ENVIRONMENTAL IMPACT

Central to sustainable development is the assessment of urban projects in terms of their environmental impact. A useful tool used to determine negative environmental impacts is an Environmental Impact Assessment (EIA). The European Community Directive 337/85 on environment impact assessment specifies the types of project for which an EIA is mandatory; these include large-scale projects such as oil refineries, power stations and motorways. This directive has been absorbed into Planning Law in the UK. The further European Community Directive 97/11/EC has led to the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999. The regulations broaden the range of development projects that need an EIA to include projects that fall within the scope of urban design. In addition to the large-scale projects, an EIA is always required if the project is included in Schedule Two of the Regulations; or if threshold criteria are met; or the project is sited in a 'sensitive area'; and is likely to produce 'significant environmental effects'. Moreover, an important innovation introduced in this Regulation is the introduction of statutory size thresholds, which have been reduced to half an acre. Environmental considerations have now become important for projects such as shopping centres, car parks, multiplex cinemas, leisure-centres and sports stadia. Figure 1.5 shows the checklist for assessing impacts of urban developments. The EIA procedure is potentially of great significance for achieving a sustainable urban environment of quality (Moughtin *et al.*, 2003a).

Figure 1.5 Checklist for assessing impacts of urban developments

1	**Local economy**
	Impact on public finances
	Impact on businesses
	Impact on employment
	Change in land values
	Impact on support grants of other agencies
	Impact on land tenure
2	**Local environment**
	Impact on air quality
	Impact on water resources (surface/ground)
	Changes in noise and vibration
	Impact on greenbelt and open spaces
	Impact on natural habitats, species and vegetation
	Changes in land use and densities
3	**Aesthetic and cultural values**
	Impact on urban patterns
	Visual impacts and effects on buildings
	Impact on cultural heritage and designated areas
	Impact on amenity and personal security
	Impact on community cohesion and identity
	Impact on minority groups and equal opportunities
4	**Infrastructure**
	Impact on public utilities
	Impact on public services and facilities
	Impact on emergency services
	Impact on traffic conditions
	Impact on public transport
	Impact on health and safety

CONCLUSION, URBAN DESIGN AND SUSTAINABLE DEVELOPMENT

The objectives for an agenda of urban design in a regime of sustainable development would emphasize conservation of both the natural and built environments. There is a need to use already-developed areas in the most efficient and effective way, while making them more attractive places in which to live and work. Principles of sustainable urban design would place

1.6

1.7

1.9

Figure 1.6 Cushendun, Northern Ireland. Conservation area
Figure 1.7 Cushendun, Northern Ireland. Group of buildings designed by Clough Williams-Ellis
Figure 1.8 Cushendun, Northern Ireland. Group of buildings designed by Clough Williams-Ellis
Figure 1.9 Cushendun, Northern Ireland. Group of buildings designed by Clough Williams-Ellis
Figure 1.10 Cushendall, a model for Clough Williams-Ellis

priority on the adaptation and re-use of existing buildings, infrastructure and roads, together with the re-use of recycled building materials and components. The concept of the conservation area, which has been so successful in the past in places such as Cushendun and Cushendall, Northern Ireland and in Wirksworth, Derbyshire, may need to be extended to less visually noteworthy existing areas of cities and towns, for reasons other than narrowly aesthetic (Figures 1.6–1.13). Where new development is necessary, the pattern of such development and its structures should

1.8

1.10