CECILIA2050
Country Report – United Kingdom

Brussels

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UK Climate Policy – A (Very) Brief History

- **Climate Change Programme (2000)**
  - First comprehensive strategy to meet 12.5% Kyoto reduction target (and beyond – 20%), by 2010
  - Stimulate renewables, energy efficiency in households, other buildings and transport
- **Climate Change Act (2008)**
  - Mandated 80% emissions reduction by 2050 (1990 base year)
  - 'Carbon Budgets' – 5-Year legal commitments. Economy-wide emission ceilings.
  - 2nd Budget begins this year – 28% reduction from 1990
- **Energy Bill (2012/13)**
  - Electricity Market Reform – CfD, PPAs and Emission Performance Standard
  - Decision on electricity decarbonisation target for 2030 delayed until 2016
  - Carbon Floor Price to underpin EU-ETS price

Energy Efficiency and Energy Consumption

- Largest landscape in UK climate policy
- 9/15 instruments assessed – either primary/secondary objective, or significant influence
- Covers all sectors defined (different extents)
- Variety of instrument categories
  - 4 Tax instruments (Inc. 1 tax relief) – main instrument type
  - 1 Command and Control
  - 1 ETS (EU-ETS)
  - 1 Technology Support
  - 1 Reporting
  - 1 Information
- Significant overlap with other landscapes

Climate Change Levy (CCL) (2001)

- Tax on consumption of electricity, coal (solid fuels), natural gas and LPG (non-transport)
- Not proper carbon tax – not directly related to CO_2 content
- £1 billion annual revenue - recycled through 0.3% reduction in employer NI contributions
- Consumption of fuel for production of electricity currently exempt
- Carbon Floor Price – exemption removed. Tax on CO_2 content. £4.94/tCO_2 (April '13)

Climate Change Agreements (CCAs) (2001)

- CCL discount to energy intensive industries – competitiveness issues (80% - was 65%)
- First Scheme ended in 2010 – restarts in April '13. No targets, but discount remained.
- CO_2 emissions targets instead (absolute or relative – 94% are relative)
- UK ETS – credit scheme – world's first CO2 trading scheme. Closed in 2006 to new entrants, ceased entirely in December 2012

European Emissions Trading System (EU-ETS) (2005)

- 64 installations granted opt-out due to UK-ETS participation (now removed)
- Phase 3 - Small Emitters and Hospital Opt-Out Scheme – intended to reduce regulatory burden. Approved by Commission. Must participate in another scheme to deliver equivalent savings. 248 installations (1% UK EU-ETS emissions, but nearly 25% of UK installations)

CRC Energy Efficiency Scheme (CRC) (2010)

- Carbon tax for non-energy intensive organisations (>6,000MWh/year electricity)
- £12/tCO_2 from both direct and indirect emissions (£16 in 2014, then increase with RPI)
- Future 'simplification' (expected to come into force in June 2013)
  - Scrapping of Performance League Table
  - EU-ETS and CCA organisations removed entirely – previously partly exempt
  - Emissions from electricity and natural gas only (currently 28 energy sources)

Green Deal (January 2013)

- Provides finance for energy efficiency measures in buildings (mainly domestic)
- ‘Golden Rule’ – savings must equal or exceed repayments. Repaid through electricity bills.
- 25 year maximum loan (up to £10,000), interest rate of 7%.
- Cashback Scheme on household cost contribution (£125 million fund)
- Non-domestic building Green Deal in operation later in 2013

Energy Companies Obligation (ECO) (January 2013)

- Obligation to fund energy-efficiency measures in low-income households unlikely to qualify for Green Deal under the ‘Golden Rule’. Tackle fuel poverty.
- Affordable Warmth Obligation (AWO), Carbon Saving Obligation (CSO), Carbon Saving Communities Obligation (CSCO) – slightly different target groups/criteria
- £1.3billion annual investment from energy companies until March 2015. Cost recovered through general energy billing.

Carbon Trust Standard (2008)

- Voluntary Scheme by ex-government sponsored Carbon Trust
- To be certified, organisations must:
  - Measure electricity, gas and other fuel consumption associated emissions, along with transport, to a given methodological standard
  - Provide evidence of a carbon management strategy
  - Demonstrate 2.5% absolute or relative emissions reductions over 3 years for recertification
- ~250 Standards granted

LSE Mandatory Reporting Requirements (2013)

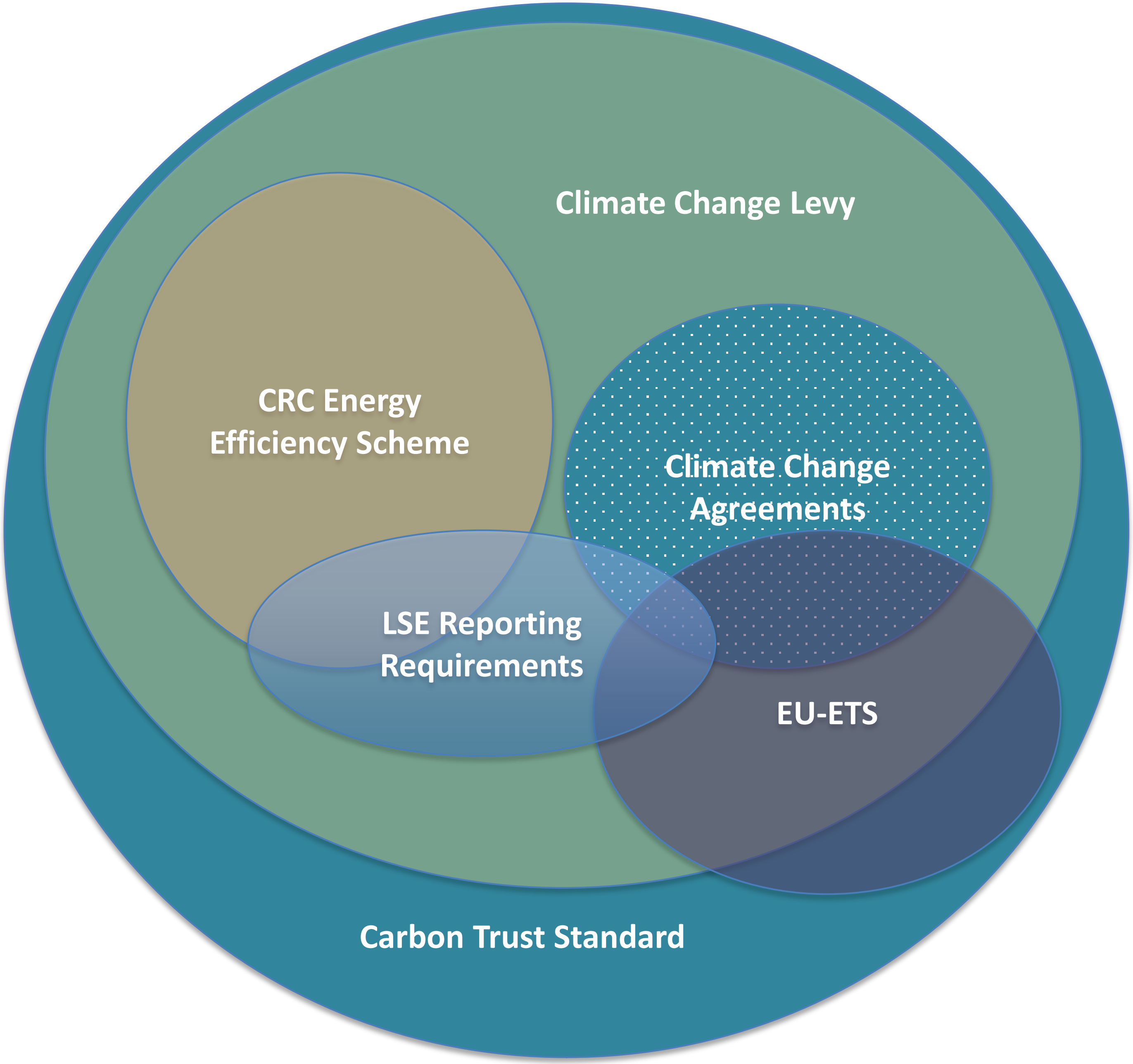
- GHG emissions of any London Stock Exchange listed company registered in the UK
- Annual Director’s report. All 6 Kyoto GHGs included.
- Absolute values and emission intensity (against turnover, etc.)
- Reviewed in 2015 – whether or not to include all large organisations

Vehicle Excise Duty (VED) (2001)

- VED for cars based on gCO_2/km. 13 bands (<100 at £65 to >225 at £475). Annual payment.
- Electric cars are exempt
- Any car registered after 31st March 2001.
- £6 Billion revenue for government
- Possible reform in near future, but no clear proposals

Interactions Between Instruments – EC&EE Landscape

- **Objectives**
  - Objectives well aligned – although energy efficiency and conservation in the primary aim of only 3 instruments (CCL, Green Deal and ECO)
  - Most state the primary goal as emissions reductions (outcome rather than just impact), but with energy efficiency as one method of achieving this goal (CCA, EU-ETS, CRC and VED), or as an inevitable component without explicit reference (Carbon Trust Standard, LSE Mandatory Reporting, VED)
- **Scope and Coverage**
  - CCL applicable to all all commercial/industrial sectors (not domestic, transport or electricity production). CCAs remove the most energy (and emission) intensive, reducing overlap with EU-ETS. CCL Carbon Floor Price reforms will increase EU-ETS overlap.
  - CRC – CCA/EU-ETS emissions excluded. Full exemptions under ‘simplification’.
  - LSE/CTS – CTS has largest scope (any organisation), but voluntary. LSE = ~1,100 organisations.
  - Green Deal/ECO – Mainly domestic (ECO entirely), commercial properties later in 2013.


Climate Change Levy
CRC Energy Efficiency Scheme
Climate Change Agreements
LSE Reporting Requirements
EU-ETS
Carbon Trust Standard

Interactions Between Instruments – EC&EE Landscape

- **Functioning and Influencing Mechanisms**
  - **CCL/CCAs** – evidence for both supporting and conflicting relationship
    - ***Conflicting*** – CCA reduces CCL obligation for most energy-intensive industries. Some evidence that emission targets are not stringent enough, and that energy intensity has in some cases increased in CCA facilities.
    - ***Supporting*** – CCA brings managerial attention to energy efficiency. Possibly increases feasibility of current and proposed CCL rates, as opposition from these sectors is reduced/removed.
  - **CCL/EU-ETS** – neutral but complimentary. Upstream and downstream tax on electricity. Strengthened with CFP. Influence of one helps achieve aim of the other.
  - **CCL/CRC, CT Standard, LSE Reporting** – weak mutually supportive relationships. All encourage emissions reduction through a mixture of financial and reputational drivers. Some formal links – CT standard counts as an 'Early Action Metric' in CRC.
  - **Green Deal/ECO** – Little to no overlap with other instruments, but small supportive relationship with each other. Installation of ECO measures may make Green Deal measures feasible (golden rule). Presence of ECO makes Green Deal more acceptable – tackles fuel poverty angle.

Interactions Between Instruments – EC&EE Landscape

- **Implementation Network/Administrative Infrastructure**
  - Department for Energy and Climate Change (DECC) bears policy oversight responsibility for most climate change mitigation instruments, including:
    - CCAs, EU-ETS, CRC, Green Deal and ECO
  - Environment Agency (E&W, Scotland and NI), bears administrative responsibility for the CCAs, EU-ETS and CRC. Includes data collection and monitoring, registries and PLT and enforcement
  - HMRC – Responsibility for CCL collection and enforcement
  - Ofgem – administrative responsibility for ECO (but not Green Deal)
  - Private sector involvement:
    - GD ORB – Gemserv – Accreditation, registration and central record database. Also MGCS.
    - ICE Futures Europe – Contracted by DECC to perform EUA auctions
    - AEA Technology – Negotiated CCA agreement targets in first scheme
  - Carbon Trust – now private sector organization
  - DVLA – manages all aspects of VED

EC&EE Landscape – How 'Optimal'?

CECILIA 2050 OPTIMAL EU CLIMATE POLICY

- **Cost-Effectiveness**
  - Broad sectoral reach (all industry, commercial, agriculture, domestic, transport)
  - Largest burden placed on non-energy intensive industry – CCL, carbon floor price through CCL, CRC, potentially CT standard and LSE Reporting Requirements.
  - Energy intensive industry – CCL discount (80%) from CCAs, no CRC commitment, but may have direct EU-ETS commitment (but lower than CRC price, and grandfathering). No common level of incentive across economy for lowest-cost efficiency efforts?
  - Domestic - Carbon floor price/Indirect EU-ETS – provides additional incentive for Green Deal uptake. Long-term uncertainty on 'golden rule' – electricity prices more dependent on other factors.
- **Environmental Effectiveness**
  - Difficult to determine impact and attribute energy/emissions savings (confounding factors)
  - Green Deal/ECO package and CRC – too early to tell. CFP – not yet introduced
  - All encourage efficiency, but only EU-ETS, CCL (CFP) and CRC provide decarbonisation incentive
  - EU-ETS – small incentive (low price). CRC, larger incentive but less influence over grid CO_2
  - CCL/CCA – largest impact – Strong evidence for overall reduction in energy/carbon intensity (15% rise in energy cost, electricity reduction of >20%). Little evidence of negative side effects (e.g. competiveness). Evidence both for and against CCAs.

EC&EE Landscape – How 'Optimal'?

- **Feasibility**
  - **Administrative implementation** – relatively coordinated – DECC responsible for policy aspects, Environment Agency responsible for administration. Administrative costs to compliance entities relatively low – data collection and reporting requirements similar across instruments (e.g. EU-ETS, CRC, Carbon Trust Standard, probably LSE Reporting).
  - **CCL/CCA** – Existence of CCAs reduces opposition to CCL of key stakeholders (energy-intensive industry). Increases feasibility of package, possibly at expense of full efficacy potential.
  - **Green Deal/ECO** - ECO tackles fuel poverty, which Green Deal does not – raises political feasibility. **Criticism** – Relatively high rate of loan interest (7%), golden rule uncertainty, lack of information and knowledge amongst population. Other charges – assessment costs, annual charge (£20), early repayment charges.
  - **Flexibility** – relatively high – CCL, CRC an VED rates may be tightened or loosened without structural change. Green Deal is inflexible – efficacy depends on cost of measures against energy cost – policy has little influence on this. LSE and CT requirements may alter. EU-ETS inflexible from national level.

Thank You!

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