The Voluntary UK ETS and the Energy Performance Commitment (EPC) proposal

Presentation to Japanese visitors

26 April 2007

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UK Emissions Trading Scheme

1. UK ETS: Why did UK do it?
2. UK ETS: What is it?
3. What has UK ETS delivered?
4. UK ETS: Views and lessons learned?
5. What future for UK ETS?

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UK ETS: Why did UK do it?

- **Emissions reductions** to meet targets
  - Kyoto -12.5% ghg basket 08-12
  - Domestic -20% CO_2 in 2010, -60% CO_2 in 2050
- Shift to **low-carbon economy cost effectively**
- **Learning-by-doing** about trading by government, industry and others (verifiers / brokers), ahead of EU / international trading
- UK **first-mover advantage**

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UK ETS: What is it?

- Voluntary Scheme 2002 – 2006
  - 31 Direct Participants
  - Participants receive share of £215m
- Mixed scheme
  - Direct Participants – cap and trade: 4mtCO2e
  - Climate Change Agreement Participants – baseline and credit
  - Trading Participants – non target holders
- Covers 6 greenhouse gases
  - UK ETS allowance = one tonne CO2e
- Includes indirect emissions

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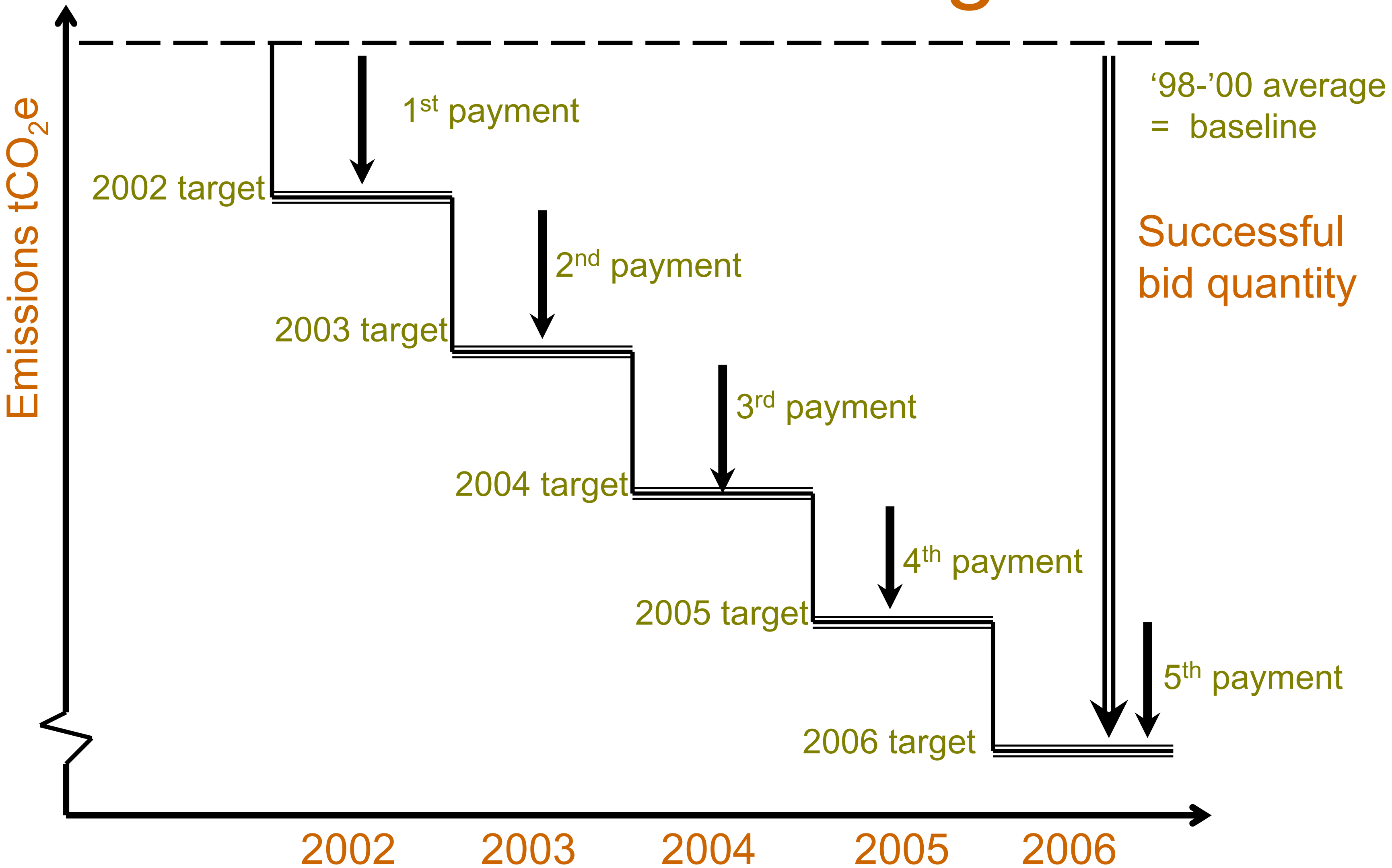
Incentive Design



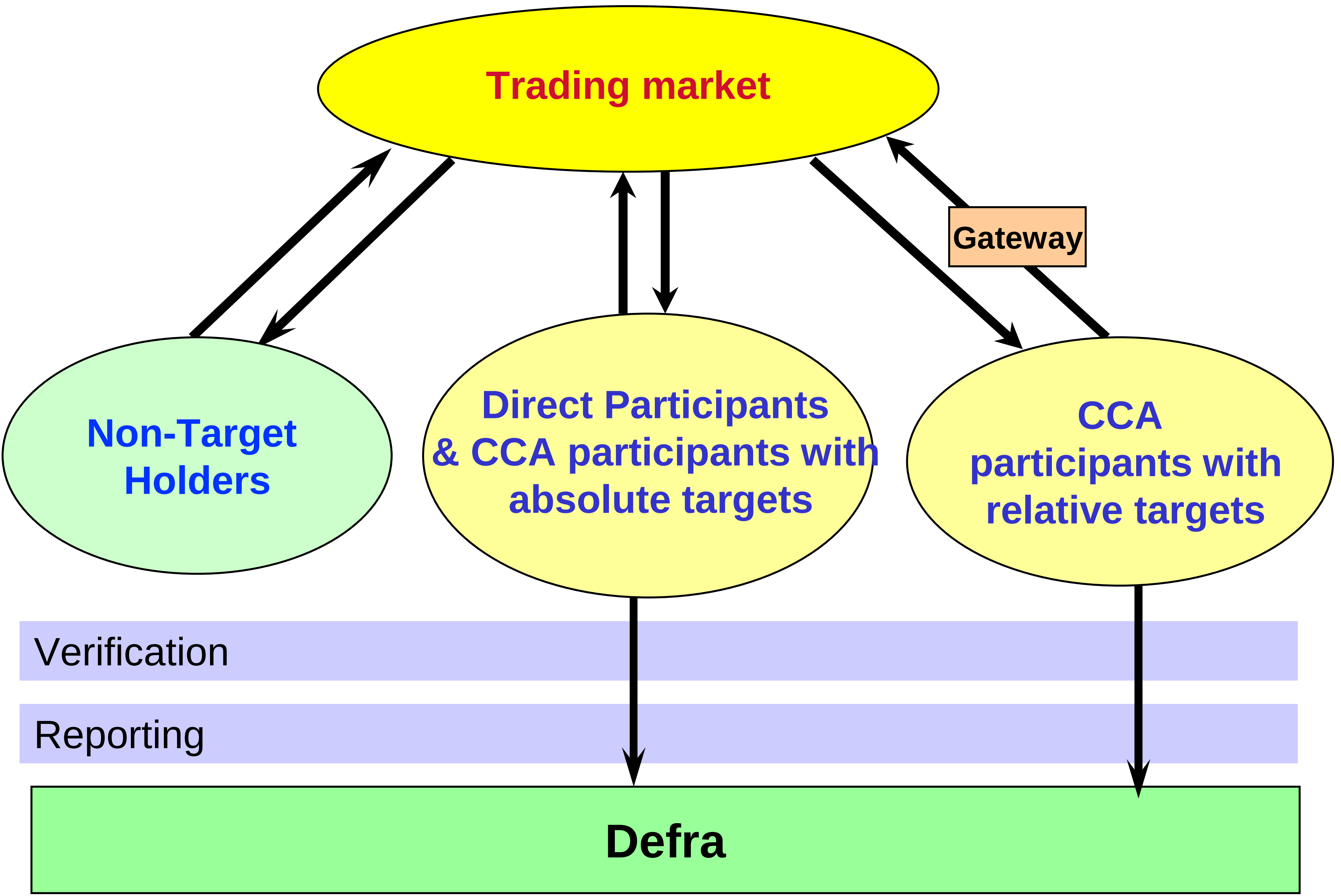

Trading market
Gateway
Non-Target Holders
Direct Participants & CCA participants with absolute targets
CCA participants with relative targets
Verification
Reporting
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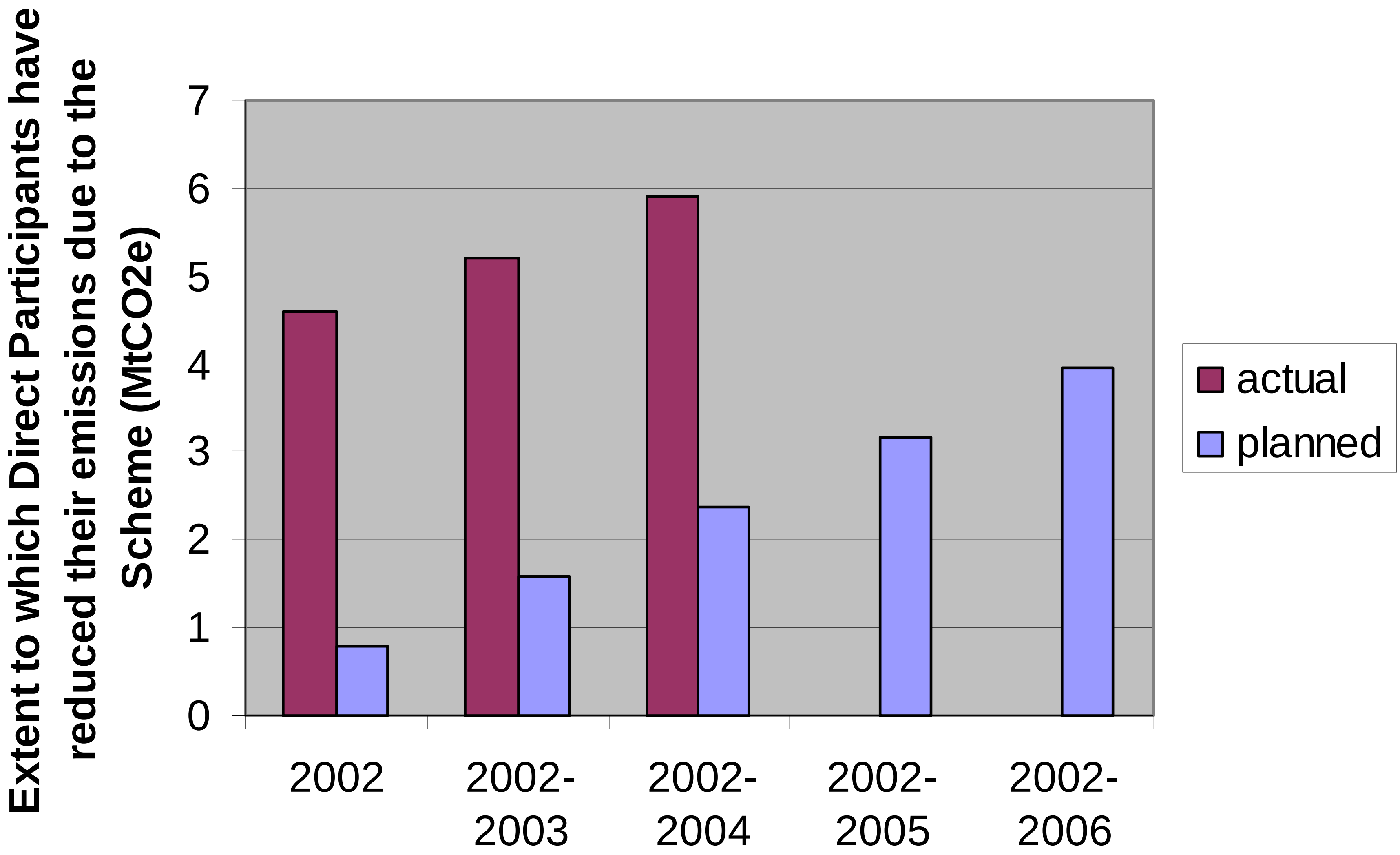
Figure 2. Emissions reductions planned and delivered



UK ETS: Views

- “The market approach can be a useful alternative to additional command and control regulation” PAC
- “Pioneering initiative… significant achievements” NAO
- “Helped us raise the profile of emissions management at all levels” Shell
- "Voluntary schemes do not offer secure emissions reductions“ ENDS

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Broader lessons learned

- Voluntary scheme: More attractive to those businesses that could easily meet their targets and then have allowances to sell
- Non-CO2: Trading has delivered more emissions reductions than anticipated
- NAO: The problems of attracting participants, auction design, undemanding targets "stem from the voluntary nature of the scheme"

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The Energy Performance Commitment (EPC)

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Policy objectives

- Balanced approach to carbon abatement across the economy, rather than emphasis on energy intensive industry
- Delivering carbon savings cost-effectively within large non-energy intensive business and public sector organisations
- Energy efficiency as contribution to energy security, improved competitiveness

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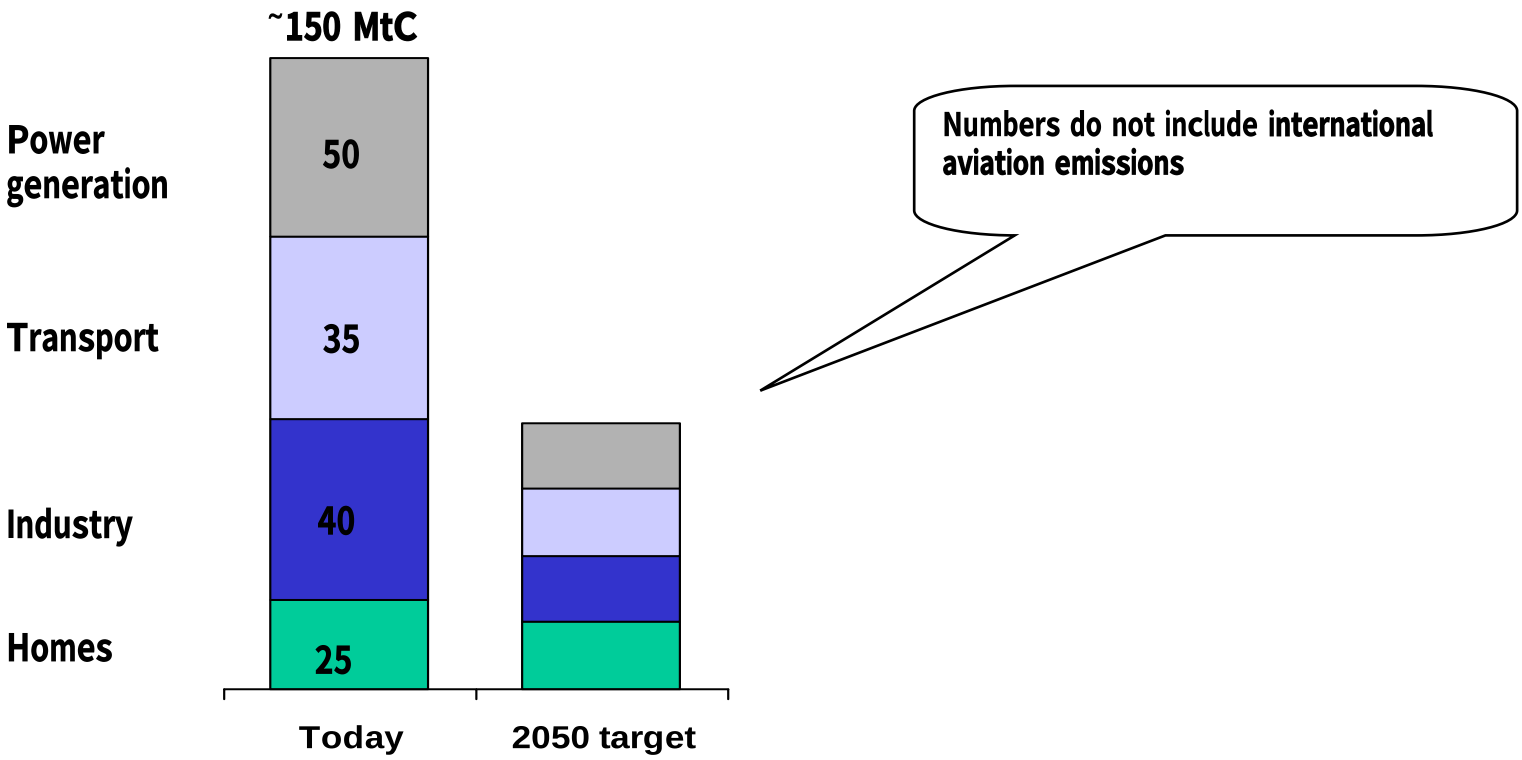
Actual carbon reductions required

UK carbon emissions (by source)
Million Tonnes of Carbon, Approx.

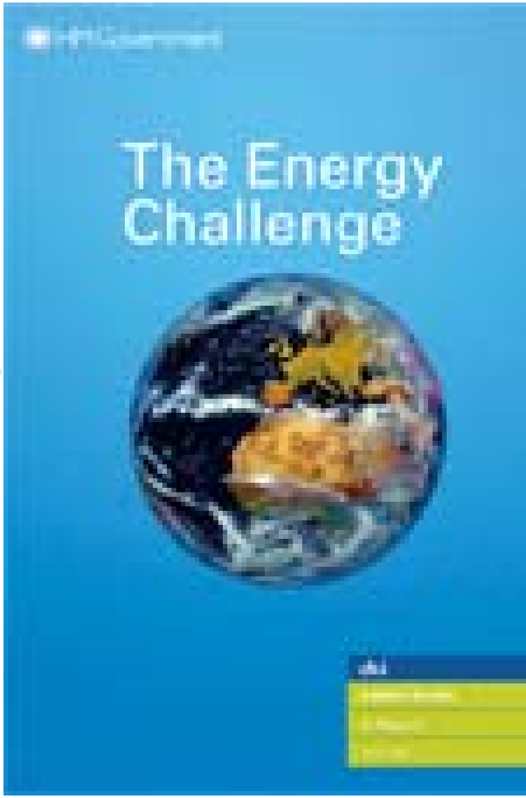
ESTIMATES ONLY



Policy context

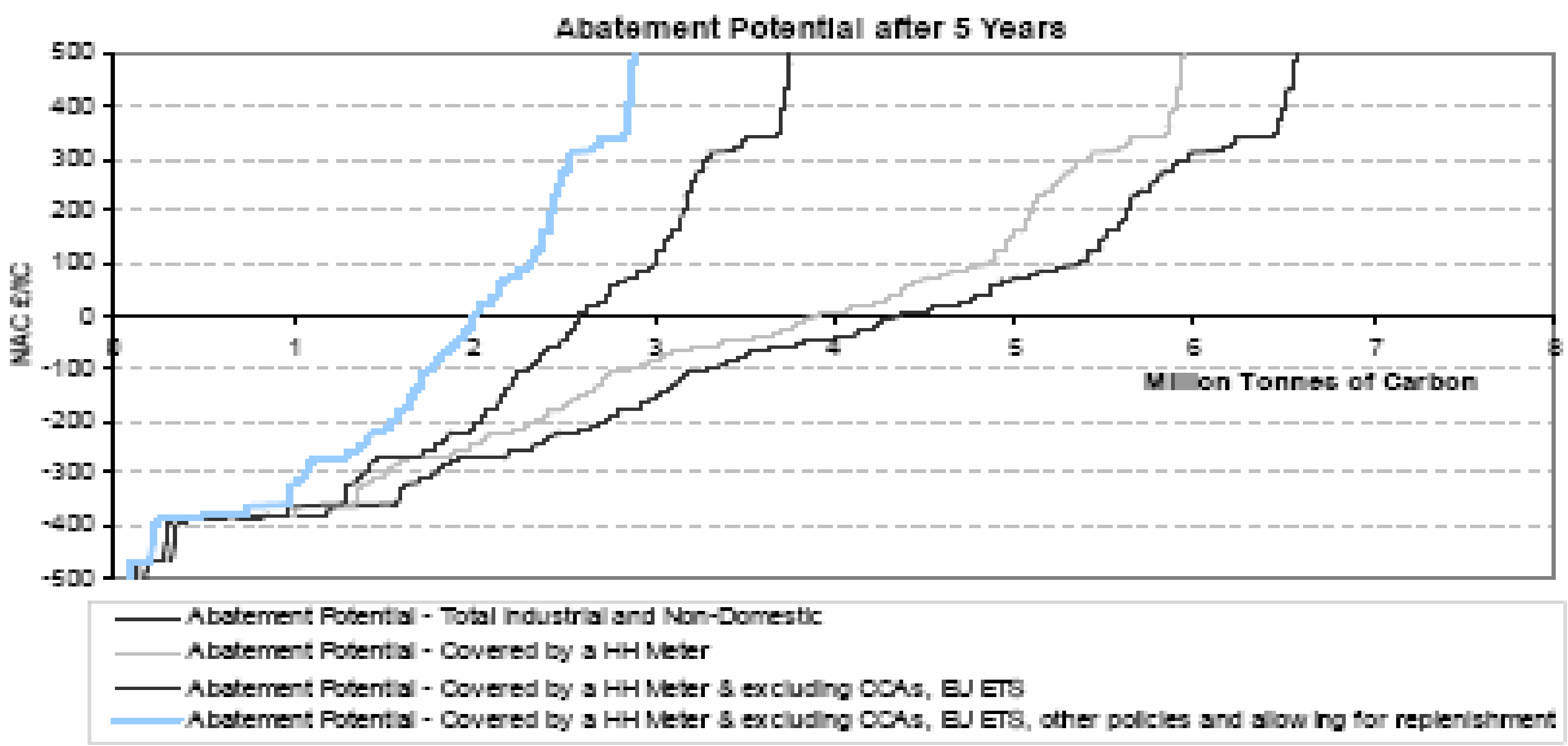
- Pre Budget Report 2004: Launched HMT / DEFRA review into innovation in energy efficiency
- Voluntary UK ETS finished Dec 2006

Dec 2005	Mar 2006	July 2006
CT report EEIR report	Climate Change Programme	Energy Review
EIR published t Pre Budget eport 2005	“Government is considering proposal for new mandatory UK ETS...”	Commitment to reduce sector emissions by 1.2 MtC / year by 2020, consulting on EPC alongside inviting views on other options – by end of 2006

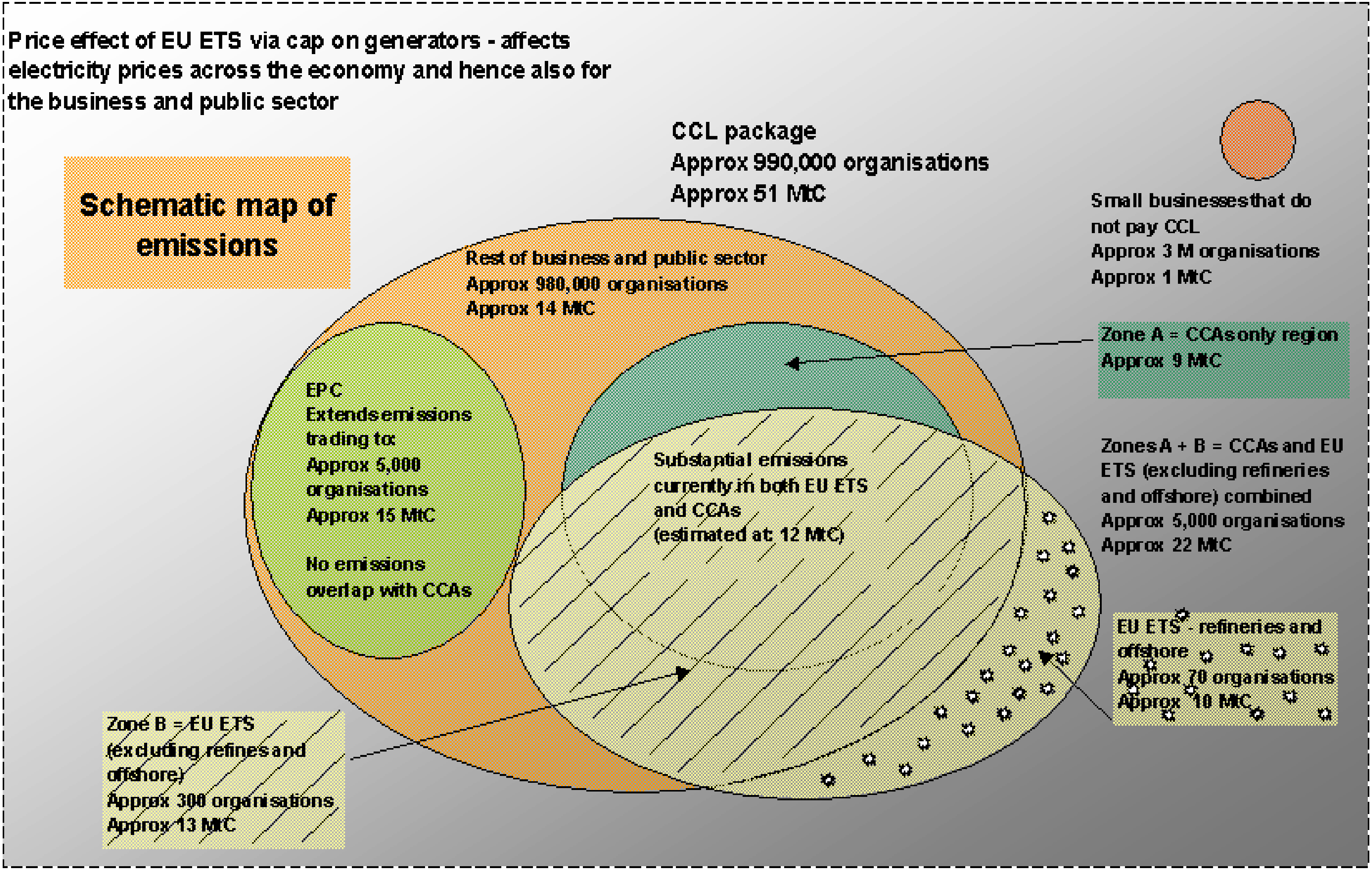


Energy Review: Agreed to target cost-effective opportunity

Figure 8.1
Abatement Cost Curves



There is a “policy gap”…



The “gap” – the “large non energy intensive sector”

- Business – e.g. supermarkets; banks; hotel chains; pub chains; some large light manufacturing organisations

- Large local authorities

- Central government; NHS; universities

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We consulted on measures to…

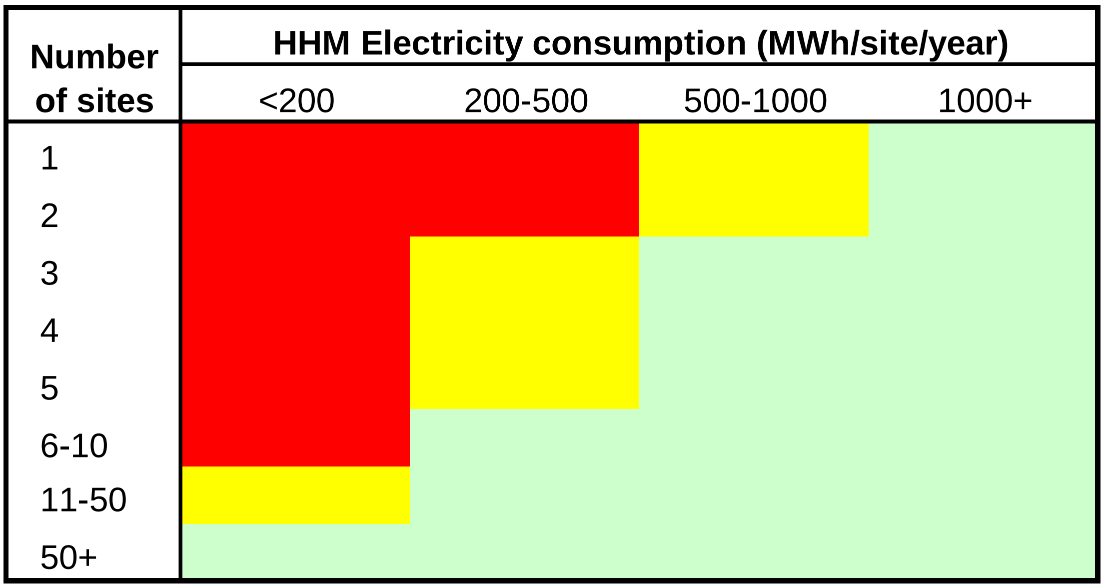
- To effectively cover large non-energy intensive organisations, including both direct energy use emissions and indirect emissions (electricity use)
- To promote energy efficiency as a means to reduce energy use and deliver carbon savings
- To provide some robustness over emissions reductions
- To address both new build and use of existing buildings
- To be cost-effective and minimise regulatory burden

The way forward to deliver the 1.2MtC/year carbon savings by 2020 was always going to be a mix of different policy measures.

Government invited views on the most effective combination of measures “to deliver these carbon savings”.

Administrative / transaction costs

- Each cell represents a class of organisation, in *average* terms



- Red (High risk): Net costs even with 10% savings
- Yellow (medium risk): Net costs at 5% savings, net benefits at 10%
- Green (low risk): Net benefit assuming only 5% savings

EPC sits alongside other measures

The Energy Performance Commitment (EPC) – a new mandatory emissions trading scheme – aims to:

- provide certainty of environmental outcome – through the cap
- raise the “incentivised ceiling” rather than simply focusing on the “regulatory floor” – through trading

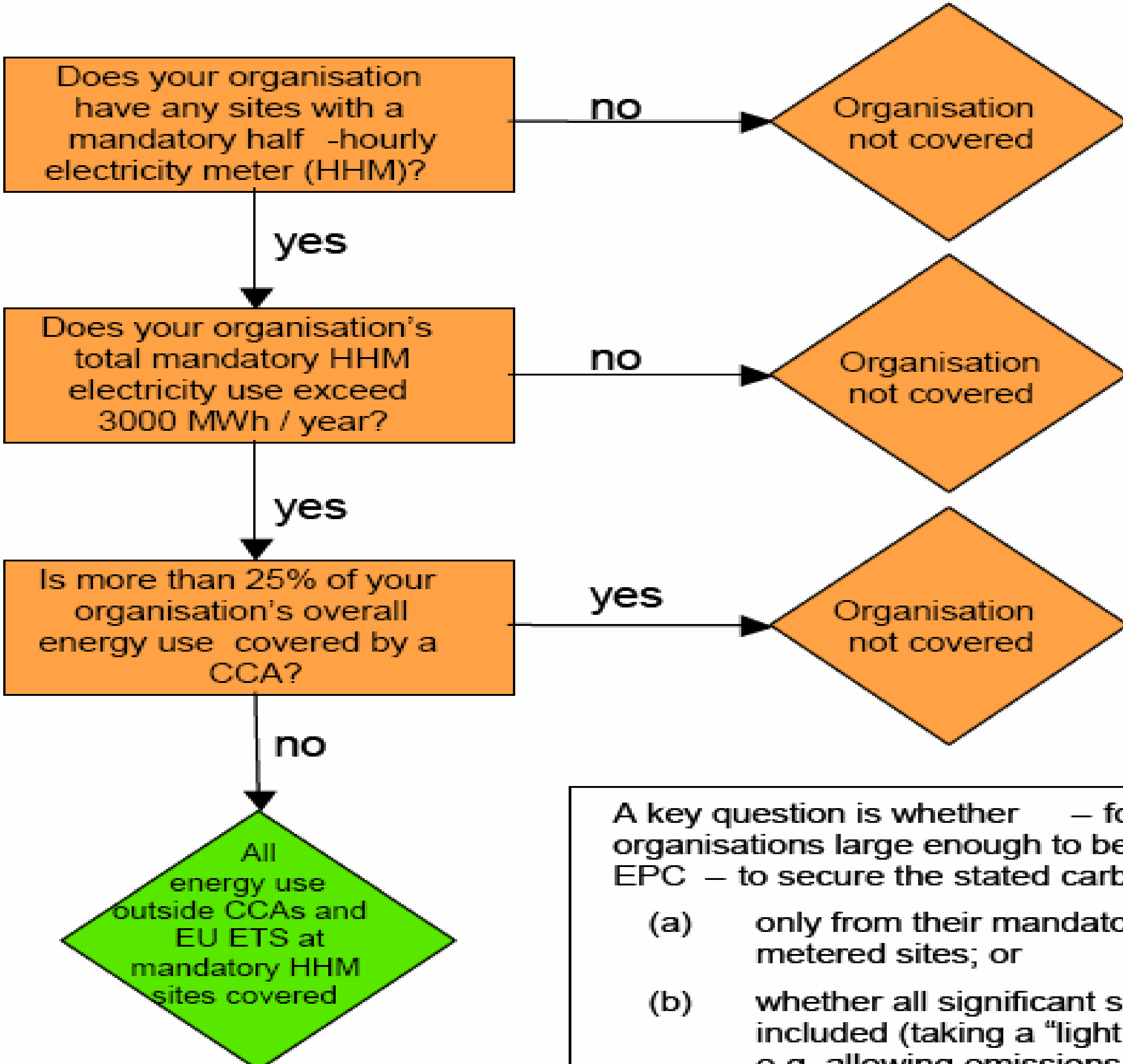
EPC is part of a broader “joined up” policy package:

- Voluntary benchmarking and reporting (e.g. building on CDP)
- Voluntary support: Carbon Trust & Salix Finance
- Regulatory requirements: Building regulations and EPBD
- Polluter pays: Cost of CCL and EU ETS in the energy bill

The EPC: What is it?

- Mandatory auction based emissions trading, targeting energy use emissions from up to 5000 large business + public sector organisations, with >6000MWhr/year HHM electricity use
- Revenue neutral to the Exchequer. Auction revenue recycled to participants
- Avoiding overlap – EPC would target energy use emissions outside EU ETS and CCAs. Firms with more than 25% of their emissions in CCAs would be exempt
- As simple a scheme as possible

Coverage



A key question is whether – for those organisations large enough to be covered by EPC – to secure the stated carbon savings:

(a) only from their mandatory half hourly metered sites; or

(b) whether all significant sites should be included (taking a "light touch" approach, e.g. allowing emissions to be based on the energy bill where automatic meter readings are not available)

Why auction?

- EPC as proposed would cover approx. 2000 - 5000 organisations, compared to around 400 EU ETS organisations
- Auction therefore necessary and desirable:
  - To avoid lengthy and complex negotiation, enabling substantially reduced administrative burden
  - To help avoid competitive distortions due to information asymmetries
  - Make organisations take responsibility for deciding their own allocations
  - With a simple fixed price introductory phase to provide data and enable learning

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Energy Review: “Auction revenue would be recycled to participants”

- Be administratively simple (emphasised by stakeholders)
- Avoid significant administrative burdens on participants
- Reinforce the signal sent by the absolute “cap and trade” mechanism, not contradict it
- Avoid creating a disproportionate burden on individual sectors or participants
- Reward installation of automatic metering (which would give credit for early action)

Revenue recycling proposal

- A simple, end of year payment, proportional to average annual emissions since start of scheme, with small bonus/penalty depending on position in a "league table"
- League table – could be based on:
  - emissions reductions relative to average annual emissions since start of scheme
  - extent of automatic metering

"Better regulation" features of EPC proposal

- Around 90% of regulatory burden eliminated, with 75% of emissions coverage retained, compared with earlier proposals – proposal would save participants money
- A simple approach – broadly revenue neutral to HMT, with auction revenue recycled to participants
- Significantly "lighter touch" than EU ETS - self-certification of emissions backed up by audit (e.g. of 5% of organisations), rather than verification
- Introductory phase, with simple fixed price sale
- A "buy only" link with EU ETS as proposed by Carbon Trust would place a ceiling on the EPC allowance price

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Carbon Trust, Institutional Investor, and CBI perspectives

Carbon Trust perspective:

- Why not extend EU ETS? EU ETS only targets direct emissions. Around 70% of sector emissions are indirect
- Why not extend CCAs? CCAs are voluntary => coverage would be patchy. Plus cost to HM Treasury
- What about CCL increases? Carbon Trust: "Economically acceptable CCL increases would have little impact on energy use from the service sector"

Institutional Investors perspective

- Business sectors outside emissions trading are **exposed** and vulnerable to tax risks (e.g. APD, CCL)
- Applying mandatory “cap and trade” would provide for a more stable regulatory framework
- Prepares UK business for future international emissions trading

<u>CBI</u> perspective

“We are seeing diminishing returns in these EU ETS industries (from emissions reductions attempts). In the commercial and SME sector there is much more scope to make quicker progress”

Head of Environment, CBI

(quoted in FT, 15/11/05)