competitiveness

- Cooperation between government and firms - Japanese example (Takamura, 2003)
- Inter-firm co-operation in UK in meeting recycling and re-use targets - impromptu trading. Baseline and credit schemes need not always incur high transaction costs (Salmons, 2003)

The age of chivalry is gone.
That of sophisters, economists and calculators has succeeded;
and the glory of Europe is extinguished for ever.
Reflections on the Revolution in France (1790) Edmund Burke

Main conclusions (1)

- Scope and scale of trading scheme in reducing costs and enhancing effectiveness
- Tensions between key stakeholders and economic efficiency lead to compromises
- Effect of non-participation of the US in Kyoto Protocol (potential for carbon leakage) on Kyoto participants’ actions
- Permit allocation - free vs auctioning – leads to emerging research into hybrid systems

I’m dying beyond my means (in Paris) Oscar Wilde
Main conclusions (2)
Emerging research/Potential for future work

- ‘Fairness’ and permits allocation
- Which conditions are preferable for ‘baseline and credit’ vs ‘cap and trade’?
- Research and observation of ‘unofficial’ trading already in action
- Costs and benefits of distribution of permits upstream or downstream
- The effect of Russia and Ukraine strategies on competitiveness and permit prices

Death has not required us to keep a day free.
Samuel Beckett in Paris

Main conclusions (3)
Emerging research/Potential for future work

- Potential for expanding trading to include developing countries
- Investigation of multi-pollutant trading and policies
- Linking of trading with sequestration, offsets etc.

I don’t know what effect these men will have on the enemy but by God they frighten me (on his Irish troops at the Battle of Waterloo). Duke of Wellington (Arthur Wellesley)
The life of an Irish Academic in the 16th century:

Sweet is the scholar’s life
He spends a while at chess,
and a while at the pleasant harp
and a further while wooing
and winning lovely women.