

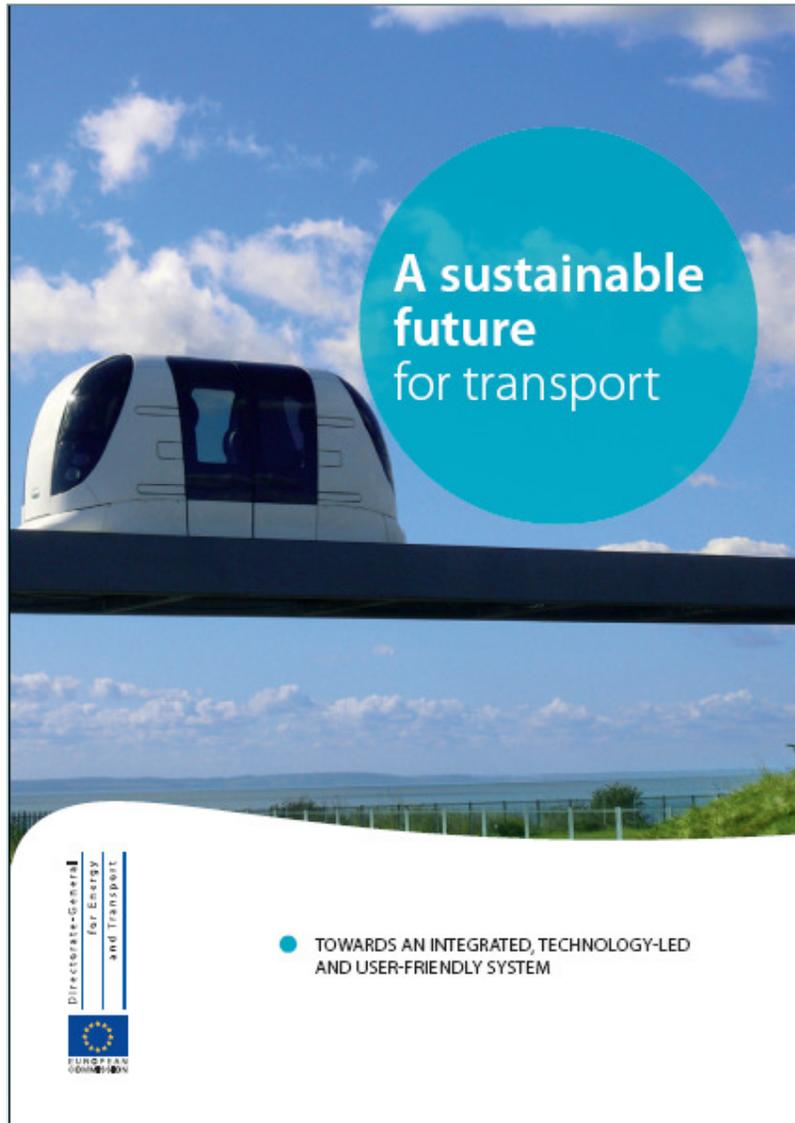
# EU and UK experiences in emissions, sustainable transport and climate change



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# Near Term EU policy 2010 to 2020



*Publication aimed at identifying EU policy options from 2010 to 2020*

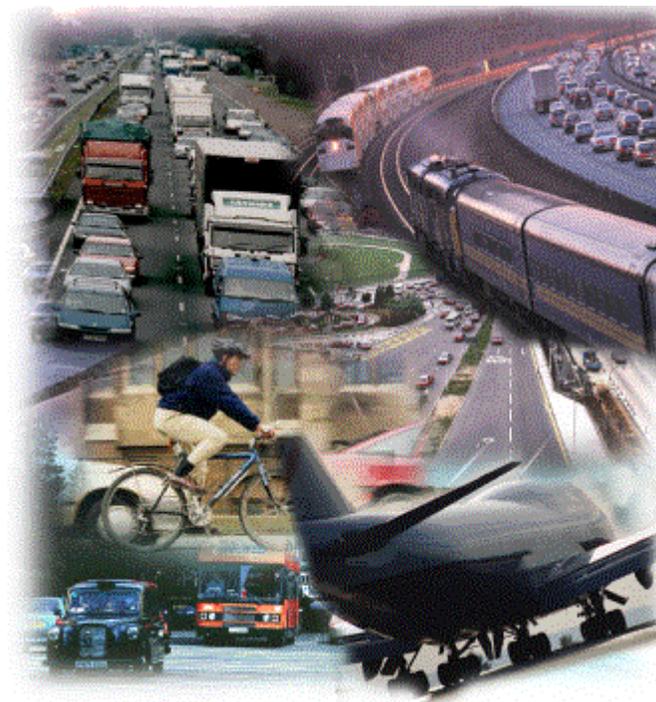
*Included in the next 2010 White Paper*

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



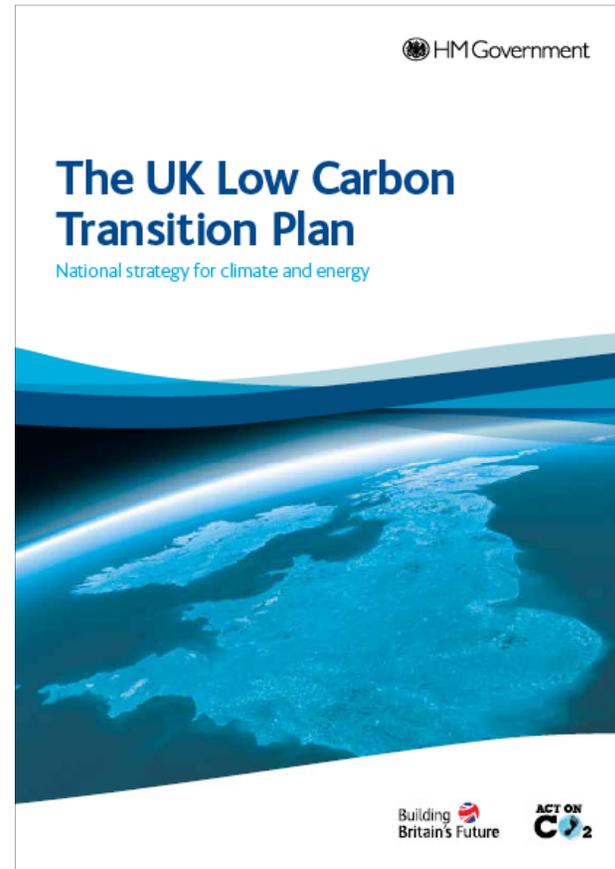
***Outcomes will be used to help identify contribution required from transport compared to other sectors***

# UK policy



## UK Climate Change Act 2008

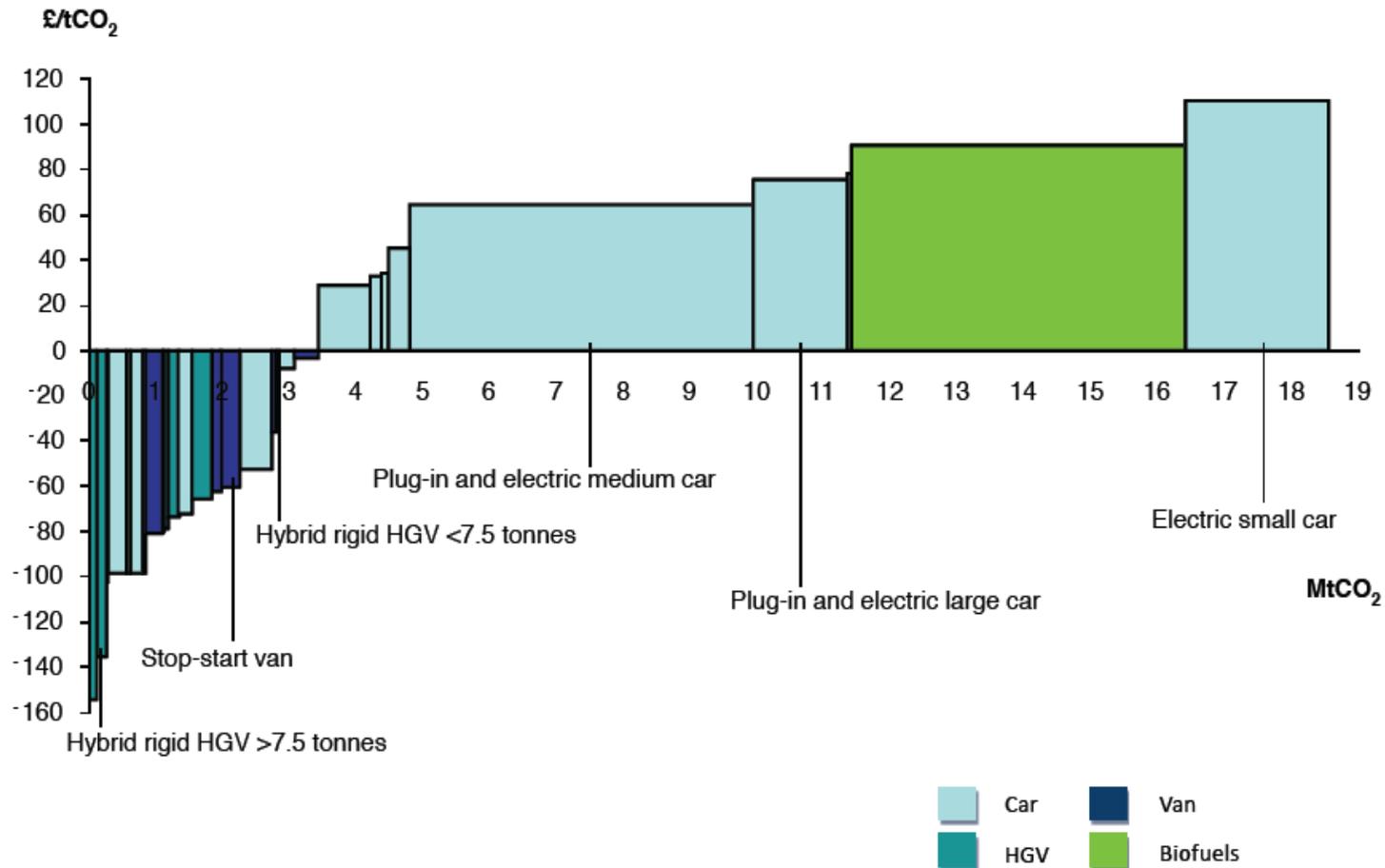
A legally binding target of at least an 80% cut in GHG emissions by 2050 against a 1990 baseline.



*Reports on progress to the UK Government*

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

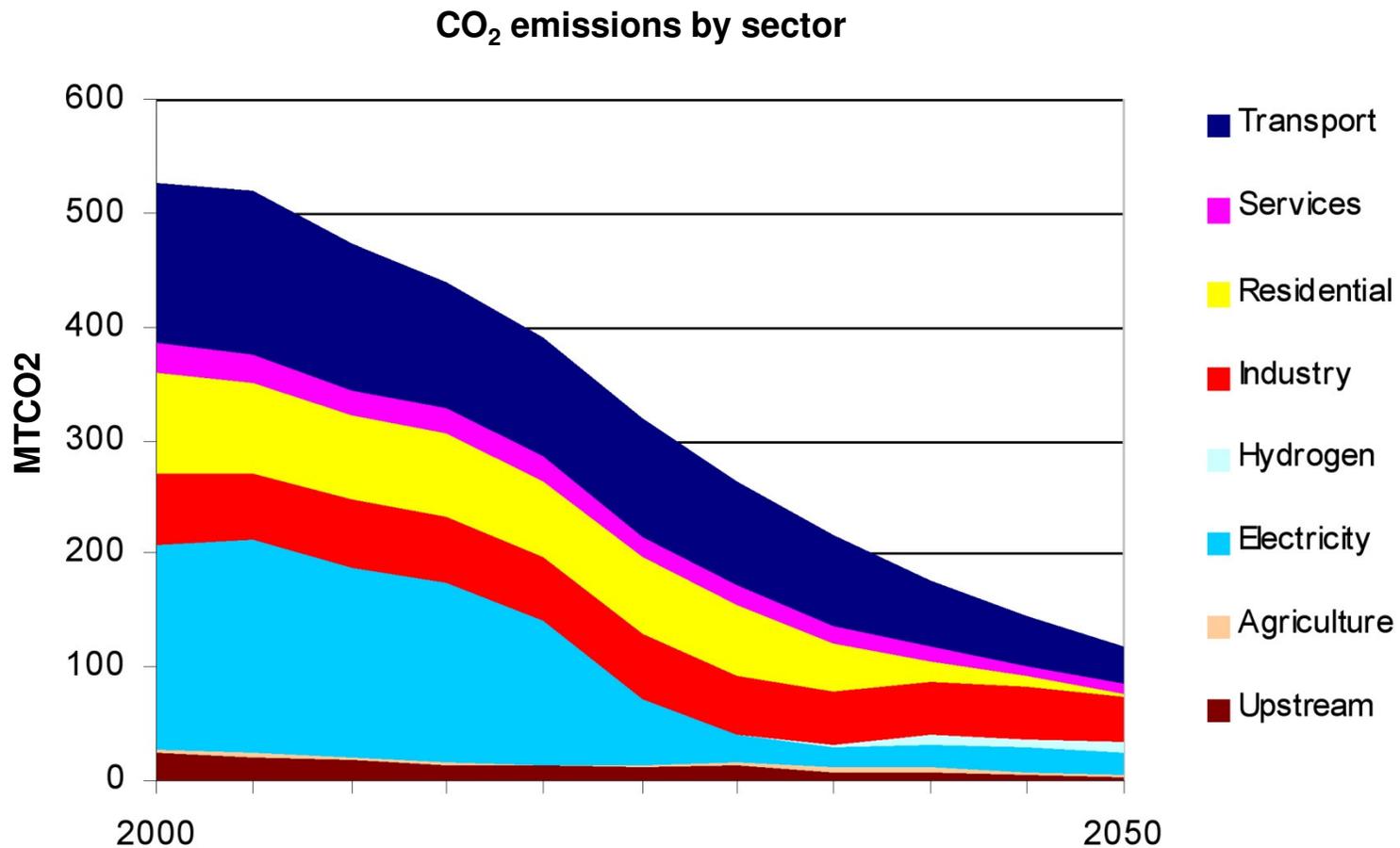
# MAC curve – road transport technologies – 2020



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

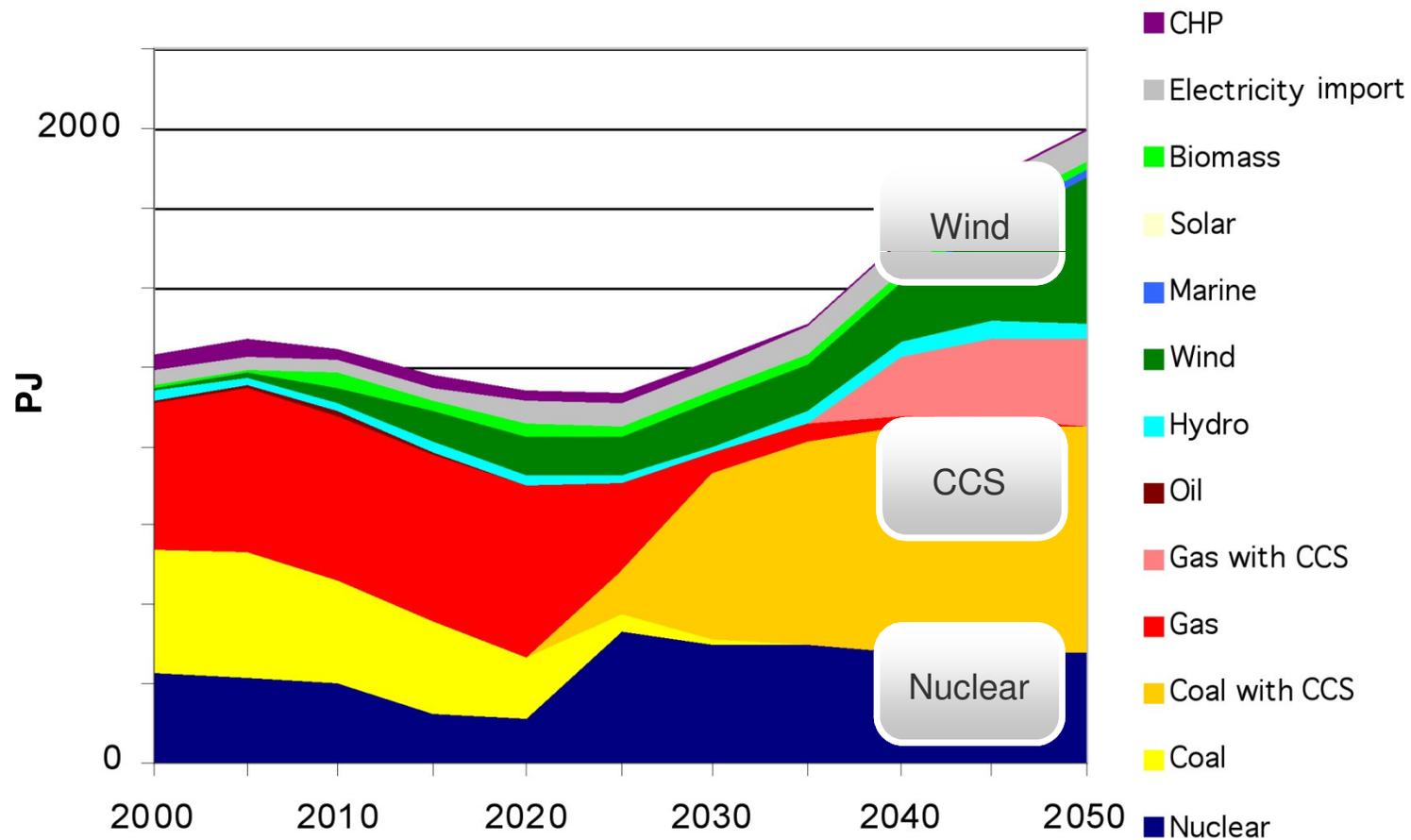
# MARKAL modeling - Emissions reduction strategies

Achieving 80% CO<sub>2</sub> reduction by 2050 – a possible pathway



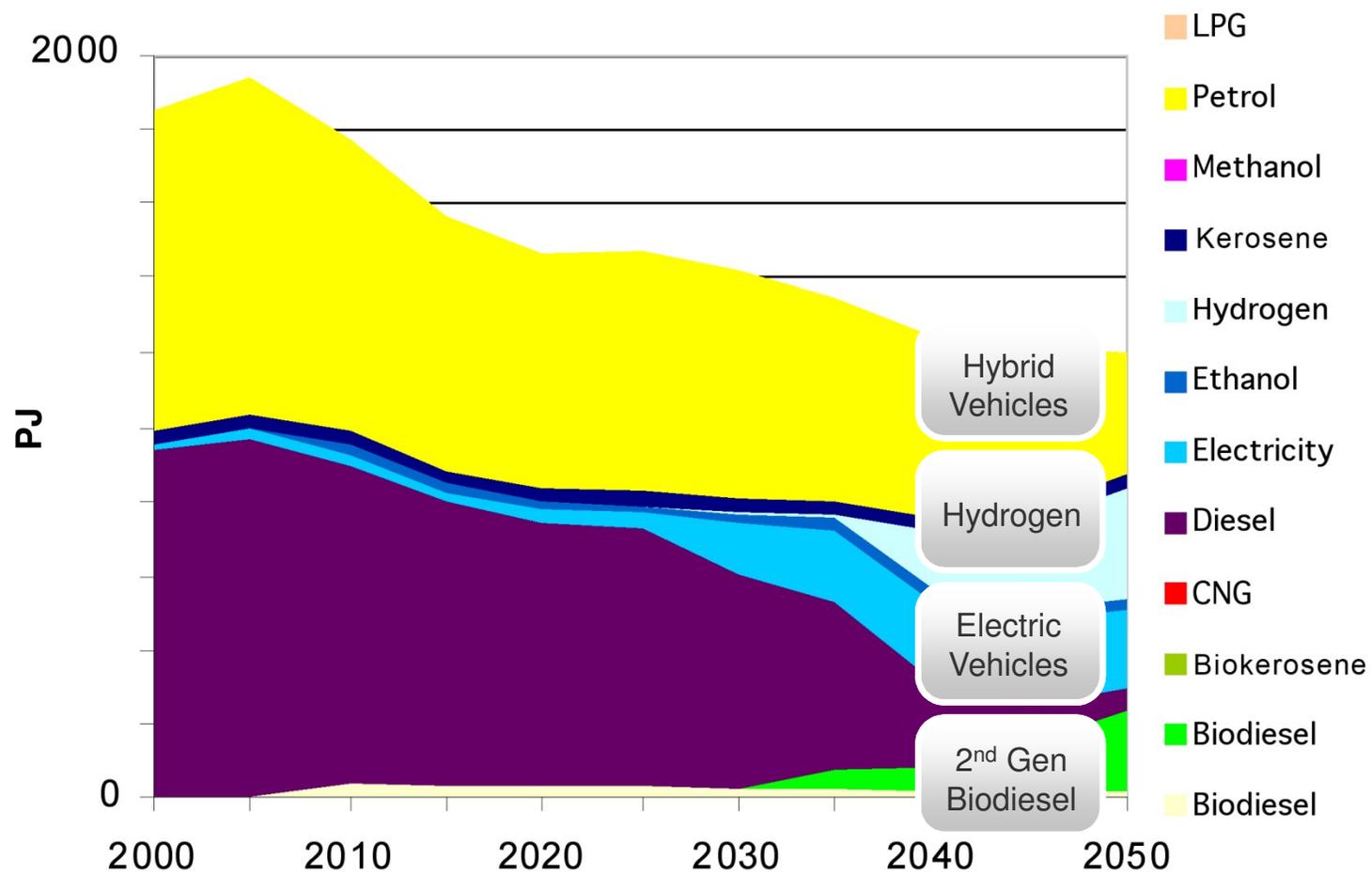
# 2020 and 2050 – very different solutions

Electricity generation under a 80% reduction scenario



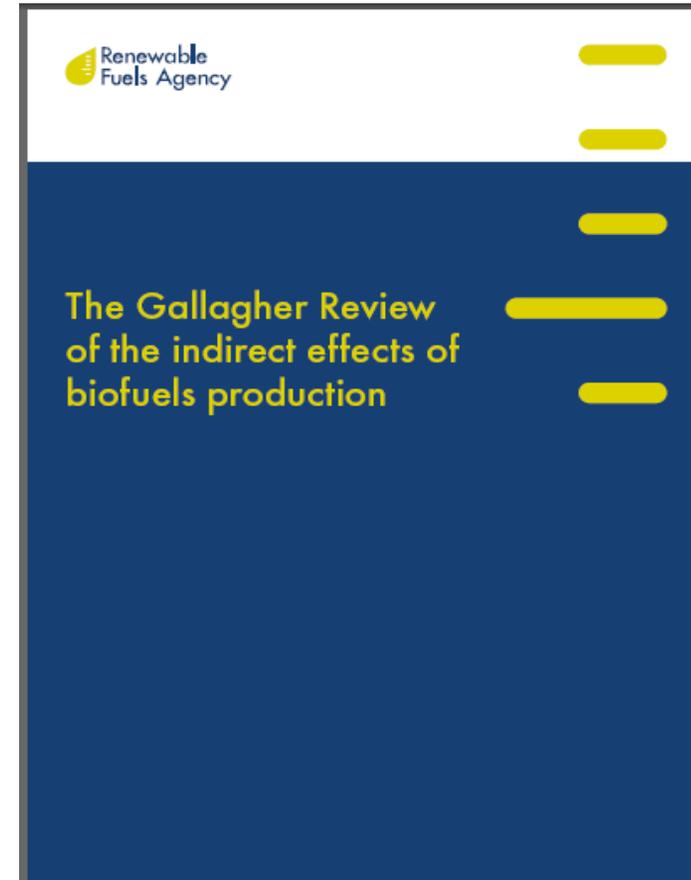
# 'Old technologies' must not be neglected

Transport 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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# UK Policy – Behavioral 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 a "Directgov" logo. A navigation menu below the header lists: "Climate change: the facts", "What you can do", "What Government is doing", "What business is doing", "Current campaigns", and "About ACT ON CO2".

The main content area features a large video player with the text "Could you drive 5 miles less a week?" overlaid. Below the video, a text box states: "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](#)." A video control bar at the bottom of the player shows a progress bar with markers 1 through 5 and a "PAUSE" button.

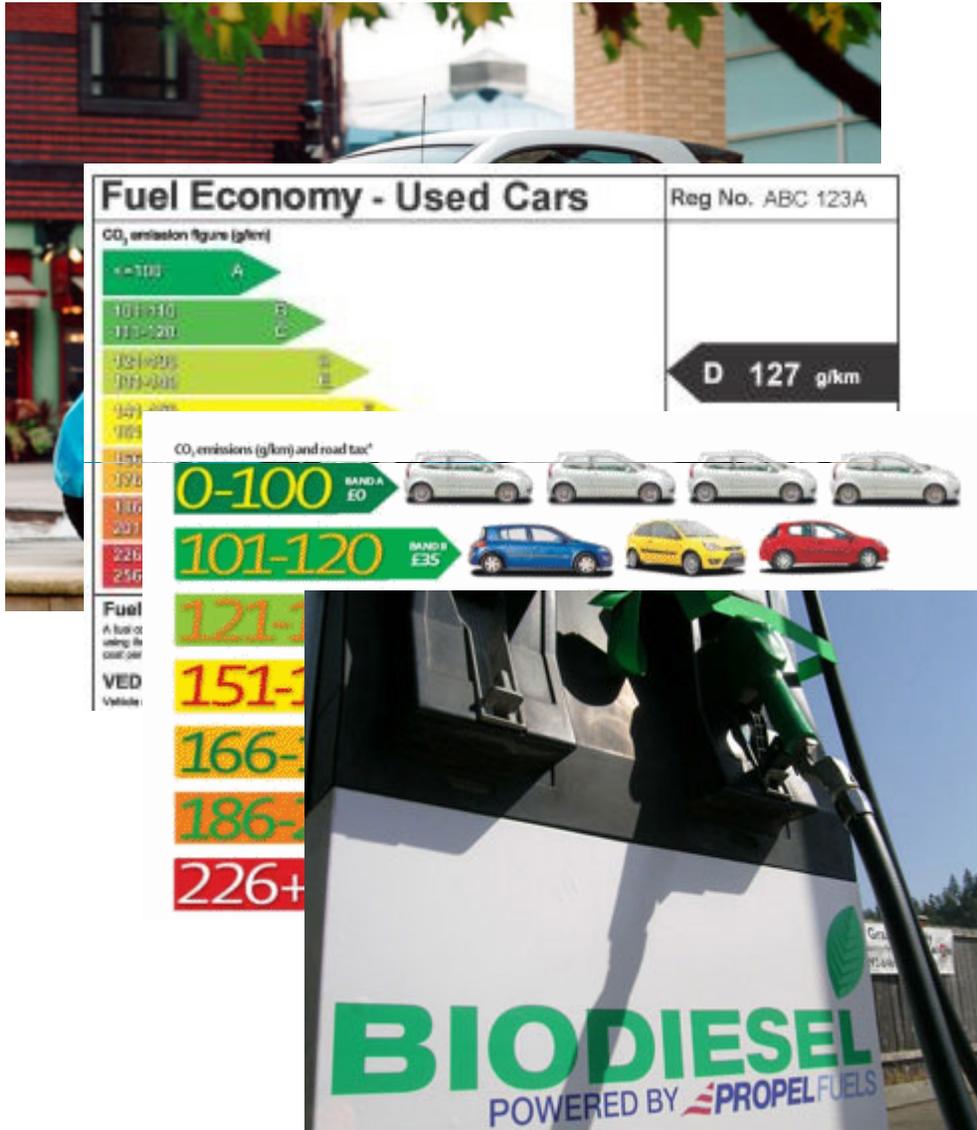
On the right side of the page, there are three promotional boxes:

- ACT ON CO2 Calculator**: "It's time to act. Calculate your carbon footprint. Find out how much CO2 you create and reduce your carbon footprint." Below this is a graphic of a bar chart with arrows pointing right, labeled "What's more", "What's better", and "What's less".
- Compare new car CO2 emissions**: "Compare the CO2 emissions and fuel costs of all new cars."
- News**: "Boiler scrappage to benefit jobs, climate and bills. Prime Minister Gordon Brown and Energy..."

At the bottom of the page, there are two more sections:

- Climate change: the facts**: A section with a dark background and a small image of a tree.
- What you can do**: "It's up to us how the story ends. Lower your CO2 emissions with these helpful tips." Below this is a small image of a car's side mirror.

# 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 CO<sub>2</sub> 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 CO<sub>2</sub>**
  - **£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

