

## Environment, Resources and Assets

### Introduction

346. Protecting the environment and using our natural resources and assets wisely is one of the three aims of this Plan. This chapter sets out policies which reflect this aim and the specific objectives identified in the Background Chapter which will help to further environmental well-being. These include making the best use of the land that has to be developed; safeguarding biodiversity and geological features; minimising flood-risk and protecting the coast; protecting, managing and using soil, air, water and minerals wisely; maximising energy efficiency; and managing waste.
347. The high quality of the environment is one of the County's greatest assets. It is widely recognised that there is a need to ensure that in meeting the needs of the communities of West Sussex, that not only is harm to the environment minimised but that opportunities are taken to bring about improvements. These may include opportunities to increase the range of habitats and species, extend woodlands, and improve air quality. Natural resources must be used wisely and not wasted, including undeveloped land as well as minerals such as sand and gravel. Protecting our environment and using natural resources and assets wisely applies to land and water, both salt and fresh, where this is within the ambit of the Plan.

### Targets

- To increase the proportion of new residential developments which are no less than 30 dwellings per hectare.
- To increase the diversity of habitats and species
- To ensure that no inappropriate development takes place on land at risk from flooding, unless flood mitigation measures are provided.
- To ensure that there is no irreversible loss of the best and most versatile land other than through the allocation of land for development.
- To ensure the provision of sufficient mineral resources to accord with the regional targets.
- To increase the number of renewable energy schemes
- To increase the amount of household waste which is recycled, composted or used to recover heat, power and other energy sources.

### Making the best use of land

#### Policy ERA1

- (a) **Development in West Sussex should not be permitted unless it makes the best use of land (including the reuse of existing buildings) taking into account the principles in Policy DEV1, and provided that it does not prevent the future development of other areas of land.**
- (b) **Local plans will include policies to:**
- (1) **secure higher density development or minimum densities in identified areas;**
  - (2) **set a minimum net-site density (no less than 30 dwellings per hectare) for residential development and only as an exception, permit residential development at a net-site density below that minimum level; and**
  - (3) **ensure that new development does not prejudice the comprehensive development of a larger site or the development of an adjoining area of land where there is a realistic expectation that the land could be developed.**

348. Land is a valuable resource which should be used wisely. Ensuring that the best reuse is made of previously-developed land and that the best use is made of greenfield sites which have to be developed, is one of the key objectives of this Plan. The amount of development to be accommodated within any scheme should be determined by the quality of the proposal, taking

into account the principles established in Policy DEV1 (High Quality Development), rather than the imposition of a maximum density. Government guidance on housing is clear that residential development in the past has used land inefficiently. It states the need to avoid development below 30 dwellings per hectare (net site density) and to encourage higher densities of development which make more efficient use of land. However, there may be circumstances where a lower density is justified, for example in certain conservation areas but this should be the exception rather than the rule.

349. Higher densities for both housing and other uses can be achieved in town, village, district and neighbourhood centres as well as locations which are highly accessible or will be accessible by passenger transport, walking and cycling. In these areas there is less need to travel by private car and consequently, less land should be provided for car parking. Higher density development should continue to be achieved in existing higher density areas which have spare capacity in facilities and services to serve additional development.
350. One of the mechanisms for delivering higher densities around transport nodes is the concept of Transport Development Areas (TDA) where higher density, less car dependent development would be permitted in suitable locations subject to developers contributing to the provision of passenger transport and other local transport objectives. Such development would need to be of high quality (see Policy DEV1) and, where possible, it should contain a mix of uses and activities (see Policy DEV2).
351. Care will be needed to ensure that policies in local plans and any associated guidance do not prevent the best use being made of land and that all development (including the conversion and reuse of existing buildings) is of high quality. This applies to site-specific allocations (both previously-developed land and greenfield sites) as well as general policies such as those relating to design, privacy, sunlight/daylight, roads, layouts and parking.
352. Policies should set out principles rather than prescriptive standards which may place unduly restrictive ceilings on the amount of development which could be accommodated. Similarly, they should avoid the use of area specific designations which unduly restrict the more intensive use of land. Rather, they should include criteria-based policies for these areas which ensure that the quality of the environment is maintained or enhanced while making more efficient use of the land.
353. Making efficient use of the land that has to be developed, can help to reduce pressure for development outside built-up areas. Development should not prejudice the future use of adjoining areas of developable land nor the comprehensive development of larger sites. This is particularly important in piecemeal development within built-up areas and the development of smaller parcels of land within large allocations.

*District planning authorities, with the Transport Authority, should:*

- *identify areas where higher density development or minimum densities should be achieved (such as town, village, district and neighbourhood centres) taking into account existing or potential accessibility by a choice of means of transport (including walking, cycling and passenger transport) and the existing or proposed capacity of facilities and services; and*
- *avoid the use of over-prescriptive and/or inflexible standards and designations which would unduly restrict the more intensive use of land.*

## **Nature conservation**

### **Policy ERA2**

- (a) **Development should not be permitted unless the wide range of habitats, species and geological features of the County will be protected, conserved and, where possible, enhanced particularly through long-term management mechanisms and habitat creation schemes. A particularly high level of protection should be afforded to sites and features of national and international importance. Proposals for the extension or creation of new habitats should be permitted provided that they are consistent with wider environmental objectives.**

**(b) Local plans will include policies to:**

- (1) ensure that site evaluation is undertaken to establish the nature conservation importance of proposed development sites;**
- (2) protect sites or features of nature conservation importance, including those protected under legislation and prevent development unless there are no alternative solutions and there are overriding reasons which outweigh the need to safeguard the value of sites or features;**
- (3) ensure that where development would result in the loss of an important nature conservation resource, a new resource is provided which is of at least equivalent value, where possible;**
- (4) where appropriate, secure the restoration, creation and management of habitats through development proposals; and**
- (5) where necessary, ensure the investigation and recording of sites and features of nature conservation importance, and, where appropriate, the preservation of any finds.**

354. One of the major influences on the character of West Sussex is its biodiversity, or "variety of life" - from woods to wetland, bugs to bacteria, and chalk to clay. Although it is often associated with the countryside, biodiversity occurs everywhere including built-up areas. The range of habitats and species has a major impact on the quality of the environment and consequently on the well-being of the communities of West Sussex. The County's varied geology, its geographical location and past land-use and management practices have contributed to the biodiversity of the County.
355. Although much of West Sussex is formally designated as being important for nature conservation, the vital linkages between these sites and the areas around them, are also of importance to maintain this biodiversity. However, the range of habitats and species has decreased over the relatively recent past, to the point at which effort is needed to reverse the trends. The Plan seeks to facilitate both maintenance and enhancement of biodiversity through protection and management of designated and retained sites and areas, and the creation and management of new areas. The positive role that high quality new development can play in providing new habitats and increasing biodiversity is recognised (Policy DEV1).
356. The concern for the decline of biodiversity and associated commitment to achieve enhancement is shared from the international to the local level. The "convention on biodiversity" signed at the Rio Earth Summit in 1992, the earlier Ramsar, Berne and Cites conventions, and the European Species and Habitats Directives represent the International dimension. National wildlife legislation and planning guidance provide the national and regional context, and local delivery completes the picture. The West and East Sussex Biodiversity Action Plan now provides the framework for policy and implementation, with delivery by the County Council, District and Borough Councils, Parish Councils, Community Groups and individuals as appropriate.
357. Government guidance (Planning Policy Guidance note 9: Nature Conservation and Planning - PPG9) covering statutorily designated sites, non-statutory sites and the wider countryside recognises that the key to the conservation of wildlife is the protection of the habitat on which it depends. This depends on the wise use and management of the land resources as a whole and includes safeguarding wildlife and geologically and physiographically important features and extends to urban as well as rural areas.
358. Some animal and plant species are protected by law and some sites and areas may be subject to formal designation. Sites of international importance include European sites (Special Protection Areas and Special Areas for Conservation) and Ramsar sites (Wetlands of international importance). There are five SPAs, five SACs and three Ramsar sites. The majority are located within Chichester and Pagham Harbours, and the Arun Valley.
359. The national network of sites includes Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR) or sites identified under the Nature Conservation Review (NCR) or Geological Conservation Review (GCR). There are 82 SSSIs within the County and two NNRs at Kingley Vale and Ebernoe Common.

360. Sites of more local importance include Local Nature Reserves (LNR), Sites of Nature Conservation Importance (SNCI) or Regionally Important Geological/Geomorphological Sites (RIGS) which are the most important places for geology and geomorphology outside statutorily protected land such as SSSIs. There are 23 LNRs and 266 SNCIs around the County. However, there may be other sites or areas of equal importance which have not been identified or designated.
361. Surface water and freshwater marsh are important habitats in the County but, apart from the two reservoirs at Ardingly and Weir Wood and the former gravel workings around Chichester, there are few areas of large inland water. However, West Sussex has a wealth of small downland dewponds, village ponds and other pools in woodland and on farmland. Drainage ditches and field watercourses are also important for biodiversity, especially on the extensive wild brooks and elsewhere on low-lying land. All the indications are that these habitats are at risk, mainly from past agricultural practices and drainage works, but also from development. Many ponds and ditches are silting up or being damaged through neglect.
362. If future generations are to continue to benefit from existing biodiversity, new development must ensure that the wide range of habitats, species and geological features are protected, conserved and, where possible, enhanced. Without this strategy, biodiversity will further decline and opportunities for future generations to benefit will be lost. This includes culturally (inspiration for art, music, and food), medically (new discovery and revival of old understanding and use), educationally (science and research), economically (employment, tourism and production) and socially (voluntary groups, and community activity).
363. Wherever possible, new development should enhance the biodiversity of the site and of the surrounding area by creating new habitats or improving existing ones. In certain circumstances, a new resource should be provided which is of at least equivalent value, where possible, to a site or feature which is lost as a result of development. This could include the creation of a new habitat on the site or elsewhere if this is more appropriate. However, in general, the loss of habitats should be resisted.
364. The Plan generally supports proposals which conserve and improve woodland and forest habitats, as well as those which create or extend woodlands particularly where it would contribute to the restoration of degraded landscapes or where significant tree loss has occurred or is expected. Wherever possible or appropriate, the district planning authorities should encourage the planting of broad-leaved native tree species, within woodland and forest habitats or in areas where this will contribute to established character. The Biodiversity Action Plan will provide the basis for co-ordinating action on woodlands and hedgerows together with associated species. Guidance on woodland character and management throughout the County is set out in the County Council's Landscape Assessment of West Sussex.
365. Habitats and geological features, such as rock formations, and raised beaches, are vulnerable to damage and destruction. Therefore, there is a need to record information about such sites or features and, where appropriate, to preserve any finds. The subsequent publication of results should be undertaken, where appropriate.

*District planning authorities should:*

- *identify sites or features of nature conservation importance, in addition to those already designated as being of international, national or local importance; and*
- *assess the potential of the sites or features for designation in local plans as Sites of Nature Conservation Importance (SNCI).*
- *assess the need for the creation of new, or the extension of existing, woodland and forest habitats, particularly in areas of degraded landscape or where significant tree loss has occurred or is expected.*

## **The coast**

### **Policy ERA3**

- (a) Development should not be permitted unless the distinctive character and resources of the County's coast and coastal waters, including river estuaries, will be conserved and, where possible, enhanced taking into account the**

**impact on the landscape, heritage, the environment, coastal processes, nature conservation, recreation and economic interests. Development on the coast outside built-up areas should not be permitted unless there is a demonstrable need for a coastal location and it cannot be located elsewhere.**

**(b) District planning authorities will:**

- (1) define in local plans, the seaward and landward extent of the coastal zone; and**
- (2) include policies in local plans to:**
  - (i) ensure that the coastal zone is conserved and, where possible, enhanced;**
  - (ii) safeguard and, where appropriate, allocate land for uses which require coastal locations; and**
  - (iii) prevent development on the undeveloped coast which should be located inland or within built-up areas.**

366. The coast is a local as well as a national resource. It contributes to the distinctive character of West Sussex; it is an attractive and desirable place to live; it attracts a large number of visitors both to the resorts and to the open coastline; it is important for nature conservation (including the internationally important Chichester and Pagham Harbours); it is an important recreation resource; and it is a place of economic activity including the ports, commercial shipping and other marine industries. However, it is a resource which is under threat from coastal processes and to some extent from development.
367. The Coastal Strategy provides a broad framework for action by all organisations and individuals involved with the management of the coastal environment of West Sussex. The Strategy takes an overview of the policies and activities operating at the coast and highlights the way in which they are interrelated.
368. District planning authorities should define coastal zones which extend seaward and landward of the coastline taking into account the geographical extent of natural coastal processes and local circumstances including key coast-related planning issues. They will need to ensure that the coastal zone is defined consistently between neighbouring authorities. They should also identify the different types of coast including built-up areas, undeveloped areas, and any despoiled areas. They should ensure the future management of the coastal areas and assess the need for measures to alleviate problems and to enhance degraded areas.
369. The Plan directs new development to existing built-up areas and seeks to resist development on the undeveloped coast. This includes the intensification of development, land reclamation and recreation (including marinas and other boat launching and parking facilities). It is important that the coast is protected and, where possible, enhanced in all development proposals.
370. Some proposals may affect the coast's geological features and have an impact on the hydrological processes of the coast or water quality locally or further along the coast, including the interruption or alteration of tidal flows. For example, waves and currents along the shore may suffer interference, including the removal of sediments thereby causing coastal erosion. The hydrology of the area should be understood before development proposals are prepared.
371. Where appropriate, district planning authorities should allocate land for uses which require coastal locations, for example, marine industries. They should prevent development on the undeveloped coast, which should be located inland or within built-up areas in order to protect the character of the coast and coastal resources.
372. The Environment Agency, coastal protection authorities (the local authorities), and other agencies have to produce a number of non-statutory plans including Shoreline Management Plans and Coastal Defence Strategies (see paragraph 376). Some of these contain policies and proposals that have land-use planning implications and should be taken into account in determining planning applications.

*District planning authorities, together with relevant organisations, should:*

- *define coastal zones which extend seaward and landward of the coastline taking into account the geographical extent of natural coastal processes and local circumstances including key coast-related planning issues. District planning authorities along the coast will need to ensure that the coastal zone is defined consistently between neighbouring authorities.*
- *identify the different types of coast including built-up areas, undeveloped, and despoiled areas; and*
- *assess the need to ensure the future management of the coastal areas and the need for measures to alleviate problems and to enhance degraded areas.*

## **Flooding and coastal defence**

### **Policy ERA4**

- (a) Development should not be permitted in areas at risk or potential risk of fluvial or coastal flooding or where it would increase the risk of flooding elsewhere. Development should not be permitted where it would adversely affect the integrity of functional floodplains, or flood protection or coastal defence measures. Development should not be permitted where there is a risk or potential risk to people and property from other natural causes including storm, erosion and land instability.**
- (b) Local plans will include policies to:**
- (1) ensure that the integrity of functional floodplains is maintained and that a risk-based sequential approach is adopted which guides specified categories of development away from flood risk areas;**
  - (2) secure the provision of measures to manage surface water run-off in new development which will help to reduce flood risk including, where appropriate, sustainable drainage systems (SuDS);**
  - (3) prevent development where:**
    - (i) there is a risk or potential risk that fluvial or coastal flooding, coastal erosion, land instability, wind, waves, sea spray or wave-borne debris (whether in normal or storm surge conditions) would endanger people or cause damage to property, or where it would increase the risk of flooding elsewhere, unless protection measures are provided to an appropriate standard;**
    - (ii) it would be detrimental to the stability or integrity of flood protection measures or coastal defences, or inhibit their maintenance or improvement; or**
    - (iii) it would hinder the implementation of future flood protection measures or coastal defence solutions;**
  - (4) ensure that essential new or replacement flood protection measures or coastal defences accord with any catchment area management plan, fluvial flood defence plan, shoreline management plan, or coastal defence strategy; and**
  - (5) ensure the provision of coastal safety/maintenance strips.**

373. The risk of flooding is an important issue in West Sussex. The coastline of the County is generally low-lying and is naturally sinking. As a result, it is particularly vulnerable to the predicted impacts of climate change. These include more coastal and river (fluvial) flooding resulting from sea-level rise, increased storminess, increased winter rainfall, and higher and more intensive waves. In past times, the rivers of West Sussex flooded regularly, helping to fertilise the low-lying meadows - flood relief measures are now in place. However, occasional flooding continues and the frequency of flood events is expected to rise in the future as a consequence of climate change.

374. The areas of coastal land and river basins where flooding is likely to be a risk in both the short and long term are identified by the Environment Agency on the Indicative Floodplain Maps (2000) which are reviewed annually. They indicate the extent of fluvial flooding associated with the main rivers for a one in one hundred year event, that is, a 1% likelihood of flooding each year. In compliance with national planning guidance, developers will be required to undertake a flood risk assessment where information is not available and to give consideration to the impacts of climate change. For flooding from the sea and tidal estuaries, the Maps show a one in two hundred (0.5%) likelihood of flooding each year land below the 1 in 200 year sea level. Further work to zone these areas according to flood risk is being undertaken by the Environment Agency.
375. The risk of flooding cannot be eliminated neither can flood damage be entirely prevented. However, the aim of the policy is to reduce the risks to people, property and the natural environment from flooding. This applies to the coast, rivers and their catchment areas. The policy also seeks to reduce risk from coastal erosion, land instability, wind, waves, sea spray or wave-borne debris.
376. The Environment Agency, coastal protection authorities (the local authorities), and other agencies have to produce a number of non-statutory plans. In West Sussex, these currently include the following documents which are either being prepared, are adopted or are subject to review: the South Downs and East Solent Shoreline Management Plans (SMP); and the Pagham Harbour to East Head, Pagham Harbour to Arun, Arun to Adur, and Adur to Brighton Marina Coastal Defence Strategies (CDS). Catchment flood management plans (CFMP) for the Arun, Adur, and Ems and West Sussex Rifes are likely to be prepared later in the plan period. Although there are no fluvial strategies in the County, the need for them will be identified through the CFMP programme. Some of these documents contain or will contain policies and proposals that have land-use planning implications and should be taken into account in determining planning applications.
377. The defence strategy along much of the coast, including all the built up areas, is currently to hold the existing defence line by maintaining or changing the standard of protection. The County Council supports this approach. In some parts of the undeveloped coast, small-scale realignment (i.e. retreat the existing line) has been suggested.
378. Flooding does not occur just along rivers and coastal floodplains. Development within a river catchment can have significant impact on flooding by increasing surface water run-off to streams and rivers. Replacing vegetated areas with development including roads and paved areas, can unless effectively managed, increase run-off as does some mineral extraction, forestry and agricultural operations. There has been growing interest in sustainable drainage systems (SuDS) which reduce the quantity of run-off from sites and slow the velocity of the run-off as well as providing a passive level of treatment. These can also contribute greatly in improving the amenity and wildlife interest of new development. The approval of SuDS in new development must be subject to appropriate location, standards of design, maintenance and legal responsibility to ensure their continued effectiveness. When determining planning applications, district planning authorities should work closely with the Environment Agency, service agencies and developers to enable surface-water runoff to be controlled by effective surface water management systems, including SuDS where appropriate, to ensure flood risk is not increased.
379. Government guidance is that a risk-based approach should be taken when assessing development proposals in or affecting flood-risk areas. Certain uses, such as agriculture, may be able to take place in areas at risk of flooding where other uses, such as housing would be inappropriate. The Environment Agency provides advice on flood issues at a strategic level and in relation to planning applications, and consultation with it is very important. If, after applying a sequential test, a site is suitable for development that requires the provision of flood defence and mitigation works, developers should contribute to the provision and maintenance of those works (see Policy DEV4).

*District planning authorities, together with the Environment Agency, should identify areas where there is a risk or potential risk to people and property from fluvial and coastal flooding, storm, erosion and land instability and the need for measures to alleviate problems.*

## **Air, soil, and water**

### **Policy ERA5**

- (a) **Development should not be permitted unless the quality of, and where appropriate the quantity of, the air, soil and water resources of the County will be protected and, where possible, enhanced. Proposals for the introduction of sensitive uses should not be permitted in areas subject to existing or potential pollution.**
- (b) **Local plans will include policies to:**
- (1) **protect the intrinsic quality of, and where appropriate the quantity of, air, soil, and water resources (including ground and surface waters) and prevent development which would be detrimental to the management and protection of such resources;**
  - (2) **ensure that quality of rivers and other watercourses is conserved and, where possible, enhanced (including within built-up areas);**
  - (3) **prevent the irreversible loss of the best and most versatile agricultural land (grades 1, 2 and 3a of the Agricultural Land Classification system) unless the need for the development outweighs the long-term protection of the land; and**
  - (4) **prevent sensitive development in areas subject to existing or potential poor air quality, or noise or smell pollution.**

380. The Plan seeks to protect and, where possible, enhance natural resources and assets including air, soil and water (see also Policy DEV1). These are essential to life and it is vitally important that the impact of development on them is minimised. Opportunities should also be taken to improve air, soil and water quality and conserve the extent, diversity and quality of soils including the best and most versatile farmland.
381. Air quality in West Sussex, whilst generally high, is constantly threatened by pollution from human activity. As pollutants associated with the burning of fossil fuels for domestic and industrial purposes have declined in the County, pollutants and particulates produced mainly by motor vehicles have increased. Traffic growth is likely to be the main influence on air quality in the County over the next few decades and concentrations of some pollutants associated with motor vehicles are likely to increase. Land-use planning has an important role to play in improving air quality. In addition to Policy ERA5, other policies of the Plan which seek to minimise the need to travel and reduce the need to use the private car, will have a beneficial impact on air quality.
382. The Local Transport Plan's Strategy for Air Quality and the Pan-Sussex Strategy for Air Quality aim to improve air quality although it is recognised that in the short term at least, some of the national or local targets for pollutants are likely to be exceeded. The Strategy identifies a number of areas for action including the link between road traffic and the impact on air quality and sensitive land uses.
383. The importance of water as a resource, its conservation, supply and disposal, is self-evident. There needs to be water of a sufficiently high quality for the purposes for which it is used. There needs to be enough of it now and for the future. Supply and quality must not be compromised by development demands. Overall, water quality in West Sussex is good, and has been improving as a result of increased investment. Drinking water quality is very good. The treatment of waste water at inland works is for the most part highly effective, and the rivers in the County are almost all in the best quality grades. There are few pollution incidents. Groundwater protection is well-established. In managing water supply, it will continue to be important to protect existing sources, reduce leakage, manage demand sensibly and examine carefully storage and transfer possibilities. Proposals related to the supply of water and the treatment of waste water should be considered against the relevant policies of the Plan. Outside built-up areas, there should be a demonstrable need for any proposals to be located in the countryside.

384. The Environment Agency and its partners, including the County Council, have developed or are developing management plans for water and river management including the Adur and Ouse, Arun and Western Streams, Medway, Mole, and Wey Catchment Abstraction Management Strategies (CAMS). Positive enhancement work is also taking place through the implementation of Biodiversity Action Plans, the Countryside Stewardship scheme, and many other projects.
385. The planning and pollution control systems are separate but complementary. Both are designed to protect the environment from the potential harm caused directly by development and any indirect impacts. In seeking to protect air and water, local authorities should continue to monitor existing and potential poor air quality and water pollution. They should take account of the location of the development where this may give rise to air and water pollution; examine any potentially polluting aspects of the development itself; and ensure that new development, especially sensitive uses such as housing, are not placed too close to existing or potential sources of pollution.
386. Maintaining high quality soil is vital to the health of the land and to agriculture. The varied geology of West Sussex has generated wide variations in soil types and consequently in agricultural land productivity, although much high-grade agricultural land has effectively been produced by improvement through cultivation. The best and most versatile land is concentrated in the coastal plain where enriched soils and favourable light conditions combine to produce farmland suitable for intensive horticulture. Elsewhere, higher grade land exists in small pockets in river valleys and on the loams developed on the sandy country on the southern fringes of the Low Weald.
387. In determining how the development requirements of this Plan should be met, district planning authorities should take an holistic view of the value of land. Although they should continue to give protection to high quality agricultural land, they should also consider other factors such as landscape quality, biodiversity, amenity value, cultural heritage, and local character. Where development is needed, it would be wrong to protect an area simply because of its soil quality at the expense of another area which has other qualities of value. Where development of agricultural land is unavoidable, priority should be given to the use of poorer quality land except where additional considerations, for example, the lack of accessibility to infrastructure, workforce or markets, suggest otherwise.

*District planning authorities should:*

- *together with the Environment Agency, assess the whole-catchment of rivers and other watercourses and identify important features or characteristics (including functional floodplains) which should be protected;*
- *identify areas subject to existing or potential poor air quality or pollution; and*
- *assess the impact of development on air quality and pollution having regard to the National Air Quality Strategy objectives.*

## **Minerals**

### **Policy ERA6**

- (a) Provision should be made for the extraction of minerals sufficient to meet identified needs. Proposals for the extraction, import, storage or processing of minerals, including sand, gravel, sandstone, chalk, and clay, and the exploration and production of oil and natural gas, should not be permitted unless they are required to meet identified needs and any impact on the environment is acceptable. Outside built-up areas, development (including buildings, plant and machinery) which is not essential to the operations should not be permitted. Development that would be detrimental to the management and protection of minerals should not be permitted.**
- (b) The West Sussex Minerals Local Plan will include policies, including the identification of suitable sites, to ensure that:**
- (1) suitable sites for the extraction, import, storage or processing of minerals are available to meet identified needs;**

- (2) minerals are conserved, as far as possible, while ensuring an adequate supply;**
- (3) where appropriate, opportunities are taken for the transport of aggregates by rail or water;**
- (4) sensitive and environmentally sound work practices are secured;**
- (5) satisfactory restoration of minerals sites to an appropriate after-use or enhanced amenity are secured; and**
- (6) mineral resources are not sterilised.**

388. West Sussex contains deposits of a variety of minerals important to the construction industry such as sand, gravel, sandstone, chalk and clay. Additionally there have been discoveries of oil and gas, which have already led to limited commercial exploitation. These minerals make an important contribution to the economy, not least in providing most of the construction materials required to implement development. They can, of course, be worked only where they occur, which means that there is a need to balance the need for the minerals with any adverse impact on the environment.
389. Naturally occurring bulk minerals worked primarily for use in construction, for example in concrete, roadstone and asphalt, or as constructional fill or railway ballast, are termed 'primary' aggregates. Other materials such as by-products of quarrying, mining, industrial processes or recycling (including demolition materials), may be suitable, dependent on their qualities, for purposes otherwise supplied from primary aggregate sources and are referred to as 'secondary aggregates'. Chalk, which is mainly quarried for agricultural purposes in West Sussex, and sandstone may also fulfil a secondary aggregate role. Currently, most secondary aggregates are used for lower-specification work such as hardstanding, foundation sub-base construction or as bulk fill. Government studies are assessing the potential for these materials to meet higher specification uses.
390. The County Council is the Minerals Planning Authority for West Sussex and is responsible for all minerals planning matters throughout the County. The Structure Plan sets out the broad framework for such matters and the West Sussex Minerals Local Plan, also prepared by the County Council, sets out detailed policies and identify where new permissions are likely to be granted. It covers the period to 2006.
391. The strategic aim is to meet the need to maintain supplies of minerals whilst ensuring that their extraction can be sustained as long as is necessary and does not harm the environment. This means protecting existing reserves, ensuring that they are not used too quickly, encouraging the reuse of existing buildings rather than their replacement, and promoting the use of recycled materials to reduce the demand for new mineral extraction. It also means reducing the environmental impact of exploiting such resources. These include direct impacts such as the visual impact on the character of an area and pollution, as well as indirect impacts from transporting the minerals. Lastly it means ensuring that land is restored to an appropriate after-use. In the countryside, development should be limited to uses which are necessary for the operation to proceed. For example, any buildings provided should not be used for purposes unrelated to mineral extraction. Buildings and plant should be removed on cessation of the extraction operations.
392. Proposals for further oil or gas workings, to appraise a find, or to develop a field for commercial production, should be considered on their merits against the policies of this Plan and local plans. However, permission should not follow automatically from successful exploration.

## **Energy generation and supply**

### **Policy ERA7**

- (a) Development of economically viable energy generation and supply should be permitted provided that it will contribute to the diversity, security and sustainability of energy supply and the reduced emission of pollutants and that the impact on the environment is acceptable.**
- (b) Local plans will include policies to:**

- (1) enable the efficient generation and supply of energy including, where necessary, the allocation of land for energy generation; and**
- (2) secure the provision of economically viable and environmentally acceptable energy generation in development proposals including, where appropriate, the potential for community heating schemes.**

393. Almost all energy used in West Sussex at present is generated elsewhere. This will remain the case although a gas turbine power station is now operating at Shoreham Harbour. However, it is Government policy, supported by the local planning authorities, to stimulate the development of new and renewable energy sources wherever they have prospects of being economically attractive and environmentally acceptable. This will contribute to diversity, security and sustainability of energy supply, reduced emission of pollutants, and the encouragement of internationally competitive industries. There may also be scope for electricity and other forms of energy generation from wastes, and for the use of waste heat (see the West Sussex Waste Local Plan Deposit Draft).
394. Energy demand in the UK is likely to remain fairly stable over the next forty years. At present there is no shortage of energy supplies as there are vast reserves of fossil fuels and uranium. However, the burning of fossil fuels results in the emission of greenhouse gases, and nuclear energy production creates problems in dealing with the highly dangerous waste. Energy conservation and the generation of energy from renewable sources can help to reduce the need to rely on fossil fuels and nuclear energy.
395. The potential for renewable energy development in South East England has been the subject of a study undertaken for the Department of Trade and Industry. SEERA has produced draft guidance on energy efficiency and renewable energy – “Harnessing the Elements”. It contains policies to promote a more sustainable pattern of energy use and generation through measures to reduce energy use, increase efficiency and increase the proportion of energy generated from renewable sources. The draft strategy sets a target for 20% of electricity to be produced from renewable sources by 2020 (in the south east region). Within West Sussex, much of the County was ruled out because of the possible impact of development on the landscape. However, wind, solar, tidal and water power may still have potential, and there may be scope for generating energy from various crops (biomass). The other main possibility is the use of wastes - landfill gas (already used at a County Council plant at Sompting), farm waste and sewage sludge.
396. Renewable energy plant (and associated distribution networks) may need to be located close to the resource itself in order for it to be exploited effectively and to minimise transport costs and energy wastage. This may lead to some local environmental impact, requiring a balance to be struck between any local disbenefits and the wider benefits of developing the energy resource. A formal environmental assessment may be needed. This Plan allows for economically viable and environmentally acceptable energy generation and supply: the siting and design of any buildings or structures will be critical. Ensuring energy efficiency, minimising the use of non-renewable energy, and maximising the use of renewable energy sources in new development is one of the principles of high quality development (see Policy DEV1).

*District planning authorities should identify the potential for economically viable and environmentally acceptable energy generation including the generation of electricity from wastes, renewable energy sources, and combined heat and power schemes*

## **Waste**

### **Policy ERA8**

- (a) Provision should be made for sufficient capacity to manage the waste that will arise in West Sussex taking into account the need to minimise landfill and to balance environmental, social and economic needs. Proposals for the management of waste (including recycling, energy recovery, and waste disposal) should not be permitted unless they are located as close as practicable to the point at which the waste is generated, integrate with rail and water-based transport systems wherever possible, any impact on the environment is acceptable, and appropriate restoration and after-use is**

**secured, where necessary. Outside built-up areas, development (including buildings, plant and machinery) which is not essential to the operations should not be permitted. Development that would prevent or hinder the management of waste should not be permitted.**

**(b) The West Sussex Waste Local Plan will include policies, including the identification of suitable sites, to ensure that:**

- (1) a sufficient range and number of waste management facilities are provided in suitable locations to meet identified needs and that the combination of facilities provides the most benefits or least damage to the environment;**
- (2) material recovery, including recycling, composting and energy generation, is maximised;**
- (3) waste disposal without energy recovery, specialised destruction and permanent storage is minimised;**
- (4) facilities are located as close as possible to the point at which the waste is generated and that they integrate with rail and water-based transport systems wherever practicable;**
- (5) sensitive and environmentally sound work practices are secured; and**
- (6) satisfactory restoration of waste sites to an appropriate after-use or enhanced amenity is secured.**

397. The County Council, as the Waste Planning Authority for West Sussex, is responsible for the land-use planning for all the main types of waste, including construction and demolition, household, commercial and industrial, and hazardous wastes. Its duties include development control and preparing a Waste Planning Strategy and a Waste Local Plan. The County Council is also the Waste Disposal Authority, and is responsible for arranging for the disposal of household waste and for waste deposited at Civic Amenity Sites. It may need to promote the development of sites to manage waste. The County Council works in consultation with the District Councils, which are the Waste Collection Authorities. The Environment Agency is the Waste Regulation Authority.
398. In 1999/2000, almost 1.25 million tonnes of waste was landfilled in West Sussex (including that imported). About 0.25 million tonnes was recycled (this was about 20% of the total amount of waste requiring management in the County). There are no major 'energy from waste' facilities. Almost 0.5 million tonnes of the total amount of waste produced in West Sussex, came from household sources. About 0.5 million tonnes of waste was imported into the County, mostly from East Sussex/Brighton and Hove. Nearly 0.25 million tonnes of the total amount of waste was exported: for example, household waste from Crawley and East Grinstead is taken to Surrey; whilst some commercial and industrial waste, and most hazardous waste was also exported. Overall, the County was broadly self-sufficient, managing within its area a similar amount of waste as was generated.
399. In West Sussex, waste has traditionally been landfilled. However, existing landfills have a limited life. The four sites which accept household and commercial/industrial wastes are at Lidsey (in Arun District), and at Brookhurst Wood, Horton (also known as Small Dole) and Washington (all in Horsham District). At current rates of filling, the total capacity at these sites would be exhausted before 2006. Opportunities for major new landfill are likely to decline, as a result of the scarcity of suitable voids. In addition, a European Union directive on landfill requires progressive reductions in the amount of waste going to landfill. Therefore, there will need to be a major shift away from landfill, which wastes valuable resources, towards processes which reuse and recover materials.
400. The Structure Plan sets out the broad framework for the land-use planning aspects of waste. When completed, the emerging Waste Local Plan will make provision for waste management facilities in appropriate locations to meet identified needs. The Waste Local Plan, which will cover the period to 2016, will also set out the considerations to be taken into account in assessing proposals for new waste management facilities. The Deposit Draft was published in February 2003 and on deposit in May/June 2003.

401. Consistent with Government policy, the aim in West Sussex is to encourage waste reduction, whilst seeking to increase reuse and recovery, including composting, recycling and energy recovery. Targets will be introduced in the Waste Local Plan for reducing the amounts of waste to be landfilled, and for increases in material recovery.
402. The County's Waste Planning Strategy also carries forward the Government's commitment to the proximity principle whereby waste should be managed or disposed of close to the point at which it is generated. Each region should expect to provide sufficient facilities to treat or dispose of all the waste it produces, unless the use of facilities outside the region represents a more practicable environmental option. However, specialised facilities may need to serve a wide area; and for landfill, proximity will have to take account of where suitable voidspace within the County are located.
403. Provision for reuse and recovery of waste should be made sufficient to enable the targets of the European Union's Landfill Directive and those of the National Waste Strategy to be met. However, there will still be a need to make provision for sufficient landfill capacity to dispose of all the residues left over after waste recovery. Proposals for waste should further the principles of integrated and sustainable waste management. Decisions should also be based on the principle of the Best Practicable Environmental Option, which is to secure the most benefits or least damage to the environment, as a whole, at acceptable cost, in the long term as well as in the short term.
404. A variety of waste management facilities will be required throughout the plan period for dealing with the various types of waste generated. For example, transfer stations carry out rebulking and sorting of wastes prior to their being sent for recycling, treatment and/or final disposal. Waste recycling facilities can include screeners and crushers, to produce secondary aggregates from construction and demolition wastes. Civic amenity sites and recycling centres provide convenient points for the collection of recyclable household materials and the safe recovery of potential pollutants such as waste oil. Sites for such built facilities require good access and must be reasonably close to where the waste is produced. They would usually be sought in or adjacent to urban areas, and for some operations substantial buildings would be required.
405. Waste management can create a range of problems, from the operation itself and from the traffic generated. For example, the transport of material by road to and from waste management facilities requires the use of large lorries. These can add to congestion at peak times and can be a source of environmental disturbance, even when empty. Accordingly, when considering proposals for new waste management facilities, account should be taken of other policies in the Plan and of how potential environmental issues such as traffic, noise, dust, smell, visual intrusion, harm to human health, restoration and aftercare, will be dealt with. In the countryside, development should be limited to uses which are necessary for the operation to proceed; for example, any buildings provided should not be used for purposes unrelated to waste management.

