

## CARFREE LIFE

The first UK conference of carless citizens

### Stop passing the buck!

Drastically curtailing our use of fossil fuels for transport: a public health and environmental imperative  
**Notes prepared by Dr. Mayer Hillman** (Senior Fellow Emeritus, Policy Studies Institute, London) for his lecture at the Directory of Social Change, London, 15 November 1997

1. What I have to say is largely drawn from my research and from reflections on its findings. The principal theme is that you cannot simply deal with each area of policy in isolation in view of its scope for furthering or interfering with the success or failure of policy objectives in other areas. And you cannot ignore moral and ethical considerations. Optimal and sustainable solutions can only be derived from an holistic approach - which we ignore at our peril.

2. We are at a defining moment in history: in the past, we have been able to look to economic growth as the source for raising material standards and prosperity as a response to arguments about equitable

shares in that prosperity. A joint report of the UK Royal Society and the National Academy of Sciences in the US stated that '... The future of our planet is in balance ...' It provided cold comfort for optimists who assert that science and technology will come up with realistic answers to avoid the need for making drastic changes to our non-renewable resource-dependent and energy-intensive lifestyles. We cannot go on burying our heads in the sand on this issue.

3. The issue of global warming represents an imperative over-arching all aspects of public policy and, therefore, commercial, institutional and private practice and behaviour. In responding adequately to it, we also provide solutions to the lesser issues including local air pollution. We now know that the planet's capacity to act as a reservoir for greenhouse gases is limited and that we must be cautious about our consumption of finite resources. The signal that the world is now receiving is akin to one stemming from divine intervention. The problem stems from man-made activities exaggerating the planet's natural greenhouse characteristics which have so far enabled it to support life. Nearly all the hottest years since records have been taken have occurred since the mid 1980s. The tundra in north Canada, Alaska and Siberia is slowly melting, in the process releasing methane gases which in turn are a significant contributor to climate change. Already changes have been observed in the character of the Gulf Stream which in the opinion of the government chief scientist, Sir Robert May, are 'awesome'.

4. Concern about this was highlighted by the Inter-Governmental Panel on Climate Change (IPCC) a few years ago. Its Reports have indicated that a reduction of carbon dioxide emissions of at least 60 per cent is needed to stabilise the world's climate, and a recent review has confirmed this assessment. Even this may prove insufficient because of the probable doubling of the world population over the next 50 years, with most of the increase in developing countries which are understandably aspiring to the standards of living in more affluent ones and are in the process of industrialising their economies in ways that require intensive use of fossil fuels and therefore intensive output of greenhouse gas emissions. It is important to bear in mind that developing nations are targeting their economies, aiming to match those of the developed world as soon as possible. It is salutary to note that the level of car ownership per capita in this country is 350 times as high as it is in China - and China's growth rate is currently 8% p.a. which will lead to a doubling of its GDP by the year 2010 and a five-fold increase by 2020. Nor does our desire for higher standards appear to be near satiation. The demand is never ending and no government seems prepared to cap it - 'we all want to drive and fly' don't we? The UK government now forecasts a 50% increase in greenhouse gas emissions from transport sources in the UK by the year 2020. And, on current forecasts of UK air travel, emissions

will exceed those from road travel by about the same year.

5. So, how have governments around the world responded to this? Some have taken it more seriously than others. Last month, the Chancellor of the Exchequer made a statement in the House of Commons on 'the most important decision this country is likely to face in our generation' - no, he was not talking about climate change but about the European single currency! Most appear to believe or hope that it will require no more than some belt-tightening. Others cling to the view that the climate scientists could prove to be wrong. Conflicting messages are put out by the media with, for instance, TV programmes drawing attention to the prospect of ecological catastrophe - only this week, a description of the dramatic changes occurring with the El Nino effect in the Pacific and the melting of the Antarctic ice shelf - but at the same time projecting images indicating a 'business as usual' future. For instance, air travel (at present, 11 million visitors come to the UK and about 11 million UK residents travel abroad, the great majority by air) and car traffic are both forecast to rise substantially in the next two decades. More commonly, the reaction of politicians appears akin to one in which the scientists' warning is to be treated as just a bad nightmare from which we will awaken and be able to proceed along the *gradus ad parnassum* towards an ever-expanding economy and material prosperity. We can carry on, it is implied, oblivious of the increasingly likely fact that we no longer have a choice if world-wide catastrophes induced by climate change are to be avoided.

6. Rio agreement for industrialised world to stabilise at 1990 emissions by 2000 = 0%. In actuality, only UK and Germany likely to achieve this target and their success cannot be credited to policy on reducing these emissions. US emissions up by about 13% since 1990.

7. At Kyoto the intention of reaching international agreement, with UK leading the way with the aim of reducing by 20% by 2010. Clearly, much more significant reductions will be needed if damage is to be prevented and this will require far more dramatic changes in fossil fuel use for road, rail and air travel than have been contemplated to date. The overriding consideration will have to be recognition of the wide-ranging implications of climate change for the character, form and function of urban areas and for the lifestyles and working practices carried out in them.

8. Escape routes from facing up to realities. Five key arguments have been put forward. First, it is claimed that it may be too early to say that the earth is necessarily in the grip of global warming triggered by human activity: in other words, most climate scientists may have made incorrect calculations. However, lack of full scientific certainty should not be used as a reason for postponing cost-effective measures to deal with climate change.

9. The second line of defence has been to cite the contribution that technology is making to reducing fuel consumption by improving efficiency in various operational aspects and pollutants by the use of alternative fuels (two days ago the government announced its intention of converting its car fleet to run on natural gas). However, it is clear that these measures when combined with competition, generate more demand with the result that the savings can, and often are, lost as a result of that increase.

10. The third positional gambit has been to point out how unrealistic it would be for any one country to act unilaterally on this issue. However, the fact that many EU countries are almost certain to fail to meet the modest target of greenhouse reductions suggests that policy in this

domain requires more intense activity rather than the reverse.

11. Fourth, somewhat more radically, it has been argued that the solution can be found in policy based on fairer and eco-oriented taxation. However, modelling the effect of the higher fares that would come in the wake of any politically realistic increase in tax suggests that demand would not be significantly affected. Alternatively, with this same approach, the 'polluter pays principle' could be interpreted as a licence to rape the environment is cited as the route to salvation whilst the proposition of a 'rapist pays principle' is clearly totally unacceptable.

12. Finally, it is argued that individuals can't be coerced. When pressed to admit that time may be up for our extravagantly damaging patterns of activity, politicians have shielded themselves behind a claim that, in a democratic society, the necessary resolute action cannot be imposed upon an unwilling public - a remarkable coalition on the road to Armageddon! The point is made that, in contrast to many other fossil fuel-dependent activities, no realistic alternative to the car exists for most current journeys made by car - 'how can I cycle 20 miles to my place of work?'. It is claimed therefore that it is more cost-effective to devote attention to achieving reductions in the other sectors of the fossil fuel-using economy. Even in the face of the possibility of catastrophic environmental damage owing to the fact that the population of the planet cannot conceivably support the developed world's level of energy-intensive lifestyles, these arguments imply that there is an unquestionable right for motorists to continue to use their cars unless some matching alternative can be found.

13. The source of the failure of policy in this regard arises from the link between current lifestyles and the urgent need for action on lowering carbon emissions. As yet, however, governments around the world have given no warning that the public may have to be called upon to make changes entailing substantial rather than modest alterations to the lifestyles that they have only been able to adopt because their environmental implications have been largely ignored. At a conference earlier in the week, the Environment Minister, Michael Meacher, played down the need for addressing these issues urgently, introducing, in my view, a note of complacency by stating that we must find ways of achieving sustainable development 'without denying people their good and proper expectations of improving standards of living'. In a similar vein, one hears talk of 'people's freedom to use their car' and the near-sanctity of personal choice.

14. This could pose a major challenge to a range of conventional assumptions: first, that demand should be met if at all possible; second, that growth is desirable and sustainable in a resource sense and only causes environmental problems that can be resolved satisfactorily by fuel switching, improving energy efficiency, and the so-called decoupling of economic growth and energy consumption; third, that energy efficiency and energy conservation are synonymous terms whereas it is clear that improving energy efficiency lowers the unit cost of energy use and in the process can therefore lead to an increase in energy consumption; fourth, that ecological strategies are more costly than conventional ones, a theme reflected in the proposition that public transport should be subsidised rather than that a proper price should be paid for the damage entailed in the use of private transport; and fifth, environmental protection can realistically only be afforded from the proceeds of economic growth. It may be that the objective of rising material wealth and current policy and practice on population control may have to be abandoned in favour of solutions derived from a very different policy base.

15. Whilst limiting environmental damage, further and faster, by air, rail, bus and car is the goal; shortage of public funds for improvement; reducing car use by investment in public transport alternatives, implying that without matching alternatives, it is unreasonable to expect people to forego car use; free fares, road pricing, petrol price increases, through-ticketing, PFI and SRS. This position is illustrated by the Deputy Prime Minister's recent statement that 'We must face up to the challenge of using the car less and public transport more' and his call for an examination of options for an M25 rail alternative.

16. Solutions do not lie, as is the current conventional wisdom, in improved energy efficiency and the transfer of our patterns of car use to public transport, first because the energy intensity of public transport travel is not sufficiently low - nor is the level of noise, danger or pollution; second, because it is wholly unrealistic to expect that public transport can match the convenience of the car however much we invest in improved bus and rail services; and third, and most importantly, because there are more effective and appropriate solutions focused on promoting thrift in our use of fossil fuels, uniquely by cycling and walking - cycling first owing to the equation  $pr^2$ .

17. I referred to the climate scientists' call for a reduction of carbon dioxide emissions of at least 60 per cent to stabilise the world's climate. Obviously the reduction will have to vary according to a principle other than one of average. The populations of the Third World cannot be expected to reduce their emissions by making the same contribution that we do in the affluent West. On a per capita basis - and there are neither moral grounds nor political prospect of obtaining international agreement on any other basis - the UK must cut its emissions by about 90 per cent - a very tall order. The task of managing the transition to lifestyles and patterns of development, with greatly reduced use of fossil fuels, is an enormous challenge to us all as well as to policy makers. Cruise analogy where limited food capacity for the passengers: first-class versus steerage.

18. What does such a reduction mean then for the typical UK household when related to its current annual average emissions of over 25 tonnes? At present, each household's share for the operation of power stations and refineries is about 11 tonnes; for industry, 5.5 tonnes; for domestic uses, mainly heating, 3.5 tonnes; and for transport, mainly car use, 4.5 tonnes. Clearly, the household 'ration' of 2.5 tonnes, that is one tenth of the current level, will only stretch to the most essential of energy-intensive activities.

19 To illustrate the significance of this figure for our current lifestyles, reference can be made to the quantity of carbon dioxide emitted on a round trip by air from London to Florida, based on the aviation fuel used and typical aircraft seat occupancy on such flights. Carbon dioxide emissions for one person's round trip accounts for 1.8 tonnes, that is, just under half of the total average annual tonnage that can be allowed for each person for all purposes, with the central IPCC recommendation. If the world climate is to be stabilised, it represents nearly double the annual tonnage that could be allowed on an equity base. And average annual car mileage accounts for over four times that annual tonnage.

20 We can't continue to 'pass the buck'. We cannot excuse ourselves for not taking action on the grounds that it is the responsibility of government as we know full well that government decisions are too heavily influenced by electoral rather than public interest objectives. We must recognise that the targets for greenhouse gas emission

reductions will only be achieved if there is due recognition of its link to the character, form and function of the areas we live in and the lifestyles and working practices we carry on in them. If the contents of policy are to be seen more than expressions of intent which do not require translating into practice, then there must be far more political and personal commitment.

21. Public awareness must be raised on the need for a holistic approach in our actions by government and ourselves - to promote significant changes to our lifestyles and to introduce necessary measures which will encourage and enable us to do so - discriminating against geographically spread patterns of activity and favouring those of a local nature, increasing the costs of motorised travel, legislation on charging for private non-residential parking, lower and better enforced speed limits, allocating adequate funds for creating cycle networks, changing the rules on VAT which presently favour fuel consumption rather than fuel saving and so on.

22. The need for motorised travel can be dramatically reduced through land use decisions and by considering their energy implications. Local authorities can be encouraged to create cycle and pedestrian networks (Gatlink costs the equivalent of 2.5 metres of JLE and total London Cycle Network costs the same as 300 metres), followed by bus networks, introducing far more parking control. They can be encouraged too to set an example through the travel patterns of councillors and staff and the promotion by industry, commerce and themselves of green transport strategies.

23. We ourselves should be far more conscious of the fact that our current lifestyles are having serious deleterious effects on our health as well as on the natural and built environment - the polluting effects of fuel used for transport purposes, the spread of noise, the loss of the street as a social focus and, with it, community conviviality, and the increasing danger, and consequently enforced behavioural changes, from the rising volume and speed of traffic, not to mention the loss of finite resources on which future generations have obvious claims. The argument that any individual's use of the car has only a marginal effect - the rationalisation that we all employ - becomes pretty irrelevant when it is recognised that there are now 30 million licence holders in Britain each driving 20 miles a day. One highly practical way of moving forward is by making an inventory of the environmental implications of our present lifestyles - in the same way that some people adopt the Weight Watchers regime. On this, I commend to those of you with access to a word processor Going for Green's two floppy discs EcoCal: your environmental health check (Tel: 0345 002100). In terms of curbing car use, this does not go far enough: it calls for 'travelling sensibly' by making fewer car journeys and sharing cars, walking and cycling more, using public transport more, and keeping cars properly tuned and maintained. But this is highly unlikely to deliver the degree of reduction needed without far more attention being paid to locational decisions which have the scope for the greatest reduction.

24. The case for a radical change in policy in the context that I referred to at the outset considerably strengthened by reference to other relevant public interest objectives - public health (expand), economy (expand), equity (expand), environmental quality (expand), and energy conservation (expand) - for which there is a broad political consensus.

25. One way of seeing a clear road ahead is by reviewing the way in which we judge whether people are well-off. Given the damage to health of different aspects of our lifestyles and indeed the financial costs,

it may be asked, who are better-off, those who need a car to get to work and for their leisure lives or those who do not need a car because most of the people and places they want to reach are easily accessible? Who are better-off, those who have central heating with its high installation and running costs or those whose homes are so well insulated that most of these costs can be avoided? Who are better-off, those who have the best medical facilities accessible to them or those whose lifestyles are so well focused on the maintenance of health that their need for these facilities is rare? And who are better off, those who can afford to fly to distant destinations to enjoy a pleasing environment or those who do not need to do so because they already live in such an environment - and want to have a clear conscience?

26. I would like to finish on a sanguine note. Clearly, a major cultural shift is called for in taking far greater account of the ecological implications of our lifestyles. Most of us like to believe that we care about the future. Consider then how we are to face our grandchildren and perhaps great grandchildren if we do not make the appropriately drastic reductions in our material standards of living in order to be able to pass over the planet to them in at least as wholesome a state as we had it passed on to us. It is an issue of personal responsibility and preparedness to limit the ecological damage that each of us causes. That can no longer be side-stepped by claiming ignorance. The history of this century, and evidence of the tragic consequences of economic and ecological failure, and avoidable damage to public and planetary health, makes the response 'we did not know' inadmissible.

27. The need for urgent action is NOW. If my lifestyle results in the production of more than my fair share of greenhouse gas emissions, then there are only two possible outcomes - either others must be denied their fair share or I will be responsible for contributing to the destabilisation of the planet's climate. There is no other option!