KING REVIEW

The King Review of low-carbon cars

Call for Evidence

Background

The Chancellor has asked Professor Julia King, Vice-Chancellor of Aston University and former Director of Advanced Engineering at Rolls-Royce plc, working with Sir Nicholas Stern, to lead a review to examine the vehicle and fuel technologies that, over the next 25 years, could help to 'decarbonise' road transport, particularly cars. The Review is drawing upon expertise in industry, both in the UK and internationally, and across Government.

Terms of reference

The Review will build on the work of the Energy White Paper and the Government's Low Carbon Transport Innovation Strategy and the TSB's Innovation Platform for Low Carbon Vehicles.

It will consider the existing evidence on technologies to reduce the carbon emissions from vehicles and examine whether, over a 25-year time frame, decarbonisation may be most cost effectively delivered through incremental evolution of existing technologies or via more radical transformational approaches.

The Review will take account of UK capabilities in research, design and development, including the competitiveness of relevant UK industry sectors and of the academic and industrial research base. It will assess the scope for the current and potential UK automotive and fuels/energy sectors to benefit from the transition to a decarbonised road transport system, how a shift in favour of lower carbon vehicle options can be achieved and how best to influence the global adoption of lower carbon technologies, including in the most rapidly expanding vehicle markets around the world.

Our approach

The Review will take a strategic approach to understanding the road transport-related technologies that can help to bring about a substantial reduction in carbon emissions over the next 25 years. It builds upon the recent Low Carbon Transport Innovation Strategy, published alongside the Energy White Paper.

- It will look at the trends in road vehicle use that will affect carbon emissions and uptake of low-carbon technologies.

- It will provide an overview of the range of technologies currently under development, as well as the potential scope for more radical solutions, and an assessment of what is likely to be achievable. The review will look at the technical, environmental and economic aspects of new technology. As far as possible, the benefits of transport technologies will be assessed in terms of contribution to reducing *total* CO2 emissions and not just road-transport generated emissions.

- It will examine the development and adoption/marketing processes for low-carbon technologies and the role of industry (both domestic and overseas), consumers and government. It will also consider the infrastructure implications of these technologies.

- It will look at whether and where there are substantial barriers to the efficient functioning of the market, identifying the strategic priorities for government intervention and support.

- It will consider the implications for UK businesses, productivity and inward investment as a result of domestic and global changes in vehicle technologies.

The review will mainly focus on the transport-related technologies with potential to reduce carbon emissions substantially over the long term. However, we will also consider ways of reducing carbon emissions and meeting our targets in the shorter term, through development and uptake of more immediately available technologies. This will complement work led by the Department for Transport responding to proposals for EU regulation of new car CO2, including short-term targets for 2012.

Timings

The deadline for responses to the call for evidence is 20 August 2007.

The review will publish an analytical report later in 2007, around the time of the Pre-Budget Report (PBR).

Response details

Representations from all interested parties are invited. Annex 1 (overleaf) contains a suggested list of questions against which representations may

be made. Please address any of the questions where you feel you can make a contribution, and add further comments if you wish. Where possible responses should be broken down by defining problem areas, establishing causes and recommending solutions.

Representations should be sent, preferably via email, to king.review@hm-treasury.gov.uk or via hard copy to Miss Mel Rich, King Review Team, HM Treasury, 1 Horse Guards Road, London SW1A 2HQ.

Information provided in response to this call for evidence will be dealt with in accordance with the access to information regimes. These are primarily the Freedom of Information Act (2000), the Data Protection Act (1998) and the Environmental Information Regulations (2004). Please note that unless confidentiality is specifically requested, each representation has the potential to be made public. A summary of responses will be published on the King Review website http://www.hm-treasury.gov.uk/king on 3 September 2007.

King Review Team
11 June 2007

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Annex 1: questions

It would be helpful if representations could be made in response to the following suggested questions. Please address whichever questions are relevant to your areas of experience and knowledge and add additional comments or attach further documents where appropriate.

Technologies and uptake

1. Which are the transport-related technologies that, over a 25-year period, are most likely to deliver substantial reductions carbon emissions? What are the environmental and economic implications of these technologies?

2. What applicable insights can be gained from past changes in vehicle technologies?

3. Looking out over this 25-year period, what visions are there for how vehicles and emissions will evolve? What will be the critical enablers and/or inhibitors for these particular visions? Will the picture be similar globally, or for example, will the markets in the UK and the rest of Europe exhibit different characteristics from rapidly developing nations such as China and Brazil?

4. Do you see any particular technologies dominating the UK and global markets or can we expect a mix of technologies to prevail? To what extent are both scenarios still open and what might be the implications of each?

5. What are the infrastructure implications of low-carbon technologies, and how will these change with levels of uptake?

6. Which segments of the car market offer the largest scope for achieving carbon reductions, either in terms of technology or consumer behaviour?

7. What in the more immediate term are the technologies that can help drive down carbon emissions?

8. What are the complementarities and trade-offs between addressing carbon emissions and achieving our wider environmental objectives?

9. What are the choices that consumers face now and in the future that can have an effect on their vehicle emissions?

10. How might consumer demand very over time and what are the implications of this?

11. What are the interactions between UK and international markets, both in the development and uptake of vehicle technologies? What are the implications of this?

12. How strong are UK capabilities in the relevant product and technology areas, from the research base through to design, development and delivery?

13. What are likely to be the major inhibitors of the implementation/uptake of low carbon vehicle technologies?

Role of government

14. To what extent does the Government's role in respect of low-carbon technologies need to be technology-specific and to what extent is a solution-based approach more desirable?

15. What does the history of current technologies tell us about the appropriate role for government?

16. What is your assessment of the effectiveness of current UK Government policy in respect of promoting low-carbon technologies?

17. Do you think that there are any significant barriers or market failures that substantially hinder the ability of the market to deliver the best outcomes for the UK?

18. What do you think should be the priorities for UK government policy in respect of low-carbon vehicle technologies? What are the best outcomes for the environment and the UK economy, and how can these best be achieved?

19. What are your views on the effectiveness of regulation and what forms of regulation are most appropriate?

20. What can we learn from international approaches to promoting the development and uptake of low-carbon vehicles?

21. How can we seize the opportunities for UK businesses and for inward investment resulting from an increased demand for low-carbon vehicle technologies, both domestically and internationally?

Other comments or issues

Please add comments and/or attach any documents you wish to submit as evidence.

KING REVIEW

KING REVIEW OF LOW-CARBON CARS
COVER SHEET FOR RESPONSES

Contact details of respondent	
Name	
Job Title (if applicable)	
Organisation (if applicable)	
Postal address	
Telephone number	
Email address	

Please mark a cross below against the questions covered by your response. Not all issues will be relevant to all respondents – please feel free to skip questions that are not relevant to you.

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21			

Have you raised any other issues in your response? Y / N

Details of accompanying documents (Please continue on additional sheet if necessary)

☐ **Place a cross in this box if you DO NOT want your response to be made publicly available.**

Representations should be sent, preferably via email, to king.review@hm-treasury.gov.uk or, via hard copy, to Miss Mel Rich, King Review Team, HM Treasury, 1 Horse Guards Road, London SW1A 2HQ. Contact telephone 020 7270 6391.

The deadline for responses is 20 August 2007.