

# Air transport & sustainable development - a submission from the SDC

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**Sustainable**  
Development Commission

## **AIR TRANSPORT AND SUSTAINABLE DEVELOPMENT**

### **A submission from the Sustainable Development Commission**

The Sustainable Development Commission is the government's independent advisor on sustainable development, reporting directly to Tony Blair and the devolved administration leaders. Chaired by Jonathon Porritt, it has twenty-one members drawn from business, NGOs, local and regional government and academia (see Annex 1).

Our mission is to inspire government, the economy and society to embrace sustainable development as the central organizing principle. Our task is to advocate sustainable development across all sectors in the UK, review progress towards it and build consensus on the actions needed if further progress is to be achieved.

The Sustainable Development Commission fully understands the economic and competitive pressures in planning the future of air transport. However we believe that there is a real opportunity for the UK to take a leadership role in determining how economic aspirations need to embrace the universal desire for a better quality of life in the round. The principles of sustainable development are central to this, and as a Commission we offer the following views on the implications of sustainable development for the future development of air transport in the UK.

#### **Principles of sustainable development**

1. In approaching all subjects related to sustainable development, the Commission seeks to apply a consistent approach based on six fundamental principles (see Annex 2):

- Putting Sustainable Development at the Centre
- Valuing Nature
- Fair Shares
- Polluter Pays
- Good Governance
- Adopting a Precautionary Approach.

2. In the Commission's view, the approach set out in the air transport consultation documents falls seriously short of sustainability in respect of all of these basic principles. It appears to be based on a classic "predict and provide" model for planning major developments, and to avoid the much deeper analysis which a truly sustainable approach would require.

3. Taking each of our six principles in turn, the approach in the consultation documents falls short in that:

- They give over-riding importance to the economic significance of airport development, and do not give adequate weight to the social and environmental impacts of such developments – in other words, they do not put sustainable development at the centre of the approach;



- They do not make an adequate assessment of the damage that may be done to the natural environment both in the locality of the proposed airport developments and more widely through the impacts of increased air traffic;
- They place great emphasis on the employment generating effects of airport development and the benefits to those who will work there and those who will be able to travel by air more easily, but much less weight to those whose quality of life will be adversely affected by the developments;
- They do not provide a full analysis of how to ensure that the aviation industry and airports (and their users) can be made to pay a proper price to reflect the environmental and social costs they impose on others, and of how far such measures might moderate the predicted growth in demand;
- They envisage a speeded-up planning process to press the developments through rather than an extended national debate on the best aims of policy and development on these issues which would provide a better model for consensual governance;
- Finally, they take much too little account of the very real dangers of climate change being exacerbated by the continuing growth of air traffic around the world, and the dangers which the world as a whole faces if we make our economies ever more dependent on continuing growth of air traffic.

4. In the Commission's view, the present rate of growth in air traffic is unsustainable in the long or even the medium term, and policy should be seeking to manage growth rates towards more sustainable levels. Airports policy should be directed to the same end. We would be glad to participate in further consultations and studies on how to bring about such a change of course.

#### **The growth of air traffic and its impacts**

5. Air traffic has grown rapidly and geometrically over the past 50 years. During the 1990s, growth averaged 5% per annum and is currently projected to go on increasing rapidly for several decades to come. Clearly this growth has been associated over much of that time with significant economic benefits. The manufacture of aircraft, the operations of the aviation industry and all the associated services have provided direct economic benefits to those employed in these sectors. The services provided have given the growing volumes of passengers the opportunity to travel for business and pleasure to more and more distant places. The movement of people and freight has been a major contributor to the growth of world trade.

6. But disbenefits are now growing rapidly as well. Noise from air flight is becoming increasingly unacceptable to those impacted by flight paths. Congestion around airports is becoming more acute. Mass travel is having serious impacts on local communities and local environments at favourite destinations. Air pollution around airports and at the sensitive boundary between the troposphere and the stratosphere is becoming more serious.



7. Above all, CO<sub>2</sub> and other greenhouse gas emissions from aircraft are becoming a more and more significant component of the greenhouse gases that are causing climate change. The contribution of air traffic to this crucial global problem can no longer be disregarded, but needs to be addressed as a central issue in considering the future of air traffic and of airports policy. We have not attempted our own assessment of this problem, but we share the concerns of the Intergovernmental Panel on Climate Change. We understand that this analysis and concern is further reinforced by a report from the Royal Commission on Environmental Pollution that is being published in parallel with this submission.

8. It is a key theme of the approach to sustainable development agreed at Johannesburg, and of the climate change strategy embodied in the Kyoto agreement, that economic growth or improvement in the quality of life must be decoupled from growth in the consumption of energy and other natural resources and from growth in pollution. The unconstrained growth of air traffic is a classic example of the failure to achieve that decoupling. Current levels of air traffic already cause major disbenefits, and those disbenefits will grow even more rapidly than air traffic itself if growth continues unconstrained.

9. In the Commission's view, present trends in the growth of air traffic are leading the economy to an excessive and dangerous dependence on air travel and the resources that it consumes. Wise policy should be leading us towards decoupling the growth of economic well-being from growth in air travel, not reinforcing their connections. It should be steering towards a soft landing from the inflationary surge of air traffic that has characterised the past 50 years.

10. Present policy heads us towards a very hard landing or crash when, either fuel becomes unacceptably expensive, or pollution loads (including the growth of greenhouse gases) become intolerable, or both. Given the lead times in this industry and the degree of interconnectedness with other parts of the economy the time to start planning for decoupling is now.

### **The consultation papers on air transport policy**

11. The consultation papers fail to take on board the sustainable development perspective. They approach air transport policy on the basis that the economic benefits of the growth of air traffic are so obvious and overwhelming that the primary objective of policy should be to provide sufficient airport capacity to enable growth to continue unconstrained by limitations on airport space. The papers are thus largely based on a classic "predict and provide" model. They appear to take the view that all the disbenefits can either be avoided or mitigated by careful location of new airport capacity, or by improved design and operation of planes. Or, insofar as they cannot be mitigated, they will have to be accepted as the unavoidable price of the desirable growth. The papers accept in principle that the cost of flying should fully reflect the cost of all associated externalities. However they argue that the elasticity of demand is so low that even if external costs were fully incorporated in prices the impact on demand for air travel would not be much diminished, and that new airport provision will still therefore be needed.

12. We believe that it is time for a more radical rethink of this approach. Recent years have seen planning for road traffic move gradually away from simple "predict



and provide” models towards a more sophisticated mix of demand management and intermodal shifts, as well as infrastructure provision, which should in due course enable a more sustainable road transport policy for the future to emerge. Planning for the growth of air traffic has however remained at a much more primitive level of analysis, dominated by “predict and provide” models. It would be timely now to move towards the more sophisticated approach in the air traffic sector, and to consider how best to introduce an element of demand management into policy.

13. There are several elements that need to feature in such a transformation. At the most fundamental level, political leadership is needed to open up the debate and to begin to get the whole of society confronting the unsustainability of present trends. At present, the aviation industry and its supporters tend to characterise the debate as being between realists, who can see that the growth of air traffic brings short term economic benefits and must therefore be pursued for the general good regardless of other consequences, and an unrealistic alliance of sentimental environmentalists and local NIMBYs who are trying to hold back progress and growth. We believe that this characterisation does not do justice to the case for a fundamental rethink of the kinds of growth of quality of life that we really want to achieve as a society.

14. All parts of society need to be engaged in working out together in a fair and acceptable way the alternative path forward. Then a suitable mix of policy instruments and actions to achieve the necessary transformation will need to be put in place.

15. There are four basic sets of instruments – fiscal measures affecting relative prices; regulatory measures mandating standards; capacity constraints; and measures to encourage alternative modes of transport or to reduce the need or demand for transport at source. All will be needed. On the fiscal, side it seems to us to be imperative that the price of aviation fuel should begin to reflect the high externalities which air traffic imposes, above all through its growing contribution to the carbon load on the atmosphere and climate change. Airport charges or passenger levies may also have a part to play. Revenue from these funds could be used to provide infrastructure for efficient and sustainable land transport. On the regulatory side, some progress has been made in recent years in reducing noise and polluting emissions from aircraft, but progress on these fronts has not kept pace with the growth in the volume of traffic, so that the overall burden is still increasing.

16. On the capacity side, physical limitations and planning restrictions on the growth of airports have clearly exercised some restraint on the growth of air traffic. Although these limitations constrain the economic growth potential for aviation in the UK, they also play an important part in limiting the adverse impacts of such growth. The planning system is in fact a crucial instrument for achieving sustainability in physical development, provided it is properly used to achieve appropriate balance between different societal objectives. It fails to deliver sustainability if it becomes dominated by a supposedly over-riding imperative to accommodate the economic growth of one sector at the expense of all other objectives. The planning system should be used positively to encourage the kind of development that reduces the demand for transport, and will encourage modal shifts towards less environmentally harmful modes of transport.

17. Existing planning permissions already imply considerable scope for expansion of air traffic movement in the UK. The Commission believes that already permitted expansion is as much as can be sustainably provided for the future. Beyond that the planning system should be used as one instrument alongside fiscal and regulatory



measures to constrain the further growth of demand for air travel and to divert it towards more sustainable modes of transport.

18. In other European countries fast train routes have attracted additional investment and often compete with air. Faster shipping routes also have considerable potential. All of these possibilities should be considered much more seriously in the UK. A more proper level of taxation on the aviation industry which reflects the externalities it imposes on society and the environment could generate resources to finance investment in these preferable alternatives.

19. The Commission believe that, rather than simply planning to provide sufficient airport facilities to accommodate an unconstrained growth of air traffic, it would be better to invite a wider national debate on a range of options for the future development of air traffic and of airports in this country. The options should range from the growth models set out in the consultation documents to a much more constrained set implying modest growth tapering off to a stable plateau and possibly eventual reduction. For each option it would be important to analyse the set of policy measures that would need to be adopted, and the overall impacts on the economy, on society and on the environment in a comprehensive sustainable development assessment.

20. It will be crucially important to engage the public and all stakeholders in wide-ranging discussion and participation in the decisions about the options and their implications for society. At present, it is probably true to say that the majority of the public want it both ways. In ever-increasing numbers they like to be able to fly to distant places for business and pleasure, and there is no sign of this demand levelling off. At the same time, there is growing concern about the impacts of continuing growth of air traffic, and a gradually growing recognition that things must be done to limit these impacts.

21. Technical developments in the aviation industry can and should do something to bridge the gap and the fiscal and regulatory measures should be shaped to encourage these changes. They will do something to mitigate the impacts of continuing growth as quieter, cleaner and more efficient engines and more optimal air traffic management systems come on stream. But there is no current prospect of being able to cope with all the impacts of unconstrained growth in demand in this way. In particular any foreseeable increase in the energy efficiency of engines and air traffic management will not be sufficient to mitigate the ever-growing impact of greenhouse gas emissions from aircraft and their contribution to climate change.

22. Sooner or later, therefore, society as a whole will have to face up to the necessity of accepting some constraints on the growth of demand for air travel so as to keep its adverse impacts to manageable proportions. In our view the adverse impacts are already so great that it would be unwise and unsafe to postpone the opening up of this debate. The controversies that have already arisen about the current proposals for airport development over the next twenty-five years show that there is already a considerable public appetite to debate these issues vigorously, and certainly no overwhelming popular mandate for continuous expansion of airports. Now would be an excellent opportunity to stand back from the local debates and controversies and to initiate a much wider-ranging public consultation on the proper objectives of a sustainable policy for aviation and airport development in the future within the context of a broader sustainable transport strategy. Air travel cannot be considered on its own. Other countries have reduced the demand for growth in air travel, particularly for short haul flights, by promoting high speed rail and other alternative modes. This should be an important element of a broader review.



23. There is at present no generally agreed methodology for carrying out a comprehensive sustainability assessment for a whole sector of the economy and alternative future pathways for it. But it is vitally needed to turn sustainable development from a high level set of principles and goals into a practical working tool for shaping future policies in key areas. The aviation sector could be a prime test bed for developing such a new approach and using it to shape policy choice in a radically different way. The Commission would be glad to work with government and others in developing such an approach in this sector, and in helping to shape the public debate and consultation.

## **our work programme**

Our work programme to April 2002 comprises five individual project areas: economic growth and well-being, climate change, food and farming, regeneration and communicating sustainable development. We also have strategies for working with individual sectors of society – business, central and local government, the English regions and the devolved administrations.

## **members of the Sustainable Development Commission**

**Jonathon Porritt (Chairman)** Director of Forum for the Future; **Maria Adebowale** Director of Capacity; **Rod Aspinwall** Deputy Chairman of the Enviros Group and Professor of Environmental Management at Cardiff University; **Councillor Maureen Child** Lead Member for Finance, Edinburgh City Council; **Rita Clifton** Chairman of Interbrand; **Lindsey Colbourne** Coordinator of InterAct; **Anna Coote** Director of the Public Health Programme at the King's Fund; **Ed Crooks** Economics Editor, Financial Times; **Valerie Ellis** Assistant General Secretary of Prospect; **Nicky Gavron** Deputy Mayor of London and the Mayor's Advisor on Planning and Spatial Development; **Brian Hanna** President of the Chartered Institute of Environmental Health; **Alan Knight** Head of Social Responsibility, Kingfisher; **Walter Menzies** Chief Executive of the Mersey Basin Campaign; **Tim O'Riordan** Professor of Environmental Sciences at the University of East Anglia and Associate Director of the Centre for Social and Economic Research on the Global Environment; **Derek Osborn** Chairman of the Stakeholder Forum for our Common Future; **Anne Power** Professor of Social Policy at the London School of Economics and Deputy Director of the Centre for Analysis of Social Exclusion; **Charles Secrett** Executive Director of Friends of the Earth; **Richard Wakeford** Chief Executive of the Countryside Agency; **Jess Worth** Campaigner with People and Planet; **Graham Wynne** Chief Executive of the Royal Society for the Protection of Birds; **Raymond Young** Board member of Forward Scotland, a member of the Scottish Welfare to Work Advisory Task Force and Chair of the Environment Task Force in Scotland.

## Working Principles for Sustainable Development

### Defining Sustainable Development

Sustainable development provides a framework for redefining progress and redirecting our economies to enable all people to meet their basic needs and improve their quality of life, while ensuring that the natural systems, resources and diversity upon which they depend are maintained and enhanced both for their benefit and for that of future generations.

Sustainable development is inevitably a contested idea, dependent of finding the right balance between different and often conflicting objectives through much more integrated policy-making and planning processes. Putting its principles into practice demands debate, experimentation and continuous learning, and therefore requires a thriving democracy to allow it to evolve and flourish.

### Principles for Sustainable Development

#### 1. Putting Sustainable Development at the Centre

Sustainable development should be the organising principle of all democratic societies, underpinning all other goals, policies and processes. It provides a framework for integrating economic, social and environmental concern over time, not through crude trade-offs, but through the pursuit of mutually reinforcing benefits. It promotes good governance, healthy living, innovation, life-long learning and all forms of economic growth which secure the natural capital upon which we depend. It reinforces social harmony and seeks to secure each individual's prospects of leading a fulfilling life.

#### 2. Valuing Nature

We are and always will be part of Nature, embedded in the natural world, and totally dependent for our own economic and social wellbeing on the resources and systems that sustain life on Earth. These systems have limits, which we breach at our peril. All economic activity must be constrained within those limits. We have an inescapable moral responsibility to pass on to future generations a healthy and diverse environment, and critical natural capital unimpaired by economic development. Even as we learn to manage our use of the natural world more efficiently, so we must affirm those individual beliefs and belief systems which revere Nature for its intrinsic value, regardless of its economic and aesthetic value to humankind.

#### 3. Fair Shares

Sustainable economic development means “fair shares for all”, ensuring that people’s basic needs are properly met across the world, whilst securing constant improvements in the quality of peoples’ lives through efficient, inclusive economies. “Efficient” simply means generating as much economic value as possible from the lowest possible throughput of raw materials and energy. “Inclusive” means securing high levels of paid, high quality employment, with internationally recognised labour rights and fair trade principles vigorously defended, whilst properly acknowledging



the value to our wellbeing of unpaid family work, caring, parenting, volunteering and other informal livelihoods. Once basic needs are met, the goal is to achieve the highest quality of life for individuals and communities, within the Earth's carrying capacity, through transparent, properly-regulated markets which promote both social equity and personal prosperity.

#### **4. Polluter Pays**

Sustainable development requires that we make explicit the costs of pollution and inefficient resource use, and reflect those in the prices we pay for all products and services, recycling the revenues from higher prices to drive the sustainability revolution that is now so urgently needed, and compensating those whose environments have been damaged. In pursuit of environmental justice, no part of society should be disproportionately impacted by environmental pollution or blight, and all people should have the same right to pure water, clean air, nutritious food and other key attributes of a healthy, life-sustaining environment.

#### **5. Good Governance**

There is no one blue-print for delivering Sustainable development. It requires different strategies in different societies. But **all** strategies will depend on effective, participative systems of governance and institutions, engaging the interest, creativity and energy of all citizens. We must therefore celebrate diversity, practice tolerance and respect. However, good governance is a two-way process. We should all take responsibility for promoting sustainability in our own lives and for engaging with others to secure more sustainable outcomes in society.

#### **6. Adopting a Precautionary Approach**

Scientists, innovators and wealth creators have a crucial part to play in creating genuinely sustainable economic progress. But human ingenuity and technological power is now so great that we are capable of causing serious damage to the environment or to peoples' health through unsustainable development that pays insufficient regard to wider impacts. Society needs to ensure that there is full evaluation of potentially damaging activities so as to avoid or minimise risks. Where there are threats of serious or irreversible damage to the environment or human health, the lack of full scientific certainty should not be used as a reason to delay taking cost-effective action to prevent or minimise such damage.