

North Somerset Council
Local Development Framework

Core Strategy

Topic Paper Resources

Resources

This Topic Paper sets out the evidence base for the three resource-based topics of waste, minerals and energy. It summarises the existing policies and describes how these could be taken forward in the Core Strategy.

This is part of a series of topic papers summarising the evidence base for the North Somerset Core Strategy.

Other topic papers available in this series includes:

- **Demography, Deprivation and Social Exclusion**
- **Housing**
- **Economic Development**
- **Leisure, Tourism and Culture**
- **Retail Hierarchy and Provision**
- **Natural Environment (including climate change, biodiversity, green infrastructure, countryside, natural environment and flooding)**
- **Transport and Communications**
- **Sustainable Construction / Design Quality including Heritage**
- **Settlement Function and Hierarchy**
- **Spatial Portrait of North Somerset**

For further information on this topic paper please contact: Allan Davies

Planning Policy Team
Development and Environment
North Somerset Council
Somerset House
Oxford Street
Weston-super-Mare
BS23 1TG

Tel: 01275 888545
Fax: 01275 888569

localplan@n-somerset.gov.uk

Waste

1.1 Introduction

The way in which waste is managed will change significantly over the period of the Core Strategy. Challenging national and regional targets and financial measures such as the Landfill Tax Escalator and the Landfill Allowance Trading Scheme are set to promote the reduction in the amount of waste going to landfill, and new recycling, composting and energy recovery facilities are needed to treat waste that would otherwise go to landfill.

The challenge for the Core Strategy, as far as waste is concerned, is to establish an approach that promotes sustainable waste management in the provision of new facilities and at the same time facilitate the achievement of improved waste reduction, reuse and recycling rates.

1.2 West of England Waste Management and Planning Strategy

North Somerset Council is working in partnership with the other West of England Authorities of Bath and North East Somerset, Bristol City and South Gloucestershire Councils to prepare a Joint Waste Management and Planning Strategy. The aim is to develop, in consultation with the public and stakeholders a range of facilities for the treatment of residual waste. (This is waste that is not re-used, recycled or composted and which remains to be treated, typically through incineration or landfill). Each local authority, including North Somerset Council, has their own planned service improvements and a common goal to reduce waste and increase the amount of waste that is recycled and composted. The Joint Waste Management and Planning Strategy incorporates a:

- Joint Residual Municipal Waste Management Strategy, that will set out HOW municipal waste should be managed, and a
- Joint Waste Development Plan Document that will deal with WHERE *all* waste should be managed.

Consultation on the Waste Strategy Issues and Options took place during Spring 2007. The views of over 1,000 local people and organisations were captured. There were some 533 written responses and over 500 people attended consultation meetings that were held throughout the West of England. Initial analysis of the response to the Issues and Options consultation suggests strong support for:

- more to be done to promote waste reduction, reuse and recycling;

- greater attention to be given to climate change and carbon emissions, and to reduce flood risk;
- reducing the distance that waste is transported; and
- making greater provision for small and local facilities.

The final version of the Joint Residual Waste Management Strategy is programmed for completion by the end of 2007. The next stage in the preparation of the Joint Waste Development Plan Document will be consultation on Preferred Options during Spring 2008. This will present a preferred waste planning strategy(ies) including consultation on a range of sites or areas of search that have potential for development for waste management purposes.

In North Somerset, when adopted, the Joint Waste Development Plan Document will be one of a suite of documents that will together form the Local Development Framework for North Somerset. It will set out planning policies on waste management facilities for municipal, commercial and industrial and other waste streams and will allocate sites and preferred areas for strategic development together with assessment criteria for development control purposes.

The North Somerset Core Strategy will incorporate the North Somerset spatial strategy for waste. The approach will be delivered through the Joint Waste Development Plan Document in relation to strategic waste facilities and through an appropriate North Somerset development plan document in relation to local waste facilities. Further information about the Joint Waste Management and Planning Strategy is available on: www.rubbishresource.co.uk.

1.3 Policy Background

Policy 29 of the Joint Replacement Structure Plan and the North Somerset Waste Local Plan provides the existing strategic framework for waste planning policy in North Somerset.

The guidance in PPS10 *Planning for Sustainable Waste Management* is that the core strategy should set out policies and proposals for waste management in line with the Regional Spatial Strategy and ensure sufficient opportunities for the provision of waste management facilities in appropriate locations including for waste disposal. The core strategy should both inform and be informed by any relevant municipal waste management strategy. This will include the Joint Residual Waste Management Strategy being prepared by the West of England Authorities and the North Somerset Waste Management Strategy.

The current Regional Spatial Strategy for the South West is RPG10. A new Regional Spatial Strategy will replace this during 2008. The draft version of the new RSS includes a number of waste management policies including an apportionment for the delivery of waste management facilities, as shown under Table 1 below.

Table 1

South West draft Regional Spatial Strategy: Annual Municipal Waste Management Capacities for the West of England ('000 tonnes)

Year	Recycling/composting	Recovery/Treatment	Landfill
2010	230	150	300
2013	280	220	240
2020	310	370	120

Source – South West Regional Waste Strategy and Appendix 2 of the draft RSS

More detailed modelling of the Municipal Waste stream carried out as part of the West of England Joint Residual Municipal Waste Management Strategy has identified some changes since the figures in Table 1 were prepared. The latest available forecasts for Municipal Waste produced in the West of England are set out in Table 2 below.

Table 2

Indicative Capacities for Municipal Waste for the West of England based on the Joint Waste Management and Planning Strategy ('000 tonnes)

Year	Recycling/composting	Recovery/Treatment	Landfill
2010	190	30	360
2013	200	290-305	50-70
2020	225	310-325	50-70

Source - Joint Residual Municipal Waste Management Strategy, Jacobs 2006

There are differences in the amount of municipal waste identified in these two tables, and it is important to establish the basis upon which the municipal waste stream is to be managed. The differences, which include a significantly reduced need for landfill, have been drawn to the attention of the Regional Spatial Strategy Examination in Public Panel, who will be reporting their recommendations to the Secretary of State during Autumn 2007.

The national waste agenda is being shaped by *Waste Strategy for England 2007*. The policies, proposals and targets in the final version of this document will have significant implications for the way in which waste is managed.

1.4 Municipal Waste Management

As part of the draft Joint Residual Municipal Waste Management Strategy, consultants Jacobs prepared projections of total and residual municipal waste arisings for the West of England. The projections for North Somerset as part of this works are set out under Table 3.

Table 3

Projected Total and Residual Waste Arisings for Municipal Waste for North Somerset based on the draft Joint Waste Management Strategy ('000 tonnes)

Year	Total Municipal Waste	Projected Residual Waste (Status Quo)	Projected Residual Waste (incorporating Programmed Service Improvements)
2005/06	114,100	86,900	86,900
2009/10	123,100	79,700	76,400
2012/13	128,000	83,000	79,000
2019/20	140,500	91,000	83,800
2027/28	154,800	100,300	92,300

Source – Joint Residual Municipal Waste Management Strategy, Jacobs 2006

It is anticipated that the Final version of the Joint Residual Municipal Waste Management Strategy will incorporate updated projections of future municipal waste that will need to be managed following waste reduction, reuse and recycling.

During 2006, North Somerset Council dealt with more than 108,000 tonnes of waste. About a third of this waste was recycled, but there is recognition that this performance will need to be improved and that the amount of waste that goes to landfill will need to be reduced. Last year over 70,000 tonnes of household waste was taken to landfill.

Recycling in North Somerset has increased from 20.5% in 2005/06 to 30.8% in 2006/07 and has reached almost 35% in the first three months of the current financial year.

There are three recycling centres in North Somerset. These are at Backwell, Portishead and Weston-super-Mare. In addition there is a kerbside recycling scheme, including a garden waste collection scheme and some 45 recycling banks.

In terms of waste disposal, there is a transfer station at Weston-super-Mare. The destination landfill sites are at Yanley in the north of the district and at Broadpath, Devon, and the approximate date at which these landfill sites are expected to reach capacity is 2008 and 2010 respectively.

1.5 A Vision for Waste

By 2026 there will be a network of sustainable waste management facilities in North Somerset as part of a wider network of facilities within the West of England that are readily accessible and take account of the Waste Hierarchy, the environmental, social and economic needs of the area, and the need to move towards the longer-term aim of zero waste.

1.6 Issues

Consultation at the Issues and Options stage of the West of England Joint Waste Development Plan Document took place during Spring 2007. The response to the consultation will be made available on the www.rubbishresource.co.uk website. The focus of the consultation was residual waste and the different technology options that appeared to be available for future strategic waste management facilities. The consultation also included the implications for planning.

The principal planning issue relates to the identification and assessment of land suitable for waste management facilities.

There was general support for the proposed objectives for site assessment criteria, and work is progressing on identifying a range of sites for detailed assessment and appraisal. This general approach can be applied to non-strategic waste management facilities that remain to be planned for in North Somerset over the period to 2026.

The Issues and Options stage in the North Somerset Core Strategy is the opportunity to build on the Joint Waste Development Plan Document consultation and to consider the need for and best means of providing for all waste facilities and to ensure that there is an efficient and effective network of facilities in place for all waste streams.

Issue: How to provide for a network of sustainable waste management facilities in North Somerset as part of a wider network of facilities within the West of England over the period to 2026 that are readily accessible and consistent with the principles of the Waste Hierarchy and the need to move towards the longer-term aim of achieving zero waste.

The Core Strategy will need to set the framework for development control relating to the provision of waste sites and facilities. Other related policies will include the control, reuse and recycling of waste arising from development. Such a policy is included as part of the North Somerset Waste Local Plan as Policy WLP3 and as part of the draft Regional Spatial Strategy as Policy W4.

1.7 Evidence Base

North Somerset Waste Local Plan

Initial Sustainability Appraisal of Issues and Options for the West of England Waste Management and Planning Strategy

Issues and Options: A Consultation Document to Develop a Waste Management and Planning Strategy for the West of England

West of England Waste Management and Planning Partnership Options Appraisal Report (Jacobs), January 2007

West of England Waste Management and Planning Partnership Draft Joint Residual Municipal Waste Management Strategy, January 2007

Response to West of England Joint Waste Development Plan Document, Issues and Options consultation, August 2007

Minerals

2.1 Quarrying in North Somerset

The contribution that North Somerset makes to mineral working is principally by the winning and working of Carboniferous Limestone. Around 1.75 million tonnes of these aggregates are produced each year in North Somerset, and currently there are three active quarries. These are Stancombe Quarry near Flax Bourton, Durnford Quarry near Long Ashton, and Freemans Quarry off the A38 near Lulsgate. Tarmac Quarry Products Ltd operates Stancombe and Durnford Quarries and Cemex (South West) Ltd operates Freemans Quarry. In addition, there is an inactive quarry known as Conygar Quarry, near Clevedon, which has reserves of Sandstone.

The *Mineral Working in Avon Local Plan* (adopted in 1993) remains the relevant planning policy document as far as minerals planning in North Somerset is concerned. This contains policies for the control of mineral development and makes specific proposals for active and inactive quarries in North Somerset.

2.2 National Guidelines for Aggregates

Guidelines on the provision of aggregates were published in June 2003 entitled *National and Regional Guidelines for Aggregates Provision in England 2001 – 2016*. For the sixteen-year period to 2016, the guidelines identify a crushed rock apportionment figure for the South West Region of 453 million tonnes (see Table 4).

Table 4 Aggregates Apportionment for the South West 2001 - 2016

South West	Million tonnes
Land-won Sand and Gravel	106
Land-won Crushed Rock	453
Marine Sand and Gravel	9
Alternative Materials	121
Net Imports to England	4

On the basis of advice provided by the South West Regional Aggregates Working Party, the South West Regional Assembly has apportioned the guidelines for aggregates to each mineral planning authority area in the South West. Mineral planning authorities are required to make sufficient provision to meet these guideline figures.

These guidelines reflected a fall in national demand for aggregates and provided for a significant increase in the use of alternatives to primary aggregates such as construction and demolition waste. The West of England is required to provide 94.95 million tonnes of crushed rock during the period 2001 – 2016 (5.93 million tonnes per annum). The crushed rock figure is a reduction in the previous annual apportionment figure of 6.5 million tonnes for 1992 -2006 and reflects the expectation and allowance in the national and regional guideline figures for an increased contribution from secondary aggregate and alternative sources to primary land-won aggregate.

The *South West Aggregates Working Party Annual Report 2005* indicates that there were of the order of 167 million tonnes of permitted reserves in the West of England which represented a landbank based on average annual sales of some 38 years, and a landbank based on apportionment of some 28 years.

There is no apportionment figure for sand and gravel in the West of England because there are no land-won sand and gravel resources. However, landings of marine dredged sand and gravel from licensed areas in the Bristol Channel and Severn Estuary at Avonmouth in Bristol accounted for around 0.47 million tonnes in 2005. The total landings of marine dredged sand and gravel from the Bristol Channel and Severn Estuary amounted to 1.8 million tonnes in 2005, and is an important source of sand and gravel for the South West.

Secondary and Recycled Aggregates are likely to continue to provide an important alternative to primary aggregates, although research by Capita Symonds for Communities and Local Government (Survey of Arisings and Use of Alternatives to Primary Aggregates in England 2005) suggests that the use of secondary aggregates has been steady at its current level, that their use is predominantly within the region but that the region has a finite requirement for such aggregates.

2.3 National Policy

The national policy for minerals planning is set out in Minerals Policy Statements. MPS 1 *Planning and Minerals*, points out that minerals are essential for economic growth and prosperity, but they are a finite resource so the best use must be made of them. It is essential that there is an adequate and steady supply of material to provide the infrastructure, buildings and goods that society and industry needs, but that this provision is made in accordance with the principles of sustainable development. Government policy adopts a hierarchical approach to minerals supply – reducing as far as possible the quantity of material used and waste generated, then using as much recycled and secondary material as possible, and finally meeting the remaining need from new primary material.

As minerals can only be worked where they occur, potential conflicts can arise from their extraction and supply. Balancing the need for minerals against environmental impacts and efficient use of this precious resource is key to achieving sustainable development.

Annex 1 of MPS1 addresses the provision of construction aggregates, and requires a landbank of at least 10 years for crushed rock but states that, providing policies are reviewed as part of their annual monitoring report and updated regularly, then maintaining a landbank beyond the end of the plan period is not an issue.

In preparing their local development documents, mineral planning authorities are expected to make provision for the sub-regional apportionment of the current National and Regional Guidelines for land-won aggregates in the approved Regional Spatial Strategy. MPS1 points out that sub-regional apportionments should not be regarded as inflexible. The preparation of local development documents provides an important opportunity to test the practicality and environmental acceptability of policy proposals at the local level. The provision to be made in each area will need to be justified in relation to other relevant considerations affecting planning for the area. The guidance is that provision should take the form of specific sites, preferred areas and/or areas of search identified in local development documents.

2.4 Regional Policy

Policy RE11 of the draft Regional Spatial Strategy requires mineral planning authorities to maintain a landbank of at least seven years in the period to 2016 (i.e. to 2023) and recognises that their ability to meet their apportionment of the regional guidelines will be tested against environmental factors as development plan documents are brought forward.

One issue relevant to North Somerset is the forecast shortfall in crushed rock resources from the quarries in the Forest of Dean Area of Outstanding Natural Beauty and the consequent potential inability of Gloucestershire to maintain its current proportional contribution to South West aggregate production without opening up new quarries in an area of high environmental value. Potentially this could represent a shortfall of 8 million tonnes. A technical and strategic assessment of aggregate supply options in the South West Region concluded that this shortfall could potentially be met from existing reserves and resources in neighbouring areas that supply similar markets. This includes North Somerset and South Gloucestershire.

In the period post 2016 the draft Regional Spatial Strategy acknowledges that the current method of sub-regional apportionment will need to be reassessed within the context of draft Policy SD1, which commits to a reduction in the ecological footprint of the region.

2.5 Sub-Regional Policy

Within the West of England, the sub-regional apportionment is shared between North Somerset and South Gloucestershire, as Bristol and Bath North East Somerset do not make any contribution to aggregate production figures. Joint Replacement Structure Plan Policy 26 expects the Mineral Planning Authorities to endeavour to maintain a landbank for crushed rock aggregate for at least 15 years.

Beyond 2006, Joint Replacement Structure Plan Policy 26 requires that the appropriate contribution to crushed rock aggregate supply will be determined in the light of national and regional guidance prevailing at the time, apportioned between and on a ratio of 40% North Somerset: 60% South Gloucestershire.

2.6 Issues

The Core Strategy will set out the contribution made by North Somerset towards the forecast aggregate requirements in the Draft Regional Spatial Strategy. The draft Regional Spatial Strategy figure for the West of England will need to be apportioned between North Somerset and South Gloucestershire.

Option 1: Should the apportionment of the West of England aggregates figure for North Somerset be based on recent past production rates, which would continue the present 60:40 split (South Gloucestershire 60%, North Somerset 40%)? or,

Option 2: Is a different apportionment more appropriate and, if so, what should this be and why?

North Somerset has an amount of aggregates reserves with planning permission (referred to as a “landbank”) to maintain production from existing quarries (save for Durnford Quarry) for many years. It seems likely that future requirements can also be met without the need to identify further land. If this is correct, then it will be market forces that determine whether any of the material from North Somerset quarries will be used in substitution for the forecast shortfall in output from the Forest of Dean. But if further assessment identifies a potential shortfall in land, then:

Option 1: Should North Somerset make a contribution to meet the forecast 8 million tonnes shortfall in the Forest of Dean Area of Outstanding Natural Beauty? or,

Option 2: Should North Somerset **not** make any contribution to meet the forecast 8 million tonnes shortfall in the Forest of Dean Area of Outstanding Natural Beauty? If so, why should no contribution be made?

2.7 Evidence Base

Annual Reports by the South West Regional Aggregates Working Party (SWRAWP)

Four yearly national Aggregate Monitoring Surveys (AM2001 and AM2005) providing data on aggregate sales, permitted reserves and destinations of sales

Technical and Strategic Assessment of Aggregate Supply Options in the South West Region, June 2005, Capita Symonds Ltd

Mineral Working in Avon Local Plan 1993

Energy

3.1 Introduction

Climate change is challenging the way we all live. Energy production, as the Government points out in the *Energy White Paper 2007: Meeting the Energy Challenge* creates around two thirds of the world's carbon dioxide, and energy policy has a major part to play in meeting the challenge. Even if we were to develop low carbon sources of energy, coal, oil and gas will continue to provide a major source of our energy and new ways will be required to reduce their emissions, by using carbon capture technology.

3.2 European Union Energy Policy

Following the *Energy Review Report* in 2006, the European Council agreed in March 2007 to a common European strategy for energy security and tackling climate change. This endorsed the objective to save 20% of the European Union's energy consumption in 2020 compared with current projections. There is also a binding target to reduce greenhouse gas emissions by 20% by 2020, and the European Union Emissions Trading Scheme is expected to play a central role in implementing the European Union's long-term strategy for reducing greenhouse gas emissions.

3.3 National Energy Strategy

The Government's energy strategy is based firstly on the need to tackle climate change by reducing carbon dioxide emissions both within the UK and abroad and secondly on the need to ensure secure, clean and affordable energy as we become increasingly dependent on imported fuel.

The Core Strategy will have a part to play in delivering the National Energy Strategy. For instance, the Government is keen that new homes become zero carbon as soon as practically possible, and is considering making this mandatory from 2016. Improvements in energy efficiency will also be required, but applying sustainable and energy conservation principles to new housing layouts would reduce energy demand and help enable new communities to be carbon neutral.

The smarter use of energy technologies would help reduce the carbon footprint of existing as well as new communities. For example, the technology exists to introduce combined heat and power and district heating schemes. Although these technologies are better able to support new development, there are other micro-generation technologies that will increasingly have a part to play in reducing

current levels of carbon emissions. Biomass can provide a cost effective alternative to the use of fossil fuels, and together with other micro-generation schemes will enable the decentralised energy system to grow alongside the centralised system.

3.4 The Energy Mix

Broadly, about a third of the current national energy supply is provided by coal and gas with nuclear providing a fifth and renewables accounting for around 4% of energy supply. As nuclear and coal power stations close the Government intends to ensure that major investment decisions in energy infrastructure will take account of the need to move towards a low carbon mix. There will continue to be a need for fossil fuels as part of the energy mix because renewable energy produced by wind, for example, is intermittent. Technologies that mitigate the emissions from the use of fossil fuel will need to be developed and used if emissions are to be reduced.

3.5 Renewable Energy

Renewable energy schemes depend upon naturally occurring and regenerating sources of energy, typically arising from the sun, the wind and the flow of water, both in terms of tidal range (as proposed for a Barrage across the River Severn) and in tidal surge. Energy from the burning of wood, a proportion of waste, and landfill gas, are also included. Electricity produced from renewables is a key part of the Government's strategy to tackle climate change, because a significant benefit of renewable energy is the reduction of carbon dioxide, which contributes to global warming. Renewable energy projects tend to be land extensive, and can involve a significant impact on the landscape.

The Government aims to see renewables grow as a proportion of electricity supplies to 10% by 2010, with an aspiration to double this by 2020. A financial driver is the Renewable Obligation, which the Government intends to increase to up to 20% as and when increasing amounts of renewables are put in place. The intention is to see around 15% of the total electricity supplied by renewables by 2015.

It is not expected that there will be large-scale electricity generating schemes deployed in North Somerset. However, the area potentially has a part to play in providing electricity from renewables. This could take the form of a limited number of large scale wind turbines, and / or a larger number of small-scale wind turbines as part of a micro-generation strategy. In the longer term there is the potential to harness energy from a range of tidal energy schemes, and the Sustainable Development Commission is to publish documents during Autumn 2007 that will add to the debate.

3.6 Planning Policy

The Government recognises the important role of the planning system in delivering the necessary energy infrastructure to meet our national needs, and PPS22 *Renewable Energy* sets out the guidance on the planning aspects of renewable energy.

Although based on the Energy White Paper published in 2003, there is recognition of the need for still more renewable energy alongside improvements in energy efficiency and the development of combined heat and power.

In planning for the use of land for renewable energy, the Government's key principles include the need for regional spatial strategies and local development documents to contain policies that promote and encourage, rather than restrict, the development of renewable energy resources. The full range of renewable energy sources, their differing characteristics, locational requirements and the potential for exploiting them subject to environmental safeguards should be recognised. The criteria that will be applied in assessing applications for planning permission for renewable energy projects are to be set out by local planning authorities.

Local planning authorities should only allocate specific sites for renewable energy in plans where a developer has already indicated an interest in the site, has confirmed that the site is viable, and that it will be brought forward during the plan period.

PPS22 also provides that local planning authorities may include policies in local development documents that require a percentage of the energy to be used in new residential, commercial or industrial developments to come forward from on-site renewable energy developments. Policy GDP/3 of the North Somerset Replacement Local Plan seeks a high level of energy saving. North Somerset Council expects that commercial, industrial, retail, institutional and community developments above 1000 sq metres and all new dwellings will generate a minimum of 15 % of predicted energy requirements through on-site renewable energy generation schemes.

3.7 Regional Planning Policy

The Regional Spatial Strategy should include a target for renewable energy capacity in the region, expressed in megawatts, for 2010 and 2020. These may be disaggregated into sub-regional targets. The smarter use and development of energy technologies that involve combined heat and power for district heating and power supply could help reduce the carbon footprint of new communities. The use of micro-generation technologies would reduce carbon emissions of existing as well as new communities.

The draft Regional Spatial Strategy has set renewable electricity targets for 2010 and 2020 for the South West. By 2010 a minimum target of 35-52 MWe installed generating capacity has been set for the West of England from a range of onshore renewable electricity technologies. The issue for North Somerset is:

Issue: How should the Core Strategy increase the production of renewable energy and reduce energy demand to meet national and regional targets?

The Severn Estuary provides an opportunity to develop a range of renewable energy technologies ranging from tidal barrages and tidal lagoons that make use of the high tidal range, and underwater turbines that make use of the tidal surge resources of the Estuary. The Sustainable Development Commission is shortly to report on the feasibility of tidal power. In the absence of Government commitment to promoting renewable energy recovery from the Severn Estuary, the role of the Core Strategy will be to maintain a flexible approach to the long-term potential of tidal renewable energy production.

Issue: How should the Core Strategy deal with schemes to extract significant amounts of renewable energy from the Severn Estuary?

3.8 Evidence Base

Energy White Paper 2007: Meeting the Energy Challenge

Micro-generation Strategy, Our Energy Challenge: Power from the people, March 2006.