1. The UK Sustainable Development Commission was established to provide independent advice on sustainable development to the Prime Minister, all government departments and to the devolved administrations. We contributed evidence to the Environmental Audit Committee’s inquiry into the Pre-Budget Report 2004.

2. In this memorandum, which we see as a series of points for discussion, we will be considering three issues which arise from the Pre-Budget Report, which we think are particularly important for sustainable development: the Comprehensive Spending Review process, environmental taxation, and the economics of climate change.

### COMPREHENSIVE SPENDING REVIEW

3. The Pre-Budget Report 2005 is a significant document for the Commission. As well as indicating the Government’s thinking as it draws up the Budget 2006, it provides important signals about the approach being taken to the Comprehensive Spending Review 2007.

4. We welcome the Government’s commitment to analyse five major “long-term trends and challenges”, including “increasing pressures on natural resources and global climate” [1], which we believe is rightly seen as a key background factor which should be taken into account in determining the allocation of government spending. We also believe it is important that the “innovation” challenge includes a focus on sustainability, because of the importance of technological innovation for sustainable development; and for the “global uncertainty” challenge to include consideration of the ways in which pressures on natural resources and the climate act as sources of conflict and instability.

5. We believe it is important to add to the CSR process as outlined in The Pre-Budget Report a systematic approach to the integration of sustainable development considerations, following up the many commitments which point in this direction contained in “Securing the Future: delivering the UK sustainable development strategy” (March 2005).

6. In our view this would need to include making explicit use of the sustainable development indicators published by Defra. The Government have said that they attach greatest priority to the “framework” indicators. Where these are showing signs of an adverse trend - as with greenhouse gas emissions, nitrogen-based air pollution, river quality as determined by chemical composition, and transport by
means of walking or cycling – Government needs to actively consider how public expenditure can tackle this deterioration. As part of the CSR process, we would like to see the Government publishing a response to any deterioration in a framework indicator, showing how it has taken this into account in drawing up the CSR.

7. It is also important for the integration of sustainable development into public expenditure decisions for the Treasury’s accounting methods to facilitate the principle of “invest to save”. Expenditure which creates financial savings in later years, such as investment in energy efficiency measures, should be accounted in a way which recognises that the additional expenditure in the short-term is likely to bring about a reduction in spending in the longer-term. In the case of some other expenditure, Government needs to be cautious in funding technologies that will bring much increased liabilities over the longer term, leading to “lock in” of public expenditure commitments in future. The Treasury should be attempting to estimate and publish figures for the implications of expenditure decisions in one year for government finances in future years. The need to do this is inherent in the concept of “sustainability”, which by its nature is about impacts on future years and not only the current year, or the three or four years covered by a spending review.

8. The Pre-Budget Report also refers to the contributions which will be made to the CSR process by four “analytical studies”. [2] We are concerned that one of these studies, the Eddington Transport Study, appears to be very narrowly economic in its focus. It therefore runs the risk of not properly including important aspects of transport policy, such as the environmental impacts of transport; the importance of the pedestrian street environment for community safety and anti-social behaviour issues; and the trends in retailing and competition policy which are bringing about the closure of many local facilities, such as post offices and corner shops, thereby generating additional demand for transport, as well as reducing access to services for the less mobile. As a result, there is a danger that the Government may fail in the CSR process to integrate its different concerns and objectives in the field of transport.

ENVIRONMENTAL TAXATION

9. “Securing the Future” re-states the Treasury’s commitment to “Making use of the fiscal system, where appropriate, to tackle environmental externalities through developing further existing environmental taxes” [3]. The Pre-Budget report refers to an earlier document: “The Government set out its framework for the use of economic instruments to meet its environmental objectives in the ‘Statement of Intent on Environmental Taxation’ in 1997, which outlined the aim over time of reforming the tax system to increase incentives to reduce environmental damage.” [4] It is not clear what timeframe Government had in mind for “over time” but progress in this field has been extremely slow, in spite
of numerous areas in which environmental taxation could play a positive part in delivering sustainable development goals.

10. Examples of taxes which could be introduced include:
(i) Taxing aviation fuel to reflect the contribution air travel makes to UK greenhouse gas emissions. Removing all subsidies for air travel and ensuring it pays its full costs (including for environmental impacts) would be bound to severely reduce levels of consumer demand by comparison with the alarmingly high levels forecast and uncritically referred to in the PBR. [5]
(ii) Varying Vehicle Excise Duty in order to penalise vehicles with particularly high levels of carbon emissions (as proposed in our submission to the Climate Change Programme Review). [6]
(iii) The extension of road user charging schemes.
(iv) Equalisation of VAT on refurbishment works and new buildings, to end the current bias in the tax system against refurbishment. Our assessment is that an 11-12% level of VAT for both would be revenue neutral. There could be a zero VAT rating for new buildings achieving a certain standard for sustainability (e.g. the top level of the Code for Sustainable Buildings).

11. However, our main concern is not so much with the detail of specific tax proposals, but with the speed of implementation of the general principles set out in the Treasury’s “Statement of Intent”. These were: the use of fiscal instruments to encourage sustainable activities and discourage unsustainable ones; shifting the burden of taxation from “goods” to “bads”; and contributing to “environmentally sustainable” growth. [7]

12. We are concerned that there is no apparent process for measuring Treasury’s own progress towards delivery of the Statement of Intent. No clear indicators or targets have been put in place to measure the level of environmental taxation, or Government progress towards the goal of taxing bads rather than goods. Despite the reduced rate of VAT on energy saving materials and microgeneration in the 2005 Budget, and the continuing impacts of the Climate Change Levy and the Landfill Tax, there is no evidence of a clear trend towards the increased use of environmental taxes as a proportion of the overall tax system. [8]

13. There is, similarly, no evidence that Treasury is taking a holistic view of taxation across the piece, and rigorously assessing the environmental impacts of all taxation – not just those taxes specifically targeting environmental issues. We believe this is a significant failing.

14. Similarly, there is no evidence that the Treasury is systematically examining whether more radical proposals for environmental taxation than those already introduced would work in practice. Treasury has the expertise of fiscal specialists who could, if so mandated, proactively work up policy ideas with an open mind as
to whether they should be adopted or not. This does not appear to have happened.

CLIMATE ECONOMICS

15. The Committee has invited views on “the adequacy of conventional economic analysis ... as a means of evaluating the long-term environmental impacts of climate change.” Without reiterating our view on other aspects of the climate change issue [9], we focus here specifically on the question of economic analysis.

16. The Commission believes it is important to bear in mind the deep differences between two different approaches which are often considered together:

(i) The approach taken in the Kyoto Protocol (and taken further in “contraction and convergence” proposals). This begins from the effects of climate change, data and forecasts about the climate, and data and forecasts about the composition of the atmosphere. On this basis, this approach proposes limits to allowable carbon emissions. There is within this framework scope for the application of market mechanisms to the allocation of carbon emissions, as in trading schemes for emissions permits. The market is here seen as a mechanism to deliver total figures (either separate national totals or ideally global totals) which are derived from natural science, and to a greater (“convergence”) or lesser (“Kyoto”) extent, also considerations of international equity.

(ii) In contrast there are also approaches to the economics of climate change which begin from the market and then attempt to derive theoretically ideal prices from the valuation of the costs of climate change and possible measures to abate it, and then seek to draw policy conclusions on that basis.

17. There are three serious deficiencies with this second approach:

(i) It is methodologically not only complex and requiring a great deal of data, but also involves many assumptions, estimates, and decisions about what factors to include and which to exclude, which are virtually arbitrary. The consequence is that this approach generates very wide ranges of estimates for the same thing, such as how much it is worth investing in abatement measures per tonne of carbon.

(ii) The total “acceptable” levels of emissions and concentrations derived from this approach are not necessarily sustainable, being based on the valuations made (such as “willingness to pay”) by members of existing generations on the basis of
the general population’s current assumptions, rather than on the basis of
collection of the interests of both existing and future generations, using the
best quality scientific information available.

(iii) There is insufficient commitment within the methodology to the principle of
 international equity. For example, studies which value damage done by
abatement measures and damage done by climate change, in order to compare
the two, have found that relatively small amounts of damage to sectors of the US
economy caused by abatement measures count for more in money terms than
the devastation of Bangladesh (which may be the outcome of climate change).
This is because the USA has a far higher GDP than Bangladesh, and energy-
intensive US manufacturing counts for far more in money terms than Bangladeshi
agriculture. It is of course possible – as some studies do - to derive completely
different valuations and policy conclusions on the basis of adjusting the
methodology to allow for some degree of equity, but such “corrections” to the
calculations tend to reinforce objection (i) because of their frequently arbitrary
nature, even though making them is preferable to not making them.

18. The economics of climate change raises some generic difficulties about the
application of conventional economic analysis to long-term global environmental
problems. Some of these are to do with the valuation of long-term costs and
benefits. Others are to do with the development of appropriate accounting
frameworks.

19. On the question of valuation, data have been collected by environmental
economists to show that consumers value, for example, living near to a park or
away from aircraft noise. These studies suggest that monetary values can be
given to these preferences, and that these values are sometimes implicitly
“internalised”, for example in the housing market. It does not follow, however,
that the same analytical techniques can be applied to environmental issues which
are much more long-term, large-scale, dependent for their analysis on complex
scientific data (rather than simply consumer preferences), and raising questions of
international and inter-generational equity. There is every reason to believe that
different techniques and different approaches to valuation will be required, and
this has in fact been recognised in the approaches taken by the IPCC and the
negotiators of the Kyoto Protocol.

20. On the question of accounting, a great deal of effort has been placed on
assessing an appropriate value for the social cost of carbon. Within a rather large
range of uncertainty, the value currently endorsed by Defra and Treasury is £70
per tonne of carbon [10]. Irrespective of the uncertainties surrounding this
number, it is unclear how this number should be used in decision-making
processes, accounting procedures and assessments of progress towards
sustainability. There is an implicit suggestion that incorporating the social cost of
carbon into investment decisions and cost-benefit analyses will lead to the ‘right’
investment decisions being made and ensure that we are on the path to sustainability. This is problematic.

21. To understand why this is so, we need to understand the nature of climate change as an inter-generational economic problem. For the most part the costs associated with climate change will fall in the (sometimes rather distant) future. But the causal influence on these costs lie to some extent in the past, to a lesser extent in the present, and also, to an unknowable extent, in the future. At this point in time, we stand in a position of enormous “ecological debt” to the future. The precise size (and repayment schedule) of that debt is uncertain, but one thing we do know is that incorporating marginal social costs into current investment decisions is insufficient either to account for the size of those future costs or to ensure that we are on a path towards sustainability. A more sophisticated and more committed “spend to save” approach is required which acknowledges the extent and complexity of our current ecological debt.

22. Our hope therefore is that the Stern Review will seek to build on what has been achieved through the Kyoto Protocol, and not undermine those achievements through the application of too-narrowly-constrained environmental economic analyses, which could easily prove to be a barrier to policies to promote sustainable development.

NOTES

2.2.06.
Prof. Tim Jackson
Sustainable Development Commission
Ground Floor, Ergon House, Horseferry Road, London SW1P 2AL.
020 7238 4999.
T.Jackson@surrey.ac.uk