



House of Commons  
Environmental Audit  
Committee

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# Are Biofuels Sustainable? The Government Response

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**Fourth Report of Session 2007–08**

*Report, together with an appendix and formal minutes.*

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## The Environmental Audit Committee

The Environmental Audit Committee is appointed by the House of Commons to consider to what extent the policies and programmes of government departments and non-departmental public bodies contribute to environmental protection and sustainable development; to audit their performance against such targets as may be set for them by Her Majesty's Ministers; and to report thereon to the House.

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The Reports and evidence of the Committee are published by The Stationery Office by Order of the House. All publications of the Committee (including press notices) are on the Internet at: [www.parliament.uk/parliamentary\\_committees/environmental\\_audit\\_committee.cfm](http://www.parliament.uk/parliamentary_committees/environmental_audit_committee.cfm).

A list of Reports of the Committee from the present and prior Parliaments is at the back of this volume.

### Committee staff

The current staff of the Committee are: Gordon Clarke (Clerk); Sara Howe (Second Clerk); Richard Douglas (Committee Specialist); Oliver Bennett (Committee Specialist); Susan Monaghan (Committee Assistant); Stella Kin (Secretary); and Elizabeth Gardner (Sandwich Student)

### Contacts

All correspondence should be addressed to The Clerk, Environmental Audit Committee, Committee Office, 7 Millbank, London SW1P 3JA. The telephone number for general inquiries is: 020 7219 6150; the Committee's e-mail address is: [eacom@parliament.uk](mailto:eacom@parliament.uk)

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## The Government's Response

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1. We published our First Report of Session 2007–08, *Are biofuels sustainable?* on 21 January 2008.<sup>1</sup> The Government sent us its response on 28 March; we have reproduced it as an appendix to this report. We considered the response in detail and welcome the Government's recognition that there is a role for biofuels providing they are cost-effective and sustainable.<sup>2</sup> We also welcome the review into the wider economic and environmental impacts of biofuel production.<sup>3</sup> However, we have significant concerns about the Government's rejection of our call for a moratorium on policies aimed at increasing the use of biofuels.<sup>4</sup> Other commentators have raised similar concerns about support for biofuels, including the European Environment Agency,<sup>5</sup> the International Monetary Fund,<sup>6</sup> the International Assessment of Agricultural Knowledge, Science and Technology for Development<sup>7</sup> and the Government's Chief Scientist.<sup>8</sup> On 24 March Professor Robert Watson, the UK's Chief Environment Scientist, called for implementation of the RTFO to be delayed until further work had been done on sustainability.<sup>9</sup> Even a joint statement issued by the Downing Street Food Price Summit, hosted by the Prime Minister, recognised the need to review the approach to biofuels and 'look closely at their impact on food prices 'to ensure we are more selective in our support'.<sup>10</sup>

2. In their response, the Government argued against a moratorium because:

- targets were set at an 'appropriately cautious level';
- an opportunity to make carbon savings from biofuels would be missed; and
- it would mean reneging on an earlier commitment on the back of which investment decisions have been made.<sup>11</sup>

We do not accept that these arguments are sufficient to dismiss the case for a moratorium.

3. We disagree that targets for biofuels have been set at an 'appropriately cautious level'.<sup>12</sup> While the UK has the theoretical capacity to produce enough sustainable biofuels to meet the current 2.5% target, the ultimate source of biofuels is uncertain. These are globally traded commodities and therefore the proportion of domestically sourced feedstocks used

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1 Environmental Audit Committee, First Report of Session 2007–08, *Are biofuels sustainable?*, HC 76

2 Government response to recommendation 1—see appendix, page 6

3 Government response to recommendation 3—see appendix, page 6

4 Environmental Audit Committee, *Are biofuels sustainable?*, paragraph 34

5 [www.eea.europa.eu/](http://www.eea.europa.eu/)

6 'Biofuel Demand Pushes Up Food Prices' IMF, October 2007, [www.imf.org/external/pubs/ft/survey/so/2007/RE51017A.htm](http://www.imf.org/external/pubs/ft/survey/so/2007/RE51017A.htm)

7 [www.agassessment.org/](http://www.agassessment.org/)

8 'Rush for biofuels threatens starvation on a global scale', *The Times*, 7 March 2008

9 'Call for delay to biofuels policy', BBC News, 24 March 2008, [news.bbc.co.uk/1/hi/sci/tech/7309099.stm](http://news.bbc.co.uk/1/hi/sci/tech/7309099.stm)

10 The Prime Minister, Article on food prices summit (22 April 2008), Downing Street website ([www.pm.gov.uk](http://www.pm.gov.uk))

11 Government response to recommendation 6—see appendix, page 7

12 Government response to recommendation 6—see appendix, page 7

to reach the target will be determined by the market.<sup>13</sup> Further to this, the Government plans to increase the target to 5% and therefore exceed the theoretical capacity of the UK to supply sustainable biofuels (the UK only has the capacity to produce half of the 5% target in a sustainable manner.) Meeting the full target without using imports would require anywhere between 10% and 45% of UK arable land area.<sup>14</sup> There is evidence that even modest targets on biofuels have had an impact on land-use and food prices. There is already pressure from the European Union to increase targets for biofuels in spite of all the evidence of their potential for harm.<sup>15</sup> We will be seeking a clarification of the European Commission's position.

4. We agree that robust measures to reduce emissions are needed. However, we do not accept that biofuels are an essential component of the UK's response, with Government estimates indicating that they will deliver 5.5-6.5% of the expected emissions reductions in 2010.<sup>16</sup> As this figure fails to take into account the emissions generated from the production of biofuels produced abroad, on which we will have to rely to meet the 5% target, the actual emission reductions could be around a third less. As we outlined in our report, biofuels are not a particularly cost-effective way of reducing emissions (we found that other forms of bioenergy can often reduce emissions by greater amounts, more sustainably and at a lower cost than current policy on biofuels).<sup>17</sup> Even more seriously, they could lead to increases in greenhouse gas emissions from land use change.<sup>18</sup>

5. The Government argued that it would have been wrong to implement a moratorium as it would have meant reneging on earlier commitments to industry. It pointed out that investment decisions had already been taken on the basis of these commitments. We recognise the concern for those that might have already invested in biofuels. But this concern is outweighed by concerns about the potential harm that could arise if the development of biofuels continues without the necessary safeguards. It will be much harder to take decisions about biofuels once an industry has fully established itself on a basis that may not be fully sustainable.

6. We accept there is a need for policy instruments that stimulate the development of more efficient and effective biofuels. The Royal Society was clear that current policy is inadequate in this regard. It argued that the main effect of the current policy will be to 'encourage the import of fuels from abroad and the domestic production of crops and fuels with low CO<sub>2</sub>-equivalent savings'. It found that the lack of banding in the incentive structure will mean that investment will flow to 'more established near term options... and little to the more promising long-term options'.<sup>19</sup> The Government must look again at how to stimulate the

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13 Department for Transport, Biofuels risks and opportunities, [www.dft.gov.uk/pgr/roads/environment/rtfo/289579?page=5](http://www.dft.gov.uk/pgr/roads/environment/rtfo/289579?page=5)

14 The Royal Society, Sustainable biofuels: prospects and challenges, Policy document 01/08, January 2008

15 European Commission, Memo on the Renewable Energy and Climate Change Package, MEMO/08/33, Brussels, 23 January 2008

16 These figures are based on *Climate Change: The UK Programme 2006*, Cm 6764, published by Defra in March 2006. It calculated that the RTFO would deliver savings of 1.6MtC. The more recent estimates given in the RTFO impact assessment indicate that the carbon savings will be even smaller at between 0.7 and 0.8 MtC.

17 Environmental Audit Committee, *Are biofuels sustainable?*, paragraphs 32 and 67

18 Environmental Audit Committee, *Are biofuels sustainable?*, paragraph 53

19 The Royal Society, *Sustainable biofuels: prospects and challenges*, Policy document 01/08, January 2008

development of second generation biofuels; support for first generation biofuels might not have the desired effect and any benefit could be outweighed by the potential for harm that exists in the absence of proper standards for sustainability. As we said in our report, transport biofuels have received 'disproportionate attention and funding in comparison to other policies that could reduce greenhouse gas emissions at lower environmental risk and lower cost'.<sup>20</sup> The evidence to our inquiry highlighted policies aimed at changing travel behaviour ('Smarter Choices'), improving vehicle fuel efficiency, encouraging more fuel-efficient driving and shifting the balance of affordability more in favour of lower carbon transport modes.<sup>21</sup>

7. In its response to our recommendation about the importance of sustainability standards and the need to protect carbon sinks (such as forests) the Government stressed the role that standards play.<sup>22</sup> We believe that the development of biofuels could continue where: (i) sustainability standards are in place and enforced; and (ii) there is wider action to prevent damaging land use change. Neither of these conditions is met currently. Standards for biofuels will not be in place until 2011 at the earliest, and effective mechanisms to protect forests will not be in place until after 2012 even if they can be agreed as part of a post-Kyoto agreement. We believe that it is dangerous to push forward with this policy in the absence of adequate information or effective safeguards. Doing so contradicts the precautionary principle agreed at the Earth Summit in Rio.<sup>23</sup> It is also contrary to the findings of the UN Millennium Ecosystem Assessment that, in order to tackle substantial and irreversible loss of biodiversity, significant changes in practices were required, including 'proactive action to address environmental problems before their full consequences are experienced'.<sup>24</sup>

**8. Without standards for sustainability and safeguards to protect carbon sinks we believe policies that encourage demand for first generation biofuels are damaging. We reiterate our case for a moratorium on policies aimed at increasing the use of biofuels and urge the Government to resist attempts to increase EU biofuel targets. The review of biofuels announced by the Government is important, and it would be a mistake to press ahead in the absence of the information needed to inform effective decision making.**

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20 Environmental Audit Committee, *Are biofuels sustainable?*, paragraph 78

21 Environmental Audit Committee, *Are biofuels sustainable?*, paragraphs 71-77

22 Government responses to recommendations 4, 5 and 8—see appendix, pages 7 and 8

23 <http://www.jncc.gov.uk/page-1575>

24 Environmental Audit Committee, First Report of Session 2006–07, *The UN Millennium Ecosystem Assessment*, HC77

## Appendix: The Government's response to the Environmental Audit Committee's Report on the sustainability of biofuels.

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### THE GOVERNMENT'S RESPONSE TO THE ENVIRONMENTAL AUDIT COMMITTEE'S REPORT ON THE SUSTAINABILITY OF BIOFUELS

On 21 January 2008 the Environmental Audit Committee published a report following an inquiry into biofuels and the role that they might play in addressing fuel security and climate change. The Committee's report "Are Biofuels Sustainable?" makes a number of conclusions and recommendations and raises a number of concerns about the sustainability of biofuels. The Government's response to the Committee's conclusions and recommendations is set out below.

#### **1. Biofuels can be used to reduce greenhouse gas emissions from road transport. (Paragraph 23)**

The Government welcomes this conclusion and agrees that there is a role for biofuels in tackling climate change providing they are cost-effective and are sustainably produced.

#### **2. A potentially significant benefit of a new sustainable biofuels market in the EU, from which developing countries could stand to benefit, could be that it would help to create economic conditions which would assist in securing international sustainability standards for agricultural products more widely. (Paragraph 25)**

The Government agrees that the development of sustainability standards for feedstocks for biofuels could help the development of standards in other sectors. However, the biofuel market is far smaller than the food sector and there will be limitations to how much a biofuel market can lead developments in wider areas.

#### **3. As different biofuels are produced in a number of ways from different feedstocks with varying impacts, it is difficult to generalise the benefits or costs of biofuels. Nevertheless, today most biofuels are produced intensively from feedstocks in ways that could have serious environmental consequences. (Paragraph 32)**

The Government recognises that the environmental performance of biofuels can vary considerably according to such factors as where and how the feedstocks are grown. Current scientific consensus suggests that the best biofuels can offer greenhouse gas savings of around 80% compared to fossil fuels. The worst offer no greenhouse gas savings at all, and can have damaging social and environmental impacts.

It is therefore essential that we develop mandatory sustainability standards for biofuels. As a first important step, the Renewable Transport Fuel Obligation (RTFO) will include a requirement for fuel suppliers to report on the carbon savings and sustainability characteristics of their biofuels. Information about suppliers' performance in these respects will be made publicly available. Proposals for mandatory standards are included in the draft Renewable Energy Directive which the European Commission published on 23

January. In negotiations on the Directive we shall wish to see these broadened and made as robust as possible.

The Government announced on 21 February that the Renewable Fuels Agency would lead a study of the wider economic and environmental impacts, particularly indirect impacts such as land use change, of different forms of biofuel production. An initial analysis is due to be provided to Ministers by the early summer. The results of the study will be relevant to the development of both the UK's and the EU's policies in this area.

**4. The sustainability standards applied by the Renewable Transport Fuel Obligation are unlikely to prevent environmental damage from biofuels. In the UK aggregate environmental impacts might make it difficult for us to meet a range of targets, including those relating to halting biodiversity loss or improving water quality. (Paragraph 33)**

Whilst by no means a perfect system, the reporting mechanism under the RTFO will be an important first step towards mandatory standards. Fuel suppliers' reports will cover issues such as the effects on biodiversity and water quality and the amount of greenhouse gas savings. For feedstocks grown in the UK this should enable a high level of accurate data on environmental impacts to be collated.

In addition to the reporting mechanism there are existing regulatory controls concerning water quality that UK farmers already have to comply with.

**5. Biofuels standards should be changed to ensure that support is given only to those that deliver environmental improvements over fossil fuels in terms of not only greenhouse gas emission reductions but also wider impacts such as fertilizer and pesticide pollution. (Paragraph 34)**

The Government announced in 2007 that it aims to introduce mandatory sustainability standards for biofuels in 2011. The draft Renewable Energy Directive contains a framework for sustainability and would require a minimum greenhouse gas saving of 35%. In future negotiations we shall be seeking for the sustainability standards in the Directive to be made as robust as possible.

The RTFO reporting mechanism will encourage the use of low-carbon biofuels, and will encourage transport fuel suppliers to consider matters such as fertilizer and pesticide use. UK farmers already have to comply with regulatory controls concerning soil degradation and contamination of water supplies. Additional measures needed to address problems with pesticides in water are being examined in the context of the implementation of the Water Framework Directive.

**6. In the absence of such standards the Government and EU has moved too quickly to stimulate the use of biofuels. Until they are developed the Government should place a moratorium on policies aimed at increasing the use of biofuels. (Paragraph 34)**

The RTFO starts off at an appropriately cautious level, with a 2.5% biofuels target (by volume) in 2008/09 rising to 5% in 2010/11. A moratorium on policies such as the RTFO would mean missing an opportunity to make carbon savings that we believe biofuels can deliver now. It would also mean reneging on earlier commitments. Investment decisions

by biofuel producers and fuel suppliers have been made on the back of those commitments. But we will not support any increase beyond current targets without being satisfied that the conditions set by the March 2007 European Council are met.

**7. One of the most effective methods of monitoring land use change is the deployment of earth observation technology. The Government should give as much support as possible to the appropriate technologies as well as to international co-operation on the shared use of earth observation data. (Paragraph 48)**

Monitoring land use, and associated changes, from space is a diverse and complex area in which the UK has much expertise and experience. Last October the Minister for Science and Innovation, Ian Pearson, launched a new centre to develop satellite instruments to observe earth from space. The Centre for Earth Observation Instrumentation brings expert scientists and industrialists together to develop new ideas and technologies for future space missions to improve understanding of the environment and climate change. UK partners are also actively involved in European activities in this area, such as under the EU Sixth Framework R&D Programme 'GeoLand' project.

**8. The stimulation of biofuels production by the Government and EU is reckless in the absence of effective mechanisms to prevent the destruction of carbon sinks internationally. The Government must ensure that carbon sinks are effectively protected before providing incentives for the use of biofuels. The Government should also explore the development of international mechanisms to enable the creation of new carbon sinks. (Paragraph 53)**

The Government believes that biofuels policy can be progressed, provided that it is accompanied by strong sustainability standards in conjunction with wider action for the protection of forests and other carbon sinks. Since 2005, the UK has been working actively with other negotiating partners under the UN Climate talks to develop a mechanism on the Reduction of Emissions from Deforestation and Degradation (REDD) in developing countries. In Bali in December last year it was agreed that deforestation should be included in a post-2012 climate agreement. There will be a process under the Bali Action Plan for establishing how to achieve this before the Climate Change conference in Copenhagen in 2009.

In addition to deforestation (carbon stock reduction associated with land use conversion from forest to non-forest), the decision at Bali includes the gradual damage caused by degradation (carbon stock reduction below the threshold for deforestation), as well as further consideration of how to reward the sustainable management of forests.

The REDD decision text encourages demonstration activities to help develop the necessary capacity for developing countries to participate and to pilot the approach. The UK has committed £50 million to slow the rate of deforestation in the Congo Basin. In Bali, we announced a contribution of £15m to the World Bank Forest Carbon Partnership Facility (FCPF), a pilot programme designed to implement and evaluate a market-oriented incentive scheme for reducing deforestation rates in three to five developing countries, over a period of up to ten years, and for building capacity in about twenty countries. The UK is scoping a project to test the development of national inventories for REDD in developing countries with tropical forests.

## Ecosystem service assessment

**9. We welcome the recently published action plan for embedding an ecosystems approach as it shows that Government is seeking to take better decisions in relation to the UK's natural environment and the protection of ecosystem services. But biofuels policy currently fails to follow such an approach. There are significant knowledge gaps relating to land management for sustainable bioenergy production and for carbon sequestration. In order to align biofuels policy to an ecosystems approach the Government must commission work to assess:**

- **the potential in the UK for carbon-oriented land management;**
- **how UK land managers might better be rewarded for maintaining, improving or creating carbon sinks and other ecosystem services; and**
- **the potential for UK sustainable bioenergy production. (Paragraph 57)**

The Government recognises the vital importance of maintaining healthy ecosystems and has set out, in the action plan mentioned, its approach to embedding an ecosystems approach.

The Government will shortly consult on a Soil Strategy for England which will give priority to halting the decline of soil carbon stores. In addition research is being undertaken to identify and develop land management practices that protect soil carbon and which may reverse any decline. A project has been set up, involving partnership working by Government and agencies, to establish the risks to peat soils and to determine the land management practices and measures required to ensure peat soils are protected and enhanced.

The Government agrees that some knowledge gaps remain and a strong programme of research is in place addressing

- Measurement of emissions from agriculture
- Mitigating agricultural nitrous oxide and methane emissions
- Climate change impacts and adaptation
- Energy in agriculture and food
- Bioenergy
- Renewable materials.

Land managers are rewarded for their contribution to ecosystems services through agri-environment payments. Currently over 60% of agricultural land in England is managed under agri-environment schemes. While these schemes have specific objectives, Defra is commissioning research into the contribution of the current scheme, Environmental Stewardship (ES), to ecosystems services. Recent research has shown that ES already makes a contribution to reducing greenhouse gas emissions from agriculture through, for example, reducing chemical inputs and by maintaining and restoring habitats that act as carbon sinks. It is expected that more will be done in future to enhance this contribution.

Defra is working to raise awareness of climate change among farmers and land managers and influence their behaviour to reduce greenhouse gas emissions. This includes identifying measures to reduce methane, nitrous oxide and carbon dioxide from agriculture, forestry and land management, and the policy levers needed to encourage changes in behaviour. The Farming Futures project is developing practical advice for farmers to help them reduce their greenhouse gas emissions and adapt to the impacts of climate change.

Defra is exploring the options for market mechanisms for greenhouse gas emissions trading in the agriculture, forestry and land management sector. Earlier this year the Government commissioned a study by NERA Economic Consulting, which looked at the feasibility of a trading scheme for agriculture, forestry and land management and the costs and benefits. The Government is now considering the results of the study and whether further work and analysis is needed.

Anaerobic digestion can help reduce greenhouse gas emissions by capturing methane from the decomposition of manure, slurry and other organic material to produce a biogas, which can be used as a source of heat, power or vehicle fuel. The Government is working with local authorities, businesses and farmers, to drive a faster growth in the use of this technology in a way that is both cost effective and beneficial to the environment. Hilary Benn announced on 18 February 2008 that Defra is making around £10m available from the Environmental Transformation Fund for the construction of new anaerobic digestion demonstration plants.

The Biomass Strategy (May 2007) set out estimates, from the European Environment Agency and other sources, which indicate the potential for a significant expansion of bioenergy production in the UK consistent with environmental protection. This potential will be considered further in the preparation of the UK's Renewable Energy Strategy on which the Government expects to consult in June 2008.

## Food security

**10. A large biofuel industry based on current technology is likely to increase agricultural commodity prices and, by displacing food production, could damage food security in developing countries. Only when technology improves and an appropriate regulatory framework is in place should biofuels be utilised. When these changes have occurred barriers to free trade in bioenergy could be removed to allow developing countries to take advantage of the market and so that UK taxpayers can take advantage of lower prices. Even then impacts on food security should be closely monitored. (Paragraph 63)**

**11. Given long-term demographic and climate change trends that might add further to food security problems we question whether transport biofuels have a long-term role. (Paragraph 64)**

The global demand for palm oil and other agricultural commodities is increasing rapidly. However, there are many reasons for this, such as an increasing world population, increasing affluence and changing diets in the Far East, and poor harvests of other crops in recent years. Biofuels have so far played only a very small part: less than 5% of all palm oil

is used for biofuel. Within the EU there is considerable potential to increase production of feedstocks in response to additional demand, with much idle agricultural land that could be readily brought back into productive use.

The Government takes the issue of food security seriously. It will ask the Renewable Fuels Agency (RFA) to monitor how markets are affected by growing biofuel demand, using the reports from biofuel suppliers. The RFA will be required to include an assessment of these effects in its annual report to Parliament. The Government will continue to gather evidence on the impacts of biofuel use to help ensure that targets are set at appropriate levels. The RFA's study of the wider economic and environmental impacts, particularly of indirect impacts such as land use change of different forms of biofuel production, will also be important in terms of future policy development.

In the longer term, second generation biofuel technologies have the potential to reduce pressure on land because they can use a wider range of feedstocks, including waste. However, the Government does not believe it is feasible to wait for technological improvements before utilising biofuels. It is through stimulating a market for biofuels that we will encourage investment and the development of advanced technology. The draft Renewable Energy Directive contains a proposed framework for sustainability standards. We shall negotiate to ensure these are made as robust as possible in respect of global environmental impacts. The reporting mechanism under the RTFO which starts in April will help to improve data gathering among suppliers and assist in the development of these standards.

### **Is current biofuels policy justified?**

**12. Current UK and EU policy fails to ensure the most efficient use of bioenergy in terms of the greenhouse gas mitigation potential of the land on which it is grown. It does not deliver good value for the taxpayer. The Common Agricultural Policy should be adjusted to ensure that bioenergy feedstock production no longer receives agricultural subsidies where it fails to constitute the most effective use of sustainable bioenergy resources. (Paragraph 67)**

**13. Transport biofuels have received disproportionate attention and funding in comparison to other policies which could reduce greenhouse gas emissions at lower environmental risk and lower cost. The focus on biofuels is an example of silo policy-making as the Department for Transport has failed to ensure that the policy fits rationally with cross-Government action on climate change. (Paragraph 78)**

Biofuel policies are part of a wider programme to address climate change, developed across a range of Government Departments. In the transport sector biofuels offer the potential for saving carbon although their use can be relatively expensive compared to other uses of biomass. However, as noted above, there needs to be a market in biofuels if industry is to have any incentive to make technological developments leading to cheaper biofuels with better greenhouse gas savings.

The European Commission will publish shortly its proposals for the CAP Healthcheck. We expect these to acknowledge the need for ongoing reform towards a market-based agricultural policy and to take into account the environmental risks and opportunities of

agriculture. We expect the Commission to propose the abolition of the existing aid for biofuel crops, on the basis that this type of support is unnecessary given the strong development of the biofuel market. We are already supporting the establishment of perennial energy crops through the UK's Rural Development Programmes, subject to strong safeguards to ensure a favourable environmental impact. These crops are used for heat and electricity production and could also be used for biofuel as new technologies develop.

**14. Support for biofuels has been premature given the substantial environmental risks associated with current technologies. Second generation biofuels might have a role to play in reducing emissions from transport at some point in the future. In the meantime other transport measures are required. Indeed, these wider measures can deliver significant and cost-effective GHG savings without the environmental risk of first generation biofuels. They could lower UK transport emissions by 14% in 2020 from 1990 levels. (Paragraph 79)**

The Government agrees that second generation biofuels could have an important role to play by reducing the pressure on land and the amount of waste that goes into landfill. The Government's role is to set the right market conditions for the best biofuels to flourish and we will do that through the RTFO.

The Government also agrees that biofuels are only a part of a much wider picture in terms of tackling climate change. We have put in place a range of policies which, taken together, will have a significant impact on transport emissions. These include policies to improve the fuel efficiency of vehicles and to enable individuals to make more environmentally friendly travel choices.

We are working to enable people to make more informed choices about how and when they travel. The Smarter Choices programme promotes techniques for influencing travel behaviour towards more sustainable options such as walking, cycling, travelling by public transport, and car clubs and car sharing. These include improved information, marketing of options, organising services to address the needs of target groups, providing new services focused on target groups (such as workplaces or developments) and providing new options that reduce the need to travel at all, such as tele-working and tele-conferencing. The Government's ACT ON CO2 communications campaign provides advice to drivers on more fuel-efficient driving and on buying more fuel-efficient vehicles.

**15. In order to stimulate the development of second generation biofuels and other low carbon fuels we recommend that the RTFO is reformed exclusively to stimulate the development and use of low carbon fuel technologies, rather than to simply encourage the use of conventional biofuels. As part of this:**

- **certificates should be granted on a highly differentiated carbon-saving basis to encourage the development and use of those technologies that deliver the most greenhouse gas emission reductions from the start of the scheme; and**
- **long-term market stability must be granted to give the confidence required to stimulate the development of effective technologies—referential tax status should be guaranteed at an appropriate level out to 2020. (Paragraph 80)**

The Government agrees that encouragement of low-carbon fuel technologies should not be limited to biofuels. It would be possible in the future for other renewable fuel technologies to be included in the RTFO. In June 2007 we announced the aim of rewarding biofuels under the RTFO according to their carbon savings, with effect from April 2010, subject to World Trade Organisation rules and to EU technical requirements and issues concerning potential barriers to trade. In October 2007 we produced an informal policy paper on this proposal. We continue to discuss these issues with the Commission in the light of the proposals in the draft Renewable Energy Directive.

The draft Directive proposes that biofuel produced from certain categories, such as waste and non-food sources, should count as double for the purposes of meeting national support schemes for biofuels. In negotiations on the Directive we shall seek to relate this provision more closely to carbon savings.

The Government agrees that long-term market stability is required to stimulate technological advances. We are helping to provide this stability through the mechanism of the RTFO.

**16. These changes, alongside robust sustainability standards, should ensure that support is no longer provided for the production of damaging first generation biofuels. Even with these changes it is not clear to us that current level of expenditure on alternative fuels is justified in light of our assessment that the money could more effectively reduce emissions elsewhere. Therefore we call on the Committee on Climate Change to report at the earliest opportunity on how more appropriately to stimulate the development and use of low-carbon fuels, taking into account the risks presented in this report. (Paragraph 83)**

This does not fall within the proposed remit of the Committee on Climate Change, which is being established to advise the Government on the emission reductions necessary to meet our long-term targets, and to report annually to Parliament on progress towards meeting them. The Renewable Fuels Agency, as the Administrator of the RTFO scheme, will regularly report to the Secretary of State about the effectiveness of the RTFO.

## PSA 28

**17. The responsibility given to the Department for Transport to consider transport's wider environmental impacts as part of Public Service Agreement 28 is very welcome but current biofuels policy is at odds with the Public Service Agreement and will jeopardise the Government's stated aim to 'secure a healthy natural environment for today and the future'. We call on the Department for Transport to reassess the policy in light of the new PSA. (Paragraph 85)**

The RTFO is consistent with PSA 28 targets and the development of the Government's biofuel policy takes these into account. The reporting mechanism which is at the heart of the RTFO addresses issues such as water quality, biodiversity and air quality. The UK will also seek to ensure that the development of sustainability standards under the Renewable Energy Directive is consistent with the PSA 28 target.

## Rural support

**18. Increased agricultural commodity prices and biofuel support mechanisms will benefit the rural economy. However current agricultural support for biofuels is inappropriate as these mechanisms do not guarantee that bioenergy is produced sustainably. By failing to move away from supporting conventional high input crops the EU is missing a significant opportunity to make overall land management more sustainable while ensuring that bioenergy potential is maximised. (Paragraph 88)**

As described above the Government recognises the importance of ensuring that sustainability concerns are addressed. The reporting requirements in the RTFO and the future development of sustainability standards in European legislation should help to address these issues. Over time the use of second generation biofuels should mean less reliance on agricultural commodities and less land use.

**19. Reforms of agricultural subsidies and support mechanisms to focus only on technologies that are the most effective at cutting greenhouse gas emissions in a sustainable fashion will benefit the rural economy and be better value-for-money for the taxpayer. Arbitrary trade barriers to international bioenergy markets must ultimately be removed, although international regulatory improvements must be in place to ensure sustainable supplies. (Paragraph 89)**

As described above in the response to recommendations 12 and 13 the European Commission is reviewing these support mechanisms as part of the CAP Healthcheck. It is also our intention to modify the RTFO so that it encourages those biofuels that offer better carbon savings. The Government's trade policy supports the removal, as far as possible and desirable, of barriers to trade in goods and services. In this respect, the Government would agree that we should support the removal of barriers to trade in bioenergy, provided that we can ensure robust international standards for sustainability.

## Fuel security

**20. In our view first generation biofuels will not improve fuel security in the EU. Second generation biofuels might have a role to play in the longer-term, but road transport fuel security is only likely to improve significantly when non-oil technologies become available. If transport fuel security is a major concern, measures other than biofuel use should be adopted. (Paragraph 92)**

The Government's support for biofuels is principally because of the benefits they offer in tackling climate change. We recognise that because a wide range of feedstocks can be used to produce biofuels they also offer a degree of diversity in energy supply but they are not seen as a solution to our current dependency on oil. We agree that in the longer term more advanced technologies will have a role to play. It is by encouraging the first generation of biofuels that we can expect to move towards second-generation technology.

## Policy co-ordination

**21. Biofuels policy is a clear example of failure to co-ordinate climate change policy. (Paragraph 93)**

**22. A long-term climate change policy framework should be developed to eliminate misguided or harmful policies, such as current biofuels policy, and to ensure that emissions are reduced in an effective and efficient manner across the whole economy. (Paragraph 93)**

As the Government set out in its response to the Committee's Ninth Report of Session 2006–07: The structure of Government and the challenge of climate change<sup>25</sup>, decisions on climate change policies are co-ordinated across all relevant Departments. The recent announcement of the new climate change Public Service Agreement, as part of the Comprehensive Spending Review, clearly shows that the Government recognises this is an issue which requires the contribution of many departments, as has been formally recognised in departmental strategic objectives.

The Government has reinforced official-level co-ordination of the climate change and energy programme, building on arrangements put in place following the 2003 Energy White Paper, to ensure even greater joined-up delivery. The Climate Change and Energy Strategy Board provides a cross-government focus on delivery and implementation of the climate change and energy programme, domestically and internationally. The Office of Climate Change in particular has added to the Government's capabilities in this area and continues to be successful in bringing together expertise across and outside of Government.

Decisions on biofuels policy have been based on analysis undertaken to a common analytical framework. This is peer-reviewed by other Departments and discussed and agreed at the interdepartmental Analysts Group. Further details of the analysis and the analytical framework are available at

<http://www.defra.gov.uk/environment/climatechange/uk/ukccp/index.htm>.

**23. This report demonstrates there may be potentially damaging environmental impacts associated with measures to reduce greenhouse gas emissions. It is vital that the Committee on Climate Change has and exercises a remit on sustainable development. (Paragraph 94)**

In developing its advice on the level of the carbon budgets and the appropriate level of our long-term targets, the Committee on Climate Change will need to take into account a range of factors, including scientific knowledge about climate change and economic and social circumstances. We therefore do not consider it meaningful to give the Committee a remit on sustainable development. The Renewable Fuel Agency will report regularly to Government on the effectiveness of the RTFO.

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<sup>25</sup> Available at <http://www.publications.parliament.uk/pa/cm200708/cmselect/cmenvaud/276/276.pdf>

# Formal Minutes

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**Tuesday 29 April 2008**

## Members present

Colin Challen  
Mr David Chaytor  
Martin Horwood  
Mr Graham Stuart

Jo Swinson  
Dr Desmond Turner  
Joan Walley

In the temporary absence of the Chairman, Joan Walley was called to the Chair for the meeting.

### ***Are biofuels sustainable?***

The Committee considered this matter.

Draft Report (*Are biofuels sustainable? The Government Response*), proposed by the Chairman, brought up and read.

*Ordered*, That the draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 8 read and agreed to.

The Government Response to the First Report of the Committee in Session 2007–08, *Are biofuels sustainable?*, was appended to the Report.

*Resolved*, That the Report be the Fourth Report of the Committee to the House.

*Ordered*, That the Chairman make the Report to the House.

*Ordered*, That embargoed copies of the Report be made available, in accordance with the provisions of Standing Order No. 134.

[Adjourned till Tuesday 13 May 2008 at 10.00am

# List of Reports from the Committee during the current Parliament

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The reference number of the Government's response to each Report is printed in brackets after the HC printing number.

## Session 2007–08

First Report	Are biofuels sustainable?	HC 76-I & -II
Second Report	Reducing Carbon Emissions from UK Business: The Role of the Climate Change Levy and Agreements	HC 354
Third Report	The 2007 Pre-Budget Report and Comprehensive Spending Review: An environmental analysis	HC 149-I & -II
Fourth Report	Are Biofuels Sustainable? The Government Response	HC 528

## Session 2006–07

First Report	The UN Millennium Ecosystem Assessment	HC 77 (HC 848)
Second Report	The EU Emissions Trading Scheme: Lessons for the Future	HC 70 (HC 1072)
Third Report	Regulatory Impact Assessments and Policy Appraisal	HC 353 (HC 849)
Fourth Report	Pre-Budget 2006 and the Stern Review	HC 227 (HC 739)
Fifth Report	Trade, Development and Environment: The Role of FCO	HC 289 (HC 1046)
Sixth Report	Voluntary Carbon Offset Market	HC 331 (HC 418)
Seventh Report	Beyond Stern: From the Climate Change Programme Review to the Draft Climate Change Bill	HC 460 (HC 1110)
Eighth Report	Emissions Trading: Government Response to the Committee's Second Report of Session 2006-07 on the EU ETS	HC 1072
Ninth Report	The Structure of Government and the challenge of climate change	HC 740 (HC 276)

**Session 2005-06**

First Report	Greening Government: the 2004 Sustainable Development in Government Report	HC 698
Second Report	Sustainable Timber	HC 607 (HC 1078)
Third Report	Sustainable Procurement: the Way Forward	HC 740
Fourth Report	Pre-Budget 2005: Tax, economic analysis, and climate change	HC 882 (HC 195)
Fifth Report	Sustainable Housing: A follow-up report	HC 779
Sixth Report	Keeping the lights on: Nuclear, Renewables, and Climate Change	HC 584 (HC 196)
Seventh Report	Sustainable Development Reporting by Government Departments	HC 1322 (HC 1681)
Eighth Report	Proposals for a draft Marine Bill	HC 1323 (HC 1682)
Ninth Report	Reducing Carbon Emissions from Transport	HC 981
Tenth Report	Trade, Development and Environment: The Role of DFID	HC 1014 (HC 197)
Eleventh Report	Outflanked: The World Trade Organisation, International Trade and Sustainable Development	HC 1455 (HC 354)
Twelfth Report	Transport Emissions: Government Response to the Committee's Ninth Report of Session 2005–06 on Reducing Carbon Emissions from Transport	HC 1718