

planning and urban design in the twenty-first century.

In conformity with the Kyoto agreement, each EU country has pledged to cut its emissions of greenhouse gases to help achieve the Union's collective goal of reducing 1990 emissions by 8 per cent before 2010. Only two of the fifteen countries will achieve that target. Britain's greenhouse emissions will be cut by just under 10 per cent by 2010. In contrast, eleven of the countries are expected to increase emissions considerably. The EU is one of the supporters of the Kyoto climate change pact, which therefore appears to be in considerable disarray. The Kyoto protocol is actively opposed by the USA, the world's largest polluter, and it also receives a less than effusive welcome from Russia, the fourth biggest polluter. An adviser to Vladimir Putin is reported as saying 'In its current form the Kyoto protocol places significant limitations on the economic growth of Russia' (*The Guardian*, 3rd December, 2003). There are, however, recent signs that Russia may soften its stance on the Kyoto protocol.

The Kyoto agreement may be in difficulty, but the problem of climate change has not gone away. As Hoskins points out, 'What we know is that, given standard physics we can all trust, then in today's climate carbon dioxide actually does play an important role in the energy balance in the planet . . . The increase in the carbon dioxide in the atmosphere has corresponded to about half of what we have emitted and all our calculations suggest that the increase we have already put in there is having an important change on the energy balance of the planet . . . The climate system has always varied and that is without us taking part in it. What we are doing is taking the earth's

climate at a time when it is relatively warm and we are turning the heat up' (House of Commons, Environment, Transport and Regional Affairs Committee, Minutes of Evidence, 5th July, 2000). Road transport's contribution to the UK's CO₂ emissions is large and growing. So where does the UK go from here? The aim of the Government is to reduce emissions by 20 per cent by 2020 – a brave goal indeed, and a much more daunting task than the 8 per cent by 2010: the painless savings will all be made before 2010. The Royal Commission for Environmental Pollution, however, urges the Government to work towards a 60 per cent reduction of CO₂ emissions by 2050.

Why should the British Government be following a policy that reduces pollution in this way and possibly affecting negatively the country's economy when few other developed nations are responding to the global environmental crisis? Furthermore, why should this country adopt these policies when climate change may be so far in the future? These questions represent one line of questioning at the evidence taken before the Environment, Transport and Regional Affairs Committee of the House of Commons of Great Britain of 5th July, 2000. As Butler put it at that meeting: 'How on earth would a 60 per cent reduction in UK production of CO₂ be effective in the great scheme of things . . .?' The reply by Professor Blundell makes a good case for the UK adopting this target: 'By definition you must be right that if it were just the UK it would be a marginal consequence. It does need leadership and I think we have to be quite clear that we have to move according to our own conscience. In the future it will affect our grandchildren and future generations.' He also went on to say that the reductions in emissions in fifty years'

time ‘... need changes in the way we live at the present time’. For example, the infrastructure for roads and public transport, together with the town extensions we build, will be with us for at least fifty years and will strongly influence the ways in which we consume energy. Patterns of future energy consumption are also determined by the strategies we now adopt for energy generation and investment in research for new energy technologies.

The current British Labour Government and the former Conservative Government, on this global issue of pollution, have both taken a creditable stand – one of leadership – despite the unpopularity of aspects of the policy with the electorate. However, following a policy radically to reduce the quantity of greenhouse gases is not all ‘bad economic news’. There is much waste of the energy that is produced in power stations and used in the home, or that used in our vehicles and the way we move around in cities. Avoiding such waste must lead to an efficiency gain, making this country more competitive against those not engaged in the activity of sustainable development. Developing new technologies for waste management, alternative more efficient energy sources and greener transport will give to the UK a ‘first in the field’ advantage for future exploitation of the new technologies by those who are now reluctant to make those necessary changes.

DEVELOPING SUSTAINABLE TRANSPORT

Top of the list of objectives for achieving sustainable transport in this country, as we have seen, set out by the Royal Commission on Environmental Pollution (1994) was the

integration of transport and land use policies at all levels of government so that there would be less need for transport and so that a greater proportion of movements would be made by environmentally friendly modes of travel. The publication of *A Guide to Better Practice: Reducing the Need to Travel through Land Use and Transport Planning* (DOE, DOT, 1994) set the scene for the revised *PPG 13 Transport* (DETR, 2001a). These documents were fine in principle, and appeared to place the integration of these two policy areas at the centre of government thinking. The Government’s *10 Year Plan for Transport* (DETR, 2001c) however was not met with universal acclaim: it has been criticized in particular by those lobby groups supporting the environment, public transport and more generally by those espousing the ideals of sustainable development.

It is widely agreed that:

- The UK has the most congested roads in Europe.
- That over the next decade this congestion is likely to grow by between 11 and 20 per cent.
- The congestion will affect both the strategic network and local roads in towns and cities.
- That congestion costs the UK economy about £20 billion each year.
- That 71 per cent of UK households have one car, and 25 per cent have two or more cars.
- That roads journeys account for 93 per cent of passenger travel within the UK (*Planning*, 18th April, 20-02, ‘Planning Going Nowhere Slowly’).

Furthermore, the National Office for Statistics’ latest survey reveals that the