

## Key findings

- ES** UK economy-wide **emissions increased by 3%** across the economy in 2010
- ES** The **underlying trend** in emissions was broadly **flat**.
- ES** Meeting carbon budgets requires an **acceleration in the rate** of emissions reduction.
- ES** **Progress has been mixed** in terms of the implementation of measures:
  - ES** The rate of improvement in **building insulation** and investment in **renewable heat** needs to increase.
  - ES** Good progress was made in 2010 in improving the efficiency of **new cars and in boiler replacement**.
  - ES** Progress adding **renewable power generation** was **broadly on track**, whilst moving forward with **Carbon Capture and Storage (CCS)** projects remains an **urgent priority**.
- ES** Effective implementation of **Electricity Market Reform** and the **Green Deal** will be crucial in driving emission reductions required to meet carbon budgets.

## Key findings



Economy-wide emissions **increased by 3%** in 2010.



The winter months of 2010 were **2°C colder** than the previous year. This, alongside a slight rise in GDP, falling energy prices and rising transport fuel prices, had an impact on emissions.



Without the cold weather, emissions would have been **broadly flat**.



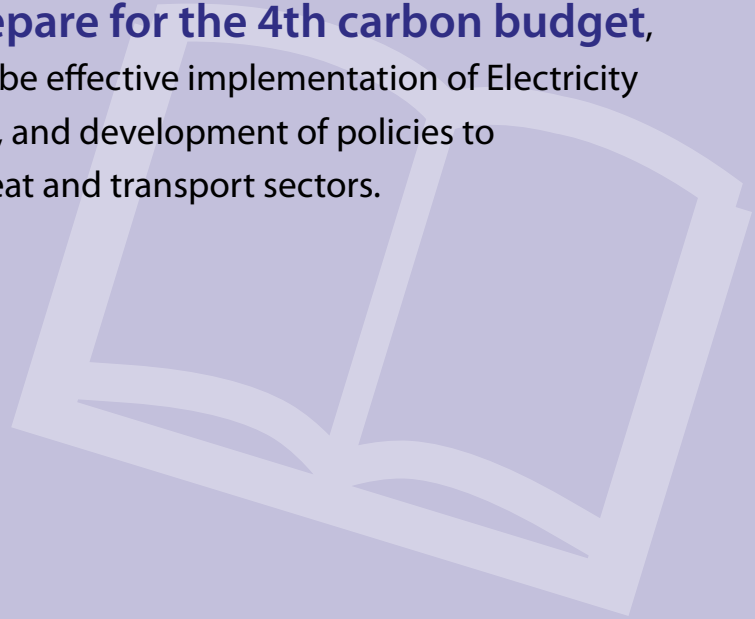
The **recession reduced emissions** by 9% in 2009. Outperformance of the 1st budget should not reduce our domestic ambition – we should **aim to outperform** the 2nd and 3rd carbon budgets.



Progress has been mixed in terms of the implementation of measures – the rate of implementation of abatement measures needs to **accelerate** in future.



In order to **prepare for the 4th carbon budget**, there needs to be effective implementation of Electricity Market Reform, and development of policies to decarbonise heat and transport sectors.



## Key findings



Power sector **emissions increased by 4%** in 2010, mainly due to cold weather and temporary nuclear outages.



**Carbon intensity** of electricity supplied increased from 489 g/kWh in 2009 to **496 g/kWh** in 2010, largely due to temporary nuclear outages.



**Achievable emissions intensity** fell from 335 g/kWh in 2009 to **316 g/kWh** in 2010, reflecting investment in gas and renewables.



**Wind capacity** increased by 0.9 GW, bringing total installed capacity to 4 GW onshore and 1.3 GW offshore. This is **broadly on track** with our indicators, but a significant ramp up will be required to meet 2020 targets.



During **2011, funding** should be awarded for the first **CCS** demonstration project and **bids** should be invited for the second set of projects.



New **electricity market** arrangements should be based on **long-term contracts** rather than premium feed-in tariffs.

## Key findings



Buildings CO<sub>2</sub> emissions **increased by 7%** in 2010, largely due to increased demand for heating as a result of the cold winter weather.



The number of professional cavity wall and loft insulation installations **fell by 30%** over the year.



Government should aim to **insulate all lofts and cavity walls** by 2015, along with **2 million solid walls** by 2020.



The **Green Deal and Energy Company Obligation need to provide sufficient incentives** to improve energy efficiency in the large proportion of the housing stock that currently lacks adequate insulation.



Energy Performance Certificates (EPCs) and Display Energy Certificates (DECs) should be **introduced into all non-residential buildings** to incentivise emissions reduction.



Industry CO<sub>2</sub> emissions **increased by 2%** in 2010 as manufacturers recovered from the recession.



The **new round of Climate Change Agreements (CCAs)** should encourage uptake of **the full range of abatement options**, including both measures to reduce emissions in the near term and preparations for longer term abatement options (e.g. through CCS).

## Key findings



Surface transport **emissions fell by almost 4%** in 2009 as a result of the efficiency of new cars and HGVs improving, a reduction in distance travelled and increased penetration of biofuels.



New car emissions **outperformed** our indicator, **falling to 144.2 gCO<sub>2</sub>/km** in 2010.



Government has made **major commitments** to support the development of electric vehicles particularly in supporting **new vehicle purchase** and the development of a **charging infrastructure**.



The Local Sustainable Transport Fund could support **wide scale roll out** of **'Smarter Choices'**, an initiative that encourages alternatives to car travel.



There has been **limited progress** on **eco-driving** training.



There was an **increase in speeding** offences in 2009; **enforcing the speed limit** could help to reduce emissions.



## Key findings



Agriculture emissions **fell by 1%** in 2009. This reduction means that agriculture is **broadly on track** to meet the 1st carbon budget.



The existing **evidence base is incomplete** and more evidence about farming practices and an **improved inventory are needed** to effectively monitor performance.



There is **scope for strengthening policies** at both UK and EU level.

We recommend that:



The **Government's policy review** in 2012 includes: an assessment of the full range of policy options available to reduce emissions in this sector; and performance triggers for the introduction of new policies.



The Government supports proposals to link support under the **Common Agricultural Policy** to the take up of emissions reduction measures.



To prepare for emission reductions in the 2020s, the Government should consider **more ambitious policies** in the areas of consumer behaviour change, waste reduction and modification of diets.

## Key findings



Emissions in the devolved administrations account for **20% of total UK GHG emissions**, and all 3 authorities now have **strategies in place** to reduce emissions.



Emissions **fell by 2.9%** in **Scotland**, and by **0.4%** in **Northern Ireland** in 2008.



Emissions **rose by 4.7%** in **Wales**, primarily as a result of a coal-fired power station coming back on to the system.



**A step change** in the pace of emission reductions **is required** in the devolved administrations in order to meet carbon budgets.



There is **scope to reduce emissions further** by improving residential energy efficiency, trialling renewable heat technologies in homes and rolling out Energy Performance Certificates and Display Energy Certificates in the non-residential sectors.



Transport emissions could be reduced by **rolling out Smarter Choices** and through **increased eco-driving training**.



Power emissions could be reduced by **shortening planning times** for renewable projects.



Agriculture emissions could be reduced by **ensuring policies** fully address the abatement potential in the devolved administrations.