

## 8 UTILISING RESOURCES

### Policy R39 : Areas of search for grid connected renewable energy

8. There is a need to ensure the efficient use of resources by increasing the use of renewable energy, reducing the use of finite mineral resources and reducing the amount of waste for disposal. The need to encourage increased energy efficiency and conservation, and where possible the use of renewable energy technology within development is also important and is considered as part of Policy ST1.

Proposals for the development of grid connected renewable energy will be favoured in the relevant Areas of Search shown in figures 10-15.

### Renewable Energy

- 8.2 The UK currently generates approximately 2%<sup>12</sup> of its electricity from renewable sources. National targets<sup>13</sup> require that renewable energy should supply at least 10% by 2010 and to increase this to 20%<sup>14</sup> by 2020. The North West region currently supplies 1.3% of its generating capacity from renewable energy sources, of which 47% is supplied from wind turbines in Cumbria. A study undertaken by Sustainability North West (2001)<sup>15</sup> suggests that by 2010, 8.5% of energy capacity in the NW region should be from renewable sources. Cumbria is identified in this study as having the greatest potential contribution of new renewable energy amounting to 27% of the regional total, mainly from on and offshore wind power, biomass, landfill gas and small scale hydro.
- 8.3 Policy ER13 of Regional Planning Guidance requires Development Plans to identify areas of search for renewable energy developments which aim to protect the Region's most valuable and sensitive environments. The North West Development Agency's Regional (Economic) Strategy highlights renewable energy as a key growth sector.
- 8.4 A technical study<sup>16</sup> has been undertaken to identify the potential for further grid connected renewable energy development in Cumbria. This took into account economic, social and environmental factors as well as technical and viability considerations. The study has enabled broad Areas of Search to be identified for different technologies. The search areas referred to in policy R39 are set out in Figures 10 to 15. These are required to be more closely defined in Local Plans following local assessment.
- 8.5 All grid related proposals will be required to meet the search criteria set out in Schedule 3 unless it can be demonstrated that for technical reasons criteria no longer apply. Proposals must also conform with all other relevant Structure Plan policies. Within the Areas of Search these criteria have been already met. Renewable energy proposals that are non-grid connected or for domestic use will be considered under general Structure Plan and Local Plan policies. In the case of the National Park and AONBs, Policy R42 will apply to all renewable energy developments. **Policy R39**

All proposals for grid connected renewable energy will be required to:

1. meet all the relevant criteria used in the identification of Areas of Search, unless it can be demonstrated that for technical reasons criteria no longer apply, and
2. conform with all other relevant Structure Plan policies.

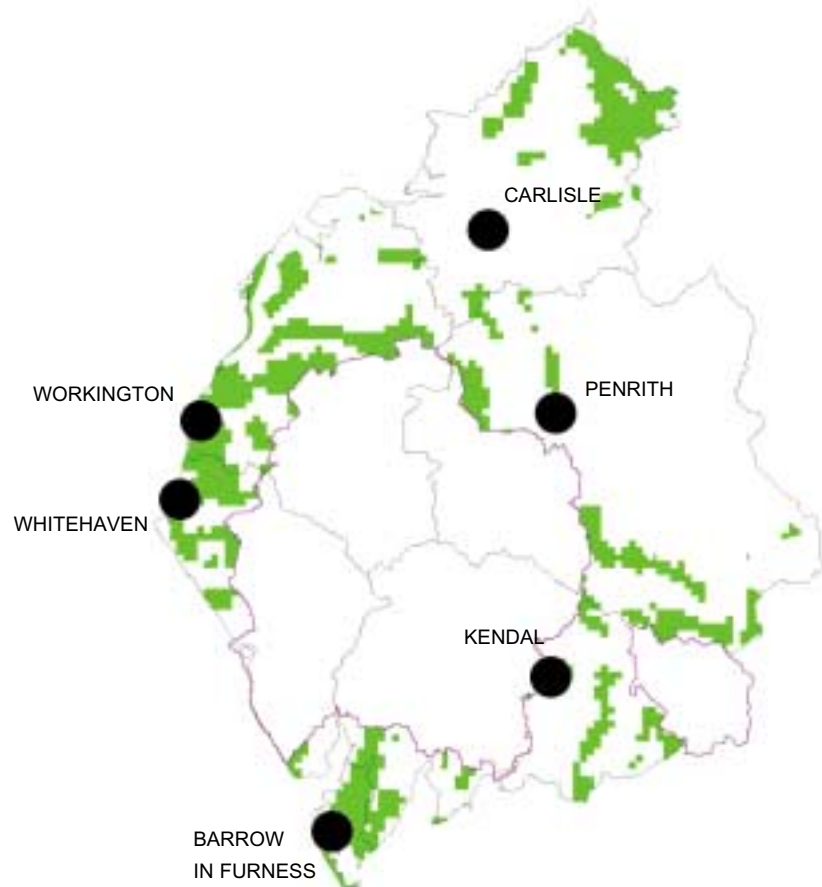
## R40 : Wind energy proposals

Proposals for wind energy development will be permitted where it is demonstrated that they satisfy all the following requirements:

- 1 there is no significant adverse affect on the landscape character of the area either individually or cumulatively through its relationship with other wind energy development,
2. there is no detrimental impact on the designated areas identified in Policy E31 or within their settings that are detrimental to their character and/or species of national or international conservation importance,
3. there is no significant adverse affect on local amenity, highways, aircraft operations or telecommunications,
4. the proposal takes all practical measures to reduce the adverse impact of development on recognised landscape, environmental, nature conservation and historical interests, and
5. measures are included to secure the satisfactory removal of structures and remediation of land following cessation of operation of the installation.

8.6 Of the range of renewable energy technologies the development of wind energy within the County has been the most emotive given the visual impact and the influence it has on the character of important landscapes and their settings. However, it is currently the technology with the greatest technical and economic viability to meet the proposed targets for Cumbria.

8.7 Figure 10 illustrates the Areas of Search for windfarms of 3MW or more whilst Figure 11 shows Search Areas for smaller grid connected windfarms. Proposals for on-shore wind energy will need to ensure that the adverse impacts of development are not significant. The need to protect landscape character will be of particular importance and this should take into account the cumulative effects of development proposals. Measures to minimise any adverse impact on the environment including obligations for the removal of redundant structures and site remediation, will also be required. **Policy R40**



*The areas shaded green meet the search criteria for onshore wind farms (3MW plus)*

**Figure 10 Area of Search for onshore windfarms (3MW plus)**

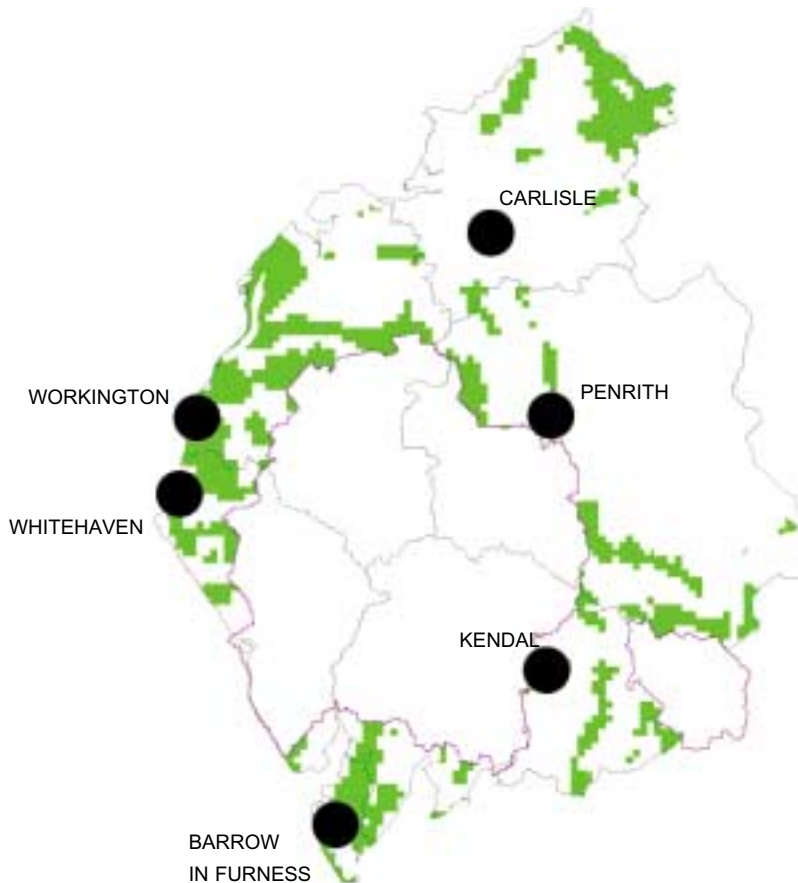
8.8 Consents for offshore Windfarms are authorised by Department of Trade and Industry. Only on-shore plant associated with offshore wind energy developments require planning permission.

## Policy R41 : Biomass and energy from waste

Proposals for the development of new plant for the generation of energy from biomass and waste will be permitted where it is demonstrated that they satisfy all the following requirements:

1. it is to be sited on existing industrial/employment sites or previously developed land subject to the land not being designated for other purposes (e.g. Nature Reserve). Where practicable, measures to transport fuel and waste by rail shall be made,
2. there is no significant adverse affect on local amenity, access and transport,
3. there is no detrimental impact on the designated areas identified in Policy E31 and/or species of national or international conservation importance, and
4. the proposal takes all practicable measures to reduce the adverse impact of development on recognised landscape, environmental, nature conservation and historical interests.

Proposals for the recovery of energy from agricultural waste within existing farm units or sewage sludge shall be well related to the activity, scale and character of the existing business/enterprise and/or setting as well as satisfying criteria 2 to 4 above.



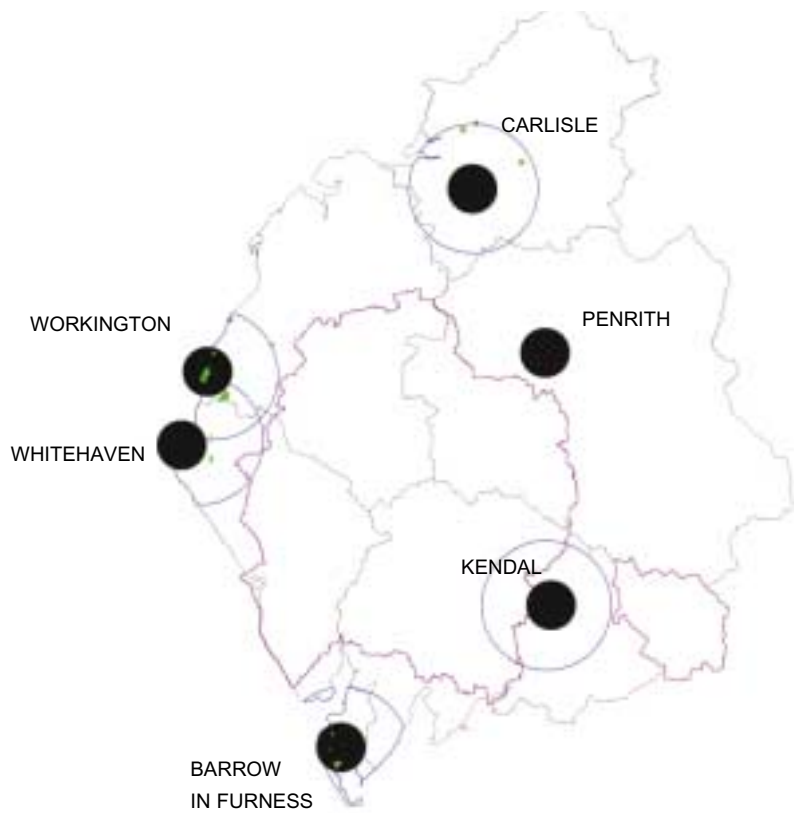
*The areas shaded green meet the search criteria for onshore windclusters of 3MW or less*

**Figure 11 Area of Search – onshore Windclusters of 3MW or less**

8.9 Potential exists for the generation of energy from both waste (municipal and industrial) and biomass (forestry wastes and coppice) in the Areas of Search shown in Figures 12 and 13. There may be scope for the anaerobic digestion of agricultural wastes and sewage where these are developed in close proximity to arisings. However, Areas of Search have not been identified, given the likely sporadic nature of development proposals.

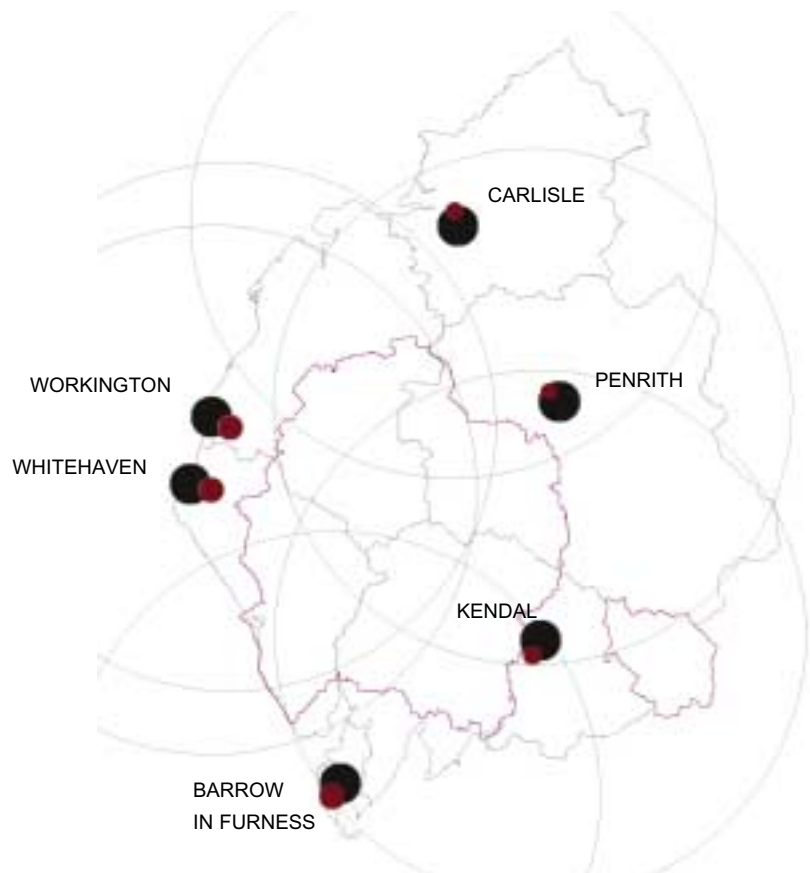
8.10 Proposals for energy from waste and biomass will be assessed, taking account of any potential adverse local impacts and the need to meet national targets. Proposals for the development of anaerobic digestion schemes associated with existing agricultural or utility operations, will require consideration to be given to the impact on the local setting, environmental interests and scale of activity.

### **Policy R41**



*The areas shaded green meet the search criteria for Energy from Waste (EfW). Potential EfW plants would be located within a 10km radius of population centres, as shown in blue.*

**Figure 12 Area of Search - Energy from Waste (EfW)**



*The areas shaded brown meet the search criteria for Biomass. The radius for wood fuel catchment areas are shown in green.*

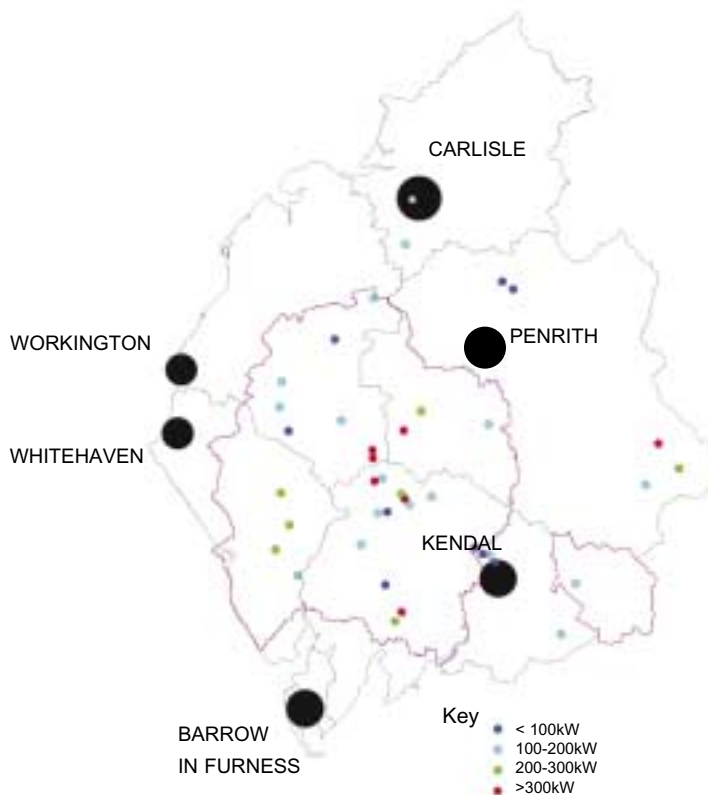
**Figure 13 Area of Search - Biomass**

## Policy R42 : Renewable Energy in the Lake District National Park and AONBs

Within the Lake District National Park and AONBs, wind farms will not be permitted. Proposals for other renewable energy developments will be favourably considered if:

1. their form, design and materials can be satisfactorily assimilated into the landscape or built environment and would not harm the appearance of these areas, and
2. they would not impact adversely on the local community, nature conservation or historical interests.

- 8.11 Proposals for small scale hydro, and landfill gas, (Figures 14 and 15), will be assessed against the provisions of Policy R39, and in the Lake District National Park and AONBs, Policy R42, taking due account of other relevant policies. Landfill gas is considered specifically in Policy R47. Solar/photovoltaic technology proposals should be considered against general planning policies. Wave power and offshore wind will be considered under Major Development Proposals, Policy ST9.
- 8.12 Windfarms inevitably have a significant landscape impact and therefore are considered inappropriate for sites within nationally designated landscapes, and within their visual settings where they would have a detrimental effect on their character. Within the National Park and AONBs windfarms are defined as schemes requiring more than one turbine or a turbine with a ground to hub height of 25 metres or more. There is more scope to assimilate other forms of renewable energy development into the landscape, and therefore their development in the National Park and AONBs is not ruled out. Proposals for both grid and non-grid connected schemes will be considered under this policy. **Policy R42**

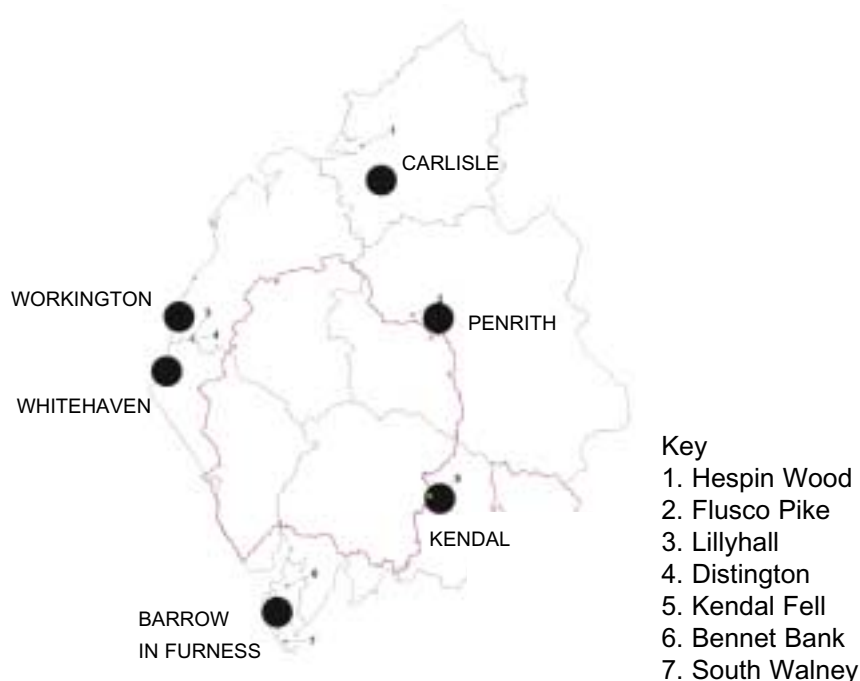


*The map shows the location of small scale hydro-electricity sites meeting search criteria. The sites are grouped according to their installed capacity.*

**Figure 14 Area of Search – Small-scale Hydro**

## Policy R43 : Safeguarding mineral resources

Development will not be permitted which sterilises mineral resources that may need to be worked in the future.



*The map shows in green the location of landfill sites meeting search criteria for this technology.*

**Figure 15 Area of Search – Landfill Gas**

### Minerals

- 8.13 Mineral resources are finite and care must be taken to safeguard known deposits of economic importance from being sterilised from other forms of development.
- 8.14 Outside the National Park, this is achieved by requiring District Local Planning Authorities to consult the Mineral Planning Authority on planning applications for non-minerals development within Mineral Consultation Areas. Mineral Consultation Areas are areas of mineral resource potential notified to District Local Planning Authorities by the County Council. Where development is considered to be essential and significant mineral resources would be sterilised, planning permission will be granted for the prior extraction of the mineral, provided the future development of the land would not be prejudiced and the environmental impacts can be kept to an acceptable level. **Policy R43**

## Policy R44 : Mineral extraction outside the Lake District National Park and AONBs

Land will be made available for mineral extraction outside the Lake District National Park and AONBs to maintain an adequate supply of minerals, including where appropriate land banks of permitted reserves, taking account of the contribution from alternative sources. Permission will not be granted for mineral extraction where there would be a significant adverse effect on the community, the local environment or the road network unless the effect is outweighed by the need for the mineral to be worked and/or the social and economic needs of the County's population. Proposals should incorporate a strategy to minimise the production of mineral waste and ensure the acceptable restoration of land.

- 8.15 Policies ER9 and ER10 of Regional Planning Guidance seek to ensure that an adequate supply of minerals is maintained. Except for dimension or building stone and slate, see Policy R45, it is considered that this will be achievable without the need to make further provision within the National Park and AONBs. Figure 16 gives the current position.

Sand and Gravel	12.8 years
General Crushed Rock*	36.2 years
Higher Specification Aggregate+	22.5 years

Source: North West Region Aggregates Working Party (NWRWP)

\* includes permitted reserves in the LDNP

+ high skid resistant material used for road surfacing of regional and national importance.

**Figure 16 The Aggregate landbank at beginning of 2002**

- 8.16 At any one time Cumbria has a requirement for a 7 year landbank of sand and gravel and a 15 year landbank of crushed rock aggregate. Further reserves of sand and gravel and high specification aggregate will need to be released to ensure an appropriate landbank is maintained throughout the period to 2016. In assessing the need for further mineral extraction the contribution that can be made from alternative sources of supply, including marine sand and gravel and waste and recycled materials will be taken into account. In addition it may be necessary to release further resources of general crushed rock, if a need can be demonstrated. Detailed policies outside the National Park will be set out in the Cumbria Minerals and Waste Local Plan and in the National Park in the Lake District National Park Local Plan.
- 8.17 All proposals for mineral extraction should seek to reuse waste mineral products and minimise the production of waste. Any unavoidable waste should be used to mitigate the visual and landscape impact of developments both during and after extraction. To ensure sites are restored to a beneficial use, conditions will be placed on any planning permission. Restoration proposals which enhance biodiversity, landscape character and public access will be particularly encouraged, although it will be expected that the best and most versatile agricultural land will be restored to its previous quality. **Policy R44**

## Policy R45 : Mineral extraction in the Lake District National Park and AONBs

Proposals for mineral extraction within the Lake District National Park and AONBs will not be permitted except for the following:

1. to provide dimension or building stone, which in the Lake District National Park will be limited to small scale extensions to existing workings or small scale re-opening of previously worked quarries, or
2. the small scale re-opening of previously worked slate quarries, or
3. the extension of existing slate quarries where there is no other reasonable alternative source of supply.

In all cases it must be demonstrated that the scale and nature of the proposed works are such that harm would not be caused to interests of acknowledged importance, or any such harm is outweighed by the need to maintain a supply of local building material, to sustain local diversity of employment or by other local economic considerations. Proposals must include strategies to minimise the production of mineral waste and ensure the acceptable restoration of land.

## Policy R46 : Waste management facilities

New facilities will be required to meet Government and European targets for the increased recovery and recycling of industrial, commercial and municipal solid waste and for the reduction of biodegradable waste disposed of to landfill, namely:

1. Materials recovery and waste treatment facilities

Large scale facilities (designed to handle waste from a wide area) to be located on existing industrial/employment sites or previously developed land close to areas of major waste arisings subject to the land not being designated for other purpose (eg Nature Reserve). Sites should wherever possible be rail linked. Priority will be given to sites for municipal solid waste

- 8.18 Attractive landscapes are often geologically rich in mineral resources and the Lake District National Park and Cumbria's AONBs are no exception. In many locations the character of the landscape and the development of towns and villages have been heavily influenced by traditions of mining and quarrying. However, modern extraction methods can have unacceptable impacts on the landscape. Because of the serious impact that mineral working may have on the natural beauty of the National Park and AONBs, minerals applications in these areas are subject to the most rigorous examination. Extraction should be in the public interest having regard to the need for the development and its effect on the local economy and the environment.
- 8.19 In view of the availability of alternative sources elsewhere, further quarrying of aggregates in the National Park and AONBs will not be permitted.
- 8.20 Continued mineral working in the National Park and AONBs may be justified in order to maintain a supply of traditional local building materials, to maintain important buildings or to sustain local employment. It may also provide opportunities to rationalise existing workings or to significantly improve past dereliction. In the AONBs, the opening of new quarries to secure supplies of locally required dimension or building stone is not ruled out. Within the National Park continued working of the remaining operating quarries, together with opportunities for the small scale reopening of suitable quarries, are sufficient to meet all local requirements and the opening of new quarries is not justified. **Policy R45**

## Waste Management

- 8.21 The majority of waste is currently disposed of in landfill sites. However national guidance<sup>17</sup> requires a fundamental change in the way waste is managed. This includes additional controls on disposal of waste, banning some forms of waste from landfill disposal, and reducing the amount of biodegradable municipal waste going to landfill to 35% of its 1995 level by 2016. The Government has also set a number of staged targets<sup>18</sup> for sustainable waste management which ultimately require the recycling and composting of 33% of household waste and the recovery of value from 67% of municipal waste by 2015. It also wishes to see future waste management decisions based on the Best Practicable Environmental Option (BPEO) for each waste stream. This must take account of the proximity principle, that is, waste should be managed as near to its place of production as possible. It should also pay regard to the 'waste hierarchy', namely, in order of preference, minimisation, reuse and recycling, recovery of value, and only then disposal without recovery. Most waste should be treated or disposed of within the region where it arises. These principles have been restated in Policy EQ4 of Regional Planning Guidance.
- 8.22 Policy EQ5 of Regional Planning Guidance indicates that waste management options should be determined having regard to the above principles and comprise an appropriate mix of facilities.

- 8.23 The County Council's waste strategy is based on an incremental expansion of recycling, composting and waste minimisation initiatives across the county. By 2005/06 material recovery facilities and composting facilities should be operational in the main centres across the county to support the collection of segregated recyclable materials by the District Councils. In addition, a range of new civic amenity and mini-recycling centres and waste collection points may be required across the county. This approach should enable Cumbria to meet government targets for 2005 but higher targets for recycling and recovery for 2010 and 2015 may require the use of other advanced technologies, possibly involving recovery of energy from waste, particularly if waste continues to grow at present rates.
- 8.24 Facilities will also be required for the management of industrial and commercial waste. In 1998/99 the County produced some 820,000 tonnes of such waste<sup>19</sup> of which approximately 50% was disposed of to landfill with the remainder being reused, recycled, landspread, treated or incinerated. Whilst these waste streams are not expected to grow significantly any new facilities will need to be compatible with the Government's principles for the sustainable management of waste (para. 8.21). Proposals that arise from the nuclear industry in the County and the associated waste it generates will be considered under Policy ST9, Major Development Proposals.
- 8.25 Proposals for waste treatment facilities will be brought forward in places which provide the Best Practicable Environmental Option. Large-scale plant will be expected to locate in the vicinity of major population centres, so that waste is dealt with where it arises. Materials recovery and waste treatment will include any kind of treatment that is environmentally beneficial, including advanced composting and mechanical and biological waste treatment. Proposals for energy from waste facilities will be considered under Policy R41. Where appropriate, the haulage of waste by rail should be pursued at the earliest opportunity. **Policy R46**
- 8.26 Whilst the thrust of National and European policy is to reduce the amount of waste disposed to landfill sites, they will remain an essential part of waste management provision for the foreseeable future. Landfill sites will be needed for residual waste, as well as wastes for which landfill remains the BPEO. Landfill sites are inappropriate in high value landscapes such as the National Park and AONBs. **Policy R47**

in the vicinity of the following centres:

- a) Carlisle
- b) Penrith
- c) Workington
- d) Whitehaven
- e) Kendal
- f) Barrow in Furness

Small scale facilities (designed to handle local waste arisings) to be located in the vicinity in which waste arises. Priority will be given to new facilities serving the Key Service Centres as defined in Policy ST2 or towns in the National Park.

2. Waste collection points  
New civic amenity sites, mini-recycling centres and other collection points for municipal waste provided for the convenience of local residents and businesses to be located throughout the county.
3. Energy from waste plants  
Energy from waste plants that meet the requirements of Policy R41 if government targets for recovery of value from waste and reduction of waste cannot be achieved by other means.
4. Residual waste sites  
Residual waste sites for the final disposal of residual waste that meet the requirement of Policy R47.

## Policy R47 : Residual waste and landfill

Proposals for the disposal of waste to landfill will not be permitted in the Lake District National Park and AONBs. Outside these areas, proposals for the disposal of residual waste will only be permitted when all the following requirements are met:

1. there is a demonstrable need for additional landfill capacity,
2. there is no significant adverse effect on the local community or environment,
3. the infill and restoration of existing sites would not be seriously prejudiced, and
4. all practical measures are taken to allow landfill gas to be utilised as an energy resource.

Where it is demonstrated that there is a lack of available mineral voids and that transferring waste to distant sites is not the Best Practicable Environmental Option, then landraise may be permitted. Priority will be given to proposals that contribute to meeting landfill restoration requirements.