

Foresight

Making the future work for you

Energy and Natural Environment Questionnaire

This questionnaire accompanies "A Way to Go", the vision of the Energy and Natural Panel about the important issues that it should concentrate efforts upon. Your opinions on our views are very important to us. This questionnaire is available in electronic form from the Foresight web site where you can send it directly to us online. Alternatively please send your responses to

The Secretariat
Energy and Natural Environment Foresight Panel
Room 582
Department of Trade and Industry
1 Victoria Street
London SW1H 0ET
Fax: 020 7215 6760
E-mail: ene@dti.gsi.gov.uk

The closing date for comments is **30 September 2000**.

Please note that your response to this consultation exercise may be made publicly available in whole or in part at the Department's discretion. If you do not wish all or part of your response (including your identity) to be made public, you must state in the response which parts you wish us to keep confidential. Where confidentiality is not requested, responses may be made available to any enquirer, including enquirers outside the UK, or published by any means, including on the Internet.

The Drivers of Change

This section looks at the trends and forces operating today and how these will affect the future.

- Q. Is this picture of drivers complete?
- Q. Do you agree that the changing market/economic framework is important?
- Q. What other trends are significant for the demands made on natural resources, energy and the natural environment?
- Q. All groups such as producers, consumers, and regulators influence the impact on the environment and on energy use. What groups have the most effect and hence should we target?

(i) The picture of drivers seems comprehensive.

(ii) The market/economic framework is VERY important, indeed fundamental.

(iii) Another significant trend is the continuing development of technological innovation.

(iv) Both producers and regulators react (ultimately) to the requirements and demands of consumers. The most lasting and significant influences will be achieved therefore by targeting the consumers. Pressure targeting of producers and regulators may achieve some short term goals (eg. demonstrations against high petrol taxes!) but the overall value of these is questionable.

The Future: Challenges and Opportunities

This section looks at what the consequences of future changes lead to in terms of problems and prospects.

- Q. Do you agree that these are the major challenges?
- Q. Which are most significant for the application of UK "know-how"?
- Q. What are time-scales over which they will be important?
- Q. Which are local and which are widespread - offering large opportunities for application of solutions?
- Q. In what areas is the UK particularly well advanced?

- (i) These seem to be the major challenges
- (ii) Change in the behavioural patterns of society is of great importance and can only be achieved through an effective educational system incorporating sustainability issues.
- (iii) Impact in this area is needed quickly - say over 10 years - in order to effect major changes over a 50 year long-term period.
- (iv) All the challenges have global application albeit these may vary in nature from region to region.
- (v) Water treatment techniques, waste management and air quality control and monitoring are all well advanced in UK.

Research, Development and Demonstration Themes

This section explores the panel's view on long-, medium- and short-term research and development needs and requirements.

- Q. Are there particular themes that you wish to highlight?
- Q. Are there additional assessment criteria that we have missed?
- Q. Which of these do you consider are the most important?

- (i) A major theme not separately identified in the consultation document is waste minimisation.
- (ii) The assessment criteria would appear comprehensive.
- (iii) Equally important.

Barriers to Innovation

This section considers social, economic and institutional factors that may act as inhibitors to application and deployment of energy and natural environment R&D.

- Q. Do you recognise the same institutional and other barriers?
- Q. What additional barriers are there?
- Q. How should these barriers be overcome?
- Q. How can the private sector, non-commercial organisations consumers be engaged and provide resources for R&D?
- Q. Does your organisation have resources that it spends in this direction? What might encourage you to spend more?

(i) Yes

(ii) The only addition to this list might be public apathy.

(iii) Barriers can be overcome by increasing awareness in the voting public and by lobbying government and industry.

(iv) Lottery funding.

(v) We only have voluntary contributions - mostly people's time. Grant aid would help but is difficult to come by!

On-Going Panel Plans

Here we present our current activities.

- Q. Is your institution engaged on relevant work?
- Q. Would it or you be willing to contribute time and effort to developing networks / joint work in this area?
- Q. Would you be interested in contributing to parallel work or associate task forces?
- Q. Have you got programmes that could act as conduits for the work of the Panel?

(i) Yes. A CPD programme for training in sustainability. This is centred within professional institutions and includes a special feature on waste management.

We also conduct some limited research on economic issues and urban regeneration.

(ii) Yes, insofar as this can be achieved by linking with existing projects work and avoiding commitment of additional resources.

(iii) As last.