

Role of Trading in Environmental Protection: A European Perspective

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Outline

- “Cap & trade” basics
- Danish CO2 quota scheme
- UK Emissions Trading Scheme
- EU Emissions Trading Scheme
- Planned national schemes
- Future prospects

“Cap & trade” basics

- Cap overall emissions
- Distribute allowances
- Impose obligations on regulated industry
 - Monitor and report emissions
 - Surrender allowances
- Establish trading mechanism
- Sit back ... and enforce

A win-win solution?

- Regulator
 - Avoids site-specific ELVs
 - Simplified enforcement
- Regulated industry
 - Lowers costs of abatement
 - Potential source of revenue
- NGOs
 - Certainty of overall effect
 - Hot spots?

Alternatives

- Trading vs. environmental taxes
 - Environmental certainty vs. price certainty
- Other trading options
 - Project-based: high transaction costs
 - Rate-based: limited environmental certainty

Danish CO₂ Quotas for Electricity Production

- Began in 2000
- 90% of CO₂ emissions from electricity sector
- Reduction of 1mt per year from 23mt
- Grandfathered on share of 1994-98 emissions
- Generic or specific conversion factors
- Penalties: excess emissions 'tax' of €5/t

UK Emissions Trading Scheme

- Began in 2002
- Cap & trade for direct participants
- 31 companies across economy
- All six GHGs – approved monitoring protocols
- Emissions statements to be verified
- Penalties
 - Excess emissions: penalty docking > £30/t
 - Other discretionary penalties
- “Gateway” allows link to rate-based CCAs
- Electronic registry

EU Emissions Trading Scheme

- Phase 1: 2005 to 2007
- ~50% of EU CO₂ emissions
- >12,000 installations in 25 states
- Harmonised monitoring and reporting guidelines
- Emission reports to be verified
- Penalties
 - Excess emissions €40/t to €100/t
 - Other “effective, proportionate and dissuasive” penalties
- Links to Kyoto project mechanisms

Planned national schemes

- UK
 - Landfill Allowance Trading Scheme
 - Water rights trading
- Netherlands
 - NOx trading scheme

Future prospects

- Sixth Environmental Action Programme
 - Communication on IPPC Directive
 - Large Combustion Plant Directive
 - Shipping - SO₂ & NO_x
- Expansion of EU ETS
 - Commission review at end of 2004
 - Unilateral inclusion from 2008
 - Transport (including aviation)
- Green “energy efficiency” certificates

Enforcement & Compliance issues

- Relationship with verifiers
- Liability for false information
 - Data used for allocation decisions
 - Annual reports
 - Late discovery
- Regulator's role in allocation decisions