

practical steps that can be taken to achieve a more sustainable urban environment and in particular it will outline those concepts useful in the process of urban design.

Sustainable development is concerned with improving the quality of life of human beings while protecting the biosphere by living within the carrying capacity of the global ecosystem. For those concerned with urban design, it is the meaning and application of this definition for the city and its region which is important. No city, region or even nation state can be completely self-sufficient, economically, socially or environmentally. Sustainable development, however, does imply that at all of these geographic levels the aim should be development which does not export pollution and does not import resources which adversely affect the global ecosystem or negatively affect sustainable development in other territories. Local sustainable development is concerned with improving the quality of life of the local community and, where practicable, living within the carrying capacity of the local environment. In other words, the aim of settlement planning is to ensure that the boundary of a settlement and its supporting hinterland is co-terminus with its ecological footprint. The aim, therefore, is to achieve a high degree of local self-sufficiency. Planning for sustainable development is most effective when the bioregion is the basis of the main planning and administrative unit. That is, when the city is conceived as part of an intricate and overlapping set of eco-systems that make up the bioregion. The city and its region appear to be the natural unit for many decisions affecting local sustainability. For example, sustainable transport may best be planned for 'travel to work' areas. So, too, the management of waste disposal may be

most effectively organized at a local city regional scale:

This is also the most appropriate level for reconciling conflicting demands. Windmills can be scenically intrusive; conifer plantations and short-rotation coppice are better for energy forestry than traditional mixed woodlands; new housing will often generate less extra traffic if it encroaches on a green belt than if it is built the far side of it. . . . Communities will rarely be unanimous about this kind of issue . . . sustainable development is a social goal which can only be arrived at through processes of consultation, shared responsibility and partnership. Democratically elected local government and the planning system are the means by which such choices and decisions are made openly and democratically. (Local Government Management Board, 1993)

## **POLITICAL FRAMEWORK**

A key concept in sustainable development is participation. For citizen participation to be other than gesture, manipulation or tokenism, the structure of government must be organized so that the political process itself becomes participatory. Our current political structures emphasize decision-making by elected representatives and by those to whom power is delegated. 'Subsidiarity' – or the delegation of pertinent decision-making to appropriate lower levels of government – is built into European governance. However, in England, local authorities emasculated under former Conservative administrations do not yet, under a Labour Government, appear to have recovered their former status: a notable exception being London with its elected

Mayor. In the United Kingdom as a whole, the delegation of some powers to Scotland, Wales and potentially to Northern Ireland is a sound basis for sustainable development in those parts of the country. Some form of regional government is necessary within England itself for structured public participation in sustainable development. The precise nature of regional government best suited for implementing sustainable development is unclear, with much room for debate. The city, together with its immediate commuter hinterland, as an administrative unit has much to commend it with powerful arguments in its favour. Nevertheless, a division of England, in particular into fewer 'natural' ecological and cultural regions, is likewise attractive. A combination of a system which has the city region as the basic elected local authority, supported by elected regional governments for about twelve major cultural areas of England, may be the type of compromise which, eventually, will be acceptable. Below the level of the city, there is a need for elected authorities having limited powers, particularly associated with issues affecting local sustainable development. It is at the level of the city quarter that public participation in urban policy formulation may be most appropriate (Moughtin, 2003).

### **TRANSPORT AND LAND USE**

A key variable, which will affect the rate that society moves towards sustainable development, is the transport system operating within the city and throughout its region. Clearly, there are powerful pressures that reinforce the trend towards a decentralized city form dependent upon the motor car. These trends are complemented

by lifestyle and cultural preferences, and reinforced by a persuasive and aggressive market. The rhetoric of sustainability is strong, and despite the Government having a strategy for sustainable development since the early 1990s (Sustainable Development: The UK Strategy; DOE, 1994d), the efforts to build an effective public transport system has been less than impressive. For example, the disastrous privatization of the railways and the deregulation of the bus services have had negative effects for a move towards sustainable development, and will take many years to put right. There are hopeful signs: a number of cities have built or are procuring tram or light rail public transport systems (Moughtin, 2003). Certainly some of these transport networks – according to the National Audit Office (NAO) – have failed to attract as many passengers as forecast, or to provide value for money (*Planning*, 30th April, 2004). Since the full environmental cost of private transport is not borne by individual car owners, it is premature to make unfavourable conclusions about the effectiveness of light rail tram systems currently being installed. A closer integration, however, of the light rail systems and other forms of public transport, as the NAO are suggesting, would have a significant impact upon their use. Furthermore, road-pricing mechanisms, such as those introduced in London, when operating in other cities, will go some way towards redressing the economic balance in favour of public transport.

The concept of sustainable development has been included in British planning documents for over a decade. These official documents have been reviewed in earlier chapters. Policy guidance, for example, includes an aim to maximize the opportunity for town centre shoppers, visitors and those