EDUCATION for SUSTAINABLE DEVELOPMENT
A Manual for Schools

The Royal Town Planning Institute
April 2004

Authors and Sponsor

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The printing and distribution of this document has been made possible by the generous support of Vodafone UK.
Using the Manual

**SUSTAINABLE DEVELOPMENT EDUCATION**
This manual has been produced by the Royal Town Planning Institute (RTPI) to assist teachers delivering the 11-19 curriculum. It will be of interest to all involved in teaching Sustainable Development, Community Planning and Citizenship. The RTPI believes that planning holds a unique position in relation to these subjects and is an ideal vehicle to use and study in the classroom. Virtually all development is subject to the planning process and will have an impact upon the environment. Achieving sustainable development is at the heart of all planning decisions.

**CITIZENSHIP**
The planning process is unique in that public engagement is a statutory requirement and any citizen has a right to express a view on any development. When preparing plans, local authorities actively encourage public participation and involvement. Most planning decisions are made by local councillors elected through the democratic process, making planning an ideal vehicle to illustrate many aspects of Citizenship.

**LOCAL STUDIES**
The RTPI positively promotes sustainable development education and encourages planning officers to help schools and pupils by providing information, help and advice where possible. This manual has been produced to give an introduction to using planning issues in the classroom and linking them with sustainable development. It should not be difficult to find relevant local issues to study to help illustrate the key concepts.

**THE PLANNING SYSTEM**
The manual also provides a brief introduction to the planning systems and government structures in the UK.

**PLANNING AS A CAREER**
On pages 68 and 69 some information is given on choosing planning as a career, including a list of accredited courses at UK universities.

The manual is in two parts.

**PART 1**
Sets out our demands for development eg. the need for housing, economic development, transport, waste management etc., how planning can influence or manage these demands and how they relate to sustainability. It illustrates the wealth of topics and materials available to schools locally, in every locality whether in urban or rural areas.

**PART 2**
Contains a guide to some planning orientated resource packs that deal with sustainable development issues using local case studies. Some have been developed by teachers and planning authorities together. A list of further sustainable development educational resources is also included.
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**Acknowledgments**
Introduction

What is sustainable development and why is it important?

This Manual is about:

- How society’s demands impact on the environment.
- How the planning system plays a positive role in managing demands and their environmental impact.
- How these two elements can be used in sustainable development education.

Human Demands and the Environment

In our daily lives we make extensive demands on our environment. The places we choose to live, our houses, work places, shops, schools, restaurants, and cinemas all take up land. To travel between these facilities we require road space, footpaths, railways, ports, and airports. The provision of land to accommodate the buildings, roads, and public spaces which are required by our activity cannot be managed purely on the basis of the free market. There could be no guarantee of adequate provision for everybody’s needs, for example for shelter, nor that the outcome would be orderly or good quality. As a consequence these processes of using land have to be managed by government. This is largely done through the planning system.

Society’s Needs

If we look at the whole needs of people it is clear that the management of land use has to go much further. As individuals we need shelter, food and water as a basic minimum, but as a society we also require communal needs, such as the provision of care, education and the disposal of waste. If organised on a strictly individual basis the satisfaction of one person’s needs could seriously interfere with the provision of someone else’s basic needs. We only have to imagine a community without a sewerage system to appreciate the insanitary and intolerable conditions that would arise without collective action. We take these things for granted but how much thought do we give to the impact of providing for these needs?

An International Dimension

In recent years we have also come to realise that there is an international dimension to societies’ needs. For example the pollution created in one country is not necessarily contained by its political borders. The impacts of depletion of the atmosphere and consequent global warming through burning of fossil fuels and pollution are two such problems.

The consequences of trade from other countries must also be taken into account. Goods imported to the UK are sometimes produced by workers who have poor or dangerous working conditions, or very few employee rights. The costs of goods often do not take into account the environmental degradation they cause, or the impact on finite fuel resources of flying such goods thousands of miles to shops here in the UK.
**GOVERNMENT RESPONSE**

The scale of the earth's population and its impact on the global environment has led governments to agree to co-ordinated action. The earth summits at Rio and Kyoto in the 1990's confirmed this commitment and the key to international action has been the universal acceptance of the concept of **sustainable development**. It is a concept which has been adopted very readily in name, so much so that it is in danger of becoming a cliché. However it has at its heart a very simple idea that provides the key to managing our impact on the environment at both individual and international scales.

**SUSTAINABLE DEVELOPMENT**

This simple idea is that whenever we are faced with a judgement about an activity which impacts on our environment, we should consider its consequences and attempt to modify our actions so as to maintain the world’s resources. This idea is so obvious that it might be dismissed as being simplistic, but previously we have tended to make such decisions in isolation from consideration of the consequences. For example we have built our towns and cities by excavating building materials without thinking how we might restore the landscape. We have allowed settlements to grow without clear plans of how to deal with the waste they generate. We have encouraged increased mobility and energy consumption without considering the effects of pollution or the impact that greater energy production might have.

**UNDERSTANDING OUR IMPACT UPON THE ENVIRONMENT**

The principle of sustainable development requires us as individuals and as a society to think through decisions about how we live our lives, about development and social advances by considering all the consequences of our actions and coming up with solutions. It is about creating a better quality of life for everyone, now and for generations to come, and it means recognising that our economy, environment and social well-being are all interdependent.

**INDIVIDUAL AND COMMUNITY ACTION**

The planning process is only one of the vehicles through which the local authority can help influence a more sustainable way of living. Two other influential processes are the preparation and implementation of THE LOCAL AGENDA 21 (LA21) STRATEGY and THE COMMUNITY STRATEGY. The former derives from the 1992 World Summit in Rio de Janiero at which all countries were asked to commit themselves to the concept of promoting and delivering sustainable development. Achieving this relies upon everybody’s individual or group actions and decisions. More recently (2000) the government required all local authorities in England and Wales to produce a Community Strategy through a Local Strategic Partnership. This requires local authorities to work with local residents, businesses, voluntary organisations and community groups to help identify local issues and priorities and deliver solutions that meet local needs in a sustainable way. The planning authorities’ policies and plans should therefore complement both these strategies (which will provide valuable material for schools).


**The UK Government** has defined the main objectives of sustainable development in their strategy and they are listed below.

- **Social progress which recognises the needs of everyone.**
- **Effective protection of the environment.**
- **Prudent use of natural resources.**
- **Maintenance of high and stable levels of economic growth.**


Through the management of new development locally, the planning process turns these concepts into reality and helps achieve sustainable development. By promoting certain kinds of development and integrating land use and transport systems, planning can help achieve economic growth, and at the same time, protect the environment and the natural resources found within it. Linking land use with transport facilities also helps to ensure access to jobs, education and other facilities which communities need to thrive.
Using Planning in delivering sustainable development education

HOW TO WORK WITH PLANNERS AND PLANNING RESOURCES

Working with town planners can help provide teachers with excellent up to date information and resources which have local relevance, such as population and transport statistics, planning projects, developments, case studies or other ‘live’ planning issues. Planners are involved in a wide range of exciting development, regeneration or conservation projects which can provide excellent resources in the field or classroom. The UK’s 20,000 town planners have a varied role in the work place, with 50% working in local government, 10% in other government agencies, 20% in private sector consultancies and the remainder in education, voluntary organisations and development industry.

YOUR LOCAL PLANNING DEPARTMENT

Most local councils prepare a ‘Development Plan’ for their area. The Planning Department takes a lead in this but it works closely with other departments dealing with transport, highways, waste collection and disposal, recreation, leisure, education, housing and social services. The policies in the plan cover the main issues that face the area and give guidance on the nature and location of new development. Plans also identify areas of environmental importance e.g. conservation areas or nature reserves.

Often, local authorities produce additional guidance to provide extra information and advice to local residents and developers alike on subjects such as building materials, shop front design, tree preservation or specific plans for a new area of development.

Useful resources available from planning departments:
- Structure plans: 15 year plans for county areas.*
- Local plans for district council areas.*
- Unitary development plans for unitary local authorities.*
- Minerals and waste local plans.*
- Local authority studies, or consultants’ reports on subjects such as shopping patterns, traffic surveys, tourism development etc.
- Planning application reports to the planning committee.
- Area frameworks and supplementary guidance.
- Planning departments may also be able to provide old photographs and maps, plus statistics on population or employment etc.

Regional or national information produced by the Government is also available:
- Regional Planning Guidance (RPG) - provides a broad regional framework for development plans.
- Planning Policy Guidance - nationally produced guidance on a range of issues such as housing, green belts, transport etc. In England these are called Planning Policy Guidance (PPG). In Wales these documents are known as TANs (Technical Advice Notes) and in Scotland, NPPG (National Planning Policy Guidance).
- Similar Guidance Notes for Minerals and Waste Planning.

* In 2004 reforms to the planning system in England will make major changes to the plans prepared by local authorities. See page 40 for more information.
CONTACTING PLANNING DEPARTMENTS
Planning departments in local councils are always very busy. They will usually try to help teachers or students if they can and sometimes specific officers are given this role. The approach to give you the best chance of getting help is to follow these golden rules:

► Contact the department well in advance of your needs.
► Discuss the possibility of help before setting out your requests.
► It may be easier for the planners to provide information about a current project than a project devised in school.
► Be specific about your needs.
► Minimise the number of contacts - go as a group, not individually, or write a group letter.
► Arrange sessions where several teachers can be involved in a meeting with officers.
► Invite a planning officer to the school.
► Set up a school conference for whole year groups from local schools.

ORGANISATIONS FOR FURTHER INFORMATION OR ADVICE

► Royal Town Planning Institute (RTPI).
   The RTPI is the chartered professional institute for the UK and Ireland to which many planners belong. The Institute maintains professional standards, supports its members and plays a leading role in national policy development and the promotion of good practice. It also gives accreditation to higher education planning courses allowing graduates to qualify for membership (see page 69).

   Each regional branch of the RTPI has an environmental education officer who could assist teachers or students with accessing information and contacts etc (www.rtpi.org.uk).

► Planning Aid is a voluntary service offering free, independent and professional advice on town planning matters to community groups and individuals who cannot afford to employ a planning consultant.

► Town and Country Planning Association (TCPA).
   The Town and Country Planning Association (TCPA) campaigns for the reform of the UK’s planning system to make it more responsive to people’s needs and aspirations, and to promote sustainable development (www.tcpa.org.uk).
How Planning Links to the curriculum

**GEOGRAPHY IN THE MAIN** provides the greatest scope to work with planners and planning materials, but the subjects of design, history, local democracy, politics, science and construction all relate to planning. Subjects such as Citizenship also link to ‘Planning through local participation’ and ‘Community Planning’.

In general, planning issues combine social, environmental and economic issues and can be used to teach the 7 key concepts of Sustainable Development:

*Ref: UK Panel for ESD, The Holland Committee.*

**Key concept 1: Interdependence**
Understanding how people, the environment and the economy are inextricably linked at all levels from local to global.

Plans deal with all the development needs of an area, relate them to the local environment and propose the most sustainable solution.


**Key concept 2: Citizenship and stewardship**
Recognising the importance of taking individual responsibility and action to ensure the world is a better place.

Each citizen has the right to participate in the planning process, to help shape their own communities. Planning is also a political process, and all decisions about development are made by politicians, so there is local accountability at the ballot box.


**Key concept 3: Needs and rights of future generations**
Understanding our own basic needs and the implications for the needs of future generations of actions taken today.

Sustainable development is at the heart of the planning system. Issues such as future population levels, employment opportunities and housing must be taken into account. Global problems with local consequences, such as climate change also need to be addressed.


**Key concept 4: Diversity**
Respecting and valuing both human diversity - cultural, social and economic - and biodiversity.

Communities and places differ, and planning needs to enhance local distinctiveness, yet protect special landscape features and wildlife.

See sections on ‘Natural Resources’, ‘Conservation’, ‘Biodiversity’.
Key concept 5: Quality of life
Acknowledging that global equity and justice are essential elements of sustainability and that basic needs must be met universally.

Equity and justice refer to equal access to opportunities such as work, education, decent housing and transport etc. Planning plays a part in this through helping to achieve places in which we want to live, work and play.

See sections on ‘Natural Resources’, ‘Conservation’, ‘Recreation, Leisure and Tourism’.

Key concept 6: Sustainable change
Understanding that resources are finite and that this has implications for people’s lifestyles, and for commerce and industry.

Planning tries to manage change, and take into account current needs, as well as allowing for future needs.


Key concept 7: Uncertainty and precaution
Acknowledging that there is a range of possible approaches to sustainability and that situations are constantly changing, indicating a need for flexibility and lifelong learning.

Town planning reviews development plans and tries to plan and manage the location and standards of developments and use of resources. Environmental Impact Assessments are also made on options for development. Regular monitoring takes place using measurable targets and indicators to track impact and resource use.


Key Skills
Using planning issues can assist with the 6 key skills of: communication, application of number, information technology, working with others, improving one’s own learning and performance and problem solving, as well as the ‘thinking skills’ of information-processing, reasoning, enquiry, creative thinking and evaluation.

For example, discussing the advantages and disadvantages and assessing the viability of new development proposals can aid with communication, enquiry, reasoning and evaluation. Also, using indicators which monitor resource use can link with the teaching of numeracy, ICT and information processing.

The following section, ‘Planning for Society’s Needs’ (page 10), and the twelve following issues (page 14 to 37) cover some of the main subject areas of planning and how they may be used in teaching.
Planning for society’s needs

CHANGES IN SOCIETY
Since 1947 when the first Town and Country Planning Act was introduced in England and Wales, there have been many changes in society. Traditional primary industries such as farming and mining have dramatically declined; steel and manufacturing have also declined, with service industries often replacing them. Another significant change in our society is the rise in mobility. Many more people than before now choose to live in rural areas and commute to towns or cities to work, for school or other services and facilities. Affluence and lifestyle changes have resulted in, for example, much greater consumption of natural resources and production of waste, as well as more holidays and an increasing number of second homes.

CHANGING SPATIAL DEVELOPMENT
Such changes in society have led to changes in the way development is managed, although the location of development has also played a part in increasing car ownership and usage. The trend during the 1980’s and 1990’s was towards car based decentralisation and dispersal of development. The location of housing, shopping centres, leisure facilities and business has often been away from existing town centres onto green field sites and near motorway junctions.

As local services (healthcare, schools, shops, banks etc.) have declined in urban and more particularly rural areas, so people have to travel further to access the services that they need. The public transport system with little investment, has become less efficient and is not suited to dispersed facilities. Fares have been increasing, leaving little choice but to travel by car for those that can afford to do so.

Many issues such as pollution, poor health, rising crime, loss of agricultural land, open space and biodiversity, poor access, lack of affordable housing are leading to problems in both urban and rural communities.

Some of these problems are often seen as the result of transport and planning policies which separated business or shops away from residential areas, and provided little or no public transport systems. Recently, however, there has been a marked shift in planning policy to put sustainability at the forefront of planning policy. Investment is now redirected back at local centres, mixed use developments are promoted and measures which reduce the need to travel. But a major hurdle the planning authorities have is that of achieving their policy objectives. Most development is privately financed, with huge corporate investment, over which the planning authorities have limited influence.

Greater investment in public transport and related infrastructure with a more integrated approach to land use and the location and type of development is the basis of modern planning. ‘Joined up thinking’ in policy making, ensuring that communities, industry, businesses and basic service providers all work together is part of this.
SO WHAT CAN WE HOPE FOR IN THE FUTURE?
Planning for Sustainable Communities
Below is a diagram illustrating how town planning can contribute to a sustainable community. It highlights those areas over which planning has some influence or compatibility. However, success in most of these areas also requires society to reverse the trends of recent years and adopt more sustainable lifestyles.
Below are some of the less obvious areas in which the planning system might address some of society’s pressing problems, thereby helping to meet the four sustainable development objectives as set out by the UK government.

**PROBLEM: UNEMPLOYMENT**
Maximise use of brownfield sites to create employment within built up areas close to people’s homes; help diversify employment opportunities through offering a range of types and sizes of investment sites eg. high-tech office locations, or small sites for start up businesses.

**PROBLEM: POVERTY**
Increase the opportunity of access to affordable housing, jobs, education and transport etc.

**PROBLEM: CRIME**
Tighter control on urban design and form, to ensure well designed and laid out developments and open space.

**PROBLEM: CONGESTION**
Plan new development or business/commercial areas in closer proximity to residential areas to reduce need for commuting. Promote better public transport facilities.

**PROBLEM: LOSS OF BIODIVERSITY**
Increase development on brownfield sites and re-use of existing buildings; greater control over agricultural operations. Protect areas of importance for nature conservation. Help the creation of new open spaces and wildlife habitats.

**UK SUSTAINABLE DEVELOPMENT OBJECTIVES**
- Social progress.
- Effective protection of the environment.
- Prudent use of natural resources.
- High and stable levels of economic growth.
The reality is that planners have to deal with what is here already and gradually seek to reshape cities and their hinterlands, and more remote areas, as and when the opportunity for change and development occurs. There is also a need to shift public opinion and create cultural change, through education and the use of the media.

Using planning material in delivering Sustainable Development Education is one means of achieving these ends, and a way of enriching the teaching of sustainability, citizenship and specific subject curricula. But one of the most important aspects of planning is the involvement of citizens. The process of planning gives everyone the chance to have a say and help shape their own community’s future strategies (see page 5 ‘Individual and Community Action’).

In meeting the needs of people, all the following issues are taken into consideration by planners working in the UK:

- **Housing** (page 14).
- **Economic Development** (page 16).
- **Retailing** (page 18).
- **Transport** (page 20).
- **Mixed Use Development** (page 22).
- **Green Belt** (page 24).
- **Recreation, Leisure and Tourism** (page 26).
- **Conservation** (page 28).
- **Biodiversity** (page 30).
- **Natural Resources** (page 32).
- **Waste Management** (page 34).
- **Pollution** (page 36).

These are discussed in detail in the next part of this section.
Demand for housing is increasing. Between 1996-2021 the Government estimates the number of households will increase by 19% although the population will only rise by 7%!

Land has to be found for an additional 3.8 million houses in England alone (An area equivalent to the size of Greater London). A substantial number will have to be built on greenfield land.

A net outward migration from the conurbations to the countryside is predicted to continue. This can lead to increased commuting and ‘dormitory towns’.

Many local people in rural areas are unable to buy local houses as they are ‘priced out’ by the better-off leaving towns and cities.

32% of houses in urban areas are in need of repair or improvement. These can include; Victorian terraces, inter war council estates and 1960’s/1970’s tower blocks. Estate Renewal and Regeneration initiatives will have to be funded.

A key role of the planning system is to allocate land for new housebuilding. Sites are shown on the Development Plan.

The aim is to provide a choice of sites and to encourage a range of house types, sizes and tenures, including affordable and special needs housing.

Based upon local housing need and future projections it is important to ensure the release of land is managed so that neither too little nor too much is released at any one time. Otherwise this may affect the momentum of economic growth. Most housing is provided by the private sector or Housing Associations.

Planners encourage good design in new housing to help create attractive high quality environments. They encourage sustainable development and try to ensure new housing is linked by public transport to jobs, education, health, shopping, leisure or local services.

As most housing already exists, the planning process also supports the continued improvement and maintenance of housing, supports selective clearance and redevelopment and assists in major Regeneration and Renewal initiatives.

70% of this increase is predicted to be in single person households. This is because:

- More young people are setting up home by themselves.
- Increasing divorce and separation rates.
- Elderly people are living longer. Many single pensioners still choose to live independently.

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<td>1971</td>
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<td>Married couple</td>
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<td>Cohabiting couple</td>
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<td>Lone parent</td>
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<td>Other multi-person</td>
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Reasons can include:

- Low incomes.
- Local housing being too expensive for first time buyers (eg in rural areas).
- They require specialist housing which is not available locally eg designed for the elderly or handicapped, student accommodation or single person flat etc.

Whereas local authorities used to provide Council Housing to meet these needs, in recent years new provision has been provided by Housing Associations or other specialist social providers. Utilising Government grants they can help provide subsidised and low cost housing to meet local needs.
Both the location and type of new housing has a role to play in promoting sustainability. The planning process can help in the following ways:

- Giving priority to housebuilding on previously developed land (brownfield sites).
- Bringing empty houses back into use (225,000 houses in England have lain vacant for more than a year), and encourage converting other buildings into residential use (eg offices to flats, city centre living, living above shops).
- Ensuring new housing forms part of mixed use developments (eg urban villages) reducing the need to travel to jobs, shops and leisure activities.
- Locating new housing near to public transport, or ensuring public transport re-routes to serve new development.
- Designing adaptable housing (eg lifetime homes) and eco-friendly designs ensuring energy and water efficiency measures are maximised. Encourage sustainable drainage schemes where appropriate, and the use of renewable building materials which are locally sourced.
- Negotiating affordable housing to meet local needs, such as rented properties, shared ownership or affordable housing in rural areas.
- Encouraging building at higher densities, especially on brownfield sites, to help reduce pressures on greenfield or other open spaces.

The Government’s target is that 60% of new housing should be on previously developed land.

Should we build brand new greenfield settlements (villages and towns) or continue to expand existing ones?

How sustainable is it to live in the country and work in the city?

Can the design and location of new housing contribute to a more sustainable society?

A healthy economy is a key ingredient in sustainable development. It provides job opportunities - a fundamental human right - and can generate the wealth and prosperity to bring about positive change, such as improved public transport, the reclamation of contaminated land and a high quality environment. However, whether we work on a farm, in a factory, an office or at home, all businesses have an impact on the environment. Similarly, businesses themselves are affected by constant changes such as global economic trends, technological change, society’s demands and competition. Sustainable economic development must address these challenges and seek to provide a better quality of life without reducing that quality for others.

### NEEDS AND ISSUES

- The type of jobs on offer continues to change and this affects how we plan for change. For example, manufacturing jobs continue to be lost. In 1970, approximately 40% of jobs in GB were in manufacturing; by 1997 this had declined to 18%.
- Where towns or areas are reliant on one key industry, eg. shipbuilding, steel, mining, car manufacturing, etc., they are very vulnerable to economic change. There is a need to plan for a more diverse economy with jobs (and training) in other types of activity.
- Service sector jobs continue to grow and now provide over three quarters of all jobs. Many offices locate in centres and place pressures on local transport services.
- Increased personal mobility means many people are prepared to travel long distances to work.
- The majority of industrial development is on brownfield sites. Many sites, however, are contaminated and require expensive reclamation works. Others may be too small or badly located. Quality of site as well as quantity is important.
- Some industries, especially hi-technology business, prefer to locate on greenfield sites. Some authorities, who need to attract such companies, are prepared to release land in the Green Belt.
- In parts of the country, eg. SE, finding enough suitable development sites is an issue, in other parts of the country, eg. NE, NW, the reverse is true, with too many sites and too little investment.
- Farming practices and the rural economy fluctuate regularly: factory farming, ‘set aside’, genetically modified crops, foot and mouth, EC subsidies all have their pros and cons.

### TRENDS AND STATISTICS

- In England, over 58,000 ha of brownfield land (an area the size of the West Midlands) is either vacant, derelict or awaiting development.
- 91% of national economic output and 89% of jobs come from urban areas.
- 70% of people travel to work by car, 8% by bus, 3% train, 12% walk, 4% cycle.
- Countryside Stewardship (managing the land environmentally) is increasing. In 1990 = 100,000 ha, by 1999 = 700,000 ha.

### THE POLLUTER PAYS PRINCIPLE

Much environmental pollution, resource depletion and social cost occurs because those responsible are not those who bear the consequence. If the polluter is made to pay for those costs, this gives incentives to reduce harm and means that costs do not fall on society at large.

For example, if a factory produces air pollution, discharges waste into the water course and encourages its workforce to travel by car - this harms the environment. If a new factory is to be built we can require suitable air discharge and water treatment measures to ensure there is no pollution and encourage the company to adopt a Green Travel Plan and promote bus and cycle use. The costs are borne by the company and the result is minimal adverse environmental impact.

**Source:** Committee on the Medical Effects of Air Pollution, 1998.
ECONOMIC DEVELOPMENT AND SUSTAINABILITY

In order to retain jobs and attract new investment, areas must be able to offer the facilities necessary for companies to prosper. This includes: land, properties, a skilled and adaptable workforce, utilities and services and an attractive environment. The planning process can assist with all of these.

The Development Plan allocates land for new development. Sites should be available to meet all sizes of company and with a choice of locations.

The Plan should also provide a policy context that balances the needs of industry and commerce with maintaining and improving environmental quality. In rural areas development necessary to meet the needs of the local economy will be balanced against the protection of the countryside - its landscape, wildlife, agriculture, natural resources and recreational value.

Planning policies and plans should promote choice, flexibility and competition - an environment in which the local economy can flourish.

When individual developments come forward the planning officer will seek expert advice on whether a development will cause pollution, damage sensitive sites or environments etc and can refuse schemes which would cause harm. Usually a scheme is approved subject to safeguards and controls being put in place first.

New developments should be located near their workforce and where the number and length of trips can be minimised. They should be well served by public transport and avoid adding to congestion.

New uses can be found for old and vacant buildings. (eg. Tate Modern, Salts Mill, see page 29).

Major schemes are required to prepare Environmental Assessments which indicate the impact they will have on the environment. (They should also consider alternative sites). This will indicate whether a scheme will cause such harm that it should not proceed or what improvements and measures are needed to offset any harm.

Offices and industries can assist sustainability by maximising energy efficiency, using locally sourced renewable resources and minimising waste. Good design will assist this.

Maximising the re-use of brownfield land, reclaiming derelict and contaminated land and providing mixed use development (see page 22) is preferable to using greenfield land.

KEY WORDS
Service industry  Brownfield
Communication technology  Jobs
Global market place

CLASSROOM QUESTIONS
-how can well located industry assist in promoting sustainability?
-who should pay for pollution: society or the industries that cause it?
-are derelict sites and buildings an eyesore or a resource?

DIBDEN BAY: A new terminal for the port of Southampton?
Associated British Ports (ABP) owns several ports in the UK, including Southampton, and the land on the river Test Estuary.

The plan is to build a new container terminal, including:

- A new quayside with space for 6 berths for container vessels.
- Aggregates wharf, rail terminal & container storage.
- New road & rail infrastructure.
- A park & sail service.
- A creek & conservation area.

The plan is a contentious one with arguments for and against.

For:

- Creation of 1800 jobs.
- Close to world trading routes.
- Current activity will be at maximum capacity in several years.
- Location can accommodate new development.
- Failure to meet demand would result in less competitiveness, job losses and price rises for consumers.

Against:

- Dibden Bay has many conservation designations and important habitat will be lost.
- Land is a greenfield site.
- Facilities could be used better.
- Highway network may not accommodate extra traffic.
- Plans have not demonstrated that the need for development outweighs the significant impacts upon the area.

FOR FURTHER INFORMATION
www.hampshire.gov.uk
www.planning-inspectorate.gov.uk/dibden/index.htm
www.dibdenterminal.co.uk
Everybody needs access to shops to buy food and other goods. How and where we shop are as much subject to trends and patterns as any other activity. The choices we make impact both on the environment and on other people. Some examples include:

- The Conservative Government of the 1980’s lifted many planning restrictions in the belief that enterprises should be free to locate wherever they saw commercial advantage. The result was ‘out of town’ superstores or retail parks. For most, these relied upon access by car. Many sites were greenfield locations. Retail stores were soon followed by other leisure activities: cinemas, restaurants, petrol filling stations etc. This legacy will be with us for many years.

- The result of the above led in many cases to a direct decline in traditional High Streets and Town Centres with lost shops and investment. Choice for those who walk or use public transport was diminished.

- More recent Government Guidance has reversed the above policy and emphasis is firmly back on investing in existing centres. Problems remain however:
  - There are often no large sites for new investment.
  - Existing shops are often too small for modern retailing needs.
  - The growth of the national chain means many centres are now very similar with the same shops with their ‘house style’ frontages.
  - There is often insufficient car parking and much on-street congestion.

- Many rural villages are losing their village shops and Post Offices.
- For some, a shopping trip is seen as a leisure activity.
- Shopping centres are a location for petty crime and there has been a rapid growth in the use of CCTV cameras to aid security.

The Government now supports a ‘plan-led’ approach to retailing, not a ‘market-led’ approach.

- The DEVELOPMENT PLAN should contain policies to support and strengthen the vitality and viability of centres. Plans should identify sites for retail, leisure and community uses.
- Plans should have coherent parking strategies (differential pricing for different users is encouraged) and enhance the opportunity for improved public transport and cycling access.
- Plans can help smaller centres and local parades by protecting the ‘core’ retail activity which can often be pushed out by offices (e.g. banks, travel agents) which can afford higher rents.
- Where sites for development are not available, planning compulsory purchase powers can be used positively to clear sites.
- The planning process supports additional investment in centres such as environmental enhancements, pedestrianisation, better street lighting etc.
- It is not the role of the planning system to restrict competition, preserve existing commercial interests or prevent innovation.

OUT OF TOWN SHOPPING

Advantages:
- Access to car users, free parking.
- Room for large and spacious store construction.
- Popular prices and high turnover with limited overheads.

Disadvantages:
- Limited access to non car users.
- Unsightly and frequently poorly designed buildings.
- Decline in city centre patronage and lack of investment in infrastructure.

HOW PLANNING CAN ENHANCE TOWN CENTRES

Improvements that local authorities and traders have introduced to enable the traditional centres to compete with new malls include:
- Pedestrianisation.
- Public art.
- Farmers’ markets.
- Street theatre.
- Re-paving and landscaping.
- Late night shopping.
- Specialisation of high quality goods.
Identifying the best location for new development

The planning system has recently regained a sense of purpose in relation to retail development. Government guidance has been strengthened by policy to discourage further out of town development and also requires development plans and those dealing with planning applications for shops to apply a “sequential test”. This principle requires sites within town centres or their edges to be utilised before permission will be granted for new edge of town development.

Locating new shops in existing centres is a key aim of the Government’s sustainability programme. Reducing the need to travel by car, encouraging competition, vitality and viability in centres is now central to creating sustainable communities and lifestyles.

The transportation of products to stores is often far from sustainable. With demand for worldwide foods and products it is often the case that goods will have travelled 8,000 rather than 8 miles to the store. Even within the UK, central distribution and delivery practices mean goods often travel the length of the country. Although planning can do little to overcome this it can help protect and promote local markets and the growth of Farmers’ Markets is a positive trend.

Safeguarding rural stores is essential if local people are to shop sustainably.

Encouraging local people back into walking or cycling to stores and buying less, more frequently, is more sustainable than loading the car up once a week.

CASE STUDY

E.H. BOOTH’S FOODSTORE, Kirkby Lonsdale.
RTPI North Western Branch winner of Good Practice in Retail Planning, 2001.

The site is at Eves Lea, 200m from the centre of the town, and adjoining the main car parks.

Features of sustainability include:

► Extensive public consultation with questionnaires and exhibition.
► Local materials used and store in keeping with local design/style.
► Excavated material reused for levelling adjoining playing field.
► 80 jobs provided (full and part time).
► New road access has reduced congestion in centre of town, and improved safety.
► Provides outlet for local produce.
► Reduces the need for travelling to other stores in neighbouring towns (Kendal & Lancaster).
► New surface water drainage system has helped combat flooding (a persistent problem in the locality).

This new store is the only local largescale foodstore in Kirkby Lonsdale, and its success has encouraged other businesses and so helped rejuvenate the town centre.

FOR FURTHER INFORMATION
Contact RTPI North West Branch
Tel: (0161) 8771782.
http://northwest.rtpi.org.uk

KEY WORDS
High Street
Superstore
Public Transport
Out of Town

LINKS
Living over the Shop initiative, The Development Plan, PPG6.

RETAILING AND SUSTAINABILITY

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► Safeguarding rural stores is essential if local people are to shop sustainably.

► Encouraging local people back into walking or cycling to stores and buying less, more frequently, is more sustainable than loading the car up once a week.

CLASSROOM QUESTIONS

► What impact on the environment will the closure of rural post offices have?
► Should new stores be located in the High Street or in out of town centres and why?
► Why has there been a growth in Farmers’ Markets in recent years?
Transport

How do we get there?

NEEDS AND ISSUES

Changing travel patterns

We all need to move around between home, work, school, shops, offices, sports clubs, bars and cinemas. Transport is not only about the movement of people, it also affects the movement of things, whether it is pasta from the supermarket, the materials needed to manufacture goods, or the waste from businesses and houses.

The infrastructure which allows us to move around our cities, towns and villages - the streets, railway lines, footpaths and cycle lanes - has an enormous impact on the form of those settlements. For example, the medieval street pattern of a city such as York, looks and feels very different from the street pattern in a new town like Milton Keynes primarily because of the changing demands for travel and transport.

Over the last 50 years, travel patterns have changed dramatically, and today people travel much further each year than they did in the past. In addition, the way that people and things are transported has also changed, with an enormous growth in the use of cars and lorries, and a reduction in journeys made by bike or on foot.

Along with the growth in car usage has been the growth of the car park. For many developments more land is taken for the car park than for the building itself!

Threats against sustainable development

These changes in the patterns of travel have a number of significant impacts which have an effect on our quality of life as a whole, including:

- The growth in emissions of greenhouse gases (influencing climate change).
- Increasing congestion.
- Declining air quality in urban areas.
- An increase in asthma and respiratory disease.
- Increasing stress for travellers, and danger for cyclists and pedestrians.
- The loss of land and habitat to road building.
- Noise pollution.
- Accidents.
- Damage to buildings from traffic vibration.

As these costs are paid for by society in general and not by individual road users, these costs are known as externalities.

CLASSROOM QUESTIONS

- How can the development of towns and cities promote the need for fewer journeys?
- How does each mode of transport impact upon the environment and which ones can contribute to a more sustainable environment?
- How can we reduce the number of car journeys?

CHANGING TRAVEL TO SCHOOL PATTERNS

At peak school travel time of 8.50am, 1 in 5 cars is taking children to school.

The proportion of secondary pupils travelling to school by car in 97/99 was 21% compared to 10% in 85/86.

NB. A car produces four times its own weight in carbon dioxide each year.

THE BENEFITS OF CYCLING AND WALKING

- Exercise.
- Reduced stress.
- Reduced congestion.
- Reduced emissions.
- Reduced noise and air pollution.
- Reduced heart & lung disease.
- Better quality of life.

‘Safe routes to schools’ is an initiative aimed at working with schools to introduce physical measures in conjunction with education and training, to improve safety and encourage walking or cycling to school.

Bus Lanes help provide increased bus use - and cycling!
Planning sustainable transport

Town planning tries to influence the length and type of journeys that people make in order to reduce the negative impacts of travel on the environment. There is a number of ways in which planning does this:

► The first is to integrate land use and transport, so that developments such as shopping centres which attract lots of visitors are close to the city centre and public transport links, while uses which generate lots of lorry movements such as distribution depots, are close to good road links. Yet much of the transport service and infrastructure provision is controlled by other organisations, and partnership working to mutual objectives is essential.

► The second technique is to make sure that new developments make space for public transport, pedestrians and cyclists as well as for cars.

► The third approach is to try to reduce the need to travel, by encouraging mixed use development and making sure that people can live close to shops, hospitals and offices, and that there are offices, shops and hospitals close to the places where people live.

Most local authority investment in the transport network is co-ordinated through the statutory LOCAL TRANSPORT PLAN.

Transport and sustainability

Decades of under investment have left the country with a transport system that suffers from overcrowding, congestion, delays, pollution and often little choice in how we can travel. So whilst too much travelling is itself unsustainable, the effects of travel add to the problem.

Positive effects

In environmental terms, planning policy on transport is trying to encourage a no pollution-low pollution approach to travel, and increase the proportion of journeys that people make by foot, on bike, bus or train. This policy has a number of potential benefits:

► A reduction in exhaust emissions, so local air quality improves, and there are fewer emissions of climate changing greenhouse gases.

► A reduction in congestion, which has an economic benefit as businesses find it easier to work efficiently.

► A reduction in the stress of travelling, so people are happier and better able to concentrate on their work.

► A fitter and healthier population (with greater life expectancy) where people travel mainly on foot/bike.

The more sustainable solutions, to complement walking and cycling, may lie in technological developments to replace the petrol engine. Battery operated and gas driven vehicles are becoming more and more efficient and experiments in solar power are progressing.

Ultimately individuals have the power to influence transport most. We have the choice now to walk, cycle or use public transport, yet how many of us can break the habit of using the car?

Edinburgh bus priority system

Edinburgh is combating congestion with its hi-tech TIRIS radio frequency identification technology. Radio frequency responders control traffic lights, and automatically the buses are given the green light. The entire fleet of 800 vehicles has these responders, and the success of the scheme is illustrated by the increase in passengers, and reduced travelling times.

For further information: www.aimglobal.org/technologies/rfid/casestudy/Edinburgh.htm

Other sustainable solutions

► Many areas promote Bus Showcase Schemes and improve accessibility for buses. This includes providing bus only or bus priority lanes and junctions.

► Park and Ride is used effectively in many historic towns and tourist destinations where there is insufficient space or parking for large volumes of traffic. It is increasingly being promoted in larger towns at busy periods - for example to cope with Christmas shopping.

Key words

Accessibility
Mobility
Air quality
Health
Externalities

Links

Mixed Use Development

A sustainable solution

NEEDS AND ISSUES

- Between the 1950’s - 1970’s the planning system operated on the basis of trying to segregate land uses. Many development plans had rigid zoning layouts locating residential, industrial, retail and commercial uses into separate areas.

- Throughout the 1980’s and early 1990’s the Government of the day preferred to let market forces influence location decisions. The result was often an ‘out of centre’ retail and leisure development. (NB. 1979 - 1997 = 13 million square metres of out of town shopping development).

Both the above approaches resulted in increasing the need to travel. In addition, the former approach led to uniform, often characterless areas that lacked any real sense of community, whilst the latter often harmed the older town centres by pulling the heart and life out of them. Partly in reaction to this and partly as a means of providing more sustainable developments, the last 10 years have seen the provision of MIXED USE DEVELOPMENTS.

EXAMPLE OF MIXED USE
Oxo Tower Wharf, London

A good example of a mixed use development is Oxo Tower Wharf in London. It is actually a refurbished warehouse on the site of what was planned to be a comprehensive redevelopment scheme. As a result of local community opposition, and most importantly, alternative proposals, the building was saved and turned into a tremendous mix of alternative uses. It remains as one of the most prominent landmarks on the south bank of the Thames.

Oxo Tower Wharf, London.
Section through the reconstructed building showing the complex range of uses in the completed building.

WHAT IS MIXED USE?
As the name implies, mixed use developments are areas which recognise that many types of activity can sit side by side compatibly and create attractive and vibrant places which people will enjoy using. By locating houses, shops, cafes, offices, workshops, recreational, leisure and light industrial uses near to each other, this not only reduces the need to travel, it can help create new and exciting areas full of energy and vitality. Mixed use developments are particularly appropriate in town centres or at new public transport nodes and can work well in areas where old or historic buildings have to be retained.

Birmingham’s former Royal Mail Sorting Office is now a vibrant mixed use development with shops, restaurants, flats, offices and BBC TV studios.

KEY

1. Open viewing gallery (around tower).
2. Brasserie, restaurant and enclosed viewing gallery.
3. Co-op flats 1-3 bedrooms.
4. Food court.
5. Arcade.
6. Designer-maker workshops.
7. Shops and Cafes.
8. Mall.
9. CSCB Offices.
10. Training centre.
11. Parking and Servicing.
12. Retail storage.
PLANNING AND MIXED USE

The planning system can help promote and achieve mixed use development by:

- Identifying sites within Development Plans suitable for mixed use schemes.
- Helping to assemble sites, if necessary using compulsory purchase powers.
- Joining in public/private/community partnerships.
- Preparing Development Briefs, design guides and Area Frameworks to promote local opportunities.

MIXED USE AND SUSTAINABILITY

Mixed use development has the potential to provide environmental, economic and social benefits through:

- Making use of otherwise unwanted or obsolete property, including listed buildings.
- Reducing the need to travel by encouraging related land uses to be located more closely and enabling multi-purpose trips.
- Providing the opportunity for people to walk to work or use other facilities and be less reliant on the car.
- Encouraging greater use of the streets and public spaces can assist in reducing crime through the indirect policing of citizen by citizen.
- Reintroducing housing back into city centres or industrial areas.
- Encouraging good design with well laid out buildings and spaces.

EXAMPLE OF MIXED USE
Brindleyplace, Birmingham

Brindleyplace, Birmingham is an area containing a mix of buildings of very different uses, although many buildings are in a single use. It came about as a result of the development of an area of derelict, former industrial land. As a result of the City Council’s intervention the site was redeveloped for a whole variety of uses including the National Sea Life Centre, an art gallery, pubs, cafes and the first privately owned housing to be built in the City Centre for many years.

Brindleyplace, Birmingham.
The development scheme viewed from the city centre.

URBAN VILLAGES Areas which are designed to create a strong sense of place and community that draw on the social character of a village while offering an urban density of development that can sustain a balanced mix of local facilities.

Urban Villages are typically:

- Small in size, ie. walkable.
- Contain a mix of uses within street blocks.
- Have pedestrian friendly environments which, whilst catering for the car, do not encourage its use.
- Incorporate traffic calming measures.
- Accessible easily by public transport.
- Mix building sizes, shapes and designs.
- Have active ground floor uses, eg. cafes, shops, bars.
- Comprise a mix of tenures.

Examples:
- Greenwich Millennium Village.
- Birmingham Jewellery Quarter.

CLASSROOM QUESTIONS

- Is it possible to live in an area and walk to your job, shopping centre and entertainment facilities?
- How can historic old buildings be used for a new purpose?
- What is an urban village and how does it contribute to sustainability?

KEY WORDS

Building re-use
Transport
Regeneration
Mixed Use

KEY

1 Canalside restaurant, bars and shops.
2 Ikon Gallery.
3 The Malt House pub.
4 Office buildings.
5 143 homes - Symphony Court.
6 National Sea Life Centre.
7 Multi-storey car park.
8 Hotel.
9 Theatre.

LINKS

Housing Associations, Living Above the Shop Initiative.
Green Belt The prevention of urban sprawl

NEEDS AND ISSUES

Although the need for green buffer spaces around towns formed part of Victorian planning thinking (see Garden Cities box), it was the rapid expansion of towns and cities between the two world wars that led to legislation in 1947 and 1955 inviting local authorities to establish Green Belts.

Unprecedented levels of new house building and the transfer of agricultural land to urban uses led to fears that:

- London and other large cities would continue to sprawl to unacceptable sizes.
- Cities such as Leeds and Bradford or Birmingham and Coventry would eventually merge.
- Historic cities such as Bath, York, Oxford and Cambridge would lose their distinctive setting and character.

More recently with the ease of commuting, Green Belt policy is a key factor in encouraging the regeneration of towns through developing on brownfield, rather than greenfield, sites.

Although widely supported by the public, the Green Belt can itself create difficulties and concerns. These include:

- Tightly drawn inner boundaries, adjacent to the built-up area constrain the opportunity for meeting new housing needs at the urban edge. This results in 'leap frogging' the Green Belt, increasing both the length of commuter journeys and car dependence.
- Trying to redefine inner boundaries to allow cities room for future growth (in a controlled way), leads to large scale and vociferous local opposition.
- Tight controls over what can be done in the Green Belt mean it is often at odds with policies for economic development, transport, leisure, agriculture and forestry.
- Land in the Green Belt near to the urban edge often becomes economically more marginal to farm.
- Increases in house prices in the Green Belt and a lack of affordable housing.
- Urban intensification leading to pressure on green spaces and playing fields in the built-up area, often of more value and quality than peripheral Green Belt land.
- Some modern businesses will only locate on greenfield sites. Cities with Green Belts may lose new investment if they cannot offer appropriate sites.

EBENEZER HOWARD AND GARDEN CITIES

In the late 19th century, Ebenezer Howard, appalled at the insanitary, overcrowded, filthy living and working environments of Victorian cities developed a Utopian vision of building which he called Garden Cities. These were to be small, self-contained towns in the countryside surrounded by a Green Belt of protected open space. They were to be slumless, smokeless towns, characterised by open spaces, parks and wide, well lit streets. His ideas came to part fruition in building Letchworth and Welwyn, but his legacy of greatly influencing urban planning thinking, not least by his concept of a Green Belt around the town, has now been the more lasting.

GREEN BELTS - ARE THEY ABOUT TOWN OR COUNTRY?

The RTPI has stated that “Green Belt policy is probably the planning policy that is best known to the public at large, but the one that is least understood”. For many people the Green Belt is assumed to be about protecting the countryside; in reality it is an urban policy tool designed to encourage regeneration, prevent sprawl and to protect the historic setting of towns.

FACTS

- Green Belts cover about 1.56 million hectares in England (approximately 12% of the land area). There are only 14 Green Belts in England. The largest surrounds London and covers 486,000 hectares.
- Green Belts cover 165,000 hectares in Scotland and the biggest is around Glasgow.
- There are no Green Belts in Wales, although one is being considered for the Cardiff-Newport conurbation.

The stark boundary between the built up area and the green belt.
Green Belts are established by the Local Authority and identified within their Development Plan. Development within Green Belts is strictly controlled to ensure their openness and permanence. Boundaries can only be altered through formally amending the Development Plan.

In contrast to the normal presumption in favour of development which characterises UK planning legislation, development control policies in Green Belts are essentially negative and restrictive.

Although there are differences in detail, Green Belts in England, Scotland and Northern Ireland (there are currently none in Wales) broadly aim to:

- Assist regeneration in urban areas by encouraging the recycling of derelict or brownfield land.
- Preserve the character of historic towns.
- Check urban sprawl.
- Prevent the coalescence of urban areas.
- Safeguard the countryside from encroachment.
- Improve the degraded urban fringe.
- Provide access to the open countryside.
- Provide for sport and recreation and to protect agriculture, forestry and related uses.

Green Belts are ideally several miles wide (to ensure an appreciable open zone) and their boundaries should be clearly defined, eg. by roads, streams, woodland etc. In general, developments which affect the openness of the Green Belt are inappropriate and will be refused.

The role of Green Belts is currently a topical issue as it is debatable whether the policy adds to or detracts from sustainable development. Channelling effort into regenerating the urban area and hence reducing the need to travel is clearly sustainable. However, if inner boundaries have been too tightly drawn the result may be house building leap-frogging the Green Belt and encouraging greater commuting. Similarly, if development within the Green Belt is controlled too vigorously it may hinder economic development and the sustainable growth of the city. Although a very successful policy in restricting the growth of cities from the 1950’s onwards, some argue that it is now strangling the ability of cities to provide the jobs and houses residents need.

Features of sustainability include:

- Traditional local architectural forms.
- Higher density mixed use.
- Pedestrian and cycle links.
- Integrated public transport.
- Green energy supplier.
- Ecological enhancement.
- A ‘local people first’ commitment.

Is it more sustainable to have tightly drawn Green Belt boundaries, or areas that allow expansion room for further development?

Does Green Belt policy result in house building pressures in villages and towns in the countryside beyond the Green Belt?

Is it sustainable for Business Parks to be built in the Green Belt?

**SOURCE:** 1. RTPI - ‘Modernising Green Belts’ - A discussion paper. May 2002. 2. PPG2 - Green Belts, HMSO.

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**CASE STUDY**

**AN URBAN EXTENSION - West Stevenage, Hertfordshire.**

In order to meet projected local housing needs, a large scale urban extension - West Stevenage - for Stevenage, Hertfordshire has been proposed. 3,600 homes will be built on this greenfield site, with the site having potential for a total of up to 10,000 homes. Sustainability is at the heart of the development, particularly the theme of better passenger transport and reduced reliance on the car. Schools, community and leisure facilities, businesses and shops, plus open spaces, are all planned as part of the development.

The greenfield site has been chosen over others because:

- It will not threaten surrounding towns and villages.
- It is located close to major road and rail links.
- It is located near to Stevenage town centre and other retail and leisure facilities.

Features of sustainability include:

- Traditional local architectural forms.
- Higher density mixed use.
- Pedestrian and cycle links.
- Integrated public transport.
- Green energy supplier.
- Ecological enhancement.
- A ‘local people first’ commitment.

**KEY WORDS**

Sprawl
Open space
Boundaries
Land value

**LINKS**

CPRE, Friends of the Earth, Countryside Agency.
Growth in time spent on recreation, leisure and tourism has been one of the biggest social revolutions of the last 50 years.

With the focus on brownfield sites, many playing fields are being used for housing.

Most recreation trips are in the family car which encourages use of more remote areas and increases road traffic.

The growth in holidays abroad impacts on the global environment through pollution and erosion. Most depend on air travel which is reliant on fossil fuel use.

Requires more airports, ferry ports and road access to terminals.

Because informal recreation is perceived as a ‘natural’ activity its environmental impact is often overlooked. ‘Management’ of informal activity is alien to many people.

How are planners involved?

Planners in local government identify the need for facilities in a local area and allocate sites for them e.g. new paths and playgrounds. They also control new leisure development.

Planners in the private sector promote new commercial facilities like multiplex cinemas, golf courses and health and fitness centres.

Planning can help to achieve sustainable recreation through:

Environmental protection (to combat noise, excess lighting, erosion, land degradation, loss of biodiversity, water pollution through oil, diesel etc.).

Improving access - opportunities for public transport, access for disabled and elderly, protection of rights of way etc.

Encouraging local involvement by involving communities in the planning process.

Employment - providing economic opportunities in recreation.

Land management - protecting landscapes, designated areas, agricultural land, traditional features (stone walls etc.) which are popular.

Buildings management - protecting historic and traditional style buildings, and encouraging new buildings to be low impact, energy efficient, and use local materials (see ‘Conservation’).

The closure of footpaths, the coastline, country parks and national parks during the foot and mouth epidemic illustrated the extent to which the countryside is used for recreation - most of it unplanned and informal.

Is the future of the countryside dependent on farming or recreation and tourism?
What’s the connection between Wembley Stadium and sustainable development?

Planning decisions on the road to Wembley: A new national stadium.

► Where should it be built - London, the North, the Midlands? Which regions need investment and regeneration?

► Should it be on a greenfield or brownfield site?

► Multi-use stadium or football only - what are the implications?

► Is the location good for public transport, train or bus, or only accessible by car?

► Traditional design conserving the twin towers or a radical new architectural solution?

► How do we design in energy efficiency, waste recycling and water conservation?

► What will the effect be on local people - noise, congestion, light nuisance etc?

► What materials should be used in construction - think about environmental cost, transport distance?

TOURISM AND THE ECONOMY

Tourism is one of the key drivers of the British economy, supporting around 1.7 million jobs. It is also one of the fastest growing industries with one in five of all new jobs being created in the tourist industry.

The UK has experienced fast growth in the tourism sector with an increase of 5% each year since 1990. In 1997, the total number of overseas visitors to the UK was 26 million. Tourism by British residents has also increased, going up 5% each year since 1990.

► Many areas of the British Isles are very popular tourist areas, whether for historical, natural or cultural reasons.

► Many areas rely on tourism as a principal part of the economy, with high percentages of people employed in the sector.

► Tourism development can take many forms, whether caravan sites, hotel sites or conference facilities, crafts, shops and restaurants.

► Certain sections of the population are dependent upon tourism for jobs and trade.

THE FOREST OF THE COMMUNITY PROGRAMME

England’s 12 Community Forests are the product of partnership between the Countryside Agency, the Forestry Commission and a host of local and national partners.

The aim is to create well-wooded landscapes for wildlife, work and education, with new opportunities for a range of recreational facilities, all on the doorstep of half of England’s population.

During 1989/99 over 1,330ha of woodland were opened up for recreation and leisure. Since 1991, the total woodland area made available for access is 10,112ha.

FOR FURTHER INFORMATION: www.communityforest.org.uk

CASE STUDY
A NEW NATIONAL STADIUM How planners are involved

CLASSE ROM QUESTIONS

► The Eden Project in Cornwall is a very successful tourist attraction. Describe the pros and cons its development has had on the local area.

► Why is it important to have public open spaces and playing fields within the urban area?

► Tourism in National Parks or Wildlife Areas - Does it destroy the very thing we go to enjoy? Discuss.

KEY WORDS

Conservation
Heritage
Regeneration
History
Culture

LINKS

British Tourist Authority, National Parks Association, Countryside Agency, Local Authorities, Sport England, Sport Scotland, Sport Wales.
Conservation

The value of our built heritage

NEEDS AND ISSUES

Protection of valued buildings

- For the first time in history, planning laws were introduced in the 1940's to protect and conserve valuable buildings and archaeological remains.
- A combination of war time bomb damage to cities and urban clearance and redevelopment schemes led to the rise of the conservation movement in the 1960's.
- The UK now has the largest number of protected buildings and monuments in the world. Despite bomb damage and demolition our towns and countryside are rich in historical and architecturally significant buildings, archaeological remains and historic parks and gardens. This is our built heritage.
- There is wide public support for conservation and our largest interest and amenity groups are in the field of conservation. The built heritage is conserved for its intrinsic quality, its historical and cultural associations, its economic benefits and to pass it on to future generations. These are essential features of sustainability.

PLANNING AND CONSERVATION

The planning system helps to conserve the built heritage by protecting 'designated' sites and buildings. There are the four main designations:

- **Scheduled Ancient Monuments** can be almost any building, structure or site of archaeological importance from Stonehenge to a preserved Second World War airfield in Lothian.
- **Listed Buildings** are of special architectural or historic interest. These buildings are given the strongest level of protection, careful conservation is encouraged and special consent is required if alteration or demolition is proposed. They vary from grand examples such as St. Paul’s Cathedral to the homes of well known people and some modern tower blocks such as Centre Point in London.
- **Conservation Areas** are designated by local planning authorities to help preserve the character of an area and the buildings within it. They often cover town centres, villages or special groups of historic buildings. Planning controls are stricter in conservation areas and cover trees as well as buildings. All buildings are treated as if they are Listed.
- **World Heritage Sites** are designated by the United Nations as being of great international significance. Recognition ensures careful planning control. The UK has 15 world heritage sites including Ironbridge Gorge in Shropshire, the Town Walls of Edward I in Gwynedd, the City of Bath and Neolithic Orkney.

**TABLE 1** Listed Buildings, Monuments, Conservation Areas and Heritage Sites in the UK

<table>
<thead>
<tr>
<th></th>
<th>England</th>
<th>Scotland</th>
<th>Wales</th>
<th>N.Ireland</th>
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<td>8,819</td>
<td>674</td>
<td>400</td>
<td>40</td>
<td>9,934</td>
</tr>
<tr>
<td>World Heritage Sites</td>
<td>11</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>15</td>
</tr>
</tbody>
</table>

A few town centres are so rich in archaeological heritage they are protected as 'Areas of Archaeological Importance':

- York.
- Canterbury.
- Chester.

Some very special sites are in the care of national governments, such as:

- Hadrian’s Wall.
- Edinburgh Castle.

Examples of listed buildings:

- 1000 old red telephone boxes.
- 12,000 churches.
- 123 cinemas.
- A petrol pump at Oxon, Nottinghamshire.
- The Essex County Cricket Club pavilion.
- Ribblehead Viaduct, North Yorkshire.
- City Hall, Cardiff.
- Carrickfergus Castle, County Antrim.
WHilst the planning system can designate thousands of places for protection from development, investment, management and enhancement are also needed. Special designations do not guarantee conservation. Although rare these days, listed buildings have been demolished but this needs special government consent.

When new economic uses cannot be found, buildings are often neglected. In Scotland there are more than 800 unoccupied or derelict listed buildings and in England more than 36,000 are at risk of neglect.

New uses have to be found for old buildings, so that their conservation is economically viable. This is not always easy. In our city centres Victorian buildings have been gutted - leaving only the facades while new structures are built behind to take modern shops and offices.

The urban renaissance, which encourages a return to living in the centres of our towns and cities, is essential for a sustainable future for the built heritage. It is a two way benefit - the new uses for old buildings provide investment in conservation, and the valuable, attractive old buildings improve the quality of life for residents.

Heritage conservation can stimulate regeneration - especially when linked to tourism - by tourists and business. 69% of holiday-makers from overseas said 'heritage' was their main reason for visiting Britain, 80% of those from North America. 33% of domestic holiday makers visit a heritage attraction. Tourism employs 1.7 million people and contributes £30 billion to the economy. In Bath alone heritage tourism is worth more than £200 million a year and employs 5,000 full time jobs.

But tourism can also damage our heritage. More than 11 million people visit the UK's historic properties each year, and damage to the structure and contents can be significant. It has been estimated that for some properties, the wear and tear in one year as a visitor attraction is equal to 20 to 100 years in normal use.

What are the benefits of designating Conservation Areas or 'listing' individual buildings of merit?

Should old unused churches be demolished or found a new use? If the latter, what uses would you recommend?

Built Heritage and Tourism - a happy marriage or uncomfortable bedfellows? Discuss.

Many of the buildings within the conservation area are listed, but were standing empty when Bradford District Council started the restoration in 1986. Environmental quality was a high priority and New Mill has been converted into offices and residential flats, the coach house restored and Salts Mill is occupied, including an art gallery devoted to David Hockney.

FOR FURTHER INFORMATION: www.wisegrowth.org.uk

KEY WORDS
Heritage
Historical
Cultural
Designations
Renaissance
Tourism

National Trust, English Heritage, Civic Trust (see also Civic Trust for Wales), Historic Scotland, Council for British Archaeology.
Biodiversity Our living environment

NEEDS AND ISSUES

What is biodiversity?
Biodiversity is a term used to describe living plants and animals and the habitats in which they live. Biodiversity also means genetic diversity - the specific genes which form the basic building blocks of all life forms - and the larger ecosystems of which we are a part.

The need for biodiversity

► There are many reasons why we need species and habitats including: primary resources such as wood, rubber, food, fuels, cotton and silk; fertile soil to grow food and important resources; for medicinal purposes as extracts from plants etc. can alleviate or cure medical problems (eg. Catharanthus roseus - Rosy Periwinkle - helps to treat leukaemia); ecological functions such as water filtration and carbon fixing; human enjoyment, intrinsic value; and employment.

► There is also a moral issue about our responsibility for stewardship of the planet.

► At the Earth Summit in Rio in 1992 the UK and Ireland signed the Convention on Biological Diversity. This committed all nations to produce their own Action Plan to halt the decline in biodiversity.

► Local Biodiversity Action Plans (LBAP’s), interpret the national plan at a local level and are usually produced by partnerships of local authorities, wildlife and habitat interest groups and other agencies.

► Biodiversity is more than conservation of species and habitats in nature reserves. It is about raising awareness of biodiversity in all environments, urban and rural, and ensuring that all developments, if possible, result in a net increase in biodiversity.

PLANNING AND BIODIVERSITY

The town planning system can help maintain biodiversity, and help monitor the effects of development through controlling its location and nature. Development under normal circumstances need not lead to a loss of biodiversity. It can also help to promote biodiversity through formation of specific policies that encourage new sites for wildlife. Biodiversity is a natural resource which we cannot take for granted. Using natural resources wisely is essential to achieving sustainable development and the maintenance of quality of life.

A key element to conserving and improving biodiversity is an efficient planning system which guides development that respects the region’s environment:

► Through promoting sustainable design and construction.

► Through active involvement in the countryside and coastal management projects.

► Through careful siting of development.

► Through controlling small-scale cumulative development.

Another important aspect of land use is farming. The planning system needs to support sustainable farming and that means finding ways of producing good food without reliance on chemical fertilisers and pesticides, supporting rural communities and helping wildlife (eg. protecting hedgrows).

In the UK there are 116 species which are endangered, and so have protected status. Examples of rare species are:

► Skylark.

► Natterjack toad.

► Heath fritillary.

► Fen orchid.

HABITATS

There are 45 habitats of conservation concern in the UK, such as peat bogs, lowland heathland, and lowland woodland.

Apples and pears are traditional UK orchard crops but in the last thirty years half of our pear orchards and over 60% of our apple orchards have been destroyed. Although there are 2,300 apple varieties and 550 pear varieties in the National Fruit Collection, just two apple and three pear varieties now dominate UK orchards.
Sustainable development means trying to ensure a better quality of life for all, including future generations. Biodiversity (species and habitats) are important for many reasons, and so a balance must be found in protecting existing biodiversity, and using it wisely, as it is a vital resource for every one of us.

There is a range of measures which can help protect biodiversity, such as:

- Minimise pollution.
- Protect open space and countryside.
- UK Biodiversity Action Plan (plus Local BAP’s).
- Land management schemes such as Countryside Stewardship Schemes.
- Encourage better farming practices eg. produce more organic food.

Threats to biodiversity

**POLLUTION**
Air - radon; CO₂; CO; nitrogen oxides. Land - toxic metals; petrol; diesel; asbestos. Water - (marine/fresh) slurry; sewage; nitrates; fine particles/organic matter causing siltation; oil spills etc.

**DEVELOPMENT**
Land used for industry; mining; housing; roads; isolation of habitats/species; water abstraction; dredging; peat extraction.

**CLIMATE CHANGE**
Change in air and water temperature can lead to changes in conditions in which animals or plants live, and affect the food chain, flooding also destroys wildlife.

**INTRODUCED SPECIES**
Threat to indigenous species by non-native species.

**AGRICULTURE**
Poor or inappropriate management of farmland; hedgerow loss; overgrazing; mono-culture of species grown for agricultural purposes; manure; slurries; fertilisers and pesticides.

**FISHING**
Over-fishing; methods of fishing (eg. trawling, dredging); litter thrown overboard.

**TOURISM/OVERPOPULATION**
Demand; erosion; air pollution through increased traffic; new development.

**GMO’s (Genetically Modified Organisms)**
Unknown consequences of genetic modification; new species which are stronger than native species; new proteins in food chain - potential negative health effects.

**NEEDINGWORTH WETLAND PROJECT, Cambridgeshire.**
28 million tonnes of sand and gravel will be extracted from land bordering the River Ouse over the next 30 years. In its place, a large nature reserve will be created by the Royal Society for the Protection of Birds (approx. 700 hectares), and will include 460 acres of freshwater reed bed. This one reserve will provide 40% of the Government’s target for this type of habitat.

**FOR FURTHER INFORMATION:**
www.qpa.org/natureconservation/bio_ca1.htm

Planning for mineral extraction and waste disposal is a major part of planning officers’ work, either for local authorities or the commercial firms involved in the minerals and waste industry. Minerals quarries were traditionally used for waste disposal but increasingly they are being restored for amenity use such as recreation or biodiversity.

**KEY WORDS**
Ecosystems
Species
GMO
Genes
Landscape designations

**LINKS**

**CLASSROOM QUESTIONS**

- Discuss the differences between an organic, sustainable farm and one which applies intensive farming techniques.
- Should rare newts, toads and orchids stand in the way of new housing?
- Can coal spoil heaps, brickworks and sand and gravel pits be brought back into beneficial use and is this important?
Modern lifestyle and society are dependent on the use of natural resources. All our food and drink, most of our travel and transport, energy, heat, light, everything that is manufactured or constructed in some way consume natural resources.

The main issues for planning are:
- Extraction, production and processing have many environmental impacts.
- Domestic and commercial use causes waste and pollution.
- Construction may sterilise resources.

Mineral resources, including oil, gas, coal, ore, rock, materials such as clay and aggregates such as sand and gravel are needed to supply raw materials to the construction and manufacturing industries as well as providing our energy. Extracting mineral resources often has an environmental impact either because they are located in sensitive landscapes (a national park for example) or because they result in large scale changes to the land surface. Dust, noise and traffic are also problems.

The infrastructure of resource use - power stations, dams, reservoirs, industrial plant, oil refineries - are located ‘out of sight’ and therefore ‘out of mind’ because they are ‘bad neighbour’ uses.

The use of renewable and alternative energy such as wind power, tidal energy and biomass production, all have other environmental impacts which pose questions. Nuclear power, once seen as a solution, brings its own problems of pollution, contamination and waste disposal.

Water, one of our most important renewable and recyclable resources, can no longer be taken for granted. Increased domestic use, over-extraction, pollution from sewage and agriculture, the demands of biodiversity (See Section 13) and effects of climate change (See Section 16) all require better resource management.

Through Minerals and Waste Local Plans, planners guide:
- The quantity of minerals extracted.
- Where operations take place.
- How they are managed to minimise visual impact and reduce noise, dust etc.
- How they are restored.

Planning permissions for new mineral operations are usually very controversial.

Historically, one of the main justifications for planning was to control the spread of new development into the countryside. By controlling development, planning therefore attempts to protect the natural resources of the coast and countryside eg. farmland, ecological habitats, areas of natural beauty or areas of recreational value.

**NEEDS AND ISSUES**

**PLANNING AND NATURAL RESOURCES**

**CASE STUDY**

**THE EDEN PROJECT, Cornwall.**
For over 100 years china clay had been extracted by open-cast methods from the Boldeva Pit. In 1997 production ended leaving a 15ha, 60 metre deep pit scarring the Cornish landscape. However, one of the most innovative Millennium Landscape Projects has returned the landscape to a useful function through creating the world’s largest greenhouse conservatories which are themselves examples of sustainability. The £86m project houses over 250,000 plants from around the world in a series of hexagonal ‘Biomes’. In addition to being one of the most successful tourist attractions in the country, the 50ha site attempts to balance the 3 key areas that the 1992 Earth Summit in Rio considered essential for life to be sustained indefinitely: the economy, the community and the environment. In restoring the landscape massive technical problems had to be overcome including dealing with industrial spoil, creating new soil and managing a complex water table. Possibly the Eden Project’s biggest problem is its popularity as this places great pressure on the local roads and transport infrastructure.

FOR FURTHER INFORMATION:
www.edenproject.com
www.eden-project.co.uk
The best agricultural land has traditionally been protected from development by the planning system, because of its value for food production. Much ‘greenfield’ development has been opposed on these grounds. This approach may now conflict with biodiversity (See Section 13) arguments because lower grade agricultural land - marshes, heathland or chalk downs for example - is often of high ecological value.

The whole debate about natural resource management is the foundation of the concept of sustainability and the linking of local developments with global issues. This has three elements:

► Consumption of finite resources threatens continued use by future generations.
► The impacts of, for example, oil, phosphates, metal ore and tropical timber production are global in scale and affect environments and societies far removed from our own.
► The link between natural resource use, principally carbon fuels, the emission of greenhouse gases and climate change.

Control and influence over many of these issues is beyond the scope of traditional planning in the UK and Ireland. However the form and location of new development can be influential. For example planners now encourage development which:

► Is high density, in existing urban areas and on brownfield or previously used sites.
► Assists the provision and use of public transport and encourages walking and cycling.
► Is efficient in its use of energy and water.
► Encourages the recycling of waste and the use of recycled materials in construction.
► Encourages urban living through good design and mixed-use developments to generate a sense of community.

Planning however can only operate at the margins of the sustainability debate by influencing new development. Levels of natural resource consumption, and waste production, are beyond its traditional scope.

The objectives of planning can no longer be achieved by plans alone - it also needs a fundamental change in the behaviour and demands of individuals and society as a whole to reduce natural resource consumption.

Highlighting the links between our demands and their impact on the environment around us is one of the main objectives of this manual.

**CASE STUDY**

**HAMMARBY SJOSTAD, Stockholm, Sweden.**

A new township in Stockholm, is integrating resources of water, energy and waste to produce a resource efficient, environmentally planned district.

**Water:** The local township has a sewage treatment plant, with heat recovery and nutrients extracted and then used on agricultural land.

**Energy:** Demand is reduced through efficient appliances, and district heating/cooling is provided through liquid bio-fuel boilers, solar panels, heat pumps and combustible waste.

**Waste:** Household and organic waste and sewage will provide biogas. Residual solids will be used for agricultural fertiliser.

**FOR FURTHER INFORMATION:** www.hammarbysjostad.stockholm.se

**KEY WORDS**

Extraction
Demand
Impact
Finite
Biomes

**LINKS**

Waste Management

Putting waste to good use

NEEDS AND ISSUES

As the rate at which we consume goods, materials and natural resources increases it leads to an enormous increase in the amount of material we throw away. Dealing with waste is an important part of our modern society. Without appropriate collection and disposal mechanisms, our streets and local environments would quickly become buried under a mound of rubbish. This would threaten our health and pollute the ecosystems which we rely on for clean water and air etc.

There are three key issues in relation to waste and waste management:

- Minimising waste production and increasing recycling.
- Using waste efficiently once produced - waste is a resource.
- Disposing of waste appropriately so people and the environment are not harmed.

Dealing with our own waste

- Some local authorities cannot deal with the waste produced in their own areas and so transport the waste to incinerators or landfill sites elsewhere. This increases congestion on the road, adds to air pollution through freight transport via road, and uses more resources of oil and petrol. Transport of waste is unlikely to remain a viable option in the future as roads become more congested, and fuel prices rise. The key issue to tackle is waste reduction at source, in the local community.
- Planning permissions for new waste incinerators or landfill sites are usually very controversial and provoke public opposition.
- Domestic waste is only 20% of all waste produced. The collection and disposal of industrial and commercial waste is outside the responsibility of local authorities.

PLANNING AND WASTE MANAGEMENT

- Local Government has the responsibility for collecting domestic waste, and planning and controlling waste disposal.
- In ‘Minerals and Waste Plans’ planners set out the strategy for waste disposal by allocating sites for landfill operations and for the construction of incinerators or energy-from-waste plants. The management of these sites to prevent pollution is a very important part of the Plan.
- The planning system also has an important role to play in achieving sustainable waste management. The planning system can:
  - Actively support development which will minimise waste, increase the recycling of waste and provide facilities or encourage markets for recycling (and recycled products).
  - Encourage energy efficient development.
  - Promote the use of energy from waste.

Each year a household is estimated to produce over 1 tonne of waste.

The average dustbin over one year contains enough energy for the following:

- 500 baths/3500 showers OR
- 5000 TV hours.

Tyseley Energy from Waste plant.

In addition to managing 350,000 tonnes of waste each year and generating sufficient surplus electricity to power 25,000 homes, this Energy from Waste Plant looks good too. At night it is illuminated with an imaginative award winning coloured light display.

The production of waste and the consumption of natural resources are linked together. Reducing waste, increasing recycling and using waste disposal to produce energy all contribute towards an overall more efficient use of resources.

Reducing waste output will not only have an effect on natural resource consumption - it will also reduce the need for unpopular and controversial landfill sites or incinerators.

The main methods of getting rid of our waste are landfill and incineration. **TABLE 2** illustrates some of the advantages and disadvantages of each method.

**TABLE 2** Landfill and Incineration: Advantages (✔) and disadvantages (✘)

<table>
<thead>
<tr>
<th>LANDFILL</th>
<th>INCINERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔ Can tap methane for energy use through burning.</td>
<td>✔ Volume of waste decreases.</td>
</tr>
<tr>
<td>✔ No large incinerator.</td>
<td>✔ Burning can produce electricity and/or heat.</td>
</tr>
<tr>
<td>✘ Road haulage bringing waste to the sites.</td>
<td>✘ Road haulage bringing waste to cities.</td>
</tr>
<tr>
<td>✘ Potential threat to water quality.</td>
<td>✘ Produces CO2, a greenhouse gas.</td>
</tr>
<tr>
<td>✘ Loss of land for development e.g. business, houses, schools, nature and wildlife.</td>
<td>✘ Smelly.</td>
</tr>
<tr>
<td>✘ Decomposition of waste can produce methane, CH4 explosive gas and also greenhouse gas.</td>
<td>✘ Air pollution and health risk through emissions.</td>
</tr>
</tbody>
</table>

**Personal responsibility**

Some ways of helping reduce the amount of waste we produce.

We as consumers can:

- Buy less, reuse and recycle goods.
- Put pressure on shops and supermarkets to stock recycled products.

Local authorities in the planning process can:

- Demand new developments have better resource efficiency.
- Develop policies and guidance for dealing with waste.
- Provide recycling facilities and kerbside collection schemes.

Local Agenda 21 strategies and ‘Community Plans’ often have ideas on how to reduce waste and deal with waste that we produce, and we, as citizens, can take part in this process.

**CLASSROOM QUESTIONS**

- Which products can a household recycle and which products can be bought made of recycled materials?
- We are a ‘throw away society’ - discuss why this is and what its implications are.
- Can waste be a resource? How can we put it to good use?

**CASE STUDY**

**THE THERMAL TREATMENT PLANT, Bexley, London.**

The South East London Combined Heat and Power Plant (SELCHP), capable of handling 420,000 tonnes of waste a year, generates enough electricity to power the plant itself, and 35,000 homes in Bexley. 56% of Bexley’s waste is incinerated. District heating and hot water to homes through the steam generated, is also planned. Metals and incinerator ash are also recycled. Only 19% of Bexley’s total waste is sent to landfill.

**FOR FURTHER INFORMATION:**


**LEGISLATION**

Targets set out in Central Governments’ ‘Waste Strategy 2000’ are:

- To recycle or compost 25% of household waste by 2005.
- To recycle or compost 30% of household waste by 2010.
- To recover value from 45% of municipal waste by 2010.
- To recover value from 65% by 2015, half of that through recycling and composting.

(The Waste Management Strategy for Northern Ireland was launched in April 2000).

**KEY WORDS**

Consumerism
Waste hierarchy
Waste reduction
Landfill
Incineration

**LINKS**

ETSU, AEA Technology
Pollution Damaging the environment

NEEDS AND ISSUES

There are many forms of pollution, and pollution incidents affect all parts of the natural and built environment, whether in seas and rivers, in the air or on land. Most examples of pollution are due to human activity, and so the solution is in our own hands with changes in behaviour and lifestyle.

Pollution is a serious obstacle in achieving sustainable development, and obtaining a good quality of life. It can contribute to poor health (such as causing asthma and other respiratory problems), damaging wildlife, making species extinct or threatened, destroying habitats and landscapes, damaging soil and poisoning lakes, rivers, aquifers and seas.

Global pollution is now believed to be contributing to climate change. Greenhouse gases such as CO2, CO, nitrogen oxides, methane etc., are upsetting the stable climatic balance of the planet. In the last 200 years, humans have increased the amount of greenhouse gases in the atmosphere by burning fossil fuels like coal, oil and gas.

CLIMATE CHANGE AND FLOODS

The earth’s climate has always changed, as there have been ice ages and much warmer periods. But due to pollution it is accepted that we are now accelerating any natural climate change.

- The earth’s surface temperature has increased 0.1 degrees Celsius in only the last 50 years.
- Precipitation patterns have changed and snowfall in the northern hemisphere has declined.
- Sea levels have risen by 10-25cm since 1850.

As a result, weather patterns are becoming more unstable and extreme conditions such as floods or droughts are more common. Flood defences are becoming inadequate (note the floods of winter 2000) and 5 million people already live in flood risk areas in England and Wales (often flood plains). Property, land and other assets on flood plains are valued at £214 billion.

PLANNING AND POLLUTION

- Pollution from 19th century industrial developments and the need to clean up towns and cities was a major influence on the need for planning. Well planned houses and streets with sewerage and clean water, located away from industrial polluters was an early benefit of the planning system.
- The planning system continues to help reduce pollution by locating new development away from potential pollution and by protecting sensitive areas such as wildlife habitats and groundwater services from potential polluters.
- A major objective of planning is to encourage a reduction in the distance travelled in vehicles to help reduce the amount of CO2 we produce. The planning system can ensure that new development is well served by public transport and does not generate any transport problems. Energy efficiency is also a key factor in reducing climate change and global warming. It will also help to conserve precious resources. Design criteria in planning policies can help promote good practice.

One success of ‘The Dome’ was to get the message of pollution and sustainability across to young children in a fun way.

CLEANER BEACHES

The number of Seaside Awards rose to 272 in 2002. Introduced in 1987 (the European Year of the Environment) the award recognises those beaches and marinas which are clean, well managed and promote care for the environment. To be considered, a beach must have attained the guideline standard of the EC Bathing Water Directive before being assessed for 24 other criteria.

ENERGY FROM LANDFILL

Landfill gas currently provides approximately 100 megawatts of electricity in the UK, with this figure set to increase rapidly in the coming years. The USA produces approximately 350 megawatts of electricity per year through the utilisation of landfill gas.
POLLUTION AND SUSTAINABILITY

Many areas of pollution are outside traditional planning control and influence. This suggests a broader scope for planning in the future to enable influence and control over activities which affect the environment and contribute to sustainability. For example:

Fresh Water

**Problem:** In 1997, 8% of English rivers and lakes were polluted with levels of pesticides above government recommended maximum levels. The cost of cleaning up this pollution is around £1 billion a year. We all pay for this on our water bills.

**Solution:** Switch to organic methods of farming, so chemical compounds cannot get into rivers or groundwater etc. Policies within development plans or land management plans can promote organic farming and include guidelines on how to handle and dispose of farm waste.

Marine Water

**Problem:** Sewerage outfalls pump raw sewage into the sea. This affects humans through bathing in contaminated water and affects wildlife through poisoning the water. Also, nappies and sanitary goods are discarded into the sewage and end up in the sea and on coastlines.

**Solution:** Increase and enforce the regulations on sewage and educate the public on disposal of nappies and sanitary goods etc.

Soil

**Problem:** Rubbish deposited in landfill sites contaminates the soil and materials such as plastics etc., sometimes never degrade (break down through natural composting processes). Methane gas is produced (a potent greenhouse gas) and CO2 (another key greenhouse gas) is released through decomposition of organic matter. Heavy metals and chemicals in industrial waste are also landfilled (see Waste Management).

**Solution:** Reduce the amount of waste produced so fewer materials have to be sent to landfill. Site specific industries in close proximity, as one manufacturer can use another’s by-product or waste. This is known as ‘closing the loop’ or ‘symbiotic industry’. Methane can also be tapped from landfill sites. The planning system can assist by promoting policies which advocate the siting of industries together. Also, targets on waste reduction and energy efficiency can help reduce the amount of landfill or incineration.

CASE STUDY

**WINTERTON POWER PLANT.**

Winterton Power Limited, Humberside.

Winterton Landfill Site receives 250,000 tonnes of waste per year. Waste is placed in clay lined cells under the ground. Landfill gas (containing methane) is produced from organic waste as it decays under the ground in anaerobic conditions. Methane gas is flammable and explosive, and is also a very potent greenhouse gas. Methane gas is extracted via pipes and fed into generators, which produce electricity. The power produced is supplied directly into the local electricity network.

FOR FURTHER INFORMATION:

www.portalenergy.com/caddet/retb/no98.pdf

**COMBINED HEAT AND POWER**

During electricity generation, a large amount of low-grade heat is produced as a by-product. In conventional power stations this heat is lost. In combined heat and power (CHP) systems the heat produced during electricity generation is recycled rather than wasted, thereby increasing the efficiency of the system.

**KEY WORDS**

Greenhouse effect
Ozone layer
Climate change
Symbiotic

**LINKS**


CLASSROOM QUESTIONS

► Why does pollution occur and what are its effects?
► ‘The Polluter Pays’ - Discuss the benefits of the costs of pollution being paid for by those who cause the pollution.
► How can we change our lifestyles to pollute less and live more sustainably?
The Planning System explained

PREVIOUS SECTIONS have explained the pressing issues that involve land use. Planning legislation was introduced to safeguard the precious resource of land and ensure good quality in our built environment. It achieves this by controlling new development, protecting areas of value and providing plans to guide the location and form of new housing, roads and schools etc. Because it intervenes in the market for land and property, the planning system is contentious and affects a number of land issues for which policies have to be devised.

Planning is very well established in the UK. It is a rigorous and open system with considerable opportunities for public involvement in decision making. The system is well respected by the public, although it is inevitable that some will be dissatisfied with the decisions that are delivered.

NATIONAL VARIATIONS
It is a misnomer to speak of the ‘UK system’ since there are four variants reflecting the constitutional arrangements for the four countries of the United Kingdom (under devolution since 1999). In practice, users of the system will notice little difference.

The important thing to remember is that each country has its own national planning policy and ‘lead organisation’ that creates it. Again there is considerable similarity but always look first for information that relates to your own country. There are a few matters relevant to planning that are dealt with for the whole of the UK - most relevant to the subject of this manual is ‘A Better Quality of Life. A strategy for Sustainable Development in the UK’.

WHO TAKES THE LEAD ON PLANNING IN EACH COUNTRY?
Local Planning Authorities do most of the day to day work on the planning system - making plans and consulting the public on them, and taking decisions on planning applications. This, however, takes place within a fairly tight framework set by national government and the devolved administrations, ie. The Welsh Assembly and the Scottish Parliament.

National Government and the devolved administrations play a dominant role. They set out national planning policy which is a very important reference point for all planning decisions. The relevant ministers decide appeals against the refusal of planning permission, and have extensive powers to intervene in the planning work of local authorities in cases of national interest. For example, major applications, such as large housing estates or contentious new shopping developments, may be ‘called in’ by a minister for a central decision.

England.
Office of the Deputy Prime Minister (ODPM).
Scotland.
The Scottish Executive Development Department.
Wales.
The National Assembly for Wales.
Northern Ireland.
The Planning Service (an agency of the Department of Environment, Northern Ireland).
POLICIES AND PLANS

Policies and plans at the national and local levels serve two functions. First, they are the primary references when a planning authority makes decisions on planning applications. Policies provide consistency and continuity in decision making, for example by saying what developments are acceptable in particular areas. Policy documents provide a guide to potential applicants about what is likely to be granted planning permission. Second, they set out proposals for future development and action. Because of its importance in decision making, many interests will want to shape the content of policy when it is being prepared. Consultation with the public and interested parties is a requirement of all levels of policy making.

There may be other National and Local policies in related fields such as transport and environment that may be important.

The local level plans are the best starting point for information on planning in your area. They are available from your planning authority (although there may be a charge) and in the main libraries. Many of the more recent plans are available on the internet (See your Local Planning Authority’s web site).

NATIONAL PLANNING POLICY GUIDANCE

National Policy guidance notes are intended to be clear and concise statements of government policy. They help ensure a consistency of decision making across local planning authorities, whose Development Plans should broadly reflect their content. Their topics are wide ranging, for example in England there are 25 planning policy guidance notes broadly covering the same range of subjects outlined in this manual. (www.odpm.gov.uk).

REGIONAL PLANNING POLICY GUIDANCE

These documents provide a broader strategy for planning and ensure issues that cut across different authorities eg. transport, housing and migration etc. are co-ordinated. (e.g www.southeast-ra.gov.uk).

DEVELOPMENT PLANS

Local Councils must prepare planning policy in the form of Development Plans which are meant to be the primary means of reconciling conflicts and provide a firm basis for rational and consistent decisions. National and Regional Policy is only ‘guidance’ whereas the development plans prepared by local authorities are statutory. Plans should, however, follow policies in place at national and regional level.

In England in areas still governed by both a County and District Council (much of the rural shires) there is a two tier development plan. A structure plan prepared by a County Council, sometimes in conjunction with Unitary Councils, establishes general policies and proposals but does not identify specific sites or boundaries. A local plan prepared by District or Borough, sets out specific policies to be used in decision making and makes detailed proposals for particular sites. The Local Plan must be consistent with the Structure Plan.

There may also be a separate plan or plans to deal with special issues such as minerals and waste policies.
In the metropolitan areas, London Boroughs and in most other unitary council areas the development plan will comprise a single Unitary Development Plan. The plan has two elements: part one and part two that reflect the structure (strategic) and local plan functions.

Scotland has recently moved to a system of unitary local authorities but has retained a two tier system of development plans with 17 structure plan areas (six cover more than one local authority) and local plans. In Wales a two tier system of structure and local plans is gradually being replaced by a single tier of unitary development plans. In Northern Ireland area plans and local plans are prepared by the six divisional offices of the Planning Service.

GETTING INVOLVED WITH PLAN MAKING

► Initial publicity and consultation. There is widespread publicity inviting comment on ‘issues papers’ or outline proposals.

► Objections. When the planning authority has a preferred or draft plan it is placed ‘on deposit’ at the council offices and libraries and advertised widely. At this stage there is an opportunity to make formal objections or comments in support. Anyone responding at this stage will be kept informed of progress.

► Inquiry or examination-in-public. Objections to local plans or unitary development plans are considered at an inquiry by an independent Planning Inspector. Public Inquiries are open to the public but only those who have made a formal objection have the right to present evidence and question the local authority. Alternatively you can present your objection through a written representation. The structure plan is subject to an examination-in-public. This is a more wide-ranging discussion of the issues surrounding the plan and whilst they are ‘in-public’ there is no right to speak at them.

► Modifications. There is a further opportunity to object to certain modifications made by the local planning authority after the inquiry, since these may not have been discussed during the earlier stages.

► Adoption. Finally, when the Local Planning Authority is ready to adopt the Plan, a further period is available for intervention or legal challenge but this would only be on fundamental matters.

WHAT IS PLANNING PERMISSION?
The need for planning permission for most new development came about because in 1947 the UK government ‘nationalised’ the right to develop or change the use of land or property in the first comprehensive Town and Country Planning Act. This was a reaction to the rapid spread of housing in the 1930’s and the need to stimulate post-war reconstruction. Many well known features such as the Metropolitan Green Belt were established at this time. The objective was to get more government control over development to address the issues described in the first part of this Manual. Since then, anyone intending to make changes to land or property must consider whether planning permission is needed.

In 2004 a new planning system will be introduced in England. The main change is that Structure Plans, Local Plans and Unitary Development Plans will be replaced by Regional Spatial Strategies and local development documents contained in a Local Development Framework. The development documents will comprise a core strategy, site allocations, area action plans, a proposals map and policies for the control of development. Each Local Planning Authority may produce one document covering all of these elements, or several separate development documents at the same or different times. The Local Development Framework will be subject to community involvement and independent examination.

See www.odpm.gov.uk
HOW ARE PLANNING DECISIONS MADE?
There is a process for dealing with proposals to develop land which starts with submitting a planning application, (for which a fee is charged).

Planning Application
Applications for planning permission are made to the local planning authority on standard forms accompanied by maps and plans setting out the proposal.

Publicity and Notification
Neighbours are usually notified of a proposal and a notice displayed at the site. Additional publicity may be required for major developments. Government departments and agencies will be asked for their view as will other departments or organisations with specialist expertise or advice relevant to the proposal. In many cases it is usual for the planning officer to negotiate with the applicant to seek improvements and modifications where these will lead to a better scheme.

Recommendations and Decision
Planning officers usually make a recommendation to a committee of Councillors. Elected members make the final decision, but many minor decisions are delegated to officers. The decision will be subject to conditions, for example requiring the use of certain materials, the provision of landscaping etc., but these must be reasonable.

The main determining factor in deciding whether permission is to be granted should be whether the proposal conforms to policies in the Development Plan.

For some developments, other permission may be required - such as listed building consent (if your proposal affects a listed building ie. one which is of special architectural or historic interest), or consents to fell or lop a tree which is protected by a tree preservation order (TPO). Many local authorities offer a ‘one stop shop’ style of advice service on what permissions are needed and welcome informal consultation before an application is submitted.

HOW CAN THE PUBLIC GET INVOLVED?
Consultation
There is an opportunity to view an application at the planning authority’s offices. Comments and objections can be made in writing to the authority. For large developments an Environmental Assessment may be required, and this is also open for public comment.

The Committee Stage
The public may attend the meeting where the decision is being made. Many planning authorities have arrangements for the applicant and any objectors to make a short statement to the committee.

Appeals
Where applicants wish to contest a decision of the planning authority, they may appeal to the government minister, and an Inspector (Reporter in Scotland) will determine the outcome. If unsuccessful, the case can also go to the Court of Appeal, the High Court and the European Court on matters of law. In Northern Ireland appeals are made to the Planning Appeals Commission. There is no right for third parties (ie. objectors) to appeal against decisions.
**WHAT IS TAKEN INTO ACCOUNT IN MAKING PLANNING DECISIONS?**

Most planning applications are from householders and cause little comment, whilst many others are relatively straightforward to deal with such as a new industrial unit on a business park. There are, however, some very contentious applications, such as housing developments on green fields, take-aways near homes, and conversion of rural shops and pubs to homes. So how does the planning authority reach a decision? They take the following matters into account:

- The Council’s planning policies and proposals as set out in Development Plans (see page 39).
- National and regional policies.
- The views of neighbours and others such as residents’ associations or conservation groups (where they raise relevant planning concerns).
- Expert opinion from the other organisations the planning authority has consulted, such as the Environment Agency, and the local highway authority.
- Previous decisions on similar applications and site visits.
- The planners’ assessment of impact of the siting, appearance, traffic generation, and neighbouring uses, and the results of the Environmental Assessment if one has been required.

**OTHER POLICY RELEVANT TO SUSTAINABLE DEVELOPMENT**

- UK Sustainable Development Strategy.
- UK National Air Quality Strategy.
- Water Resources and Supply: Agenda for Action.
- Strategy for Sustainable Waste Management.
- Climate Change: The UK Programme.

Other national policy documents (of which there are many).

- Regional sustainable development frameworks.
- Regional economic development strategies.
- Air quality management plans.
- Energy conservation reports.
- Local environment agency plans.
- Local biodiversity action plans.
- Local transport plans and strategies.
- Waste management plans.
- Community plans.
- Local Agenda 21 plans.
WHAT PLANNERS DO IN THE PLANNING SYSTEM

There are many different jobs and roles a planner can play. Many professional town planners are employed in local government. Some develop policies and plans for the future involving forecasting, analysing social and economic trends and identifying available land. Other planners are employed to help decide planning applications, advising local councillors on the relevant issues to determine the proposal, this is called ‘Development Control’. Local authority planners may also help implement proposals, for example, working on regeneration and renewal projects. Others may develop specialisms such as working in building conservation, environmental or transport planning.

In the private sector, planners are employed by development companies, consultants, housebuilders, utilities etc. In this role they advise their clients on objections to plans, assist with application submissions, negotiate with the planning authority and conduct any appeals. Specialist planning consultants may be called in to advise developers (in the UK and overseas) or even local authorities. They may be employed to undertake research projects for Government, the European Commission or developers.

Planners also work for Central Government and National Assemblies and Parliaments, either centrally or in the various regional offices in England, whilst others may be academics both educating student planners and undertaking research.

THE PLANNING SYSTEM

The range of work for planners has expanded enormously in recent years, with most land and property groups as well as commercial and voluntary groups employing planners. Here is a list of some examples:

► Regeneration agencies such as the Regional Development Agencies.
► Urban Design Consultants.
► Housing Associations.
► Royal Society for the Protection of Birds.
► Countryside agencies.
► Environment agencies.
► Airports.
► Bus and rail operators.
► Volume house builders.
SOURCES OF INFORMATION ON THE PLANNING SYSTEM

All planning authorities provide leaflets on the planning system especially on how to make a planning application and what planning policies apply within their areas. Increasingly a great deal of useful information can be found on their websites.

Most meetings of a planning authority and the minutes and documents presented are open to public scrutiny (except for a few matters regarding financial confidentiality). Planning applications themselves can be inspected at the authority’s offices. Members of the public can also request environmental information about their area (that is the state of the water, air, flora or fauna, soil, natural site or other land).

The main textbooks on town and country planning provide an overview of the purposes, policies and procedures. Several are mentioned below:


THE FOLLOWING pages set out a range of educational resources produced by local authorities and other organisations that relate to planning and the issues discussed in Part 1.

The aim of this section is to provide teachers with information about existing resources that they might want to use in the classroom to explore town and country planning. Although some of the materials included here have been produced for a local audience and a particular curriculum, the activities within them are of universal interest and might easily be replicated in a different location.

The resources have been organised into two separate sections.

**PLANNING RELATED ISSUES**

Entries give detailed information about 11 different educational resource packs.

- **Our Changing City**: Birmingham City Centre Past, Present and Future.
- **Portland**: Island of Discovery.
- **Plan Your Planet** or Town, or Village, or Street...
- **Guides to Sources of Information**.
- **Student Fact Sheets**: South Gloucestershire.
- **Castlevale**: Planning for the Future, Edinburgh.
- **Environmental Education Case Studies** and Guide for teachers and students.
- **Windows on our World**.
- **Chelsfield**: White City Project.
- **Placecheck**.
- **Canals and Regeneration**: A Resource Pack for teachers based on Birmingham canals.

**ADDITIONAL RESOURCES FOR SUSTAINABLE DEVELOPMENT**

Short entries give brief information on over 40 educational resources for teachers. The topics are crosscutting, and are arranged under the same issue headings found earlier in the manual. They include housing, transport, leisure and tourism, biodiversity and waste. Several gateway web sites are also listed which guide teachers to finding more resource packs and materials.

The resources listed are just a sample of those available throughout the UK and beyond.
A Code of Practice for developing educational materials has been developed by the Council for Environmental Education (CEE), in consultation with its member organisations and others. A list of organisations committed to the principles of the Code is available from CEE. The Code of Practice is supported and endorsed by the Government.

The ten principles making up the Code of Practice are:

- Principle 1: **Principles of sustainable development.**
- Principle 2: **Integrity.**
- Principle 3: **Balance.**
- Principle 4: **Values and attitudes.**
- Principle 5: **Knowledge and skills.**
- Principle 6: **User-centred approach.**
- Principle 7: **Need.**
- Principle 8: **Development.**
- Principle 9: **Production.**
- Principle 10: **Promotion and distribution.**

It is worth noting that many of the educational resources listed in this manual were developed before the Voluntary Code of Practice was developed. Nevertheless, it is clear that almost all of them address the principles in some way.
Our Changing City:
Birmingham City Centre Past, Present and Future

SUMMARY

Birmingham City Council has produced a resource pack for schools (published in 2000) made up of teachers’ notes, a resource book containing maps, illustrations and extracts from historical documents. The pack also includes photographs, maps and a disk containing land use data.

The purpose of the pack is to support geographical and historical investigations into the Birmingham City Centre, for Key Stage 2 and 3, years 5 to 9. There are also links to literacy, numeracy and ICT.

The pack sets out information about the development of Birmingham City Centre, looking back and discussing the development of particular sites over time, moving from the past to the present and into the future. Supporting material includes facts and figures about Birmingham City Centre (eg. population, employment and transport) and possible learning activities. For example, there is guidance about surveys, a photo trail, an environmental audit and other activities including ICT. The pack includes copyable worksheets, as well as detailed ideas about using photographs and maps, and information about the contents and use of the source book.

LINKS TO PLANNING

With its focus on the changing city centre, the pack relates to the following issues:

► Regeneration.
► City centre management.
► The spatial clustering of land uses.
► Retail and office development.
► City centre housing.
► Transport and accessibility.
► Mixed use development.

LINKS TO THE CURRICULUM

MAIN LINKS

History and Geography activities at Key Stage 2 and 3.

ADDITIONAL LINKS

Literacy, Numeracy, ICT, Citizenship and Special Educational Needs.

CONTACTS AND FURTHER INFORMATION

John Hopkin, Geography Advisor, BASS, Matineau Centre, Balden Road, Harborne, Birmingham B32 2EH.

www.bgfl.org

Price:
£22 for Birmingham schools, £44.50p for other schools.
Weymouth and Portland Borough Council has produced a teachers’ guide to geography fieldwork enquiry on Portland and South Dorset, for key stage 3, GCSE and A Level.

The guide, produced in 1996, is primarily to support field study visits, and is focussed on 10 activity-based case studies. Additional case studies are now available (from January 2001). Each case study has a theme, and sets out activities, resources and background information, including the role of students in case study. Activities are supported by additional information and copyable activity sheets. Each case study begins with a summary, setting out the issues, resources and tasks - curriculum links are also explained.

The case studies include the following themes: retail development, tourism, geology and quarrying, coastal management and land management.

The pack covers a range of issues:

► Conservation.
► Management plans.
► Housing.
► Retail.
► Leisure and tourism.
► Quarrying and waste disposal.
► Coastal management level.

The pack includes a brief section on curriculum and syllabii links.

Simon Williams,
Weymouth and Portland Borough Council,
Planning Department,
North Quay,
Weymouth,
Dorset DT4 8TA.

Tel: (01305) 838 000.
Fax: (01305) 838 600.
Price: £15
The Royal Town Planning Institute (Southern Branch) has produced a teaching pack to help with sustainable development education for geography at Key Stages 1, 2 and 3. The pack includes a teacher booklet which explains the materials supporting the different Key Stages, (1, 2 and 3), as well as listing organisations and materials which are available to support geography and planning in schools. The teacher booklet also explains how the planning system works in England. Each Key Stage is supported by a separate teaching scheme which sets out the links with geography attainment targets, learning objectives, teaching time and activities supported by the pack. The Key Stage 3 scheme contains three units, covering shopping, flood issues and countryside planning. Each unit is supported by a bundle of background information, further links and resources and photocopy masters. The scheme is designed to build on the ‘Plan your Planet’ pack at Key Stages 1 and 2.

The Key Stage 3 pack relates to the following planning issues:

► Retail.
► Countryside.
► Flooding.
► Housing.
► Green belt.
► Agriculture.

The teaching schemes set out curriculum links in detail, including the links between each unit in the pack and learning outcomes and activities.

CONTACTS AND FURTHER INFORMATION

RTPI Southern Branch Administration Officer.

E-mail: southofengland@rtpi.org.uk

Free of charge to all primary and secondary schools in the Southern Branch area.
The Royal Town Planning Institute (East of England Branch) Environmental Education Sub-Committee has produced a series of information guides setting out basic information on current legislation, documents, and organisations for a number of subject areas. The subjects include:

- Conservation and the built environment.
- Crime.
- Employment.
- Environment.
- Housing.
- Population and statistics.
- Retail development.
- Transport.

Each guide describes the type of information available, its location and cost (where relevant). It is likely that when updating takes place in the near future, the guides will be available on CD-Rom and will also include other material of use to planning practitioners and the general public.

The pack covers a range of issues:

- Conservation.
- Environment.
- Retail.
- Housing.
- Transport.
- Employment.

There are no specific links identified.

Contacts and further information:

Ann Hockey, Research Manager, Environmental Policy Division, Colchester Borough Council, PO Box 885, Town Hall, Colchester, Essex CO1 1ZE.

Tel: (01206) 282 477.
Fax: (01206) 282 711.
E-mail: ann.hockey@colchester.gov.uk

The guides are free.
South Gloucestershire District Council has prepared 9 student fact sheets on various aspects of development and planning in the local area. The fact sheets are available on-line (www.southglos.gov.uk) and are intended to assist anyone with a general interest in the subject and/or area. The fact sheets cover the following areas:

- Bradley Stoke (housing).
- Severn Barrage (energy).
- Patchway (general information).
- Second Severn Crossing (transport and infrastructure).
- Cribbs Causeway (out-of-town shopping).
- Yate and Chipping Sodbury (general information).
- Longswell Green (retail and employment).
- Embrons Green (housing).
- Kingswood Town Centre (retail).

Each fact sheet gives information about the development, its history and policy context. The length and detail of the fact sheets vary considerably.

The fact sheets cover a range of issues:

- Town centres.
- Out-of-town retail.
- Housing.
- Transport.
- Green belt.
- Conservation.
- Energy.

The fact sheets are of use in helping deliver Citizenship, Geography, History and English.

RTPI Southern Branch Administration Officer.

E-mail: southofengland@rtpi.org.uk

Free of charge to all primary and secondary schools in the Southern Branch area.
The Castlevale project began early in 1996 with the aim of involving local school children in the planning process for the development of the Edinburgh south-east wedge. The project has encouraged both primary and secondary school children to build a vision of the future that they would like to see for their area. In addition to the practical involvement of children in the planning process, the project has raised awareness of issues related to planning for housing, transport, education and health. Children from a number of schools in the Craigmillar area worked in groups with a teacher and external experts in a mirror planning process. The groups investigated different issues related to the redevelopment, formulating and presenting recommendations during a special conference. The groups worked on planning, housing, transport, education and economy.

Information about the work that the schools did can be seen on the Castlevale web-site www.ccis.org.uk/castlevale/home.html. Many of the activities included on the web-site could be replicated by classes elsewhere. The Friends of Craigmillar published a book/booklet about the Castlevale project in 1997, entitled ‘Castlevale: Craigmillar’s Children Planning for the Future’.

The project links to the curriculum in a number of ways, including Citizenship, Geography, History and English.
Environmental Education Case Studies
and guide for teachers and students

SUMMARY
The Royal Town Planning Institute (South West Branch) has produced a teaching and resource pack aimed at teachers, lecturers and students at GCSE, AS/A2 level. The pack, published in 2001, is made up of 12 detailed case studies based on real-life issues and examples from the South West region along with an introduction to the planning system and curriculum links. The case studies cover a range of issues, including quarrying, traffic, out-of-town shopping, coastal management, low-impact settlements and tourism. Each case study has a similar format: a one page summary; an introduction setting out issues and activities; resources (maps, facts, figures and histories); role play exercises; questions and tasks. The case studies have been written by local planning practitioners and experts.

The pack is primarily intended to support geography class and field work. It is loose-leaf and in a copyable format.

LINKS TO PLANNING
The pack covers a range of issues:
- Transport.
- Nature conservation.
- Minerals and quarrying.
- Urban design.
- Building conservation.
- Retail.
- Water resources.
- Recreation and tourism management.
- Sea defences.
- Coastal management.

LINKS TO THE CURRICULUM
MAIN LINKS
Geography at GCSE, AS/A2 level.

ADDITIONAL LINKS
Citizenship, Leisure and Tourism,
Education for Sustainable Development.

CONTACTS AND FURTHER INFORMATION
Simon Williams,
Environmental Education Officer,
RTPI (South West Branch),
c/o Weymouth and Portland Borough Council,
Weymouth,
Dorset DT4 8TA.

Free to all secondary schools in the South West (Cornwall, Devon, Gloucestershire, Somerset, Wiltshire, the Isles of Scilly, the Channel Islands and the former county of Avon).
Walsall Metropolitan Borough Council has produced a series of project resource packs which together form 'Windows on our World', a Walsall Young People's Agenda 21 project for the millennium. The 14 packs focus on geography and history topics at Key Stages 1, 2, 3 and 4. Each pack includes lesson guidelines, copyable worksheets and archive material relevant to the topic area, and some packs include additional teachers' notes. Each lesson guideline sets out the Key Stage at which it is aimed, learning outcomes, cross-curricula links and activities set out in a clear, consistent and easy to use format.

The four Windows on our World geography packs cover pollution (radon), eco-schools, improving school grounds and weather; the history packs include issues such as mining, cholera, canals and World War II. Much of the teaching material is downloadable from the web, which also has links to schools involved in the project and the results of their Windows on our World activities.

LINKS TO PLANNING

The Key Stage 3 pack relates to the following planning issues:
- Transport.
- Pollution.
- Decision-making.
- Waste.
- Water.
- Conservation.

LINKS TO THE CURRICULUM

MAIN LINKS
Geography Key Stages 1, 2, 3, and 4;
History Key Stages 1, 2, and 3.

ADDITIONAL LINKS
Science, PSHE, ITC, English, Art, Maths.

Cross-curricula links, learning outcomes, activities and skills are clearly identified for each lesson plan provided.

CONTACTS AND FURTHER INFORMATION

Helen Barlow,
Environment and Heritage,
The Civic Centre,
Darwell Street,
Walsall WS1 1DG.

Tel: (01922) 652 282 or 653 369.
E-mail: barlowh@walsall.gov.uk
www.millennium.walsallgfl.org.uk
The Chelsfield White City Project is one of a number of initiatives co-ordinated by the Hammersmith and Fulham Urban Studies Centre (HFUSC). The project is linked to the extensive re-development of White City and has been helping children learn about the process of change in their local area. The project has also enabled local children and their schools to participate in the development process.

Schools involved in the project have undertaken a number of activities and exercises, including questionnaires, surveys and investigations into issues related to the development - traffic, for example. The activities have been supported by resources from HFUSC which include copyable factsheets, exercises and a White City trail. The resources also set out curriculum links at Key Stages 3 and 4. Information about the White City Project, including findings from the children’s surveys and questionnaires can be seen on the web, www.la21.org.uk/whitecity

The project links to the following planning issues:
- Regeneration.
- Transport.
- Mixed uses.
- Employment.
- Participation.
- Housing.
- Retail.

The project links to the curriculum in a number of areas, including: Geography, History, Science, Maths, English, ICT, PSHE and Design and Technology at Key Stages 3 and 4.
Placecheck

SUMMARY

Placecheck is one of the simplest and most effective ways of involving people in creating ideas as to how their local environment may be improved. At the simplest level it involves just three questions:

What do you like about the place?
What don’t you like?
What needs to be improved?

Children are immensely creative and visionary. Where adults see only problems, children can see opportunities. Even as children they have a great deal to contribute to how we manage and improve our environment, and through Placechecks their vision can go beyond a learning experience, into action by adults.

Placecheck has been developed by the Urban Design Alliance, based on the work of Robert Cowan in the *Connected City*.

A user guide is available by post and further material, including material for schools is available via the Placecheck website. Campaigns and initiatives are also listed on the website, for example linkages with TimeBank.

**What is Placecheck about?**

Placecheck is about people: professionals, children, adults, politicians, from any background, anywhere.

Placecheck is about improving local environments: bringing people together and getting them to provide answers as to how they would like to improve their local environment.

Placecheck is about action: Placecheck helps identify ways of turning aspirations into reality.

**What can Placecheck be used for?**

To a local authority it can be a means of aiding the production of development briefs or design statements. It can also be used as the basis of community involvement and consultation. It can be a means of generating proposals for the Community Plan which truly come from local people.

To a professional it offers a simple and rapid way of defining project briefs.

To a member of the public it is a way of getting involvement and commitment from neighbours on how to improve a street. It can bring improvements to the quality of life and the value of property.

To schools or parents it is a means of involving children - through school curriculum work, or in national walk to school week, in understanding and changing the world in which they live.

**LINKS TO PLANNING**

- Community involvement.
- Community capacity building.
- Production of action plans.

**LINKS TO THE CURRICULUM**

MAIN LINKS

Geography, Citizenship and Art and Design.

**CONTACTS AND FURTHER INFORMATION**

Copies of the Placecheck Guide may be obtained free from:

Urban Design Alliance,
70 Cowcross Street,
London EC1M 6EJ.

www.udal.org.uk
Canals and Regeneration
A Resource Pack for teachers based on Birmingham canals

SUMMARY
Birmingham City Council has produced a resource pack for teachers focusing on the canals of Birmingham. The pack, published in 1996, explores the historical development of the canals and the influence that they had on neighbouring land uses, as well as looking at current development next to the canals.

The resource pack contains 19 photocards and 21 information sheets. All of the material is in a loose-leaf A4 format suitable for copying. The information sheets are based on a number of different topics, and include background information as well as questions and activities. The pack also contains an answer sheet for teachers. The pack could be used for field as well as classroom study.

LINKS TO PLANNING
The pack relates to the following issues:
- Transport.
- Regeneration.
- Tourism.

LINKS TO THE CURRICULUM
 Particularly relevant to History and Geography at Key Stages 2 and 3.

CONTACTS AND FURTHER INFORMATION
John Hopkin, Geography Advisor, BASS, Matineau Centre, Balden Road, Harborne, Birmingham B32 2EH.

www.bgfl.org

Price: £10
Additional Resources for sustainable development

**HOUSING**

**THE SETTLEMENT**
A role play exercise based on a dispute between a building firm and a health authority about the use of two private houses by patients with mental illness. Contains activities, copyable information and curriculum links.

Part of Living with the Law Book 2 'In the Community' (ISBN 0-340-5752-3) now out of print, produced by the Citizenship Foundation, 15 St. Swithins Lane, London EC4N 8AL. TEL: (020) 7367 0500 FAX: (020) 7367 0501 EMAIL: info@citfou.org.uk WEB: www.citfou.org.uk

**RETAIL**

A key stage 3 unit for year 8 geography students. The unit deals with retail service provision as part of the settlement theme by investigating patterns of retail development. The unit includes learning objectives, curriculum links and learning outcomes.

Available to download from the DfES standards. WEB: www.standards.dfes.gov.uk/schemes

**TRANSPORT**

**PEDESTRIANS ONLY**
A role-play exercise simulating the process of creating a traffic-free zone in a town or city. Contains activities, copyable information and curriculum links.

Part of Understand the Law Book 1 'The Individual and Society' (ISBN 0-340-62054-4) now out of print but currently still available from the Citizenship Foundation, 15 St. Swithins Lane, London EC4N 8AL. TEL: (020) 7367 0500 FAX: (020) 7367 0501 EMAIL: info@citfou.org.uk WEB: www.citfou.org.uk

**ROUTES TO SCHOOLS, SECONDARY TEACHERS’ RESOURCE PACK**
Teaching pack about safer routes to schools. Separate packs are available for the Scottish, Welsh and English curricula.

Available from Sustrans, 35 Kings Street, Bristol, BS1 4DZ. TEL: (0117) 929 0888 EMAIL: schools@sustrans.org.uk WEB: www.sustrans.org.uk PRICE: £15 (+ p&p).

**LEISURE, RECREATION AND TOURISM**

Teaching pack on tourism’s impacts. Flexible material suitable for secondary schools and students at GCSE and A level.


**CHOICES IN DEVELOPMENT: SOLOMON ISLANDS**
Education pack for 14-16 year olds including copyable student’s book and teachers’ book which contain activities and resource material.

Available from the World Wide Fund for Nature (WWF), WWF-UK Education Distribution, PO Box 963, Slough SL2 3RS. TEL: (01753) 643104 FAX: (01753) 646553 or in Scotland, Scottish DEC, Playhouse Close, Morayhouse Institute of Education, Holyrood Road, Edinburgh EH8 8AQ. TEL: (0131) 557 3810 FAX: (0131) 555 8329 WEB: www.wwflearning.co.uk
COMMUNITIES UNDER THREAT - THE IMPACT OF RESORT DEVELOPMENT IN ZANZIBAR (1999)
Role play for students aged 11 and older with photos and source material based on real-life proposals for Zanzibar’s Nungwi Peninsula.
Available from Tourism Concern, Stapleton House, 277-281 Holloway Road, London N7 8HN.
TEL: (020) 7753 3330  FAX: (020) 7753 3331  WEB: www.tourismconcern.org.uk  PRICE: £8.50 (£7.50 members).

ENVIRONMENT AND DEVELOPMENT PERSPECTIVES
A resource book for A level geography and BTEC travel and tourism students which focuses on the environmental and development perspectives of tourism. The book includes case studies on Bali, Turkey and the Norfolk Broads as well as a range of activities.
Available from the World Wide Fund for Nature (WWF), WWF-UK Education Distribution, PO Box 963, Slough SL2 3RS.
TEL: (01753) 643104  FAX: (01753) 646553  or in Scotland, Scottish DEC, Playhouse Close, Morayhouse Institute of Education, Holyrood Road, Edinburgh EH8 8AQ.
TEL: (0131) 557 3810  FAX: (0131) 555 8329  WEB: www.wwflearning.co.uk

LOOKING BEYOND THE BROCHURE (1999)
Secondary level video pack for english, geography and citizenship which includes a 20 minute video looking at tourism in the Gambia plus 120 pages of copyable teaching materials.
Available from Tourism Concern, Stapleton House, 277-281 Holloway Road, London N7 8HN.

NEW DEPARTURES (1998)
Teaching pack of copyable topic-based case studies for A-level and NVQ based on tourism and eco-tourism issues.
Available from Tourism Concern, Stapleton House, 277-281 Holloway Road, London N7 8HN.

Issues analysis pack for post 16 study of tourism and fragile environments. Pack includes detailed case study material, photos and a decision-making exercise.
Available from Tourism Concern, Stapleton House, 277-281 Holloway Road, London N7 8HN.
TEL: (020) 7753 3330  FAX: (020) 7753 3331  WEB: www.tourismconcern.org.uk  PRICE: £8.50 (£7.50 members).

TOURISM - GOOD OR BAD? (2000)
A key stage 3 unit for year 8 geography students. The unit includes learning objectives, curriculum links and learning outcomes.
Available to download from the DfES standards.
WEB: www.standards.dfes.gov.uk/schemes

TOURISM - INFORMATION FOR EDUCATORS
Downloadable A4 booklet about tourism, including information, resource sheets, activities, curriculum links and details of other WWF teaching resources about tourism. Curriculum links are set out in detail - in different subject areas, different key stages and in the context of both the Scottish and English/Welsh national curricula.
Available from the World Wide Fund for Nature (WWF), WWF-UK Education Distribution, PO Box 963, Slough SL2 3RS.
TEL: (01753) 643104  FAX: (01753) 646553  or in Scotland, Scottish DEC, Playhouse Close, Morayhouse Institute of Education, Holyrood Road, Edinburgh EH8 8AQ.
TEL: (0131) 557 3810  FAX: (0131) 555 8329  WEB: www.wwflearning.co.uk
CONSERVATION

CONSERVATION FACT SHEET
Downloadable and copyable fact sheet about conservation and the role of the Environment Agency. The fact sheet includes activities and questions.

THE NATIONAL TRUST, CONSERVATION AND THE ENVIRONMENT - STUDENT FACT SHEET
A downloadable fact sheet for students explaining the work of the National Trust in relation to the environment and the conservation of historic buildings.
Available from The National Trust. WEB: www.nationaltrust.org.uk/learninganddiscovery

BIODIVERSITY

Set of 6 posters and accompanying teachers’ notes designed to help students understand the concept of biodiversity, with a special emphasis on biodiversity in Scotland.
Available from Scottish Natural Heritage, 12 Hope Terrace, Edinburgh EH9 2AS. TEL: (0131) 447 4784 FAX: (0131) 446 2277 WEB: www.snh.org.uk PRICE: Free.

THE NATIONAL TRUST AND NATURE CONSERVATION - STUDENT FACT SHEET
A downloadable fact sheet for students explaining the work of the National Trust in relation to nature conservation.
Available from The National Trust. WEB: www.nationaltrust.org.uk/learninganddiscovery

NATURAL RESOURCES

COASTAL FLOODING FACT SHEET
Downloadable and copyable fact sheet about coastal flooding and the role of the Environment Agency. The fact sheet includes activities and questions.

RIVER FLOODING FACT SHEET
Downloadable and copyable fact sheet about river flooding and the role of the Environment Agency. The fact sheet includes activities and questions.

THE CUTOVER AND CUTAWAYS BOGS EDUCATION PACK (2000)
An education pack exploring the wildlife value and uses of cutover and cutaway bogs in the Irish Midlands. The 150 page pack is linked to the Cutover and Cutaway Bogs Explorer’s Guide on the web.
Available from the Irish Peatland Conservation Council, 119 Capel Street, Dublin 1. TEL/FAX: 00 353 1 872 2397. EMAIL: bogs@ipcc.ie WEB: www.ipcc.ie
THE WATER CYCLE FACT SHEET
Downloadable and copyable fact sheet about the water cycle. The fact sheet includes activities and questions.

USERS OF THE WATER ENVIRONMENT FACT SHEET
Downloadable and copyable fact sheet about the way in which people use water, including housing, farming, industry and leisure. The fact sheet includes activities and questions.

WASTE AND WASTE MANAGEMENT

RECYCLING FACTS ISBN 1854670603
Pack of 53 photocopy masters for secondary schools, linking to science AT5 & 6 and geography AT7.
Available from Pearson Publishing, Chesterton Mill, French’s Rd, Cambridge, CB4 3NP. **TEL:** (01223) 350555

SCIENCE IN FOCUS: MATERIALS 2
Materials including video on the Science of Recycling, teachers’ guides and net notes.
Available from Channel 4 Schools, PO Box 100, Warwick CV34 6TZ. **TEL:** (01926) 3436333
**WEB:** www.channel4.com/learning

SUSTAINABLE WASTE MANAGEMENT
CD-ROM aimed at key stage 3 pupils introducing materials recycling and the waste hierarchy.
Available from Focus Four Interactive Ltd, 1 Portland Drive, Willen, Milton Keynes, MK15 9JW. **TEL:** (01908) 678277 **FAX:** (01908) 666654

WASTE CONTROL FACT SHEET
Downloadable and copyable fact sheet about waste control and the role of the Environment Agency. The fact sheet includes activities and questions.

WASTE WATCHERS
A teaching unit to help pupils explore the legal and more complex problems involved in environmental protection. Contains activities, copyable information and curriculum links.
Part of Living with the Law Book 2 ‘In the Community’ (ISBN 0-340-5752-3) now out of print, produced by the Citizenship Foundation, 15 St. Swithins Lane, London EC4N 8AL. **TEL:** (020) 7367 0500 **FAX:** (020) 7367 0501 **EMAIL:** info@citfou.org.uk **WEB:** www.citfou.org.uk

WISE UP TO WASTE
A cross-curricula resource pack for students aged 15-18 linking to technology, history, geography, maths and other subjects.
Available from Waste Watch, Europa House, Ground Floor, 13-17 Ironmonger Row, London EC1V 3QG. **WEB:** www.wastewatch.org.uk include A4 SAE and 5 first class stamps.
ADDITIIONAL RESOURCES

EMERGENCY!
A teaching unit covering emergency planning in the case of an accident at a nuclear power station.
Part of Living with the Law Book 2 'In the Community' (ISBN 0-340-5752-3) now out of print, produced by the Citizenship Foundation, 15 St. Swithins Lane, London EC4N 8AL. **TEL:** (020) 7367 0500 **FAX:** (020) 7367 0501
**EMAIL:** info@citfou.org.uk  **WEB:** www.citfou.org.uk

POLLUTION FACT SHEET
Downloadable and copiable fact sheet about pollution and the role of the Environment Agency. The fact sheet includes activities and questions.

COASTAL ENVIRONMENTS
A key stage 3 unit for year 8 geography students. The unit deals with geomorphological patterns and processes as well as considering coastal management and conflicts. The unit includes learning objectives, curriculum links and learning outcomes.
Available to download from the DfES standards. **WEB:** www.standards.dfes.gov.uk/schemes

ADVANCES POSTER SERIES
A poster series of 6 posters, teachers’ notes and a set of student worksheets. Posters are supplied individually, and cover issues such as Scotland’s land cover, land cover change in Scotland and peatland mapping.
Available from Scottish Natural Heritage, 12 Hope Terrace, Edinburgh EH9 2AS **TEL:** (0131) 447 4784 **FAX:** (0131) 446 2277  **WEB:** www.snh.org.uk  **PRICE:** £3.50 per poster.

DECISIONS AND THE ENVIRONMENT
A CD ROM for A level geography looking at the way that decisions about land management affect the environment. Available in Welsh and English. Includes issues such as the acidification of streams in coniferous forest, the Severn barrage, upland land use, farming and wildlife.
Available from the Royal Society for the Protection of Birds (Education), The Lodge, Sandy, Bedfordshire SG19 2DL **TEL:** (01767) 680551  **WEB:** www.rspb.org.uk  **PRICE:** £9.99 (a free copy on request to every secondary school in Wales).

Handbook containing a variety of resource materials including books, videos and sound recordings. The book lists each of the resources along with suggestions about how they might be used.
Available from Scottish Natural Heritage, 12 Hope Terrace, Edinburgh EH9 2AS. **TEL:** (0131) 447 4784 **FAX:** (0131) 446 2277  **WEB:** www.snh.org.uk  **PRICE:** £12

ENVIRONMENTAL MANAGEMENT FACT SHEET
Downloadable and copiable fact sheet about environmental management and the role of the Environment Agency. The fact sheet includes activities and questions.
EXPLORING EUROPE’S ENVIRONMENT DATA BULLETIN
Windows based software package with text, graphics and data aimed at 11-16 year olds and linking with the science, geography, maths and english curricula. The bulletin also includes a teacher’s manual with practical activities and case studies.
Available from the World Wide Fund for Nature (WWF), WWF-UK Education Distribution, PO Box 963, Slough SL2 3RS TEL: (01753) 643104 FAX: (01753) 646553 or in Scotland, Scottish DEC, Playhouse Close, Morayhouse Institute of Education, Holyrood Road, Edinburgh EH8 8AQ. TEL: (0131) 557 3810 FAX: (0131) 555 8329
WEB: www.channel4.com/learning

E ZONE
CD-ROM aimed at science and geography key stages 3 & 4, and covering topics such as: waste, pollution, water and conservation. In English and Welsh.
Available from EECW, PO Box 911 Cardiff, CF1 3US. TEL: (01222) 395559 FAX: (01222) 344211 PRICE: £25

GLOBAL WARMING 12-16
An interactive web-site for 12-16 year-old students which examines global warming through activities and a quiz. The web-site is supported by downloadable teacher’s notes with curriculum links and ideas for class activities. The web-site is also supported by a free information and activity pack.
Pack is available from the DTLR, PO Box 236, Wetherby, West Yorkshire, LS23 7NB. TEL: (0870) 1226 236 FAX: (0870) 1226 237 WEB: www.defra.gov.uk/environment/climatechange/schools/12-16/

PEOPLE’S EFFECT ON THE ENVIRONMENT
A CD ROM for key stage 3/4 geographers and scientists looking at the way human activity affects the environment. Available in Welsh and English. Includes topics such as upland land-use change, black grouse, wildlife and oil pollution at sea.
Available from the Royal Society for the Protection of Birds (Education), The Lodge, Sandy, Bedfordshire SG19 2DL. TEL: (01767) 680551 WEB: www.rspb.org.uk PRICE: £9.99 (a free copy on request to every secondary school in Wales).

SEA CHEST HANDBOOK (1996) ISBN 1 85397 232 0
A handbook of marine environment resources, similar to the Environmental Community Chest handbook.
Available from Scottish Natural Heritage, 12 Hope Terrace, Edinburgh EH9 2AS TEL: (0131) 447 4784 FAX: (0131) 446 2277 WEB: www.snh.org.uk

SWALLOWS ON THE LINE - DATA BULLETIN
Teaching package which examines the relationship between migrating swallows and environmental factors. The pack is aimed at students aged 11-16 and links to English, geography, science, maths and ICT.
Available from the World Wide Fund for Nature (WWF), WWF-UK Education Distribution, PO Box 963, Slough SL2 3RS. TEL: (01753) 643104 FAX: (01753) 646553 or in Scotland, Scottish DEC, Playhouse Close, Morayhouse Institute of Education, Holyrood Road, Edinburgh EH8 8AQ. TEL: (0131) 557 3810 FAX: (0131) 555 8329
WEB: www.wwflearning.co.uk PRICE: £19.99

SUSTAINABILITY POSTERS (1994) ISBN 1 85397 108 1
Pack containing 5 posters and accompanying teachers’ notes for secondary schools. The posters cover ‘carrying capacity’, ‘the precautionary principle’ and ‘environmental quality’.
Available from Scottish Natural Heritage, 12 Hope Terrace, Edinburgh EH9 2AS. TEL: (0131) 447 4784 FAX: (0131) 446 2277 WEB: www.snh.org.uk PRICE: Free
THE NATIONAL TRUST AND CLIMATE CHANGE - STUDENT FACT SHEET
A downloadable fact sheet for students explaining the work of the National Trust in relation to climate change.
Available from The National Trust. WEB: www.nationaltrust.org.uk/education

EDUCATIONAL RESOURCE GATEWAYS

COUNCIL FOR ENVIRONMENTAL EDUCATION
Database of books, packs, posters, wallcharts and software produced by other organisations as well as general information about environmental education, teachers’ resources and funding. Free termly newsletter for schools about education for sustainable development.

Contact: 94 London Street, Reading, RG1 4SJ. TEL: (0118) 950 2550  FAX: (0118) 959 1955
EMAIL: info@cee.i-way.co.uk

ENFO ENVIRONMENTAL INFORMATION SERVICE
A national (Irish) service providing information about the environment and sustainable development. The ENFO web-site contains a vast library of teaching materials including videos, teaching packs and books, some of which may be borrowed.

The ENFO drop-in centre is open at 17 St. Andrew Street, Dublin 2. TEL: 3531 888 2001 or 1890 200 191
EMAIL: info@enfo.ie WEB: www.enfo.ie

SEPA EDUCATION
The Scottish Environmental Protection Agency web-site includes an education section, with a downloadable guide to environmental education resources produced in 1999. The guide is roughly 35 pages, and lists books, CD-ROMS, teaching packs and other resources under topic headings.

Available from the SEPA education WEB: www.sepa.org.uk/education

WILDKIDS
Web-site with a series of environmental education resources for teachers to download. These include fact sheets and activity ideas on summer meadows, rivers and streams and pond-life.

Available at WEB: www.wildkids.org.uk
GOVERNMENT WEBSITES - ENGLAND
www.odpm.gov.uk is an excellent resource for planning, regeneration, housing, neighbourhood renewal and urban issues etc. www.defra.gov.uk hosts information and resources on environment, farming, water, sustainable development (see www.sustainable-development.gov.uk) plus wildlife and countryside.

GOVERNMENT WEBSITES - WALES
The National Assembly for Wales: www.wales.gov.uk contains resources for economic development, transport and environment etc. Also useful information on Wales, including maps and tourist and travel data.

GOVERNMENT WEBSITES - SCOTLAND
www.scotland.gov.uk and www.openscotland.gov.uk both provide useful information on Scottish Executive initiatives, plus rural affairs, transport, health, education etc and www.scottish.parliament.uk provides useful research on many issues such as economic development, planning, housing and social exclusion etc.

GOVERNMENT WEBSITES - NORTHERN IRELAND
National Government for Ireland: www.nics.gov.uk - A gateway to information on all government departments.

GOVERNMENT WEBSITES - IRELAND (EIRE)
www.irlgov.ie - gives links to all state organisations.

www.ukonline.gov.uk also provides a wealth of information upon many topics covered in the manual, linking to governmental services in England, Scotland, Wales and Northern Ireland.
www.idea.gov.uk plus www.lga.gov.uk are two sites which provide interesting material covering all aspects of local government.

Three sites which contain useful data relating to national parks are:
www.anpa.gov.uk
www.nationalpark.org.uk
www.cnp.org.uk

OTHER USEFUL RESOURCES
WHAT ABOUT CAREERS IN TOWN PLANNING?
If your pupils have enjoyed their studies and projects on issues related to consideration of their built and natural environment and might be interested in working in a profession that is concerned with shaping the future, improving the quality of life in our towns and cities, helping make a better and sustainable environment...they should consider a career in Town Planning.

This offers a rich variety of job opportunities, as outlined in this manual. For example they could be working on planning applications or involved in areas such as regeneration, community planning, housing renewal, transport planning, waste management, conservation, tourism and recreation, urban design, retail planning etc. Jobs are available in local and central government, in consultancies and a range of other agencies, working on local, national, European or international issues. Planners work with a wide range of people - other professionals, clients, developers, politicians and members of the public. Therefore, they need good communication skills and an ability to listen to and analyse many different views in order to make balanced recommendations and decisions based on the strengths and weaknesses of proposals.

The professional qualification for Town Planners is membership of the Royal Town Planning Institute (RTPI) and this can be achieved by studying an RTPI accredited undergraduate or postgraduate course at one of the Universities listed on page 69, followed by a period of experience working as a planner. Further information on careers in town planning and how to qualify can be obtained from:

The Royal Town Planning Institute, 41 Botolph Lane, London EC3R 8DL.

Telephone (020) 7929 9481/9482 or e-mail careers@rtpi.org.uk

or by looking at the website www.rtpi.org.uk where there are also profiles of planners working in different areas of town and country planning.
The RTPI would particularly like to thank the following Planning Schools for their generous sponsorship of this manual:

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<td>Department of Land Economy,</td>
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<td>Department of Environmental Planning</td>
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<td>School of Planning and Landscape,</td>
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The following Universities also offer RTPI accredited courses:

- Anglia Polytechnic University*
- University of Central England in Birmingham
- Cardiff University
- University College Dublin***
- University of Dundee*
- Joint Distance Learning Consortium
- University of Hong Kong***
- Leeds Metropolitan University
- Liverpool John Moores University
- University College London
- South Bank University
- University of Newcastle upon Tyne
- Oxford Brookes University
- University of Reading

* Undergraduate courses only
** No further intakes to these courses
*** Postgraduate courses only
Acknowledgments

PHOTOGRAPHS
The RTPI would like to thank the following individuals and organisations for allowing their photographs to be reproduced:

King Edward VI Camp Hill School for Girls, Birmingham.

Christine Wright.

Keith Martin.

Birmingham City Council.

N.A.S.A.

CADDET.
(An implementation agreement under the International Energy Agency).

Skiptonweb.
www.skiptonweb.co.uk

Stirling Council and Small Towns Rural Development Group.

Wembley National Stadium Limited.