UK Legislation Timeline
Emissions | Energy | Efficiency

ARUP

Drivers | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 - 2049 | 2050

Targets

Global
Targets set under the Kyoto Agreement.

- 16 Feb 2005: Kyoto Protocol came into force
- CoP16 Cancun
- CoP17 Durban
- 5.2% legally binding reduction in CO_2 equivalent Kyoto Protocol Annex I country GHG (Carbon Dioxide, Methane, Nitrous Oxide, Sulphur Hexafluoride) and Hydrofluorocarbons and Perfluorocarbons by 2012 (1990 baseline)

European Union
Targets imposed under various EU policies and directives.

- 8.0% reduction in CO_2 equivalent Kyoto Protocol European Union
- 20% EU Renewable Energy; 20% EU GHG Reduction (1990 baseline); 20% Less Energy Consumption — 20-20-20

United Kingdom
Targets set under the Climate Change Act 2008. Scotland and Wales targets set by devolved parliaments.

- 12.5% reduction in CO_2 equivalent Kyoto Protocol United Kingdom
- 15% UK Renewable Energy (~ 32% Renewable Electricity)

Carbon Budgets

- 01 Apr 2008 – 31 Mar 2013: 22% Carbon Reduction Budget (CRB) 3018MtCO_2e (midpoint 2010) from 1990 baseline
- 2010: 4 TWh of electricity produced from renewable sources in Wales
- 2011: 31% of gross electricity consumed from renewable sources in Scotland
- 01 Apr 2013 – 31 Mar 2018: 28% CRB 2782MtCO_2e (midpoint 2015) from 1990 baseline
- 01 Apr 2018 – 31 Mar 2023: 34% CRB (midpoint 2020) 2544MtCO_2e from 1990 baseline
- 2020: 7 TWh of electricity produced from renewable sources in Wales; 80% of gross electricity consumed from renewable sources in Scotland
- 1 Apr 2023 – 31 Mar 2027: 50% CRB 1950MtCO_2e from 1990 baseline
- Carbon (equivalent) Reduction Budget from 1990 baseline: 80%

Emissions

European Union Emissions Trading Scheme (EUETS)
Largest multi-country, multi-industry emissions trading scheme initially focussed on Greenhouse Gas reduction.

- 01 Jan 2005 – 31 Dec 2007: **Phase I (3 years)** — Large Electricity Producers (>20 MW); Offshore facilities (including flaring); Refineries + Partial inclusion of Others
- 01 Jan 2008 – 31 Dec 2012: **Phase II (5 years)** — Large Electricity Producers; Offshore facilities; Refineries; Iron & Steel; Cement; Lime; Ceramics; Glass; Pulp & Paper; Chemicals; Food & Drink; Aluminium; Services; Other Electric; Downstream Gas; Gypsum; Mineral Wool; Aerospace; Vehicle Manufacture; Textiles; Tyres; Munitions.
- 01 Jan 2013 – 31 Dec 2020: **Phase III (7 years)** — Aviation: Estimated 500MtCO_2e saving per annum; 50% of allowanced to be auctioned; Use of non-EU allowances capped at 50%
- 21% CO_2 reduction (2005 baseline)

UK National Allocation Plan (NAP)
Plan which defines the UK allocation of EU Allowances (EUA) across the spectrum of carbon emitting sectors.

- 01 Jan 2005 – 31 Dec 2007: **UK NAP 1** — 245.3 MMT CO_2 per year limit; EU approved 29 Nov 2006; Free allocation
- 01 Jan 2008 – 31 Dec 2012: **UK NAP 2** — 246.2 MMT CO_2 per year limit; ~7% Auctioned EUA; ~52% of UK CO_2 emissions covered
- 01 Jan 2013 – 31 Dec 2020: **EU Allocation Plan** — 1.74% CO_2 reduction per year; National Allocation Plans (NAPs) superceded by EU wide allocation plan; 100% auctioning or sale of EUAs in Large Electricity Producer (LEP) sector

Emissions Performance Standards (EPS)
Restrictive emission limits for power generation driving CCS operation. Not included in 2010 Energy Bill as originally suggested.

- SO_2 limits drove requirement for FGD
- Proposed introduction of Carbon Capture and Storage (CCS) Levy
- April 2013: Introduction of Carbon Floor Price; EPS introduced
- 2015: Report on Decarbonisation and CCS Progress
- 2018: Report on Decarbonisation and CCS Progress
- Restrictive CO_2 emissions for coal power plants driving CCS operation?
- Gas power plants built after 2020 to include CCS ?

Large Combustion Plant Directive (LCPD)
EU Directive imposing limits on Sulphur Dioxide, Nitrogen Oxides and Dust.

UK National Emissions Reduction Plan (NERP)
UK specific implementation of Large Combustion Plant Directive.

Plants larger than 50 MWth

- 'New New' — Plants licensed after 27 Nov 2002
- 'New' — Plants licensed between 1 Jul 1987 and 27 Nov 2002
- 'Existing' — Plants licensed before 1 Jul 1987

01 Jan 2008:
- 'New New', 'New', 'Existing Opt-In': Comply with LCPD Emission Limit values (ELV's) and/ or trade emission allowances in NERP; 1 Jan 2016 NO_x limit for >500 MW_{th} Solid Fuel (Coal) drops from 500 to 200 mg/Nm3 driving SCR retrofit. Plants Opting-Out close by 2023; Continues unless superceded by IED or other
- 'Existing Opt-Out': Limit operation from 1 Jan 2008 to 20,000 hours or close by 31 December 2015; Plants close by 31 Dec 2015 at the latest

Industrial Emissions Directive (IED)
Recasting of seven existing emissions directives, including LCPD and IPPC into a single legislative item.

IED combines directives: Integrated Pollution Prevention and Control (IPPC) Directive; Large Combustion Plant Directive (LCPD); Waste Incineration Directive (WID); Directive limiting Volatile Organic Compounds; and Various Titanium Dioxide directives

- 01 Jan 2014: Decision to opt out 'Older Plant'
- 01 Jan 2016: **Transitional National Plans** — Comply with tighter emission controls by 30 Jun 2020 — Jul 2020
- **'Older Plant'** — Limit operation from 1 Jan 2016 to 17,500 hours or close by 31 December 2023; Plants close by 31 Dec 2023 at the latest

Waste Incineration Directive (WID)
Limits emissions from incineration and co-incineration of waste with a focus on dioxins, mercury and particulate matter.

- From 04 Dec 2000: Imposes Emission Limit Values (ELV's) for incineration and co-incineration of waste, including limits on: Dust; Heavy Metals; Dioxins; Carbon Monoxide; Poly Aromatic Hydrocarbons; SO_2; NO_x. Continues unless superceded by IED or other

Energy

Renewables Obligation (RO)
Increasing requirement for suppliers to source electricity from renewable sources within the UK.

- From Apr 2002 - 3.0%: **GB (England, Wales & Scotland)**
- From Apr 2005 - 2.5%: **NI (Northern Ireland)**
- 9.7 ROCs/100MWh (Actual); 11.1 ROCs/100MWh (Actual); 11.4% Fixed 10% Headroom; 12.4% Fixed 10% Headroom; 13.4% Fixed 10% Headroom; 14.4% Fixed 10% Headroom; 15.4% Fixed 10% Headroom; 15.4% Fixed until 31 Mar 2027
- 3.5 ROCs/100MWh (Actual); 4.27 ROCs/100MWh (Actual); 5% Fixed 10% Headroom; 01 Apr 2012; 6.3% Fixed 10% Headroom; 6.3% Fixed until 31 Mar 2027
- Less than 20 years ROC provision for any new facility before 2037
- Less than 20 years ROC provision for any new facility before 2033
- ROCs end for existing (accredited before 25 Jun 2008) facilities on 31 Mar 2027
- GB RO Ends 31 Mar 2037
- NI RO Ends 31 Mar 2033

Renewables Obligation Banding
Differentiated banding of various forms of renewable generation under the Renewables Obligation. Four yearly cycle of renewable banding levels.

- 01 Apr 2009 – 31 Mar 2013: **2009 - 2013 Banding** — Onshore Wind (1 ROC); Wave, Tidal, PV (2 ROC); Dedicated Biomass (2 ROC); Offshore Wind (1.75 ROC) except 2 ROC if accredited (operational) between 01 Apr 2010 and 31 Mar 2014
- 01 Apr 2013 – 31 Mar 2017: **2013 - 2017 Banding** — Banding to be determined by First Banding Review; CHP uplift expected to be removed; CHP specific tariffs under consideration
- 01 Apr 2017 – 31 Mar 2021: Renewables obligation vintaged
- Apr 2007: Marine Supply Obligation Introduced in Scotland
- Apr 2009: ROC uplift in Scotland to 3 for tidal and 5 for wave, to replace the Marine Supply Obligation
- Oct 2010; Summer 2011; Autumn 2011; Consultation; **First Banding Review**; Feb 2011; Accelerated Review (fast track for large scale PV); Dec 2011; Apr 2012
- Apr 2014: Feed-in Tariff contract for difference introduced
- Apr 2017: Renewables obligation closed to new generation

Feed in Tariff (FIT)
Incentive to support small-scale renewable electricity generation up to a capacity of 5MW.

- 5% - 8% return on investment
- 01 Apr 2010 – 01 Apr 2013: **Years 1&2** — PV (8.5 - 41.3 p/kWh); Wind (4.5 - 34.5 p/kWh); Hydro (4.5 - 19.9 p/kWh); AD (9.0 - 11.5 p/kWh)
- First Scheme Review 2013
- 01 Apr 2013: **Continuation for new entrants after Year 3 to be determined**
- **FIT Tariff lifetime:** AD, Wind, Hydro - 20 years; PV - 25 years

Renewable Heat Incentive (RHI)
Proposed incentivisation for the generation of heat from renewable and low carbon sources.

- July 2009: Eligibility date
- 2011 – 2015: Biomass; Biogas combustion; Biogas injection; Energy from waste; Geothermal; Heat pumps; Solar thermal; Support for non-domestic from 2011; Support for domestic from 2012

Efficiency

Climate Change Levy (CCL)
A charge on non-domestic consumers' energy use. Discounts to energy intensive sectors available under Climate Change Agreements (CCA).

- 01 Apr 2001: 80% discount on climate change levy available to energy intensive industry through Climate Change Agreements (CCA)
- 01 Apr 2011: 65% discount on climate change levy through Climate Change Agreements (CCA)
- 01 Apr 2013: Climate Change Agreements extension to be determined

Carbon Emissions Reduction Target (CERT)
Obligation on large energy suppliers to make efficiency savings through support to residential customer base.

- 01 Apr 2005: **Energy Efficiency Commitment (Phase II)** — 139 TWh energy consumption reduction
- 01 Apr 2008 – 31 Dec 2012: **CERT** — 293 MtCO_2 expected overall installation lifetime reduction through domestic energy saving interventions. 68% achieved through insulation measures; 40% targetted at low income and over 70 years of age; 15% targetted at high Fuel Poverty risk group
- **Energy Company Obligation?** Details to be determined

Community Energy Savings Programme (CESP)
Obligation on energy suppliers to provide 'whole house' energy saving solutions to domestic consumers in low income areas.

- 01 Oct 2009 – 31 Dec 2012: 19.25 MtCO_2 reduction in carbon emissions through 'whole house' or 'whole street' approach

Carbon Reduction Commitment (CRC) Energy Efficiency Scheme
Mandatory energy efficiency and emission reductions scheme for large public and private sector organisations.

Applicable if > 6,000MWh per year or on 1/2 hourly metered electricity in 2008

Introductory Phase
- 01 Jan 2008 – 31 Dec 2008: Qualification Period
- 30 Sep 2010 End registration
- Footprint year; 3 Year Introductory Phase (including footprint year)

Second Phase
- 01 Apr 2010 – 31 Mar 2014: Qualification Period; Footprint year
- Nov 2010 Consultation on scheme simplification
- 30 Sep 2012 End registration
- 7 Year Second Phase (including footprint year)

Third Phase
- 01 Apr 2016: Qualification Period; Footprint Year
- 30 Sep 2017 End registration (Third Phase)
- 7 Year Third Phase (including footprint year)

Building Regulations
Statutors instrument defining the standards for new and replacement building developments in the UK.

- 01 Oct 2006: Part L (Conservation of fuel and power) updated
- 30% improvement in CO_2 emissions in Scotland
- 01 Oct 2010 – 2013: 25% energy efficiency improvement (baseline 2006 Part L)
- 44% energy efficiency improvement (baseline 2006 Part L)
- 2016: Pathway to 'zero carbon'
- 2019: All new buildings to be 'zero carbon'

Code for Sustainable Homes (CSH)
Sustainability assessment process for new homes incorporating performance standards in England and Wales.

- 01 Apr 2007: Code for Sustainable Homes introduced
- 01 May 2008: All new homes to be given a CSH rating
- 2008: Publicly funded housing to be CSH 3
- 2010: CfSH energy requirements aligned with Part L 2010
- 31 Dec 2011: Building Regulation powers devolved to Welsh Assembly
- 2012: 50% improvement in CO_2 emissions in Scotland; Green Deal begins
- 2013: Expected 55% improvement in CO_2 emissions on 2006 levels in Wales
- 2016: New schools to be 'zero carbon'; Allowable solutions for 'zero carbon' introduced
- 2016: New buildings to be 'zero carbon' in Scotland
- 2018: New public sector buildings to be 'zero carbon'
- 2030: All new buildings to be total life 'zero carbon'

Key

THESE SYMBOLS IN **ALL COLOURS** DENOTE **EXISTING LEGISLATION**

THESE SYMBOLS IN **ALL COLOURS** DENOTE **LIKELY OR PLANNED FUTURE LEGISLATION**

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Edition No.4 August 2011
We would be pleased to receive your views and comments or for further information, please contact: energy@arup.com

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