

EU and UK experiences in emissions, sustainable transport and climate change

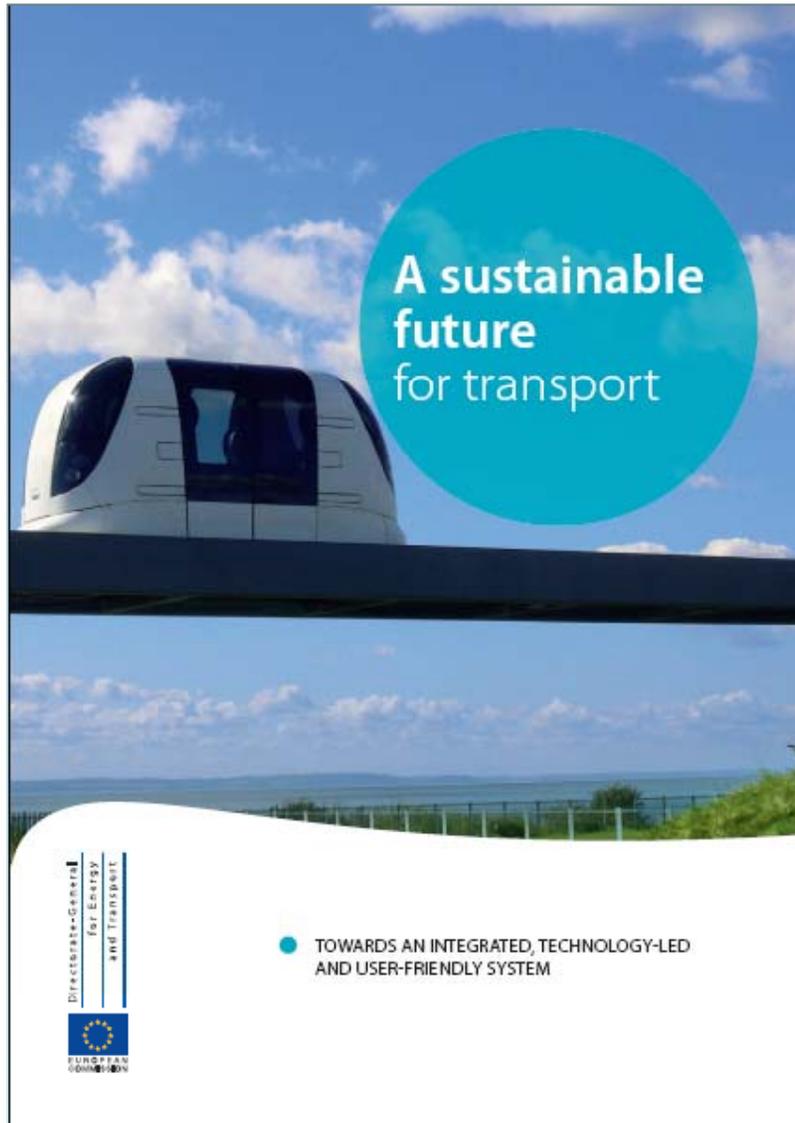


Dr Stephen Finnegan

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Near Term EU policy 2010 to 2020



Publication aimed at identifying EU policy options from 2010 to 2020

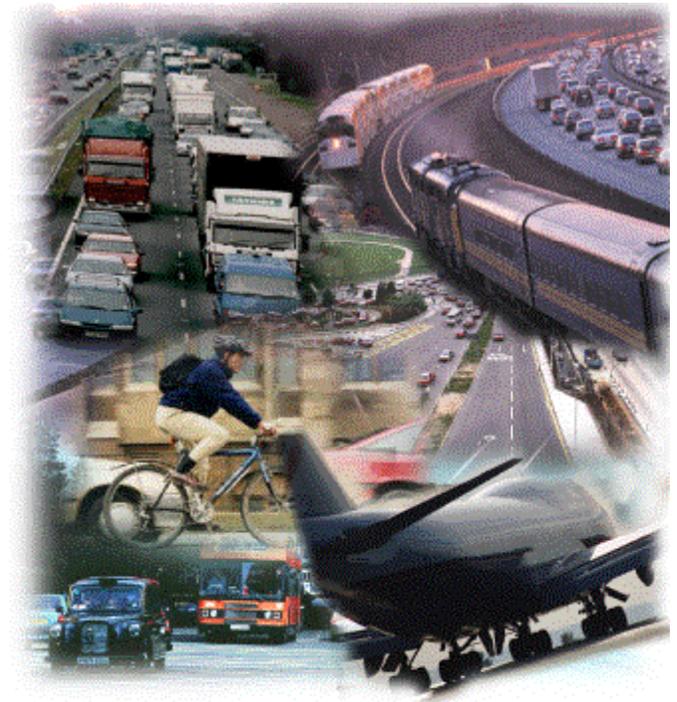
Included in the next 2010 White Paper

The European Union (EU) has committed itself to reducing its greenhouse gas (GHG) emissions by **20%** by **2020** (compared to 1990 levels)

Long Term EU Policy - beyond 2020

EU Transport GHG Routes to 2050

- Focused on developing policy framework for reducing transport sector GHG emissions
- Examining behavioral options and technological options for reducing emissions
- EXTENSIVE CONSULTATION with stakeholders across Europe
- Quantifying costs and emissions impacts of possible policy measures



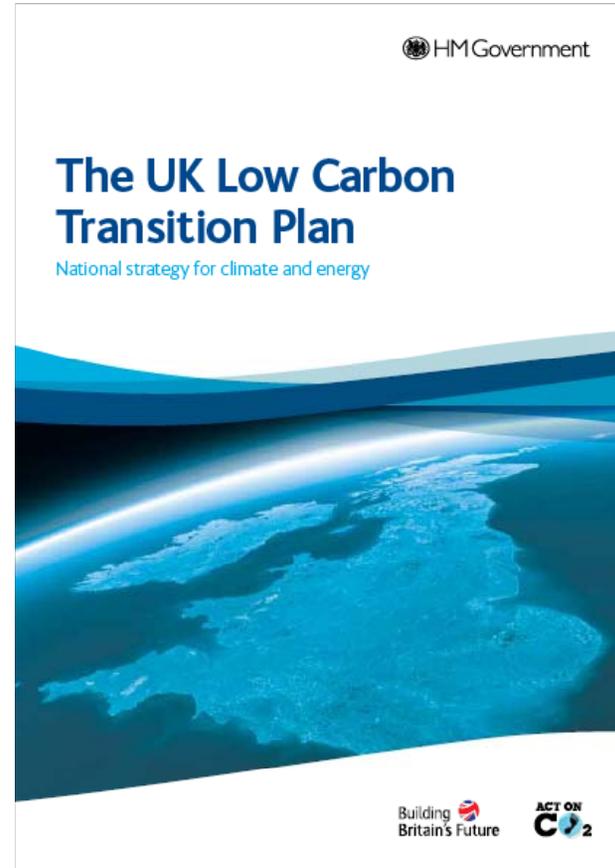
Outcomes will be used to help identify contribution required from transport compared to other sectors

UK policy



UK Climate Change Act 2008

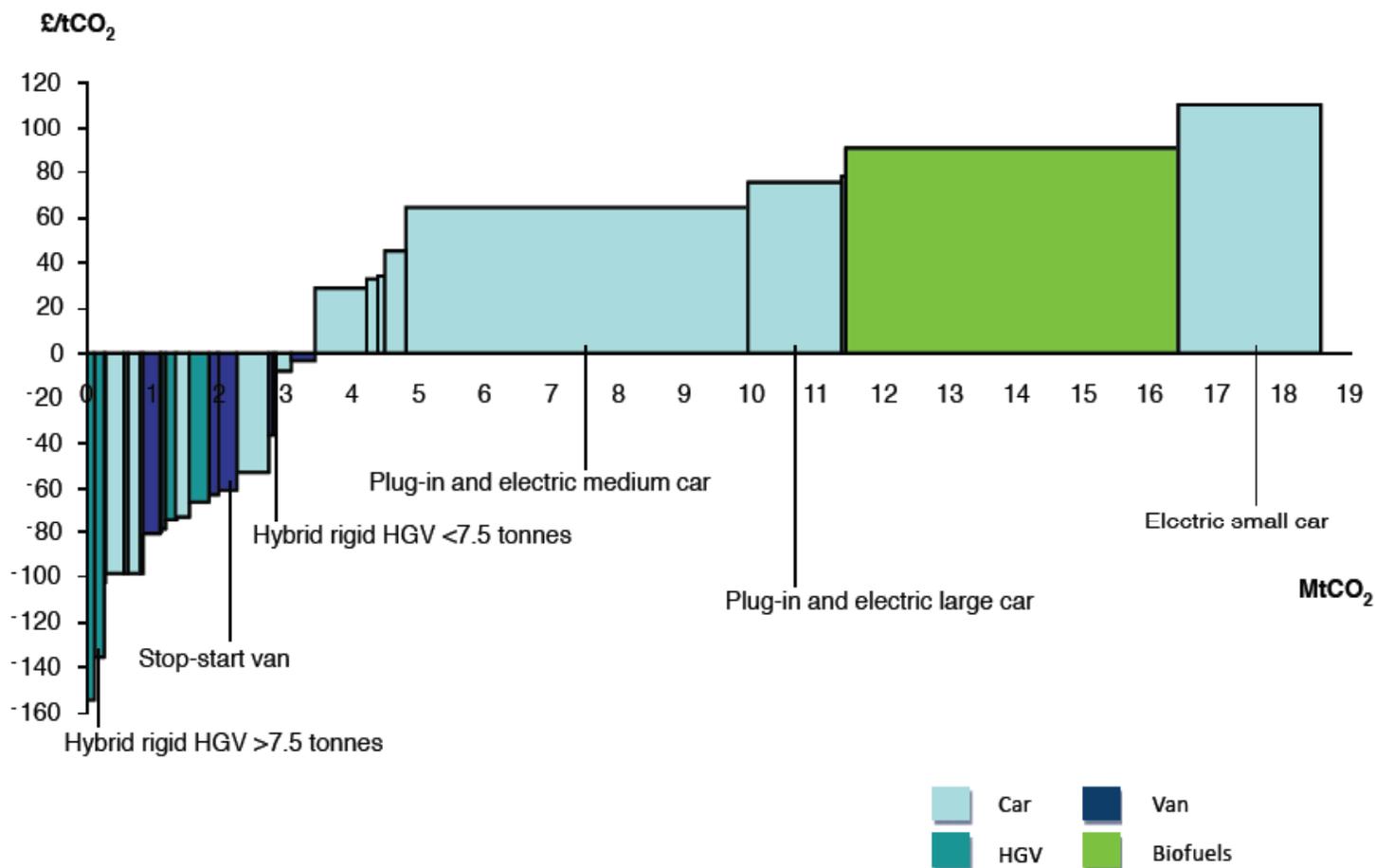
A legally binding target of at least an 80% cut in GHG emissions by 2050 against a 1990 baseline.



Reports on progress to the UK Government

**How can we achieve these targets?
How can we monitor progress?**

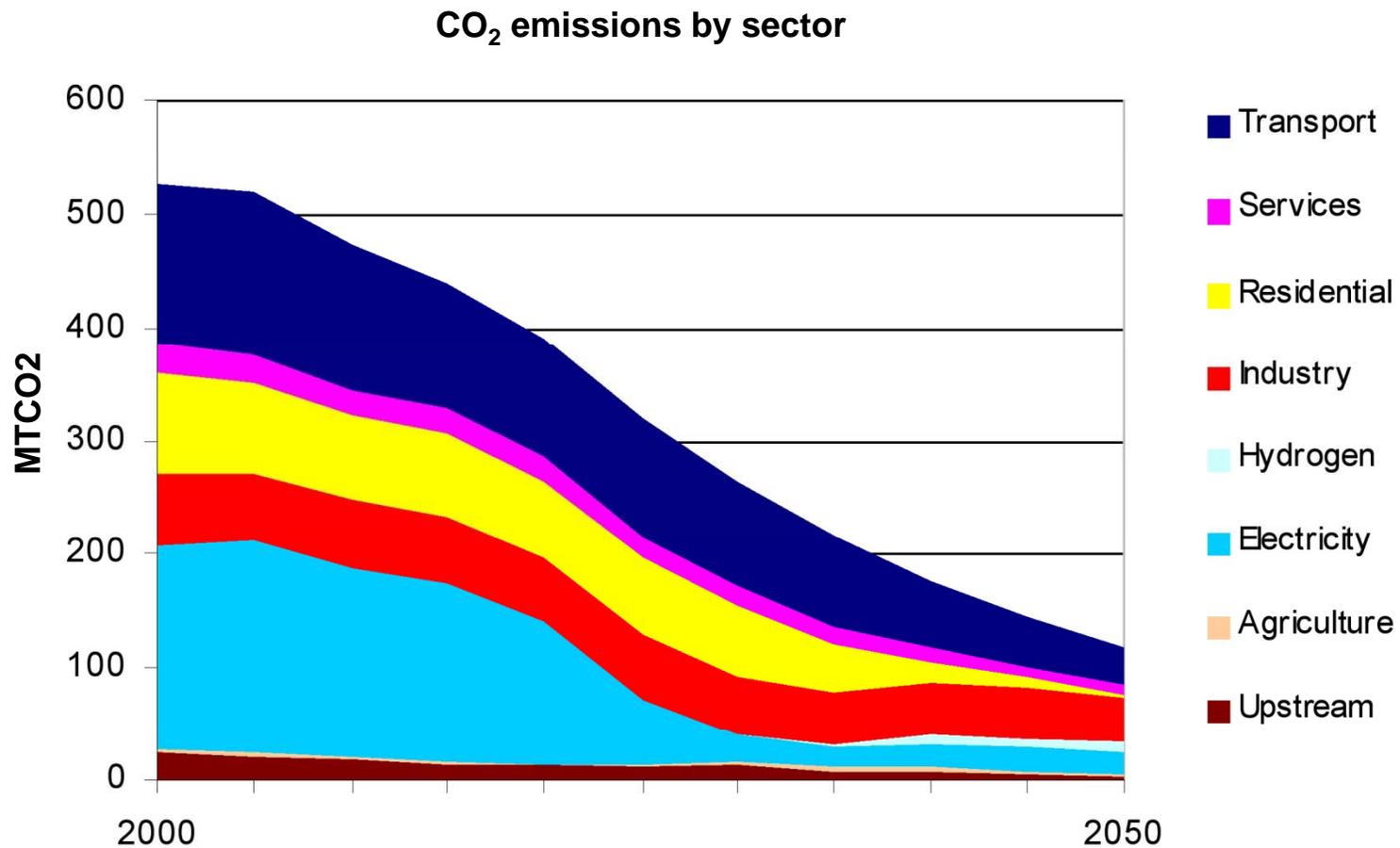
MAC curve – road transport technologies – 2020



Outputs used to develop emissions reduction targets for the UK's 2008 Climate Change Act

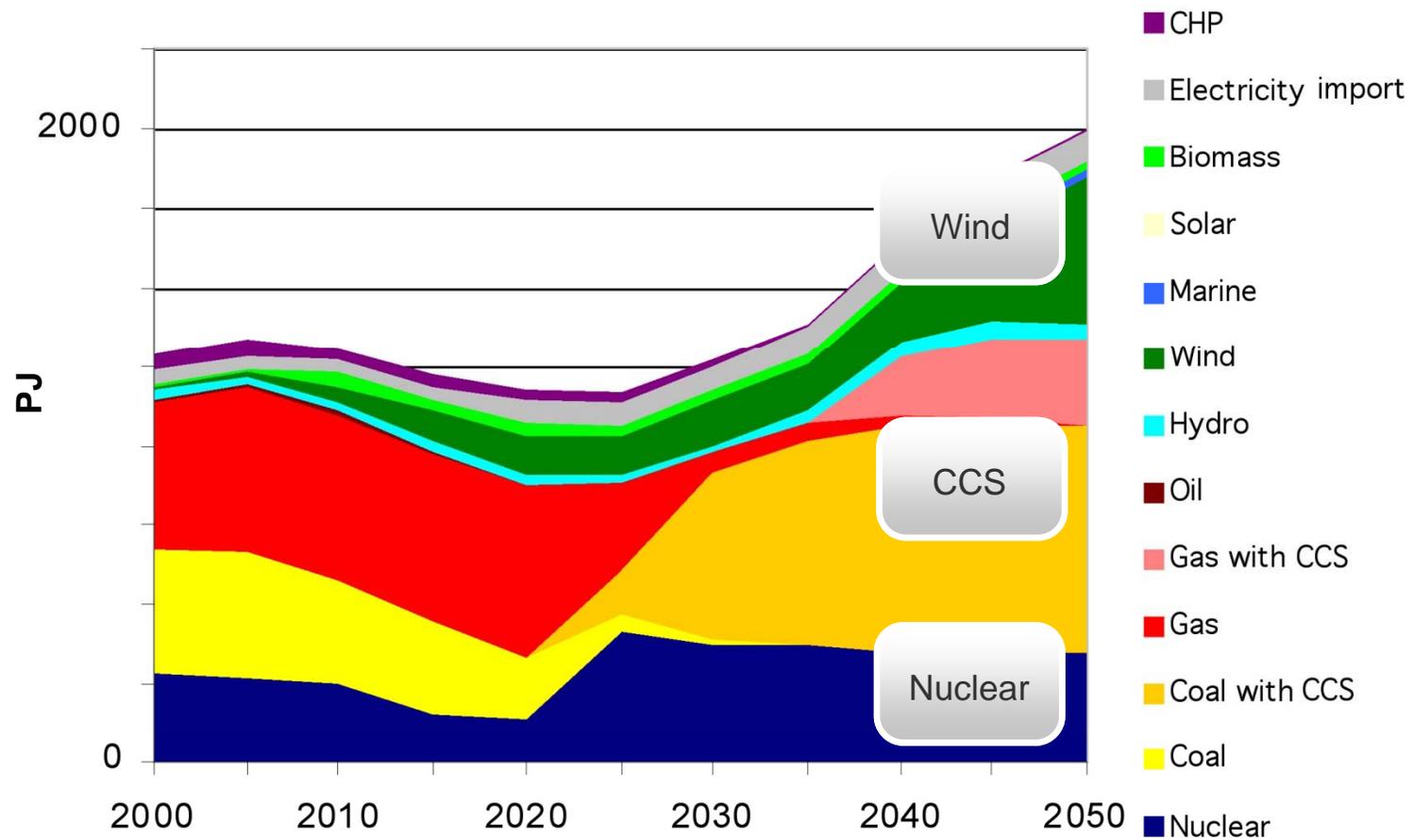
MARKAL modeling - Emissions reduction strategies

Achieving 80% CO₂ reduction by 2050 – a possible pathway



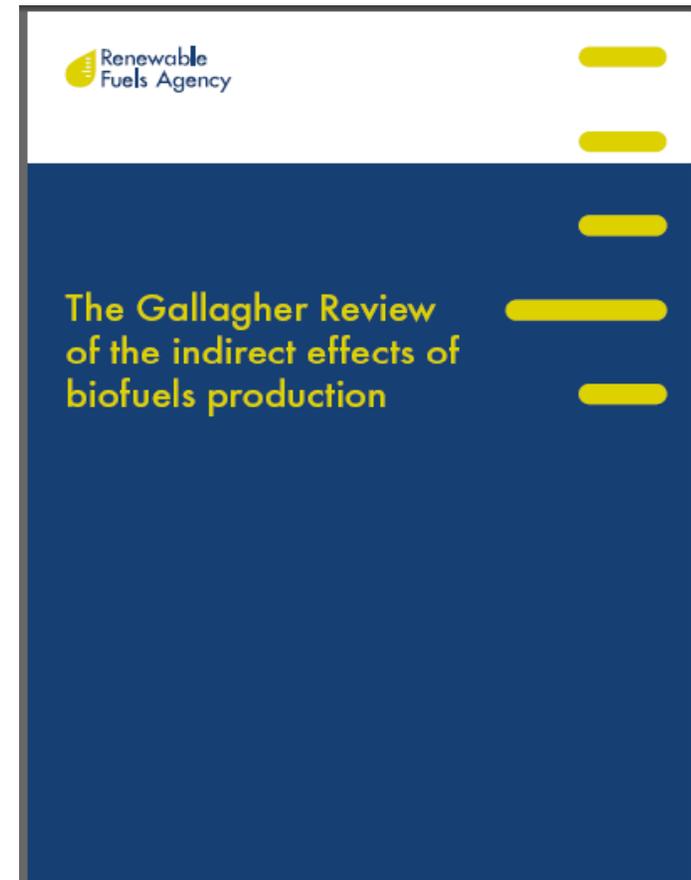
2020 and 2050 – very different solutions

Electricity generation under a 80% reduction scenario



Biofuels – The Gallagher Review

- Commissioned in response to sustainability concerns regarding biofuels
- Examined the indirect effects on land use
- Key findings **confirmed** that biofuels do lead to indirect land use change



Findings from the work have led to major changes in UK and EU policy with respect to acceptable lands for cultivating bioenergy crops

Any Questions?



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www.aeat.com

EU Transport 2050 Project

www.eutransportghg2050.eu

Project Performance Corporation

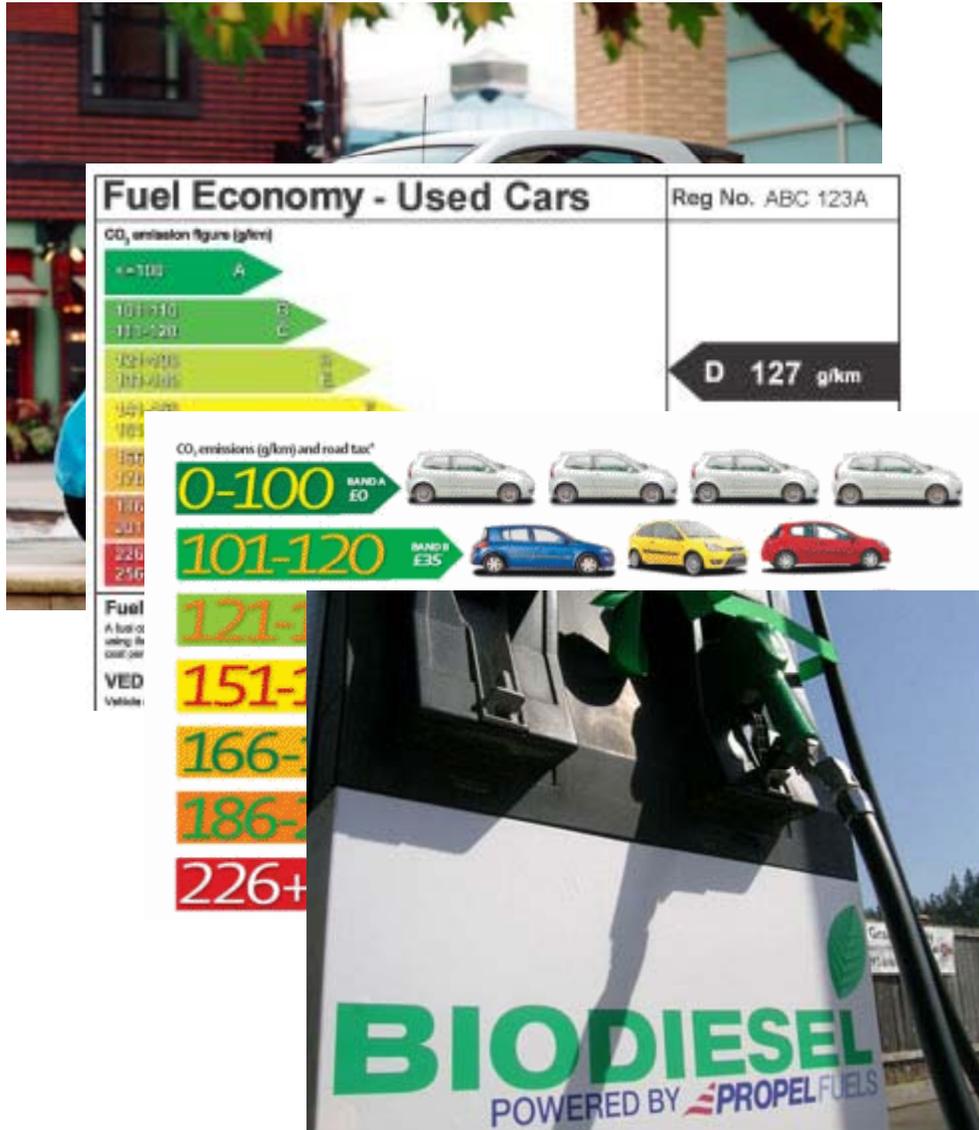
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UK Policy – Behavioural Change

The screenshot shows the ACT ON CO2 website in a Windows Internet Explorer browser window. The browser's address bar displays the URL <http://actonco2.direct.gov.uk/actonco2/home.html>. The website header includes the ACT ON CO2 logo, a search bar with the placeholder text "< Enter your search terms here >", and navigation links for Home, Contact, and Accessibility. A "SHARE" button is also present. The main content area features a large banner with the text "Could you drive 5 miles less a week?" and a sub-headline: "More CO2 comes from our car travel than from any other kind of UK transport. Together we can begin to make a difference by driving 5 miles less a week." Below the banner is a progress indicator with buttons for 1, 2, 3, 4, 5, and a PAUSE button. The website is decorated with a light blue background and white snowflake graphics. On the right side, there are several promotional boxes: "Directgov" logo, "ACT ON CO2 Calculator" with the tagline "It's time to act", "Calculate your carbon footprint" (Find out how much CO2 you create and reduce your carbon footprint.), "Compare new car CO2 emissions" (Compare the CO2 emissions and fuel costs of all new cars.), and "News" (Boiler scrappage to benefit jobs, climate and bills; Prime Minister Gordon Brown and Enerov).

EU policy on carbon fuels



1) *Mandatory regulation to reduce emissions (g/km reduction) cars, vans and heavy duty trucks*

2) *Better information for consumers (Car labeling schemes)*

3) *Fiscal measures (car tax based on CO₂ emissions)*

4) *Renewable fuels (biofuels) Renewable Energy Directive*

Eco-driving – the measured benefits

- Over 700 driver trainers in the UK
- More than **13,500 heavy duty truck drivers** and **11,500 van drivers** have been through SAFED training
- Potential annual savings:
 - **95,000 tonnes of CO₂**
 - **£33 million reduction in fuel spend**
- Average fuel consumption benefits:
 - **10% improvement for heavy duty trucks**
 - **16% improvement for vans**
- Long-term benefits in process of being robustly evaluated – initial evidence points to 5-7% reduction in fuel consumption

