
**SUSTAINABILITY APPRAISAL AND
STRATEGIC ENVIRONMENTAL ASSESSMENT
OF THE WEST MIDLANDS REGIONAL
ECONOMIC STRATEGY**

DRAFT SCOPING REPORT

For Advantage West Midlands

Halcrow Group Limited
26 September 2006

AMENDMENT RECORD

Issue	Description	Date	Initials
1	First Draft for discussion with AWM	18-Sep-06	NJD
2	Second Draft for sign-off by AWM	25-Sep-06	MRB
3	Third Draft for consultation	26-Sep-06	MRB

CONTENTS

Amendment Record.....	2
Contents	3
1 Introduction.....	1
1.1 Purpose of this Report	1
1.2 The West Midlands Economic Strategy: 'Delivering Advantage' (2004)	1
1.3 Sustainability Appraisal and Strategic Environmental Assessment	3
1.4 Consultation on the scoping report	4
1.5 The rest of this report.....	4
2 Approach to SA/SEA.....	6
2.1 Introduction	6
2.2 Sustainability Report	7
2.3 Post-Adoption SA/SEA Statement.....	9
3 Review of Plans, Programmes and Policies (PPP).....	10
3.1 PPP Review	10
4 Baseline.....	15
4.1 Baseline topics.....	15
4.2 Baseline Data.....	15
5 Key Challenges: Problems and Opportunities	31
5.1 Key Issues	31
5.2 Challenges and Opportunities	33
6 Sustainability Objectives	36
6.1 SA/SEA Objectives and their purpose.....	36
6.2 Identifying the SA/SEA Objectives.....	36
Assessment Framework.....	38
6.3 Concept.....	38
6.4 SA Framework	39
7 Legal Requirements of the SA/SEA.....	41

7.1	Legislative Context	41
7.2	Strategic Environmental Assessment and Sustainability Appraisal Legal Requirements	41
7.3	Guidance.....	43
7.4	Consultation	43
7.5	Post Adoption.....	43

1 INTRODUCTION

1.1 Purpose of this Report

This scoping report has been prepared by Advantage West Midlands (AWM) as part of the Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) for the review of the West Midlands Economic Strategy (WMES). This report has been published for consultation with the consultation bodies¹ as required by Regulation 12 (5) of the UK SEA Regulations 2004.

1.2 The West Midlands Economic Strategy: 'Delivering Advantage' (2004)

The current WMES is called Delivering Advantage and was prepared by the Regional Development Agency, Advantage West Midlands, in partnership with a range of working groups, advisors and region-wide consortia. It was published in 2004. The Strategy is owned by the entire region and it is on this basis that it has this vision:

“by 2010 the West Midlands is recognised as a world-class region in which to invest, work, learn, visit and live and the most successful in creating wealth to benefit all of its people”.

'Delivering Advantage' is part of the ten year Economic Strategy published in 1999 by AWM, called 'Creating Advantage'. It was decided in 2001 that rolling three-year updated economic strategies should be produced to deliver the aspirations of the original ten year strategy and also to review and take into account changes in policy to keep abreast of the prevailing economic climate. The first of the three year economic strategies was called 'Agenda for Action' which was published in 2001. With 'Delivering Advantage' well underway, a new WMES is being prepared for publication in 2007. As yet it has no title.

The purpose of this SA/SEA is to integrate environmental and sustainability issues into the plan preparation process. It will predict and evaluate the environmental, economic and social consequences of the WMES, in order that more sustainable alternatives within the WMES can be considered and promoted.

The WMES focuses primarily on furthering the economy of the West Midlands, and at the same time recognises that improved social and environmental performance within the region will help strengthen the economy. Through integrated economic and social policies, and appreciating the wider alignment of a range of cross-regional strategic frameworks, the WMES is able to drive improvements in the quality of life of the communities in the West Midlands, including the physical environment and tackling social exclusion. The WMES is also able to support greater awareness of the environmental and sustainability implications of business activities.

The strategy operates on by focusing intervention through three key delivery mechanisms:

- Regeneration Zones
- Business Clusters; and

¹ Countryside Agency, English Nature, English Heritage and Environment Agency.

- High Technology Corridors.

Challenges facing the WMES are identified as 13 discreet issues and grouped into four pillars which were originally identified in 2001. These four pillars are supported by the theme of 'providing a powerful voice for the region' (introduced in 2004), as well as three cross-cutting themes. See table 1.

Table 1: Pillars of the WMES

Pillars of the 2004 WMES: Delivering Advantage
Pillar 1: Developing a diverse and dynamic business base
Pillar 2: Promoting a learning and skilful region
Pillar 3: Creating the conditions for growth
Pillar 4: Regenerating communities
Providing a powerful voice for the region.
Plus the cross-cutting themes: of urban & rural renaissance, sustainable development and equality, diversity and inclusion. ²

The WMES has thirteen challenges, five of which have been given priority by the WMES. These are listed as follows:

The Enterprise Challenge – because an enterprise culture is critical to a successful region. This must have a strong focus on young people, as they are crucial to the future prosperity of the region;

The Manufacturing Challenge – because manufacturing is vitally important to the region's economy yet is experiencing falling employment and low productivity. Modernisation and diversification are essential if the region is to build upon its historical base and increase employment and productivity;

The Skills Challenge – because the region is failing to fully equip all of its people with the skills they require and to provide employers with the skilled workforce they need;

The Transport Challenge – because the transport system in the region is inadequate for the present economy, let alone the world-class economy the West Midlands aspires to be. Partners in the region believe that the West Midlands will never achieve its potential unless this challenge is addressed; and

The Economic Inclusion Challenge – because differences in economic performance within the region are growing, and must be addressed so that all who live and work here share in the wealth created.

² AWM (2004) Delivering Advantage. The West Midlands Economic Strategy 2004-2010. p.6

The environmental and sustainability challenges are presented later in this report in chapter five.

1.3 Sustainability Appraisal and Strategic Environmental Assessment

SA and SEA are processes that are intended to improve the contribution that the document being appraised (in this case the WMES) makes to the achievement of sustainable development and to the minimisation of environmental impacts. The two processes follow very similar methodologies and it is possible to combine them without losing the essence of either³.

The SA looks at effects of the WMES on environmental, social and economic sustainability whilst the SEA is concerned with the environmental assessment of the plan. The concept of sustainable development is to meet the needs of the present without compromising the ability of future generations to meet their needs. Chapter 2 explains in greater detail how SEA and SA and be combined and includes methodological details about how this SA/SEA will be undertaken.

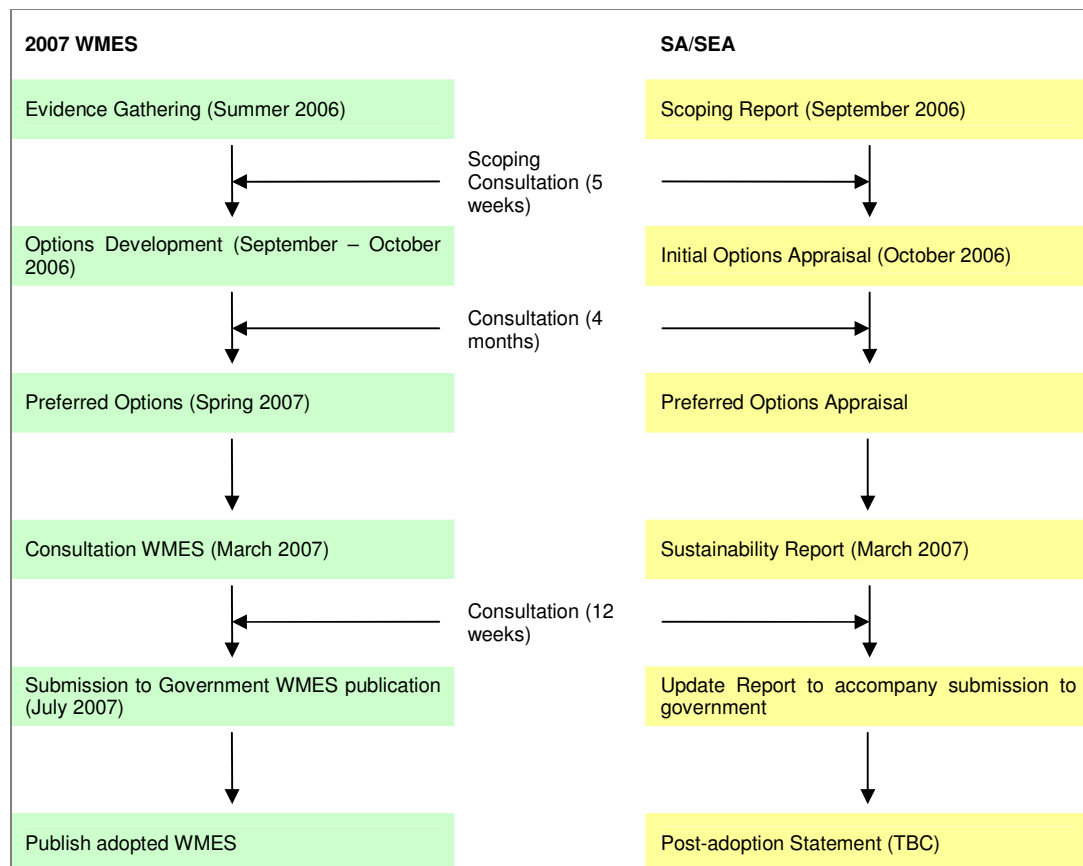


Figure 1 – Integration of the SA/SEA process with production of the 2007 WMES

³ ODPM (November 2005) Sustainability Appraisal of Regional Planning Bodies and Local Planning Authorities. p13

1.4 Consultation on the scoping report

In line with Regulation 12(5) of the SEA Regulations, this scoping report will be sent to the statutory consultation bodies: Countryside Agency, English Nature⁴, English Heritage and the Environment Agency. Additionally, AWM wish to broaden the consultation to include: West Midlands Regional Assembly, Sustainability West Midlands, Regional Biodiversity Partnership, Strategy Review Reference Group⁵ to build agreement around the SA/SEA environmental, economic and social criteria.

The consultation period will last for five weeks from the date published at the start of this document (see the amendment record). We welcome all comments on this Scoping Report and encourage particular attention to:

Consultees should consider the following questions when commenting on the report. This list is not definitive:

- Do you understand the SEA process and objectives?
- Do you have any comments on methodology?
- In section 3, has the scoping report identified the plans, programmes and environmental objectives relevant to the SEA process
- Is any key baseline data (see section 4) available that this report has not identified?
- Is any baseline data misrepresented?
- Do the key issues and opportunities reflect the baseline?
- Do the sustainability objectives (section 6) reflect the environmental issues and resources of the East Midlands?

To respond to this consultation, please send written comments to:

Neil Davidson
Halcrow Group Limited
5 Tally Ho Lane
Guiting Power
Cheltenham
GL54 5TY

Email: davidsonn@halcrow.com

1.5 The rest of this report

⁴ Countryside Agency and English Nature are now represented as Natural England.

⁵ The Strategy Review Reference Group represents the following organisations: West Midlands Regional Assembly, Solihull MBC, Shropshire County Council, Staffordshire County Council, Government Office for the West Midlands, West Midlands Business Council, Transport & General Workers Union, Learning & Skills Council, WMHEA, West Midlands Public Health Group, Regional Action West Midlands, Sustainability West Midlands, Culture West Midlands, CBI, Regional Skills Partnership, Enterprise Board & Regional Finance Forum, Innovation and Technology Council, Rural Affairs Forum, Tourism West Midlands, Ethnic Minority Business Forum, Regional Transport Partnership, Regional Equalities and Diversity Partnership, Regional Planning Partnership, Regional Equalities and Diversity Partnership, Regional Planning Partnerships, Association of Colleges, West Midlands in Europe, Our City Region, Trade Union Congress, and Environment Agency.

The following chapters seek to:

- Explain the approach being taken with regard to the SA and SEA (chapter 2);
- Review relevant plans, policies and programmes (chapter 3);
- Present baseline environmental and sustainability data (chapter 4);
- By analysing the information in chapters three and four, draw out and identify key environmental and sustainability issues and opportunities (chapter 5);
- Present the SA/SEA Objectives (chapter 6);
- Explain the assessment framework to be used as the key mechanism in the assessment;
- Detail the legal SEA requirements and how this process will meet them.

2 APPROACH TO SA/SEA

2.1 Introduction

The approach for carrying out the SA/SEA of the WMES is based on current best practice and the following guidance:

- *Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents, Office of the Deputy Prime Minister (November 2005); and*
- *Practical Guide to the SEA Directive, Office of the Deputy Prime Minister (September 2005).*

The assessment is to be undertaken by Halcrow Group Limited, working closely with Advantage West Midlands in order to fully integrate the SA/SEA with the production of the WMES.

AWM, Statutory Consultees, and other environmental bodies and working groups in the region, will be engaged in the SA/SEA process at different times. The key outputs of the process are:

- Scoping Report;
- Initial Sustainability Appraisal of the 2007 WMES policy options;
- Sustainability Report (incorporating the requirements of the SEA Directive – see chapter 8 for more details); and a
- Post-Adoption Statement explaining how the assessment was undertaken, who was consulted, the results of assessment and the reasoning behind the chosen actions in the final Regional Economic Strategy (RES).

It is vital that key stakeholders have the opportunity for involvement in the process from an early stage and that full advantage is taken of relevant expertise. To facilitate this, AWM are undertaking a comprehensive options identification and consultation. This consultation process will include initial sustainability appraisal of options. Figure 1 sets out the proposed timetable for these activities.

2.1.1 Scoping Report

The purpose of this scoping report is to set the criteria for assessment (including the SA/SEA objectives), and establish the baseline data and other information, including a review of other policies, programmes and plans. The scoping process involves an overview of key issues, highlighting areas of potential conflict. These can then be investigated in greater detail in the assessment.

2.1.2 Review of Plans, Programmes and Objectives

To prevent inconsistencies and to highlight links or constraints with other Plans, Programmes and Policies, a review of all relevant documents at the international, national and regional level will be undertaken (see chapter 3 for more details).

2.1.3 Baseline

The assembly of baseline data is a fundamental stage of the scoping study. Baseline data represents the state of the environment as it currently stands, taking into account trends. The availability of good data is essential for use in the setting of indicators and later in the assessment stages.

2.1.4 Key Issues and Opportunities

The baseline data, together with the Review of Plans, Programmes and Objectives, will highlight key environmental and sustainability issues in the region. These issues and opportunities will play a vital role in informing the assessment of the WMES. Likewise they will be extremely useful in the development of the Assessment Framework (see chapter 7 for more details).

2.1.5 SA/SEA Objectives

This scoping study establishes a set of environmental and sustainability objectives, against which the WMES will be assessed. It is important to ensure that any potential conflicts are highlighted at an early stage, and that appropriate alternatives can be investigated. A Compatibility Matrix will be used to demonstrate this.

2.1.6 Consulting on the Scoping Report

Public and stakeholder participation is an important element of the SA/SEA and plan-making process. Consultation helps to ensure that the SA Report will be robust and have due regard to the appropriate information that will support the plan in its contribution to sustainable development. The Regulations do not require full consultation with the public at this stage, however the guidance suggests that it may be desirable for other bodies to be consulted as the RDA considers appropriate, seeking a balance between those concerned with social, environmental and economic issues. The Scoping Report consultation will be for five weeks (see chapter 1 for scoping consultation details).

2.2 Sustainability Report

The Sustainability Report documents the SA/SEA process providing an audit trail of decision making and showing how environmental issues have been taken into account. The SA/SEA Report will be focussed and concise. The Sustainability Report will carefully illustrate how the requirements of the SEA Directive have been met whilst also documenting the wider SA process and findings.

The Sustainability Report will present the predicted environmental, social and economic effects of the WMES, including alternatives, in a form suitable for public consultation and use by decision makers. It will also recommend opportunities to maximise environmental, social and economic benefits.

2.2.1 Alternatives

This is a key stage in the SA/SEA process as it identifies and examines alternative policy scenarios and actions for the plan. Identification of alternatives must be carefully planned into the process and close communication will be needed at this stage of the process. It will be necessary to ensure that the options being considered are realistic and reasonable, and that the appraisal process is compliant and transparent in supporting the final preferred actions and policies.

2.2.2 Initial Options Assessment

To ensure a comprehensive assessment of policy options and aid SA/SEA integration into the WMES production process, an initial options assessment will be carried out before the preferred options are selected. This environmental and sustainability assessment will be open to consultation over the winter period.

2.2.3 Assessment of potential impacts (negative/adverse and positive/beneficial)

All proposed WMES actions and policies will be assessed using the Assessment Framework identified in chapter 8. Assessment frameworks are devised from the ODPM Guidance on sustainability appraisal⁶. They are useful because they provide a robust mechanism for ensuring that all relevant sustainability and environmental issues are raised in the assessment process. The assessment will also draw on the baseline data and review of policies, plans and programmes.

2.2.4 Sustainability Appraisal and Strategic Environmental Assessment – Conflict of interest?

By merging the SA and SEA process in the way advocated by ODPM⁷ it is critical to be clear about meeting the legal requirements of the SEA Directive as well as delivering the Sustainability Appraisal. The adopted SEA methodology used in this assessment will present findings and results transparently and be explicit to document environmental issues separately to economic and social issues to reflect the requirements of the SEA Directive. That is to say, when proposed WMES policies are analysed they will each be assessed purely in environmental terms as well as wider sustainability terms (which include environmental issues). Significant environmental effects, including cumulative, secondary and synergistic ones, of the plan will also be predicted and evaluated and mitigation measures will be considered.

2.2.5 Monitoring

The monitoring framework (including indicators and targets) will be devised as part of the assessment framework and finalised in the post adoption statement. Monitoring focuses on avoiding unforeseen effects on the environment once a plan or programme is underway.

⁶ ODPM (November 2005) Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents. p105

⁷ ODPM (November 2005) Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents. p13

2.2.6 Consulting on the Sustainability Report

This will take the form of a twelve week consultation period involving the public. The AWM consultation programme will make sure every effort will be made to include a broad range of stakeholders and the public are consulted and that there is citizen buy in. Consultation responses will be documented and any significant changes made to the plan as a result of the consultation will be assessed for their environmental and sustainability implications. The consultation responses and significant changes which arise through them will be documented in the post-adoption statement and may lead to further revisions in the WMES.

2.3 Post-Adoption SA/SEA Statement

The Post-Adoption SA/SEA statement provides information about how the SA/SEA process has been undertaken; who was consulted and the reasons why the plan looks the way it does. It provides monitoring details with regard to the significant environmental, economic and social effects of the plan/programme (if there are any).

3 REVIEW OF PLANS, PROGRAMMES AND POLICIES (PPP)

3.1 PPP Review

The following tables represent a comprehensive, accurate and concise list of the key policies, programmes and plans (including legislation) that are likely to be relevant to the WMES and the SA/SEA assessment process. They have been initially examined and will again be revisited as part of the assessment process (see chapter 2).

International				
Document Title	Date	Author	Relevance	Web Link
Wild Birds Directive	1979	European Commission	EC Directive 79/409/EEC on the conservation of wild birds.	http://europa.eu.int/eur-lex/en/consleg/pdf/1979/en_1979L0409_do_001.pdf
Habitats Directive	1992	European Commission	EC Directive 92/43/EEC on the conservation of Natural Habitats of Wild Flora and Fauna.	http://ec.europa.eu/environment/nature/nature_conservation/eu_nature_legislation/habitats_directive/index_en.htm
Water Framework Directive	2000	European Commission	EC Directive 2000/60/EC Requires all inland and coastal waters to reach "good status" by 2015. This is being done by establishing a river basin district structure within which demanding environmental objectives are being set, including ecological targets for surface waters.	http://ec.europa.eu/environment/water/water-framework/index_en.html
Waste Framework Directive	1975	European Commission	EC Directive 75/442/EEC on the prevention and recycling of waste.	http://ec.europa.eu/environment/waste/strategy.htm
Landfill Directive	1999	European Commission	EC Directive 99/31/EC on the landfill of waste.	http://europa.eu.int/servlet/portail/RenderServlet?search=DocNumber&lg=en&nb_docs=25&domain=Legislation&coll=&in_force=NO&an_doc=1999&nu_doc=31&type_doc=Directive

National				
Document Title	Date	Author	Relevance	Web Link
Securing the Future - UK Government sustainable development strategy	Mar 2005	Department for Environment Food and Rural Affairs	Sets a broad-ranging policy agenda for achieving sustainable development in the UK.	http://www.sustainable-development.gov.uk/publications/pdf/strategy/SecFut_complete.pdf
Energy White Paper: Our Energy Future – Creating a Low Carbon Economy	Feb 2003	Department of Trade and Industry	Sets out Government's long term energy policy.	http://www.dti.gov.uk/energy/energy-policy/energy-white-paper/page21223.html
Transport White Paper: The Future of Transport – A Network for 2030	Jul 2004	Department of Transport	Sets out factors that will shape transport in the UK over the next thirty years. Also sets out how the Government will respond to the increasing demand for travel, while minimising the negative impact on people and the environment.	http://www.dft.gov.uk/stellent/groups/dft_about/documents/divisionhomepage/031259.hcsp
Rural Strategy 2004	Jul 2004	Defra	Sets out the Government's approach to rural policy focussing on: economic and	http://www.defra.gov.uk/rural/strategy/default.htm

National				
Document Title	Date	Author	Relevance	Web Link
			social regeneration, social justice for all, and enhancing the value of our countryside.	
UK Climate Change Programme 2006	Mar 2006	Defra	Sets out Government policies and priorities for action in the UK and internationally to tackle climate change without damaging our economy.	http://www.defra.gov.uk/ENVIRONMENT/climatechange/uk/ukccp/index.htm
Waste and Emissions Trading Act 2003	Nov 2003	Defra	An Act to make provision about waste and about penalties for non-compliance with schemes for the trading of emissions quotas.	http://www.opsi.gov.uk/ACTS/acts2003/20030033.htm
The Water Environment (Water Framework Directive) (England and Wales) Regulations 2003	Dec 2003	Defra	Requires all inland and coastal waters to reach "good status" by 2015. This is being done by establishing a river basin district structure within which demanding environmental objectives are being set, including ecological targets for surface waters.	http://www.defra.gov.uk/environment/water/wfd/transposition.htm
National Air Quality Strategy plus amendment	Jan 2000 and Feb 2003	DETR and Defra	Sets out health-based objectives for ambient air pollutants in the UK.	http://www.defra.gov.uk/environment/airquality/#aqstrategy
Waste Strategy 2000 plus amendments	May 2000 (amendments 2005)	DETR	The national strategy for managing waste, Waste Strategy 2000, sets the policy context for the preparation of planning strategies on waste management.	http://www.defra.gov.uk/Environment/waste/strategy/cm4693/index.htm
Transport Ten Year Plan 2000	Jul 2000	DETR	Government's ten year transport plan.	http://www.dft.gov.uk/stellent/groups/dft_about/documents/page/dft_about_503944.hcsp
The Historic Environment: A Force for Our Future	Dec 2001	DCMS	Sets out how the historic environment holds the key to: an inspiring education resource; more attractive towns and cities; a prosperous and sustainable countryside; World class tourist attractions; and New jobs.	http://www.culture.gov.uk/Reference_library/Publications/archive_2001/his_force_future.htm
Biodiversity: The UK Action Plan	Jan 1994	Department of the Environment	Government's strategy for protection and enhancement of biodiversity, from 1992 convention on Biodiversity commitments. Advises on opportunities and threats for biodiversity.	http://www.ukbap.org.uk/
Working with the Grain of Nature: A Biodiversity Strategy for England	Oct 2002	Defra	Government's strategy for the integration of biodiversity into public, private and voluntary sector policies and programmes in England.	http://www.defra.gov.uk/wildlife-countryside/biodiversity/biostrat/index.htm
Education and Skills: Delivering Results, A Strategy to 2006	Dec 2002	DfES	Sets out the DfES aim and objectives and sets out strategic priorities.	http://www.dfes.gov.uk/aboutus/strategy/
Choosing Health: Making Healthy Choices Easier, White Paper	Nov 2004	Department of Health	Sets out the key principles for supporting the public to make healthier and more informed choices in regards to their health.	http://www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/PublicationsPolicyAndGuidanceArticle/fs/en?CONTENT_ID=4094550&chk=aN5Cor
Tackling Health Inequalities: A Programme for Action	Jul 2003	Department of Health	Lays the foundation for meeting the government's targets to reduce the health gap on infant mortality and life expectancy by 2010. The Programme emphasises the need to improve health and the factors that contribute to health faster in disadvantaged areas than elsewhere.	http://www.dh.gov.uk/PolicyAndGuidance/HealthAndSocialCareTopics/HealthInequalities/ProgrammeForAction/ProgrammeForActionGeneralArticle/fs/en?CONTENT_ID=4072948&chk=%2B0wc2o
The Future of Air Transport white paper	Dec 2003	DfT	Sets out a measured and balanced approach providing a strategic framework for the development of air	http://www.dft.gov.uk/stellent/groups/dft_aviation/documents/divisionhome

National				
Document Title	Date	Author	Relevance	Web Link
			travel over the next 30 years.	page/029650.hcsp
PPS1: Delivering Sustainable Development	Feb 2005	Office of the Deputy Prime Minister	Sets out the Government's overarching planning policies on the delivery of sustainable development through the planning system.	http://www.communities.gov.uk/index.asp?id=1143804
PPG2: Green belts	Jan 1995, amended Mar 2001	DoE and ODPM	The fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open.	http://www.communities.gov.uk/index.asp?id=1143927
PPG3: Housing	Mar 2000	ODPM	Government planning policy guidance for housing.	http://www.communities.gov.uk/index.asp?id=1143940
PPG4: Industrial, commercial development and small firms	Nov 1992	DoE	Government planning policy guidance for industrial, commercial development and small firms.	http://www.communities.gov.uk/index.asp?id=1143958
PPS6: Planning for Town Centres	Mar 2005	ODPM	Sets out the Government's policy on planning for the future of town centers.	http://www.communities.gov.uk/index.asp?id=1143820
PPS7: Sustainable Development in Rural Areas	Aug 2004	ODPM	Sets out the Government's planning policies for rural areas.	http://www.communities.gov.uk/index.asp?id=1143823
PPS9: Biodiversity and Geological Conservation	Aug 2005	ODPM	Sets out planning policies on protection of biodiversity and geological conservation through the planning system.	http://www.communities.gov.uk/index.asp?id=1143832
PPS10: Planning for Sustainable Waste Management	Jul 2005	ODPM	Sets out the Government's policy to be taken into account by waste planning authorities and forms part of the national waste management plan for the UK.	http://www.communities.gov.uk/index.asp?id=1143834
PPG13: Transport	Mar 2001	ODPM	Government planning policy guidance for transport.	http://www.communities.gov.uk/index.asp?id=1144014
PPG15: Planning and the Historic Environment	Sep 1994	DoE	Government planning policy guidance for the historic environment.	http://www.communities.gov.uk/index.asp?id=1144040
PPG16: Archaeology and Planning	Nov 1990	DoE	Government planning policy guidance for archaeology.	http://www.communities.gov.uk/index.asp?id=1144056
PPG17: Planning for Open Space, Sport and Recreation	Jul 2002	ODPM	Sets out the policies needed to be taken into account by regional planning bodies in the preparation of Regional Planning Guidance and by local planning authorities in the preparation of development plans.	http://www.communities.gov.uk/index.asp?id=1144066
Good Practice Guide on Planning for Tourism	May 2006	Department for Communities and Local Government	Government planning guidance for tourism.	http://www.communities.gov.uk/index.asp?id=1500045
PPS22: Renewable Energy	Aug 2004	ODPM	Government planning policy statement for renewable energy.	http://www.communities.gov.uk/index.asp?id=1143908
PPS23: Planning and Pollution Control	Nov 2004	ODPM	PPS23 is intended to complement the new pollution control framework under the Pollution Prevention and Control Act 1999 and the PPC Regulations 2000.	http://www.communities.gov.uk/index.asp?id=1143916
PPG25: Development and Flood Risk	Jul 2001	ODPM	Explains how flood risk should be considered at all stages of the plan and development process in order to reduce future damage to property and loss of life.	http://www.communities.gov.uk/index.asp?id=1144112
MPG1: General Considerations	Jun 1996	DoE	Government general minerals policy guidance. Sets out the principles and the key planning policy objectives against which plans for minerals and	http://www.communities.gov.uk/index.asp?id=1144138

National				
Document Title	Date	Author	Relevance	Web Link
			decisions on individual applications should be made.	

Regional				
Document Title	Date	Author	Relevance	Web Link
Restoring the Region's Wildlife: The Regional Biodiversity Strategy for the West Midlands, Final Draft	Mar 2005	WM Biodiversity Partnership	A regional biodiversity strategy for the West Midlands.	www.wmra.gov.uk/download.asp?id=1055
A Water Resources Strategy for the West Midlands	(no date)	Environment Agency	The Environment Agency has developed a suite of National and Regional Water Resources Strategies that will protect the environment while encouraging sustainable development.	http://www.environment-agency.gov.uk/commdata/acrobat/112987
Delivering Advantage: The West Midlands Economic Strategy and Action Plan 2004-2010	2004	AWM	Sets out a Vision for transforming the West Midlands into a world-class region by 2010.	http://www.advantagem.co.uk/west-midlands-economic-strategy.pdf#search=%22advantage%20west%20midlands%20Delivering%20Advantage%3A%20The%20West%20Midlands%20Economic%20Strategy%20and%20Action%20Plan%202004-2010%22
Enriching Our Region: An Environmental Manifesto for the West Midlands	Jun 2005	West Midlands Regional Sustainability Forum	Proposals for environmental improvements which will benefit the people of the West Midlands and help the region to play its part in revitalising urban areas, protecting natural environment and heritage.	http://www.cprewm.org.uk/envmanifesto.htm
The West Midlands ICT Cluster Strategy 2005	Qtr3 2005	West Midlands ICT Cluster Opportunity Group	The ICT Cluster works to enable the region to become renowned for its R&D and innovation in the digital industries.	www.wmictcluster.org/.../The%20West%20Midlands%20ICT%20Cluster%20Strategy%202005%20-%20final%20versio.pdf
International Trade Strategic Plan for the West Midlands	(no date)	AWM/Trade Partners UK	Sets out proposals for international trade with the West Midlands.	www.advantagem.co.uk/downloads/international-trade-strategic-plan.pdf
The West Midlands Language Strategy	Oct 2003	Advantage West Midlands	Addresses the challenge of filling the languages skills gap in the West Midlands.	http://www.advantagem.co.uk/downloads/language-strategy.pdf#search=%22The%20West%20Midlands%20Language%20Strategy%22
Cultural Life in the West Midlands: A Call for Action	Jan 2001	West Midlands Life	Aims to ensure that the West Midlands are recognised as one of the foremost regions for cultural activity both nationally and internationally.	http://www.westmidlandslife.org.uk/wjsp/microsite/index.html
West Midlands Regional Energy Strategy	Nov 2004	WMRA, AWM and GOWM	Sets out for the first time how the region can contribute towards the development of renewable energy and greater take up of energy efficiency.	http://www.energywm.org.uk/page.asp?id=4
The West Midlands Visitor Economy Strategy	2004	Advantage West Midlands	Seeks to promote tourism to the West Midlands.	http://www.advantagem.co.uk/tourism.html
West Midlands Regional Forestry Framework 2004 and	Oct 2004	Forestry Commission West Midlands	Aims to inspire and guide those involved in the management of trees, woodlands and forests in the region to secure the sustainable development of this	http://www.advantagem.co.uk/downloads/growing-our-future--west-midlands-region-forestry-

Regional				
Document Title	Date	Author	Relevance	Web Link
Delivery Plan 2005/06		Conservancy	resource.	framework--oct-2004-.pdf#search=%22West%20Midlands%20Regional%20Forestry%20Framework%202004%20and%20Delivery%20Plan%202005%2F06%20%22
West Midlands Regional Housing Strategy 2005	Jun 2005	Regional Housing Board	A strategy for raising the standard and accessibility of housing across the West Midlands.	http://www.wmra.gov.uk/page.asp?id=63
Regional Sustainable Development Framework	Jan 2005	West Midlands Regional Assembly	Sets out sustainable development objectives for the region and a process for incorporating these objectives into policies, strategies and plans in the West Midlands.	http://www.wmra.gov.uk/page.asp?id=155
Regional Planning Guidance for the West Midlands (RPG11)	Jun 2004	Government Office for the West Midlands	Provides the long-term context for integrating land-use and transport policy and identifies transport investment priorities for the region.	www.wmra.gov.uk/download.asp?id=107
Priorities Action Plan	Feb 2005	West Midlands Regional Skills Partnership	Addresses skills issues and opportunities in the West Midlands.	www.advantagem.co.uk/downloads/rsp-priorities-action-plan.doc
Rural Renaissance: Advantage West Midlands' Rural Framework	Feb 2005	Advantage West Midlands	Sets out an integrated approach to rural development. It demonstrates roles and strategies for implementing the West Midlands Economic Strategy (WMES) in the rural West Midlands.	http://www.advantagem.co.uk/rural-renaissance-framework.pdf#search=%22Rural%20Renaissance%3A%20Advantage%20West%20Midlands%E2%80%99%20Rural%20Framework%22
Valuing People and Places: Priorities for Action	Jun 2005	Culture West Midlands	Sets priorities for action to achieve cultural excellence and development in the West Midlands.	http://www.culturewm.org.uk/downloads.jsp
West Midlands Regional Spatial Strategy Annual Monitoring Report 2005	Feb 2005	West Midlands Regional Assembly	Annual monitoring report for the Regional Spatial Strategy.	http://www.wmra.gov.uk/page.asp?id=52
Counting Consumption – The West Midlands Ecological Budget Report	Jun 2006	WWF	Forms part of the wider Biffaward mass balance programme to map the environmental impacts of resource and consumption flows throughout the UK by regions, material streams or industry sectors.	http://www.wmro.org/standardTemplate.aspx/Home/RDIN/TopicGroups/EnvironmentNaturalResources/EnvironmentBulletinJuly2006/CountingConsumption

4 BASELINE

4.1 Baseline topics

The following data has been collected in large part by the RSS process. For full details of the RSS baseline see the Scoping Report⁸. AWM are grateful for access to and use of this information. Work commissioned for the WMES evidence base will also be considered for the baseline, when available.

The data is produced in tables which include information covering:

- Indicators
- Associated quantitative data
- Regional / National Comparators
- Trends
- The source of the data.

The focus of the data is on the RES and seeking to ensure that the data is as up to date as possible. The selected topics are derived from Annex I(f) of the SEA Directive: biodiversity, population, human health, flora, fauna, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the inter-relationship between the above factors.

Additional 'sustainability' topics have been added including transport, landuse, energy and economy.

4.2 Baseline Data

4.2.1 Economic factors

The West Midlands has a longstanding reputation as being the manufacturing heartlands of the UK with the sector making the largest contribution to the region's economy than anywhere else⁹. Employment in this sector is however falling and the region now faces the challenge of strengthening existing manufacturing industries by allowing them to move up the value chain whilst also diversifying its economy to include emerging sectors. This need to diversify the economy is further compounded by a decline in agricultural employment across many rural areas¹⁰.

⁸ WMRA (June 2006) Sustainability Appraisal of Draft Regional Spatial Strategy (RSS) Phase 2 for the West Midlands: Scoping Report. Prepared by URSUS Consulting.

⁹ The West Midlands Economic Strategy and Action Plan 2004-2010. Page 14. Available online: <http://www.advantagem.co.uk/west-midlands-economic-strategy.pdf>

¹⁰ The West Midlands Economic Strategy and Action Plan 2004-2010. Page 17. Available online: <http://www.advantagem.co.uk/west-midlands-economic-strategy.pdf>

The region has a strong culture of innovation with over 50% of patents that are registered in the UK having come from the West Midlands¹¹. Despite this, the region is lacking in skills, recording below average GCSE results¹² with 12% of the population possessing no qualifications at all¹³. In addition to broadening the region's skill base, there is also a need to retain more first graduates from the 13 higher education institutions in the West Midlands as currently 50% leave following graduation¹⁴.

ECONOMIC FACTORS in the West Midlands					
Feature	Indicator	Quantified data	Regional/ National Comparator	Trends	Source
Productivity	Gross value added (GVA) per worker	£14 538 (2003)	UK average £15 980 (2003)	Continual annual increases from 1991-2003	Office for National Statistics http://62.73.191.157/regind/regional.asp?ind=A1a
	Gross value added (GVA) per hour	94.6 index (UK=100)	Poorest performing region in England after the North East and Yorkshire & Humber	Slight increasing trend in the region from 1996-2003	Office for National Statistics http://62.73.191.157/regind/regional.asp?ind=A1b
Investment	Business investment by UK owned companies	£858m (2002)	UK total: £7,936m (2002)	Steady regional decline between 1999-2002 that mirrors a broader national trend	Office for National Statistics http://62.73.191.157/regind/regional.asp?ind=B1a
	Business investment- foreign owned companies	£466m (2002)	UK total: £3 529m (2002)	48% decline on 2001 investment	Office for National Statistics http://62.73.191.157/regind/regional.asp?ind=B1b
Innovation	Gross Expenditure on Research and Development as a percentage of GVA	1.3% (2002)	UK average: 2% (2002)	Regional declining trend 1997-2002	Office for National Statistics http://62.73.191.157/regind/regional.asp?ind=C2
	Business expenditure on R&D as a share of regional GVA	0.9% (2002)	UK average: 1.4% (2002)	Slight regional declining trend 1997-2002	Office for National Statistics http://62.73.191.157/regind/regional.asp?ind=C1
	Percentage of turnover attributable to new or improved products	11% (2000)	UK average: 8.6% (2000) West Midlands ranked second in the UK	0	Office for National Statistics http://62.73.191.157/regind/regional.asp?ind=C4
Skills	Percentage of pupils achieving 5 or more grades A*-C at GCSE level or equivalent, 2003/04	52.0% (2003/2004)	UK average: 54.2% (2003/2004)		National Statistics Online http://www.statistics.gov.uk/cci/nugget.asp?id=1153
	Percentage of employees receiving job-related training within the last 4 weeks	15.3% (2004 Spring)	UK average: 16.1% (2004 Spring)	No discernible trend 1999-2004	Office for National Statistics http://62.73.191.157/regind/regional.asp?ind=D3

¹¹ The West Midlands Economic Strategy and Action Plan 2004-2010. Page 10. Available online: <http://www.advantagewm.co.uk/west-midlands-economic-strategy.pdf>

¹² National Statistics Online. <http://www.statistics.gov.uk/cci/nugget.asp?id=1153>

¹³ The West Midlands Economic Strategy and Action Plan 2004-2010. Page 16. Available online: <http://www.advantagewm.co.uk/west-midlands-economic-strategy.pdf>

¹⁴ The West Midlands Economic Strategy and Action Plan 2004-2010. Page 16. Available online: <http://www.advantagewm.co.uk/west-midlands-economic-strategy.pdf>

Enterprise	Total entrepreneurial activity (% of adult population involved in such activity)	4.9% (2004)	UK average: 6.3% (2004)	Decrease on 2003 regional figure (6.6%)	Office for National Statistics http://62.73.191.157/regind/regional.asp?ind=E1
	Business startups: VAT registrations per 10,000 of the adult population	34 (2002)	UK: 37 (2002)	Slight regional declining trend 1998-2002 that mirrors national trend	Office for National Statistics http://62.73.191.157/regind/regional.asp?ind=E2
Employment	Employment rate	75.1% (Sept–Nov 2004)	74.8% (Sept–Nov 2004)	Steady regional increase since 1992	Office for National Statistics http://62.73.191.157/regind/regional.asp?ind=G1a
	Unemployment rate	4.4% (Spring 2004)	4.7% (Spring 2004)	-	National Statistics Online http://www.statistics.gov.uk/cgi/nugget.asp?id=1153
	Median gross weekly earnings: males in full-time employment, April 2003 (£)	£444.1 (April 2003)	£475.1 (April 2003)	-	National Statistics Online http://www.statistics.gov.uk/cgi/nugget.asp?id=1153
	Median gross weekly earnings: females in full-time employment, April 2005 (£)	£345.5 (April 2005)	£371.8 (April 2005)	-	National Statistics Online http://www.statistics.gov.uk/cgi/nugget.asp?id=1153
Property value	Average dwelling price	£139 689	£166 784	-	Region in figures: West Midlands, National Statistics. http://www.statistics.gov.uk/downloads/theme_compendia/region_in_figures_winter04/West_Midlands.pdf

4.2.2 Population

The 2001 Census demonstrated that 5.27m people live in the West Midlands, of which 2.58m were male and 2.70m were female. The population had increased by 0.98% since the previous census in 1991. The population is expected to grow to around 5.39m by 2010, an increase of 1.9%.

According to the 2001 Census, the age distribution of the Region's population was similar to that of the UK as a whole, with 20.8% of the population under 16 years old, 18.5% at pensionable age (over 60 for women, 65 for men), and the remaining 60.7% of the population of working age.

The total population of the West Midlands reached 5.3million in 2002 of which 1.13 million were living in the rural districts. At 21.3%, the proportion of the West Midlands population living in rural districts is significantly lower than the proportion of the population of England living in its rural districts (28.5%), although this figure did increase between 1981 and 2002.

POPULATION in the West Midlands					
Feature	Indicator	Quantified data	Regional/National Comparator	Trends	Source
Population size	Population estimates	5.3m(2003)	UK: 59.6m (2003)	Consistent annual increase at both regional and national level	Region in figures: West Midlands, National Statistics. http://www.statistics.gov.uk/downloads/theme_compendia/region_in_figures_winter04/West_Midlands.pdf

Population density	Number of people per km2	409 (2003)	UK: 246 (2003)	The region's population has increased by 2.6% from 1981-2003. This is less than half the UK total of 5.7%	Region in figures: West Midlands, National Statistics. http://www.statistics.gov.uk/downloads/theme_compedia/region_in_figures_winter04/West_Midlands.pdf
Birth rate	Rate per 1000 population	12 (2003)	11.7 (2003)	Slight decreasing trend from 1981-2003	Region in figures: West Midlands, National Statistics. http://www.statistics.gov.uk/downloads/theme_compedia/region_in_figures_winter04/West_Midlands.pdf
Death rate	Rate per 1000 population	10.4 (2003)	10.3 (2003)	No discernible trend 1981-2003	Region in figures: West Midlands, National Statistics. http://www.statistics.gov.uk/downloads/theme_compedia/region_in_figures_winter04/West_Midlands.pdf
Ethnic composition	Percentage of total population of different ethnic groups	In 2001: White - 88.7% Asian - 7.3% Black - 2% Mixed - 1.4% Chinese - 0.3% Other - 0.3%	UK 2001: White - 91.3% Asian - 4.4% Black - 2.2% Mixed - 1.4% Chinese - 0.4% Other - 0.4%		Region in figures: West Midlands, National Statistics. http://www.statistics.gov.uk/downloads/theme_compedia/region_in_figures_winter04/West_Midlands.pdf
Population age structure	Percentage of population of different age groups aged	In 2003: 5 or under - 5.8% 5 to 15 - 14.5% 16 to p.a. - 61% p.a. + - 18.7% Nb. p.a. = pension age	UK 2003: 5 or under - 5.7% 5 to 15 - 14% 16 to p.a. - 61.8% p.a. + - 18.5%	Percentage of population of pension age is increasing at both regional and national levels	Region in figures: West Midlands, National Statistics. http://www.statistics.gov.uk/downloads/theme_compedia/region_in_figures_winter04/West_Midlands.pdf
Pensioner Poverty	Proportion of pensioners living in low income households	2001/2-2003/4 25% before accounting for housing costs 24% after accounting for housing costs	England Average 22%	Before housing costs figures rose by 1 percentage point between 1995/6-1997/8 and 2001/2- 2003/4 but decreased by 3 percentage points after housing costs	West Midlands Sustainable Development factsheet available from http://www.gos.gov.uk/gowm/docs/177226/394418/SDWMfactsheet1205
Childhood Poverty	Percentage of children living in relative low-income households	2001/2-2003/4 24% before taking housing costs into account 31% after accounting for housing costs	England average 20% before accounting for housing costs England average 29% after accounting for housing costs	Decreased by 3% in the West Midlands between 1995/6-1997/8 and 2001/2-2003/4 before taking housing costs into account and by 2% after housing costs	West Midlands Sustainable Development factsheet available from http://www.gos.gov.uk/gowm/docs/177226/394418/SDWMfactsheet1205
Housing Condition	Number of dwellings failing to meet 'Decent Homes' standard	2001 - 828,000 38.5% of the total number in the region	English average 33%		West Midlands Sustainable Development factsheet available from http://www.gos.gov.uk/gowm/docs/177226/394418/SDWMfactsheet1205
Fuel Poverty	Based on income and heating costs	2003 - 8.5% In 2003 the region had the third highest proportion of households living in fuel poverty	England average 7.2%	Down from 15.2% in 2001	West Midlands Sustainable Development factsheet available from http://www.gos.gov.uk/gowm/docs/177226/394418/SDWMfactsheet1205
Homelessness	Rough Sleepers	It is estimated that there were 23 people sleeping rough in the West Midlands in 2004		Down from 99 in 1998	West Midlands Sustainable Development factsheet available from http://www.gos.gov.uk/gowm/docs/177226/394418/SDWMfactsheet1205
	Families in temporary accommodation	At the end of the first quarter of 2005 there were 2,630 households in temporary accommodation in the region		Up from 1,070 in 1997	West Midlands Sustainable Development factsheet available from http://www.gos.gov.uk/gowm/docs/177226/394418/SDWMfactsheet1205

4.2.3 Air

Air quality in the region is good in the rural areas but transportation related effects are leading to poorer levels of air quality in certain places.

A total of thirteen Air Quality Management Areas (AQMA) have been declared by the six local authorities¹⁵. Of these, twelve of the AQMAs have been designated solely because they are failing to meet the Local Air Quality Management (LAQM) objective for nitrogen dioxide (NO₂)¹⁶. NO₂ is a direct cause of respiratory problems and its main source is road transport.

Total number of AQMAs however is not necessarily an accurate indication of air quality in a region. This is because a local authority may choose to designate an entire city which is failing to meet LAQM objectives in a number of areas as a single AQMA to minimise administration. This is the case in Birmingham and Wolverhampton. It is often more useful therefore to compare the Number of Areas of Exceedence (NAE) in a region which is the total number of areas where the measured air quality fails to reach LAQM objectives. The disadvantage of this indicator however is that NAE data is not so readily available.

AIR QUALITY in the West Midlands					
Feature	Indicator	Quantified data	Regional/National Comparator	Trends	Source
Local Air Quality Management (LAQM)	Number of Air Quality Management Areas (AQMAs)	13	N/A	N/A	National Air Quality Information Archive
Local Air Quality Management (LAQM)	Number of Areas of Exceedence where National Air Quality Objectives are not being met.	29 ¹⁷	-	-	West Midlands Local Transport Plan March 2006

4.2.4 Agriculture

Nearly one million hectares of land are used for agriculture in the West Midlands, accounting for over 70% of land use in the region. Over 51% of farms participate in some form of non-agricultural diversification; sport, recreation and tourist accommodation are the main activities.

The West Midlands covers an area of 13 000 km² and has a varied topography ranging from the high wet uplands of northeast Staffordshire to the fertile rolling fields of Herefordshire.

¹⁵ Birmingham Metropolitan Borough Council; Coventry City Council; Dudley Metropolitan Borough Council; Sandwell Metropolitan Borough Council; Walsall Metropolitan Borough Council; Wolverhampton Metropolitan Borough Council

¹⁶ National Air Quality Information Archive. Available online: www.airquality.co.uk.

¹⁷ West Midlands Local Transport Plan (March 2006). Air Quality, Noise and Climate Change Appendix

Despite being the manufacturing centre of the country, 80% of the region consists of farmland or forestry and contains more grade 1,2 or 3 agricultural land than the national average¹⁸. Industry and agriculture have strongly influenced the landscape however the region has a number of natural assets including distinct river corridors such as the Wye Valley and the southern part of the Peak District national Park.

AGRICULTURE & LAND USE in the West Midlands					
Feature	Indicator	Quantified data	Regional/National Comparator	Trends	Source
Agriculture	Percentage of land that is agricultural	70.3 (2001)	UK: 67.8 (2003)	From 1987 to 1997 there was a reduction of 942 (4.8 %) in the number of holdings recorded by the census to 18,871 in 1997. For comparison, the figure for England was down by 7.8% for the same period	National Statistics Online http://www.statistics.gov.uk/STATBASE/Expodata/Spreadsheets/D7649.xls Defra: West Midlands Regional Chapters at http://www.defra.gov.uk/erdp/docs/wmchapter/default.htm
Land Quality	Proportion of ALC	Grade 1 – 1.0% Grade 2 – 16% Grade 3 – 48% Grade 4 – 12.5% Grade 5 – 2.5% Non-Agri – 12% Urban – 8%	National Cover Grade 1 – 2.6% Grade 5 – 8.5%		Defra: West Midlands Regional Chapters at http://www.defra.gov.uk/erdp/docs/wmchapter/default.htm
Land recycling	Percentage of dwellings built on previously developed land	71% (2004)	English average in 2004 – 68%	An increase of 22% since 1994 Around 82% built on previously developed land expected for 2004-5	West Midlands Sustainable Development factsheet available from http://www.gos.gov.uk/gowm/docs/177226/394418/SDWMfactsheet1205
Number of farm holdings		Around 19,000 farms holdings within the West Midlands region	Only 38 co-operatives and farmer controlled businesses	From 1987 to 1997 there was a reduction of 942 (4.8 %) in the number of holdings recorded by the census to 18,871 in 1997. For comparison, the figure for England was down by 7.8% for the same period	Defra: West Midlands Regional Chapters at http://www.defra.gov.uk/erdp/docs/wmchapter/default.htm
Farm diversification	Number of farms with diversified activities	51% of full time farms in the region have diversified activities	English average 56%		Farm Business Survey 2003
Woodland Cover	Area planted under the Woodland Grant Scheme (hectares)	2001/2 – 280 2002/3 – 484 2203/4 – 403 2204/5 – 382		Woodland cover in West Midlands in 2001 was 96,474 hectares or 7.6% of the total (National Inventory of Trees and Woodlands)	Forestry Commission as noted in the West Midlands Annual Monitoring Report 2005, section 5, Quality of the Environment, from http://www.wmra.gov.uk/page.asp?id=52

¹⁸ West Midland Facts About our Partnership. 2005. Produced by the Countryside Agency, the Rural Development Service and English Nature. Available online: http://www.countryside.gov.uk/Images/Natural%20England%20Factsheet_tcm2-26693.pdf

4.2.5 Biodiversity

Clearance of the countryside for development and use as intensive agriculture has led to the loss of wildlife habitats and the plants and animals that live in them¹⁹. The West Midlands Biodiversity Strategy²⁰ identifies action for habitats and species across the region. There are 23 UK Priority Habitats²¹ (see the UK BAP for more details of priority habitats). Wetlands are a distinct and important biodiversity characteristic of the West Midlands. Other key habitats identified by the Regional Strategy are:

- lowland heathland
- lowland meadows
- lowland dry acid grassland
- lowland wood parkland and pasture; and
- broad leaved woodland.

Each require special attention and this list is not exclusive. Typically lowland habitats are small and fragmented whilst upland habitats are often damaged and impoverished²². Towns and cities play an important role for biodiversity enabling people to enjoy wildlife and green spaces. Notable 'town/city' species are Peregrine Falcon (which next on the BT tower in Birmingham) and the Black Redstart²³.

Statutory sites across the region include:

- 439 SSSIs
- 15 SACs
- 1 SPA
- 1 Ramsar site
- 60 Local Nature Reserves²⁴.

Information concerning non-statutory sites is not comparable as there are a range of different non-statutory site systems at county level. For example Staffordshire has Sites of Biological Importance and Warwickshire has Ecosites. Non-statutory sites play a very important role in maintaining the wider integrity of biodiversity however there is a lack of published data on the quality of such sites. Monitoring data is likewise hard to find.

Across the region there are county level BAPs which contain information about specific needs of the habitats and species, the threats they are facing and what needs to be done to protect them. There are more than 130 priority species²⁵ present the West Midlands including:

¹⁹ Environment Agency Website: http://www.environment-agency.gov.uk/regions/midlands/835324/835577/1025715/?version=1&lang=_e Retrieved 13-09-2006

²⁰ West Midlands Biodiversity Partnership. (March 2005) Restoring the Region's Wildlife: Regional Strategy for the West Midlands

²¹ West Midlands Biodiversity Partnership. (March 2005) Restoring the Region's Wildlife: Regional Strategy for the West Midlands. Appendix 4.

²² West Midlands Biodiversity Partnership. (March 2005) Restoring the Region's Wildlife: Regional Strategy for the West Midlands. p.8

²³ West Midlands Biodiversity Partnership. (March 2005) Restoring the Region's Wildlife: Regional Strategy for the West Midlands. p.7

²⁴ West Midlands Biodiversity Partnership. (March 2005) Restoring the Region's Wildlife: Regional Strategy for the West Midlands. p.7. Also note that the Environment Agency (www.environment-agency.gov.uk) identify 80 LNRs in the region.

²⁵ West Midlands Biodiversity Partnership (1999) West Midlands Biodiversity Audit

- Pearl bordered fritillary butterfly;
- Great crested Newt;
- Horse shoe bat;
- Corn Bunting; and
- Early gentian.

The Regional Strategy seeks strong positive links with the WMES and demonstrates that there are several opportunities for private sector-led business initiatives (see chapter 5 for more details).

BIODIVERSITY in the West Midlands					
Feature	Indicator	Quantified data	Regional/National Comparator	Trends	Source
SSSIs	% of SSSIs in favourable condition	37% of SSSIs are in favourable condition 34.63% are favourable/recovering SSSIs cover 243.5 sq km (or 1.9% of the region)	The West Midlands has the smallest SSSI quota of any English region.	Quality of sites is increasing. Only 56% were in favourable conservation status on 2003.	West Midlands Biodiversity Partnership. (March 2005) Restoring the Region's Wildlife: Regional Strategy for the West Midlands.
Number of non-statutory designated nature conservation sites.	Number lost/created each year through developments linked with RES initiatives.	None available.	Not available.	No data.	
Farmland birds	Population of farmland birds.	Of the 19 farmland bird species monitored in the region between 1994 and 2003 per cent increased, 37 per cent declined and 26 per cent remained fairly stable.	Not available.	Overall farmland bird numbers are low but seemingly stable. National picture is also showing a steady pattern which has evolved from a low base since 1990.	Defra (December 2005) Regional Sustainable Development Indicators.
Woodland Birds	Population of woodland birds.	Of the 30 species of woodland bird monitored in the region, 43 per cent increased between 1994 and 2003, whereas 33 per cent declined and 24 per cent showed little change.	Not available.	Woodland bird populations in 2004 were about 20% lower than the peak of the early 1970's but remained stable thereafter.	Defra (December 2005) Regional Sustainable Development Indicators.

4.2.6 Landscape

The landscape of the West Midlands is made up of different landscapes and includes protected landscapes.

LANDSCAPE in the West Midlands					
Feature	Indicator	Quantified data	Regional/National Comparator	Trends	Source
National Parks		2% of the West Midlands land cover is designated as National Park - 20,000 hectares in March 2004	National coverage is 7% designated as National Parks		West Midlands Sustainable Development factsheet available from http://www.gos.gov.uk/gowm/docs/177226/394418/SDWMfactsheet1205
Areas Of Outstanding Natural Beauty		10% of the region is designated AONB	National coverage is 16% designated AONB		West Midlands Sustainable Development factsheet available from http://www.gos.gov.uk/gowm/docs/177226/394418/SDWMfactsheet1205
Landscape Change	Degree of change in Countryside Character	33% of the Region's landscapes (as defined as Joint Character Areas) had experienced marked changes that were inconsistent with the existing character area descriptions for those areas	Although much of the Region has not changed (compared to the England average), the Region actually has the highest proportion of landscapes which show marked changes that are inconsistent with existing character descriptions	According to research into the quality of the countryside across England, carried out by the Countryside Agency in 2004, large areas of the countryside in the West Midlands have changed over the period 1990-1998	Change to regional landscape character, as noted in West Midlands Annual Monitoring Report available from http://www.wmra.gov.uk/page.asp?id=52

4.2.7 Climatic Factors

The greatest single driver of climate change is CO₂ emissions. Around 36 per cent (England average 45 per cent) of CO₂ emissions in the West Midlands were from industry and commerce, compared with approximately 34 per cent from domestic sources (England average 30 per cent) and 28 per cent from road transport (England average 25 per cent).²⁶

One of the effects of climate change that is already in evidence is an increase in the incidence of flooding. Despite this 4% of new houses were built on flood zone between 1998 and 2001, although this compares favourably to the national average at 11%. These figures translate to around 57,000 properties at risk of flooding, incorporating over 130,000 residents.²⁷

²⁶ <http://www.sustainable-development.gov.uk/regional/summaries/02.htm>, 2003

²⁷ Environment Agency website, 2006

CLIMATE CHANGE in the West Midlands					
Feature	Indicator	Quantified data	Regional/National Comparator	Trends	Source
CO ₂ emissions	CO ₂ emissions per capita	3.13 tonnes	UK average: 2.49 tonnes	On a national level, CO ₂ emissions have fallen by 15% from 1990 to 2002, and this trend is probably mirrored in the West Midlands.	UNCE, 2003
CO ₂ emissions	% of CO ₂ emissions by source	Industry – 36% Domestic – 34% Road transport – 28%	Industry – 45% Domestic – 30% Road transport – 25%		http://www.sustainable-development.gov.uk/regional/summaries/02.htm , 2003
Flood risk	Extent of flood zone	6% of land area	12% for the whole of England	The incidence of flooding has been increasing in the Region with more frequent wetter periods associated with global warming.	WMRA Annual Monitoring Report 2004
Flood risk	% of new houses built on flood zone	4% (between 1998-2001)	England - 11% (between 1998-2001)		

4.2.8 Water

The West Midlands has some of the driest regions in the UK yet the region has a limited capacity to store water along with some of the highest population densities in the UK²⁸, thus ensuring that water is a particularly important resource in the region.

Public supply constitutes the greatest use of water in the West Midlands with 14000 million litres of water a day (MI/d) being abstracted for public use. In addition to this, industries abstract a further 230 MI/d whilst agricultural irrigation accounts for a further 80 MI/d of abstraction²⁹.

Water quality is measured by the Environment Agency and classified using a system called General Quality Assessment. In 2004, nearly 4000km of the West Midlands' rivers and canals by were assessed. Of these, 91% were of good or fair chemical quality whilst 89% were of good or fair biological quality³⁰.

WATER in the West Midlands					
Feature	Indicator	Quantified	Regional/National	Trends	Source

²⁸ Water Resources Strategy for the West Midlands. Page 3. Available online: www.environment-agency.gov.uk/commodata/acrobat/112987

²⁹ Water Resources Strategy for the West Midlands. Page 6. Available online: www.environment-agency.gov.uk/commodata/acrobat/112987

³⁰ Water Quality in the West Midlands. Available on agency.gov.uk/regions/midlands/835324/835577/1169194/1268521/?version=1&lang=_e

		data	Comparator		
Water availability	Regional rainfall	750 mm/yr ³¹	Average UK rainfall (1971-2000) is 900 mm/yr		Met Office Statistics
Water use	Volume of water used per person per day	145 l/day ³²			Regional Water resources Strategy, Environment Agency
River water chemistry overall quality	Percentage of river length rated 'good' or 'fair' under General Quality Assessment	91% in 2004 ³³	UK average was 93.5% in 2004 ³⁴	Overall improvement in water chemistry between 1990 and 2004	Environment Agency General Quality Assessment data
River water biological quality	Percentage of river length rated 'good' or 'fair' under General Quality Assessment	89% in 2004 ³⁵	UK average was 95.4% in 2004 ³⁶	No overall improvement or decline between 1990 and 2004	Environment Agency General Quality Assessment data

4.2.9 Cultural Heritage

The West Midlands boasts a rich and diverse history, the remnants of which represent valuable assets to the region that reflect its diversity and innovation. The Iron Bridge and Ditherington Flax Mill are both testament to the region's importance in the industrial age whilst Ludlow represents one Europe's finest medieval planned towns.

The region has a total of 36,660³⁷ listed buildings which are protected by law due to their architectural or historic value. Similarly, there are 731³⁸ conservation areas which are also awarded legal status in order to preserve their character and appearance. In addition, the West Midlands has 1,432³⁹ scheduled ancient monuments, 6 registered battlefields⁴⁰, 143⁴¹ registered parks and gardens. Finally, the international significance of the region's heritage is exemplified by Iron Bridge Gorge on the River Severn which in 1986, became one of the first UK sites to be awarded World Heritage Site status.

CULTURAL HERITAGE in the West Midlands

Feature	Indicator	Quantified	Regional/National	Trends	Source
---------	-----------	------------	-------------------	--------	--------

³¹ Water Resources Strategy for the West Midlands. Page 3. Available online: www.environment-agency.gov.uk/commdondata/acrobat/112987

³² Water Resources Strategy for the West Midlands. Page 7. Available online: www.environment-agency.gov.uk/commdondata/acrobat/112987

³³ Water Quality in the West Midlands. Available online: www.environment-agency.gov.uk/regions/midlands/835324/835577/1169194/1268521/?version=1&lang=_e

³⁴ Summary-General Quality Assessment (GQA) for rivers in England and Wales, 2005. Available online: www.environment-agency.gov.uk/commdondata/103601/summ_gqa__2005_360266.xls

³⁵ Water Quality in the West Midlands. Available online: www.environment-agency.gov.uk/regions/midlands/835324/835577/1169194/1268521/?version=1&lang=_e

³⁶ Summary-General Quality Assessment (GQA) for rivers in England and Wales, 2005. Available online: www.environment-agency.gov.uk/commdondata/103601/summ_gqa__2005_360266.xls

³⁷ About the West Midlands. Available online: www.english-heritage.org.uk/server/show/ConWebDoc.4732

³⁸ About the West Midlands. Available online: www.english-heritage.org.uk/server/show/ConWebDoc.4732

³⁹ About the West Midlands. Available online: www.english-heritage.org.uk/server/show/ConWebDoc.4732

⁴⁰ Register of Historic Battlefields. Available online: www.english-heritage.org.uk/server/show/nav.1436

⁴¹ About the West Midlands. Available online: www.english-heritage.org.uk/server/show/ConWebDoc.4732

		data	Comparator		
Buildings of architectural or historical value	Number of Listed Buildings	36,660		Increase in 1.6% of Grade I or II* over the past year ⁴²	National Monuments Records Register, English Heritage
	Number of Conservation Areas	731			Local authority records
Sites of historical value	Number of Scheduled Ancient monuments	1,432		N/A	National Monuments Records Register, English Heritage
	Number of Registered Battlefields	6	43 nationally ⁴³	N/A	Battlefields Register, English Heritage
Sites of international cultural or natural importance	Number of World heritage Sites	1	27 nationally ⁴⁴	N/A	UNESCO World Heritage List

4.2.10 Energy

Data from the Department of Trade and Industry⁴⁵ indicates that in 2003, total energy consumption for the West Midlands was 155 993 Giga Watt hours (GWh). This equates to 7.3% of the total energy consumption in the UK. Consumption was evenly distributed between the three sectors of industry and commercial; domestic; and transport with the domestic sector marginally being the largest consumer.

The West Midlands' capacity for electricity generation comes from a number of sources. The most significant of these is the two large coal fired power stations at Ironbridge and Rugeley which have a generating capacity of 970 MW and 1006 MW respectively⁴⁶. Other sources in the region include 95 combined heat and power (CHP) schemes⁴⁷ and 5 municipal waste incinerators⁴⁸.

The West Midlands was the first region to establish a dedicated regional energy office in the form of Energy West Midlands. Their role is to deliver the West Midlands Regional Energy Strategy which was published in November 2004. The Strategy outlines its commitment to ensuring a '*sustainable, secure and affordable supply of energy for everyone*'⁴⁹. The strategy also however highlights several challenges facing this vision.

Energy efficiency in buildings is one such area in which the West Midlands could improve. Standard Assessment Procedure (SAP) is used for calculating a dwelling's energy efficiency on a scale from 1 (low) to 120 (high). The mean SAP energy rating for the West Midlands is 48.8 which is below the national average while the SAP energy rating for social housing in the region is the lowest in the country⁵⁰.

The Government has a target to generate 10% of energy using renewable sources by 2010 which increases to 15% by 2015. Currently approximately 0.6% of electricity in the West

⁴² Facts and Figures. Available online: www.english-heritage.org.uk/server/show/ConWebDoc.5306

⁴³ Register of Historic Battlefields. Available online: www.english-heritage.org.uk/server/show/nav.1436

⁴⁴ UNESCO World Heritage List. Available online: whc.unesco.org/en/list/

⁴⁵ Regional and Local Energy Consumption: 2003. Available online: <http://www.dti.gov.uk/energy/statistics/regional/index.html>

⁴⁶ The West Midlands Regional Energy Strategy 2004. Page 17. Available online: <http://www.gos.gov.uk/gowm/docs/177226/394405/WMRES>

⁴⁷ The West Midlands Regional Energy Strategy 2004. Page 17. Available online: <http://www.gos.gov.uk/gowm/docs/177226/394405/WMRES>

⁴⁸ The West Midlands Regional Energy Strategy 2004. Page 17. Available online: <http://www.gos.gov.uk/gowm/docs/177226/394405/WMRES>

⁴⁹ The West Midlands Regional Energy Strategy 2004. Page 2. Available online: <http://www.gos.gov.uk/gowm/docs/177226/394405/WMRES>

⁵⁰ The West Midlands Regional Energy Strategy 2004. Page 14. Available online: <http://www.gos.gov.uk/gowm/docs/177226/394405/WMRES>

Midlands is generated from renewable sources⁵¹. The West Midlands currently generates renewable energy using landfill gas, sewage gas, hydro, solar thermal and solar voltaic sources however heat technologies and biofuels have been identified as having strong potential for growth⁵². Wind energy is currently the most cost effective source of renewable energy however the West Midlands has relatively few economic onshore wind resources owing to its geography. A study in 2004 however identified numerous sites including Birmingham, Telford and Wrekin, Northern Warwickshire and Northern Staffordshire as having the potential to deliver urban wind energy in the region⁵³.

ENERGY in the West Midlands					
Feature	Indicator	Quantified data	Regional/National Comparator	Trends	Source
Energy consumption	Total annual energy consumption	155 993 GWh	2,123,986 GWh nationally. The West Midlands' consumption ranks fifth in the UK.		Department of Trade and Industry Regional and Local Energy Consumption: 2003 http://www.dti.gov.uk/files/file19335.xls
Renewable electricity generation capacity	Percentage of electricity consumption from renewables	0.6%	3.6% nationally in 2004	Increasing at both regional and national levels	The West Midlands Regional Energy Strategy http://www.gos.gov.uk/gowm/docs/177226/394405/WMRES http://www.dti.gov.uk/energy/sources/renewables/index.html
Energy Efficiency	Average SAP rating of homes	48.8	UK average is 51	Increasing at both regional and national levels	The West Midlands Regional Energy Strategy http://www.gos.gov.uk/gowm/docs/177226/394405/WMRES

4.2.11 Transport

The West Midlands is at the centre of national road and rail networks. Maintaining good regional transport links is essential to the region's prosperity and strategic routes such as the M6, M5 and M42 and West Coast Mainline and Cross Country Route railways play an important role in meeting the region's transport needs. Birmingham International Airport is the region's principal international airport with Coventry Airport providing a complementary service to a limited number of European destinations.

Transport policies for the region are set out in the Regional Transport Strategy (RTS) which was published in 2004 and has been incorporated into the Regional Spatial Strategy (RSS). This document affirms the need for better transport and highlights a number of transport-related issues that face the region including; widespread congestion, road traffic accidents, unreliable public transport and excessive pollution from transport sources⁵⁴.

The West Midlands Local Transport Plan was published in March 2006 and addresses transport policy in the Metropolitan area of the region. The Plan reiterates the issues presented in the RSS with many of the region's problems such as congestion, poor air quality, the need to improve accessibility and road safety becoming more acute at the local Metropolitan level.

Cars are the main mode of transport, accounting for over half of journeys in the region. Bus or rail transport account for approximately a quarter of journeys in the region with rail use having grown steadily over the last 50 years. The need to improve bus services however presents a challenge to the region.

⁵¹ The West Midlands Regional Energy Strategy 2004. Page 20. Available online: <http://www.gos.gov.uk/gowm/docs/177226/394405/WMRES>

⁵² The West Midlands Regional Energy Strategy 2004. Page 18. Available online: <http://www.gos.gov.uk/gowm/docs/177226/394405/WMRES>

⁵³ West Midlands Regional Urban Wind Capacity Study 2004. Page 44. Available online:

http://www.gos.gov.uk/gowm/docs/177226/394405/Wind_Capacity_Study_-_West1.pdf

⁵⁴ The West Midlands Regional Spatial Strategy 2004. Page 101. Available online: <http://www.go-wm.gov.uk/gowm/docs/260727/285505/WMRSS>

Bus operators are reporting unacceptable delays due to congestion and bus use declined overall as a method of travel to work between 1991 and 2001⁵⁵.

TRANSPORT in the West Midlands					
Feature	Indicator	Quantified data	Regional/ National Comparator	Trends	Source
Car use	Ratio of cars to residents	47 cars per 100 residents		Steady increase in levels of car ownership over recent years	West Midlands Local Transport Plan http://www.westmidlandsltp.gov.uk/2006/section_18.html
	Percentage of journeys made by car	56%			West Midlands Local Transport Plan http://www.westmidlandsltp.gov.uk/2006/section_18.html
	Annual percentage change in distance travelled by car	1% decrease from 2003-2004	Overall slight decrease nationally 2003-2004.		National Statistics online http://www.statistics.gov.uk/cgi/nugget.asp?id=1440
Public transport use	Percentage of journeys made by rail or bus	24%		Decrease in use of bus transport to travel to work between 1991-2001	West Midlands Local Transport Plan http://www.westmidlandsltp.gov.uk/2006/section_18.html
				Steady increase in use of rail transport over the last 50 years	
Road accidents	Number of casualties	82 people killed and 1 067 seriously injured in 2004	34 351 people were killed or seriously injured in the UK in 2004	Decline in accidents between 2000 and 2004 at both regional and national level	Road Casualties Great Britain: 2004 http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/downloadable/dft_transstats_041304.pdf

4.2.12 Health

Mortality rates are comparable to the English average for cancer and suicide although higher for circulatory disease and infant mortality. Childhood obesity and alcohol related death compare unfavourably to the English average. Life expectancy is increasing, showing a 2.7 year increase for males and a 1.9 year increase for females between 1991-3 and 2002-4 although the figures still lag behind the English average.

HEALTH in the West Midlands					
Feature	Indicator	Quantified data	Regional/ National Comparator	Trends	Source
Health Inequality	Life expectancy	West Midlands Regional data Male – 75.9 Female - 80.6	English Average Male – 76.6 yrs Female – 80.9 yrs	Between 1991-3 and 2002-4 male life expectancy increased by 2.7 years and life expectancy for females increased by 1.9 years	West Midlands Sustainable Development factsheet available from http://www.gos.gov.uk/gowm/docs/177226/394418/SDWMfactsheet1205
Mortality Rates	Circulatory Disease	110 deaths per 100,000 people in 2001-3	England average 103 per 100,000	Down by 25 per cent since 1996-8	West Midlands Sustainable Development factsheet available from http://www.gos.gov.uk/gowm/docs/177226/394418/SDWMfactsheet1205
	Cancer	125 deaths per 100,000 people in 2001-3	England average 124 per 100,000	Down by 11 per cent since 1996-8	West Midlands Sustainable Development factsheet available from http://www.gos.gov.uk/gowm/docs/177226/394418/SDWMfactsheet1205

⁵⁵ The West Midlands Local Transport Plan 2006. Available online: http://www.westmidlandsltp.gov.uk/2006/section_18.html#task_650_ID_21

	Suicide	8.9 deaths per 100,000 people on 2001-3	England average 9 per 100,000	Up by 6 per cent since 1996-8 and the only region for which the suicide rate increased	West Midlands Sustainable Development factsheet available from http://www.gos.gov.uk/gowm/docs/177226/394418/SDWMfactsheet1205
Infant Mortality	Babies with fathers in routine occupations	2002-3 8.5 deaths per 1,000 live births	England average 6.7 deaths per 1,000 live births	Infant mortality in the West Midlands in 2002 was higher than the England average. Between 1981 and 2002 average infant mortality rates fell from 11.7 to 6.5 deaths per 1,000 live births	West Midlands Sustainable Development factsheet available from http://www.gos.gov.uk/gowm/docs/177226/394418/SDWMfactsheet1205
Alcohol abuse	Alcohol related death rate	17.1 per 100 000 for men (2004)	14.4 per 100 000 (2004) The West Midlands ranks third in the UK	Increase between 1994 and 2004	Alcohol in the West Midlands http://www.gos.gov.uk/gowm/docs/379127/409132/AlcoholintheWM
		8.1 per 100 000 for women (2004)	7.4 per 100 000 (2004) The West Midlands ranks third in the UK	Increase between 1994 and 2004	Alcohol in the West Midlands http://www.gos.gov.uk/gowm/docs/379127/409132/AlcoholintheWM
Childhood obesity		Almost 16% of 2 to 10 year-olds in the West Midlands were obese in 2001-2	England average 15.5%	Third highest prevalence of childhood obesity amongst the regions	West Midlands Sustainable Development factsheet available from http://www.gos.gov.uk/gowm/docs/177226/394418/SDWMfactsheet1205

4.2.13 The inter-relationship between the factors above

The above factors should not be considered in isolation. Policies that are implemented by the RES may impact upon different aspects of the environment in different ways. These impacts could in turn lead to secondary impacts that are often difficult to predict.

Climate change is being caused by the release of greenhouse gasses by human activities. These gasses include carbon dioxide, methane and nitrous oxide. Climate change will have far-reaching and unavoidable impacts across the Region. Many of these impacts will be negative. They include:-

- greater rainfall which may create increased river flood risk;
- more flooding on the coast and around rivers;
- higher temperatures, leading to deterioration in working conditions;
- less water available for domestic, industrial and agricultural purposes;
- changes in the sorts of plant and animal species found in the region; and
- changing the types of crops grown in the region.

Flooding and flood risk in the region may lead to changes in demographics.

Businesses and homes may be subject to higher water bills to provide sufficient long term investment to provide secure water supplies and maintain environmental protection under the National Environment Programme. Commercial and residential property owners may find it increasingly more difficult and expensive to insure property in areas at risk of flooding.

Water management issues will have implications for both future development and an impact on important wildlife habitats.

Some wildlife species may be lost in our region and we already suffer from low biodiversity. Water quality and resources may be inadequate to meet demand during hotter, drier summers. The patterns of health service demands will change, with new diseases and different pressures emerging, e.g. heat related illness. Increasing levels of investment will be required to provide flood protection

The UK Government has a commitment to reduce emissions of greenhouse gasses by 20% by 2020 (compared to 1990 emissions). The Government has pledged to extend this to 60% by 2050. Depending on the policies that are included, the RES has the potential to contribute to the Region's commitment to tackling climate change.

5 KEY CHALLENGES: PROBLEMS AND OPPORTUNITIES

5.1 Key Issues

This section represents key sustainability issues in the region which both the WMES revision and the SA/SEA of it will need to take into consideration and address where possible. These issues have been identified by reviewing the baseline data alongside a range of strategy documents as listed in the PPP Review (see chapter 3).

Below is a summary of the key issues, which are explained in more detail in the following sections.

- Innovation, entrepreneurial activity, skills deficit, and a requirement for modernisation and diversification in the manufacturing and agricultural industries;
- Poverty and deprivation amid a high population density;
- Health;
- Congestion, decreasing use of buses, increasing commuting by car;
- CO₂ emissions per capita above the national average;
- Water abstraction at capacity, increased flooding; and
- Decline in habitat quality and quantity.

5.1.1 Economic Factors

The manufacturing sector makes the largest contribution to the region's economy. Employment and productivity in this sector is, however, falling and the region must focus on modernisation and diversification in the manufacturing industry. Similarly, agricultural employment is also in decline and diversification in rural and farm activities should also be seen as a priority.

Innovation and entrepreneurial activity in the Region show the region to be behind the national average in these areas and are showing declining trends.

A skills deficit, particularly in deprived areas such as North Staffordshire and the Black Country highlights the need to address training and employment opportunities in these areas.

5.1.2 Population

The West Midlands has a high population density although the population is increasing at less than half the rate of the rest of the UK. Poverty and deprivation remain an issue for the region which the WMES should seek to address.

5.1.3 Health

The West Midlands faces some challenging issues surrounding health. Cultural and lifestyle changes are required to address this issue particular attention should be paid to health in the WMES where possible.

5.1.4 Transport

Trends show increasing population movements from conurbations to urban areas outside the main conurbations. Many of these people are the most economically active, many of whom become commuters into the main conurbations⁵⁶. This pattern corresponds with small increases in rail travel and increasing use of the car. Improved transport links between urban centres are therefore of increasing importance, particularly when related to climate change, road safety, social exclusion and increasing congestion. Bus travel is declining in the region, a trend that bus operators attribute to increasing congestion increasing delays and journey times.

The positioning of the region places it at the heart of the UK's transport network which gives rise to heavy demands as a strategic transport corridor. The potential expansion of Birmingham International Airport in line with increasing demands for air transport in the UK may serve to exacerbate congestion, air pollution and road safety issues in the region. The WMES needs to carefully consider implications of economic change on the transport network.

5.1.5 Climate Change

Climate change is expected to result in wetter winters and drier summers in the West Midlands. Threats come in the form of changing habitats and resulting threats on biodiversity, flooding, challenges to agriculture, and water supply and demand changes, amongst other issues. The West Midlands CO₂ emissions per capita are higher than the UK average at 3.13 and 2.49 tonnes respectively. The incidence of flooding has also increased over recent years, this is likely to continue increasing impacts of climate change.

5.1.6 Energy

Only 0.6% of electricity consumed in the region is generated from renewable sources compared with 3.6% nationally. Particular attention should be paid to increasing this figure, thus reducing the amount of energy generated from greenhouse gas emitting fossil fuels, where the WMES is able to influence it.

5.1.7 Water

The West Midlands region has one of the highest population densities in the UK and yet receives less rainfall annually than the UK average and has a limited capacity to store water. The majority of the surface waters in the region are already fully committed to existing abstractions, and groundwater abstractions exceed their sustainable limit in a number of areas.

Both chemical and biological water river water quality is also an issue as the region falls short of the national average in these areas.

⁵⁶ Regional Planning Guidance for the West Midlands (RPG11), GOWM, Jun 2004

5.1.8 Biodiversity

Pressures from changing land use and climate change are resulting in a decline in habitat quantity and quality for the region's fauna and flora. The WMES should seek to protect and enhance biodiversity, realising the economic value of the region's natural assets in terms of its role in supporting economic development, regeneration and quality of life.

5.2 Challenges and Opportunities

The WMES sets out 13 challenges which are listed below. Under each, where relevant, is a selection of key sustainability issues that the WMES should consider.

Challenge 1: Enterprise – to increase and sustain employment and productivity by developing a world-class enterprise culture.

- Will the option narrow the GVA gap between the best and the worst performing parts of the region?

Challenge 2: Manufacturing – to carry out the modernisation and diversification essential in the manufacturing industry that forms the bedrock of our regional economy.

- Will the option encourage diversification in the manufacturing industry?

Challenge 3: Skills – to raise the basic and higher level skills in the region, to sustain and attract investment, thus narrowing the gap with other regions and reducing differences within the region.

- Will the option help reduce skills deficits across the region?
- Will the option reduce inequalities in skills and education across the region?

Challenge 4: Transport – to address the inadequacies of our transport infrastructure through partners developing innovative ways to create the sustainable, world-class transport system we need.

- Will the option promote more sustainable transport patterns?
- Will the option improve access to public amenities, facilities and services?

Challenge 5: Economic Inclusion – to recognise widening differences in economic performance and deprivation levels, to address this issue in areas of the region experiencing social exclusion and underperforming economies, especially North Staffordshire and the Black Country, and to ensure that everyone shares in created wealth.

- Will the option address poverty and disadvantage?

- Will the option diminish inequalities in morality, health and wellbeing across the region?

Challenge 6: Innovation – to build on the innovative potential of companies through increasing and exploiting research and development, promoting creative talent and developing all aspects of an innovative and market-led culture.

- Will the option encourage entrepreneurship?
- Will the option encourage innovation?

Challenge 7: Environmental – to ensure that economic development enhances and is enhanced by the environment.

- Will the option protect and enhance the region's environmental assets, including the natural, built and historic environments?
- Will the option enhance the amenity value of the countryside, meeting the recreational and leisure needs of communities?
- Will the option protect and enhance the character and appearance of the region's landscapes and townscapes?
- Will the option protect and enhance the region's priority habitats and species?
- Will the option lead to reduced air pollution?
- Will the option lead to reduced surface or groundwater pollution?
- Will the option help address climate change?

Challenge 8: Visitor Economy – to develop our visitor economy as a powerful force for economic development and for regeneration in urban and rural economies.

Challenge 9: Development Sites – to ensure that Regional Planning Guidance is implemented, so that sites are made available to meet the needs of business or reused for other purposes.

- Will the option promote the use of previously developed land?

Challenge 10: Housing – to link housing availability and quality to employment opportunities.

- Will the option encourage sustainable design and construction practices?

Challenge 11: Demography – to ensure that changing demographic conditions in the region are used to benefit both employers and the workforce.

- Will the option reverse the pattern of people migrating from conurbations to rural parts of the region?

Challenge 12: International – to take advantage of opportunities available in an international context (particularly from European Union Community Initiatives), whilst being aware of the competitive challenges these present.

Challenge 13: Image – to create a positive image of the region and to improve the way it markets itself to target audiences.

6 SUSTAINABILITY OBJECTIVES

6.1 SA/SEA Objectives and their purpose

The purpose of the sustainability objectives is to provide a way of checking whether the proposed WMES objectives and proposed policies/actions are the best possible ones for sustainability and can be seen as a methodological yardstick against which the social, environment and economic effects of the strategy can be tested. The SA/SEA objectives seek to address the full cross-section of sustainability issues, including social, environmental and economic factors. The SEA topics identified in Annex I (f) of the SEA Directive are one of the key determinants when considering which SA/SEA Objectives should be used for the environmental criteria.

Objectives can be expressed so that they are measurable (e.g. an objective to 'reduce greenhouse gas emissions', could be expressed as "reduce CO2 emissions by 12.5% by 2010"). The Objectives in table 6 have not attempted to do this. Instead, an SA framework has been designed in chapter 7 to provide depth and clarity to the scope of the SA/SEA Objectives by introducing questions and combining with the indicators in the baseline; some indicators are new to the framework i.e. not all indicators listed in the baseline will necessarily feature in the assessment framework. This is important when using the objectives as the basis of the assessment process.

6.2 Identifying the SA/SEA Objectives

The baseline information (see chapter 4) and other plans and programmes of particular interest (see chapter 3) have both been used to inform the SA/SEA Objectives.

As a starting point for the identification of SA/SEA Objectives to be used in this assessment, the Regional Sustainable Development Framework (RSDF) and its 33 sustainability objectives⁵⁷ have been examined and the relevant sustainability issues have been incorporated into those below.

To aid the process SA/SEA process and to facilitate application of the objectives, they have been kept succinct. Selection of objectives has been carried out by careful consideration of the objectives in the RSDF as well as the SA/SEA baseline, PPP Review and key issues distilled from them.

⁵⁷ Sustainability West Midlands (July 2006) A sustainable future for the West Midlands – Regional Sustainable Development Framework. Version Two. Appendix 2.

Table 6: SA/SEA Objectives

No.	Objective
Environmental	
1	Protect and enhance biodiversity.
2	Protect and improve air quality.
3	To protect and enhance the quality of the region's ground and river waters.
4	To reduce greenhouse gas emissions.
5	To protect and enhance the Region's cultural and built heritage.
6	To maintain and enhance the character, quality and diversity of landscapes and townscapes.
Social	
7	Reduce poverty and increase economic inclusion.
8	Reduce crime, disorder and the fear of crime.
9	To ensure good accessibility for all to services, including facilities, health centres, educational sites and places of work.
10	Promote healthy lifestyles
Economic	
11	Reduce the requirement for energy use, promote efficient energy use and increase the use of energy from renewable resources.
12	To make efficient use of existing transport infrastructure, and encourage modal shift to sustainable integrated forms of transportation.
13	To manage waste sustainably, reduce waste production and increase re-use, recycling and recovery rates.
14	Encourage innovation and a culture of enterprise
15	To reduce skills deficits and inequalities in education and training.
16	To promote economic diversification.
17	To adapt to and manage the effects of climate change.
18	To adapt to demographic change.

The west midlands futures project is currently identifying key regional future drivers/uncertainties which will be fed into the SA criteria and process, e.g. though the longer term analysis of the objectives.

ASSESSMENT FRAMEWORK

6.3 Concept

The SA framework consists of the sustainability objectives (see Chapter 6) and associated information (baseline and PPP review) which together form the assessment tool for the SA/SEA process. The framework is a means of helping to ensure that all the key issues to be considered in the SA are recognised. This detail in turn gives clarity with regard to how effects are assessed. Information in the Assessment Framework can be used in monitoring the implementation of the plan.

The framework is based on the 16 objectives listed in section 6. These objectives have been tested to ascertain whether there are any mutual incompatibilities between them (figure 7.1 below).

		SA/SEA Objectives																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
SA/SEA Objectives	1	Grey																	
	2	Green	Grey																
	3	Green	Green	Grey															
	4	Green	Green		Grey														
	5					Grey													
	6	Green	Green	Green		Green	Grey												
	7							Grey											
	8						Green	Green	Grey										
	9							Green		Grey									
	10					Green	Green	Green	Green	Green	Grey								
	11	Green	Green		Green								Grey						
	12	Green	Green		Green		Green	Green		Green	Green		Grey						
	13		Green	Green			Green				Green	Green		Grey					
	14														Grey				
	15							Green		Green					Green	Grey			
	16							Green		Green					Green		Grey		
	17																	Grey	
	18							Green		Green			Green	Green	Green	Green			Grey

Key to compatibility symbols	
Compatible	Green
Potentially incompatible	Yellow
No links	White

Table 7.1 – SA/Sea objectives compatibility matrix

As table 7.1 shows it is not thought that any of the objectives are potentially incompatible. For example Objective 4 (to reduce greenhouse gas emissions) is compatible with Objective 12 (To make efficient use of existing transport infrastructure, and encourage modal shift to

sustainable integrated forms of transportation) as reduced dependence on the car and less congestion will reduce CO₂ emissions from transport.

6.4 SA Framework

Table 7: SA/SEA Framework

SA/SEA Objective	Questions Will the option/proposal...	Indicators	Targets
Protect and enhance biodiversity.	Protect and enhance the region's priority habitats and species?	Area of protected habitats protected and restored in the region. Changes priority habitats.	23 priority habitats have targets set for protection and restoration.
	Protect and enhance the region's designated sites?		
Protect and improve air quality.	Lead to reduced air pollution?	Annual levels of particles and ozone.	
To protect and enhance the quality of the region's ground and river waters.	Lead to reduced surface or groundwater pollution?	% of watercourses in 'good' or 'fair' biological and chemical quality.	All surface waters to achieve 'good' status by 2015.
To reduce greenhouse gas emissions.	Reduce the region's contribution to climate change?	CO ₂ emissions by sector and per capita	Industry: reduce CO ₂ emissions by 18% by 2010 and an additional 32% by 2020. Commercial and public sector: reduce CO ₂ emissions by 36% by 2010 and an additional 26% by 2020. Domestic: reduce CO ₂ emissions by 19% by 2010 and an additional 29% by 2020. Transport: stabilise CO ₂ emissions by 2010 and by 7% by 2020.
To protect and enhance the Region's cultural and built heritage.	Protect and enhance the region's environmental assets, including the natural, built and historic environments?	Number of listed buildings (Grade I and II*); monuments (Scheduled Monuments); and landscapes (Registered Parks and Gardens) at risk.	
To maintain and enhance the character, quality and diversity of landscapes and townscapes.	Protect and enhance the character and appearance of the region's landscapes and townscapes?	% of Joint Character Areas showing no change or showing change consistent with existing character area descriptions.	
Reduce poverty and increase economic inclusion.	Address poverty and disadvantage?	Population living in workless households. % of people of working age who are economically inactive. Childhood poverty. Pensioner poverty.	
	Diminish inequalities in morality, health and wellbeing across the region?		
Reduce crime, disorder and the fear of crime.	Will the option reduce crime and the fear of crime?	Recorded crime for (a) vehicles (b) domestic	Reduce domestic burglary by 5%

		burglary (c) robbery.	Reduce robberies by 9% Reduce vehicle crimes by 8% (Targets for 2004-2005)
To ensure good accessibility for all to services, including facilities, health centres, educational sites and places of work.	Enhance the amenity value of the countryside, meeting the recreational and leisure needs of communities?		
	Improve access to public amenities, facilities and services?	Access to key services (households perceiving difficulty)	
Promote healthy lifestyles	Diminish inequalities in morality, health and wellbeing across the region?	Healthy life expectancy. Infant mortality: differences between socio-economic groups	
Reduce the requirement for energy use, promote efficient energy use and increase the use of energy from renewable resources.	Promote energy efficiency?		
	Promote the use of renewable energy.	% of energy generated from renewables and CHP	Renewable energy generation equivalent to 5% of electricity consumption by 2010 and 10% by 2020.
To make efficient use of existing transport infrastructure, and encourage modal shift to sustainable integrated forms of transportation.	Promote more sustainable transport patterns?	Congestion/journey times: - mean travel time to work (minutes) - % of average trunk road speed achieved at a.m. peak.	Increase rail share of market by 10% by 2010.
		Tonnes of freight transported by rail and road per annum.	
To manage waste sustainably, reduce waste production and increase re-use, recycling and recovery rates.	Reduce waste production and incentivise re-use and recycling?	Total waste arisings. Amount of domestic waste being generated, recycled and recovered.	Recycle 30% of domestic waste by 2010.
Encourage innovation and a culture of enterprise	Encourage entrepreneurship?	% of new companies surviving 3 years.	
	Encourage innovation?	% of companies reporting innovative activity.	
To reduce skills deficits and inequalities in education and training.	Help reduce skills deficits across the region?	% of workforce qualified to NVQ 3+.	50% of young people moving into higher education by 2010.
	Reduce inequalities in skills and education across the region?	% of school leavers staying on to FE/structured training. Numbers of organisations employing graduates. % of employers reporting skills gaps.	
To promote economic diversification.	Narrow the GVA gap between the best and the worst performing parts of the region?	GVA per capita	To raise GVA per capita above the national average.
	Encourage diversification in the manufacturing industry?		
To adapt to and manage the effects of climate change.	Prevent inappropriate development in areas of flood risk?	% of new houses built in flood risk areas.	
To adapt to demographic change.			

7 LEGAL REQUIREMENTS OF THE SA/SEA

7.1 Legislative Context

In July 2004, the Office of the Deputy Prime Minister published *The Environmental Assessment of Plans and Programmes Regulations 2004* (the SEA Regulations, Statutory Instrument 2004, No 1633). The Regulations provide the legislative mechanism for transposing European Directive 2001/42/EC, 'the Assessment of the Effects of Certain Plans and Programmes on the Environment' (the SEA Directive) into UK legislation.

Paragraph 11 of *Guidance to RDAs on Regional Strategies* (DTi 2005) states:

"Both RES and RSS are subject to European Directive 2001/42/EC on strategic environmental assessment (transposed by the Environmental Assessment of Plans and Programmes Regulations 2004)."

In addition paragraph 3 states:

"In developing the RES a full sustainability appraisal should be carried out in order to identify how the RDA and its partners will contribute to sustainable development."

The Planning and Compulsory Purchase Act 2004 details the requirement for SA to be undertaken as a part of the development or revision of Regional Spatial Strategies; Development Plan Documents (including Core Strategies, site-specific allocation of land and area Action Plans); and Supplementary Planning Documents. The principles of this SA procedure are applied to the RES in a similar way.

Informal correspondence with Defra, DTi and ODPM (now the Department for Communities and Local Government, DCLG) indicates that Government recommends SEA be subsumed into existing SA processes and frameworks. There is no specific proposal as to how this might be achieved for the RES, but the methodology used to deliver the SA/SEA follows a similar approach to that laid out in Government guidance for sustainability appraisal of Regional Spatial Strategies.

7.2 Strategic Environmental Assessment and Sustainability Appraisal Legal Requirements

7.2.1 Strategic Environmental Assessment

The objective of SEA is to:

'Provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development' (Article 1 of the SEA Directive).

SEA provides plan-making authorities with a process to incorporate environmental considerations into decision-making at an early stage and in an integrated way. It is a baseline-driven process that allows the likely significant environmental effects of implementing the plan or programme, and reasonable alternatives, to be identified, evaluated and compared.

A key product of the SEA process is the Environmental Report which is published with the plan or programme; a non-technical summary of this report is also required. Article 5 of the SEA Directive states:

‘1. Where an environmental assessment is required..., an environmental report shall be prepared in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated.

2. The environmental report prepared pursuant to paragraph 1 shall include the information that may reasonably be required taking into account current knowledge and methods of assessment, the contents and level of detail in the plan or programme, its stage in the decision-making process and the extent to which certain matters are more appropriately assessed at different levels in that process in order to avoid duplication of the assessment.

3. Relevant information available on environmental effects of the plans and programmes and obtained at other levels of decision-making or through other Community legislation may be used for providing the information referred to in Annex I.

4. The authorities referred to in Article 6(3) shall be consulted when deciding on the scope and level of detail of the information which must be included in the environmental report.

7.2.2 Sustainability Appraisal

Sustainability Appraisal is an objectives-led process that looks at the extent to which plans contribute to the achievement of a set of objectives that cover environmental, social and economic considerations. The SEA Objectives are designed to ensure that the topics identified in the SEA Directive are all represented (see Article 1(f)⁵⁸ of the Directive).

SA and SEA are processes that are intended to improve the contribution that the document being appraised makes to the achievement of sustainable development and to the minimisation of environmental impacts. It is possible to combine the two processes without losing the essence of either. The combined approach has been prepared on the basis of the following principles:

1. Objectives are used as the basis for appraising impacts on various environmental, social and economic components;
2. A review of the baseline situation is undertaken, including social and economic factors;
3. Alternatives are appraised against social, economic, environmental and natural resource objectives, as well as baseline conditions;
4. Policies are appraised on the same basis; and

⁵⁸ Annex 1(f) of the SEA Directive includes the a requirement that the assessment process considers potential significant effects on the following issues: biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the inter-relationship between the above factors.

5. Indicators are devised for all objectives to assist in monitoring delivery of the plan and any negative effects thereof.

7.3 Guidance

The methodology adopted for the strategic environmental assessment and sustainability appraisal of the RES is an integrated approach. It draws on professional experience and best practice in both procedures, meets the legal requirements and is consistent with the following Government guidance documents:

- ODPM (Nov, 2005): Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents.
- ODPM (Sep, 2005): A Practical Guide to the Strategic Environmental Assessment Directive.

7.4 Consultation

Public involvement through consultation is a key element of SEA. Consultation also takes place with statutory consultees. In England these are the Countryside Agency, English Heritage, English Nature and the Environment Agency. The SEA Directive states that public consultation is part of the SEA procedure:

The draft plan or programme and the environmental report prepared in accordance with Article 5 shall be made available to the authorities and the public. Article 6(1)

The authorities and the public shall be given an early and effective opportunity within appropriate time frames to express their opinion on the draft plan or programme and the accompanying environmental report before the adoption of the plan or programme or its submission to the legislative procedure. Article 6(2)

7.5 Post Adoption

Following the consultation stages and when the RES is due for adoption, a statement summarising how environmental considerations have been integrated into the plan will be prepared. Details for this procedure are identified in Article 9 of the SEA Directive:

Member States shall ensure that, when a plan or programme is adopted, the authorities referred to in Article 6, the public and any Member State consulted under Article 7 are informed and the following items are made available to those so informed:

- (a) the plan or programme as adopted,*
- (b) a statement summarising how environmental considerations have been integrated into the plan or programme and how the environmental report prepared pursuant to Article 5, the opinions expressed pursuant to Article 6 and the results of consultations entered into pursuant to Article 7 have been taken into account in accordance with Article 8 and the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with, and*
- (c) the measures decided concerning monitoring in accordance with Article 10. Article 9(1).*

