

**Moray Renewable Energy Strategy**

**Strategic Environmental Assessment**

**Scoping Report**

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## **Introduction**

The purpose of this Strategic Environmental Assessment (SEA) Scoping Report is to set out sufficient information on the Moray Renewable Energy Strategy to enable the Consultation Authorities to form a view on the consultation periods and scope/level of detail that will be appropriate for the Environmental Report.

### **SECTION 1**

#### Key Facts

- Name of Responsible Authority – The Moray Council
- Reason for Strategy - The Council wish to take positive action to support the Scottish Executive's targets for renewable energy generation and the Strategy will promote a range of renewable energy projects considered appropriate in Moray.
- Plan Subject – Renewable Energy
- Period Covered by Plan – 5 years
- Frequency of Updates – Annual monitoring and full review after 5 years
- Plan Area – Moray Council local authority administrative area

### **SECTION 2**

#### Background

In July 2004 a new European Directive (2001/42/EC) became law in the United Kingdom requiring local authorities to show that the effects on the environment of new strategies and plans have been taken into account before they are finalised. The Directive is being implemented in Scotland through the Environmental Assessment (Scotland) Act 2005 which came into effect on 20 February 2006. The objective of the Strategic Environmental Assessment (SEA) Directive is:-

“to provide for a high level of protection of the environment and contribute to the integration of environmental considerations into the preparation and adoption of development plans...., with a view to promoting sustainable development”.

The approach taken by the Moray Council is considered to be in full accordance with the requirements of the SEA Directive. Authorities are required to assess the likely significant effects of their plans and programmes on the environment including issues such as biodiversity, population, human health, flora and fauna, soil, water, air, climatic factors, material assets, cultural heritage including archaeological and architectural heritage, landscape and the inter relationship between these factors.

This report explains the process the Moray Council has followed so far and the proposed content and issues to be considered in the Environmental Report for the Moray Renewable Energy Strategy. This Scoping report has been prepared

following the guidance set out in, “A Draft Practical Guide to the Strategic Environmental Assessment Directive” and Circular 2/2004, “Strategic Environmental Assessment for Development Planning: the Environmental Assessment of Plans and Programmes (Scotland) Regulations 2004”.

### **Strategic Environmental Assessment of the Moray Renewable Energy Strategy**

The SEA has two key stages. The first stage is this Scoping report, which is available for public consultation in March and April 2006, which sets out baseline information, and key issues and alternatives to be addressed in the Strategy. The second stage is a more detailed Environmental Report which involves a detailed assessment of the likely significant environmental effects of the Strategy. The Environmental Report will summarise how the assessment was undertaken and set out mitigating and monitoring measures. The Environmental report will be published alongside the draft Strategy in May/June 2006.

#### **Aims of the Scoping Report**

- To establish the context of the Moray Renewable Energy Strategy and the process for undertaking the SEA.
- To identify other relevant plans and programmes which affect the preparation of the Strategy.
- To establish SEA objectives and indicators which can be used in the assessment of any environmental effects resulting from the actions proposed in the Moray Renewable Energy Strategy.
- To identify any predicted significant environmental effects arising from the Moray Renewable Energy Strategy and mitigation measures.
- To set out the proposed methodology and programme for the remainder of the SEA process.

#### **Consultation**

The SEA Regulations require that the Moray Council consult with the following bodies on the scope of the SEA:-

- the Scottish Ministers (including Historic Scotland);
- the Scottish Environmental Protection Agency;
- Scottish Natural Heritage.

In addition to the above, the Moray Council would welcome your views on the scope of the Strategy, in particular the objectives, indicators and baseline information collected. Comments should be sent to Gary Templeton, Planning Officer, The Moray Council, Council Offices, High Street, Elgin, IV30 1BX before **14 April 2006**.

## **Context of the Strategy**

The UK target for electricity generation from renewable energy sources is 10% by 2010. However, the Scottish Executive have set a more ambitious target of 18% renewables generation by 2010. Beyond that the Scottish Executive has an aspirational target of 40% (6GW) of Scotland's electricity to be generated from renewable energy sources by 2020. These targets form a key component in the government's strategy to reduce greenhouse gas emissions as part of the 1997 Kyoto agreement.

The Scottish Executive is committed to providing a policy, economic and planning environment which places Scotland in the vanguard of a new sustainable energy industry that could bring considerable economic benefits to Scotland. To achieve this and the target for 2020 the Executive are currently considering introducing regional targets for renewable energy.

Moray has an important role to play in contributing to national and regional targets for renewable energy. The area has the potential to develop the sector both in terms of generating energy and in providing manufacturing, research and development opportunities. With Moray's wind, solar, and timber resources it is well placed to generate renewable energy.

The aims of the Strategy are:-

1. To contribute to the Scottish Executive's target of providing 40% of Scotland's electricity from renewable technologies without adversely affecting Moray as an attractive place to live and work;
2. To develop skills (research, production, manufacture and provision) in renewable energy within the local economy;
3. To raise awareness of the economic and environmental benefits of renewable energy.

These aims are further developed into a series of objectives.

## **Strategy Preparation Programme**

The Strategy is being prepared by officers from the Planning and Development Section of Moray Council. Officers are supported by the Renewable Energy Working Group which consists of elected members and officers of the Council and a representative from HIE Moray.

<b>Action</b>	<b>Date</b>
Renewable Energy Working Group Meeting 1	23 August 2005
Renewable Energy Working Group Meeting 2	25 October 2005
Renewable Energy Working Group Meeting 3	5 December 2005
Consultation on Scoping Report	February/March 2006
Renewable Energy Working Group Meeting 4	February 2006
Draft Renewable Energy Strategy and Environmental Report Consultation	May/June 2006

## **Relevant Plans and Programmes**

The SEA Directive requires that the environmental report should ensure that information is provided as to, “the plan’s relationship with other relevant plans and programmes” and “the environmental protection objectives, established at international, European Community or national level, which are relevant to the plan and the way those objectives and any environmental objectives have been taken into account during its preparation.

The process concentrated on identifying those plans and programmes that will influence the Strategy and which are most relevant to the key environmental factors detailed within the SEA Directive. Information was gathered on the following:-

- The objectives of international, national, regional and local plans and programmes and strategies;
- Key targets and indicators from those plans and programmes;
- The implications of these for the Strategy and how the plan can take them into account;
- The implications for the environmental appraisal process.

The table below sets out some of the main plans and programmes which require consideration in the course of preparing the Moray Renewable Energy Strategy. This is not intended to be an exhaustive list, simply an indication of the main policy drivers.

<b>Plan/Programme</b>	<b>Objectives/Requirements of Plan/Programme</b>	<b>How Objectives/ Requirements might be taken on board</b>
United Nations Framework Convention on Climate Change	Amendment to the treaty signed at Rio, aims to stabilise greenhouse gas emissions to prevent climate change.	EU has a target for an 8% reduction in greenhouse gas emissions from 1990 levels by 2012. UK has target of 12.5%.
Kyoto Protocol	Treaty signed at the Rio Earth Summit in 1992. Treaty aims to reduce greenhouse gas emissions to address global warming issues.	National objective to reduce greenhouse gas emissions by producing “clean” energy.
EC Directive on the Conservation of Wild Birds 79/409/EEC 1979	Requires Member states to sustain populations of naturally occurring wild birds by sustaining areas of habitats to maintain ecologically and scientifically sound levels.	Strategy must protect designated sites and protected species.

<b>Plan/Programme</b>	<b>Objectives/Requirements of Plan/Programme</b>	<b>How Objectives/Requirements might be taken on board</b>
EC Directive on the Conservation of Natural Habitats of Wild Fauna and Flora 92/43/EEC 1992	Requires Member states to maintain and restore natural habitats and wild species at favourable conservation levels.	Strategy must protect designated sites and protected species.
Directive 2000/60/EC The Water Framework Directive	Requires Member states to achieve good ecological status of inland water bodies by 2015.	Strategy must prevent pollution to watercourses.
Directive 1966/62/EC on ambient air quality and management	Establishes standards for air quality and sets limits for various pollutants.	Strategy must consider potential effects of proposals on pollution.
Moray Structure and Local Plan	Supports renewable energy development and provides policy framework for assessing proposals. Also promotes micro renewables.	Strategy to consider policy framework.
North of Scotland Strategic Options Review Group – Strategic Outline Case 19/1/06	Considers options for strategic waste management in North of Scotland.	Consider energy from waste.
SPP2 Economic Development	Development Plans to ensure that existing business locations are able to meet the anticipated changes in the economy and provide choice for a diverse range of economic developments, secure and support the delivery of sites for economic development in sustainable locations and engage a positive culture of engagement with business interests.	Strategy should consider opportunities for new industrial and commercial development and infrastructure improvements.
NPPG5 Archaeology and Planning	Plans should include policies for the protection, preservation and enhancement of all nationally important sites of archaeological and landscape interest and their settings and other remains worth preserving.	Strategy must take account of the need to safeguard archaeological resources.

<b>Plan/Programme</b>	<b>Objectives/Requirements of Plan/Programme</b>	<b>How Objectives/ Requirements might be taken on board</b>
NPPG6 Renewable Energy Developments	Development Plans should provide a positive framework guiding developers to locations where renewable energy developments are likely to be permitted, having regard to environmental and amenity considerations. Should set out criteria for assessing Renewable development proposals.	Strategy must consider a wide range of potential renewable resources.
NPPG13 Coastal Planning	Development Plans should distinguish between policies for the developed, undeveloped and isolated coast.	Strategy should safeguard the sensitive coastal area from inappropriate development.
NPPG14 Natural Heritage	Development Plans should set out policies to conserve and enhance designated natural heritage areas and the wider natural heritage.	Strategy must consider the implications on the wider natural heritage.
NPPG15 Rural Development	Development Plans should identify development opportunities designed to meet rural needs in a way that enhances rather than diminishes environmental quality.	Strategy should consider the opportunities and potential impacts of renewables in rural areas.
NPPG18 Planning and the Historic Environment	Development Plans to provide policies to conserve and enhance the historic environment.	Strategy must take account of the potential effects on the built heritage.
Nature Conservation Bill	Sets out the protection afforded to wild animals and plants and puts a duty of biodiversity care on public bodies.	Strategy will consider policies on biodiversity conservation.
Climate Change: The UK Programme	Aims to cut the UK's carbon emissions by 60% by 2050.	Strategy will consider policies aimed at reducing carbon emissions, promoting energy efficiency and renewable energy.
Air Quality Strategy for England, Scotland, Wales and Northern Ireland: Working Together for Clean Air	Sets out objectives for 8 main air pollutants to protect health.	Strategy will consider proposals which may affect air quality and policies to monitor and improve air quality.

<b>Plan/Programme</b>	<b>Objectives/Requirements of Plan/Programme</b>	<b>How Objectives/ Requirements might be taken on board</b>
Memorandum of Guidance on Listed Buildings and Conservation Areas	National guidance on the conservation of listed buildings and conservation areas and assessment of proposals affecting the built heritage.	Strategy will consider the potential effects on listed buildings and conservation areas.
North East Scotland Local Biodiversity Action Plan	Wide range of action plans on key habitats, species and areas of biodiversity value in Moray.	Strategy to consider potential effects on biodiversity action plan habitats and species.
Cairngorms National Park Local Plan and Management Plan	Currently being prepared	Need to ensure conformity between plans and sensitive policy framework around the edges of the National Park.
Moray Forestry Strategy	Identifies preferred search areas for new woodland planting and opportunities to restructure existing woodlands.	Consider opportunities for new woodlands in and around towns. Consult with Forestry Commission Scotland.
Moray Waste Strategy	Sets out a range of actions to reduce, reuse and recycle waste in Moray and improve how waste is disposed in future.	Identify additional policy requirements for waste management and site allocations if required for disposal facilities.
Adjacent authorities renewable energy strategies	Neighbouring authorities plans to provide renewable energy to meet national targets.	Strategy to consider implications of regional targets and consistency with neighbouring areas.
Moray Wind Energy Policy Guidance	Identifies preferred search areas for large, medium and small wind farms.	Strategy to reflect approved guidance on wind energy.

### **Key Environmental Issues**

#### **Key Issues/Problems relevant to the Moray Renewable Energy Strategy**

<b>Issue/Problem</b>	<b>Supporting Data</b>	<b>Implications for Strategy</b>
Cumulative effect of windfarms on the landscape	Planning applications and scoping reports for wind farms in Moray. Wind Energy Policy Guidance.	Wind Energy guidance already approved. Need to provide for a range of renewables.
Need to reduce CO <sub>2</sub> emissions and improve air quality	National targets for reduction of CO <sub>2</sub> .	Reduction of pollution.

<b>Issue/Problem</b>	<b>Supporting Data</b>	<b>Implications for Strategy</b>
Need to protect sensitive landscapes	Designated Areas of Great Landscape Value and Historic Gardens and Designed Landscapes.	Planning policies for development proposals affecting sensitive landscapes.
Conservation of key biodiversity habitats and species and the wider natural heritage	SNH and Moray Council nature conservation designations.	Planning policies for development proposals affecting nature conservation designations.
Protection of historic and cultural assets	Historic Scotland – listed buildings, conservation areas, archaeological sites, etc.	Planning policies for development proposals affecting built heritage designations.
Protection of town/village character	SNH Landscape Character Assessments.	Potential effect on settlement character.
Noise/air pollution	Industry statistics on noise/pollution associated with renewable energy production.	Need supporting policy framework to avoid/mitigate any adverse effects.
Reduction of waste	The Moray Council data on waste produced, recycled, etc.	Reduction of waste to landfill, potential to generate energy from waste.
Need to diversify the local economy	Moray 2020 Strategy.	Potential to develop new skills in the manufacture/provision of renewable energy products.
Public attitudes to renewable energy	National surveys on public attitudes. Responses to Development Plan consultations.	Attitudes to be considered in preparing the Strategy.
Stability of renewable energy supply	Data available on wind speed, timber resources, etc.	Strategy to be specific to Moray's resources.

### **Baseline Information**

#### Wind

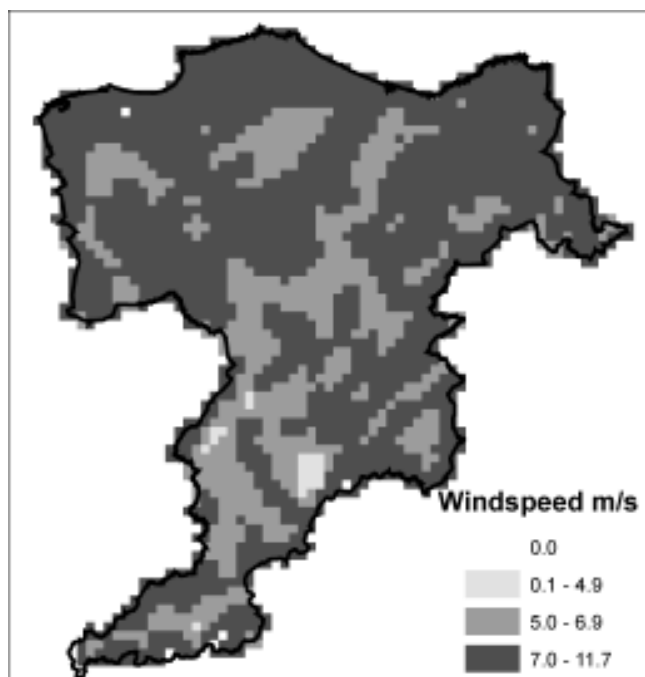
There has been considerable interest in wind energy development in Moray. The figure below shows the “installed capacity” which has been granted planning consent and an estimate of how this compares with Moray’s total electricity requirements.

<b>Windfarms with planning consent</b>	<b>Capacity</b>	<b>% of total electricity requirements in Moray</b>
Paul's Hill	77MW	44
Cairn Uish	56MW	32
Drummuir	42MW	24
Findhorn	1MW	0.57
	176MW	100.57

The Drummuir windfarm was granted planning consent following a Public Inquiry. The decision is subject to a legal challenge by Moray Council.

The Council has not objected to a proposal for a wind farm at Berryburn. A decision on the proposal is expected from the Scottish Executive during 2006.

The Council have approved Wind Energy Policy guidance which identifies Preferred Search areas for large, medium and small windfarms.



Average wind speeds in Moray recorded at 45m.  
Source - BWEA

### Municipal (Domestic) Waste

Moray's population of 87,000 has a total waste arisings of 78,300 tonnes p.a. This is forecast to rise to 105,381 tonnes by 2020. In 2004/05, 41,314 tonnes of waste were landfilled at the one operating landfill site at Dallachy, 28,874 tonnes (70%) of this material would be classed as bio-degradable. The quantity of bio-degradable municipal sold waste (BMW) disposed of to landfill must be reduced by the UK to:

- 75% of 1995 baseline levels by 2010 – This target is already achieved as at 2006
- 50% of 1995 baseline levels by 2013
- 25% of 1995 baseline levels by 2020

The Council are involved in a strategic review of waste with Highland, Aberdeenshire and Aberdeen City Councils.

### Forestry

Moray is one of the most forested areas in Scotland with some 28% of its land under forestry, compared to about 15% for all of Scotland. At present some 260,000 tonnes of timber are being produced from all the forests in Moray. Only 24% of this material was processed in Moray.

Biomass is used extensively in Europe as a renewable energy source for power generation and heating buildings. Wood fuel can be produced as woodchips co-products from sawmill processing or wood pellets. Timber output data for Moray, obtained from a survey of growers, indicates a total output of 263,212 tonnes in 2003/04. The private sector and FE outputs were similar at around 130,000 tonnes each.

**Forecasts of Timber Production in Moray**  
**Average Annual Volume for Felling (tonnes – wet)**

<b>From</b>	<b>To</b>	<b>Timber Production Total</b>	<b>Logging Residues 50%</b>	<b>Sawmill Co-Product 45%</b>
2004	2004	263,822	131,911	77,951
2005	2005	329,940	164,970	96,108
2006	2006	311,694	155,847	95,206
2007	2007	287,308	143,654	911,602
2008	2008	298,027	149,014	96,864
2009	2009	448,726	224,363	143,026

Combined conifer felling forecasts with estimates of brash and sawmill co-products. Source - Biomass Energy Report and Strategy for MBSE, by NIFES Consulting 2005.

A power station generating 20MW of electricity would require about 250,000 tonnes of wet fuel per year. The co-product created from timber produced in Moray is estimated to increase to over 15,000 tonnes by 2022.

**Biodiesel**

Oilseed rape (OSR) is well suited to Scotland (2 crops/year) and useful in the crop rotation. It is used in the food and petrochemical industries including as a fuel.

There is no processing facility in Scotland, it is sent for crushing in England or overseas.

Changes in CAP provide both threats and opportunities for OSR. The EU has set a target for the use of road biofuel of 2% by 2005 and 5.75% by 2010. In November 2005, UK government announced a renewable fuel obligation and set a target of 5% by 2010.

Production of OSR in Scotland peaked in 1998 at 181,000T and 2004 130,000T. Price was a high £300/T in 1980's and is now around £130 to £140/T.

The North East grows 40% of Scotland's OSR.

All car manufacturers guarantee their engines for a 5% biodiesel mix without any modification – Renault, Peugeot and Citroen will guarantee for up to 30% mix.

There is a 20p/litre duty rebate on biodiesel. Estimated demand of diesel in Scotland is 1,900,000T. The Moray Council uses 1,800T/year.

## SECTION 3

### **Proposed Methodology for the SEA**

SEA Regulations require that the significant environmental effects of a plan or programme are identified, described and evaluated. The likely significant effects on the environment will be described in the Environmental report and measures identified to avoid, reduce or mitigate any significant effects of the Plans. A panel of officers from the Planning and Development Section will undertake the SEA of the Strategy. Staff have experience of undertaking SEA. Officers will carry out the assessment against a framework of objectives to assess the potential impacts of the different technologies and actions proposed in the Strategy. A matrix has been developed setting out environmental objectives for the strategy, with indicators and columns for carrying out the appraisal of potential impacts.

The matrix will be completed using the symbols in the key below.

Significant positive impact	No or minimal positive impact	Neutral or unknown impact	No or minimal negative impact	Significant negative impact
++	+	?	-	--



<b>Policy:</b>									
<b>Objective</b>	<b>Questions</b>	<b>Timescale</b>		<b>Impact</b>	<b>Scale</b>		<b>Rural</b>	<b>Urban</b>	<b>Commentary</b>
		<b>Short Term</b>	<b>Long Term</b>	<b>Severity</b>	<b>Local</b>	<b>Tran-Boundary</b>			
1.	To improve air quality within the Moray Council area								
2.	To reduce the causes and impacts of climate change								
3.	To increase energy efficiency and the proportion of energy generated from renewable sources								

<b>Policy:</b>										
	<b>Objective</b>	<b>Questions</b>	<b>Timescale</b>		<b>Impact</b>	<b>Scale</b>		<b>Rural</b>	<b>Urban</b>	<b>Commentary</b>
			<b>Short Term</b>	<b>Long Term</b>	<b>Severity</b>	<b>Local</b>	<b>Tran-Boundary</b>			
4.	To protect and enhance the biodiversity and landscape of the Moray Council area. Including the protection and enhancement of species, habitats, geology and landform	<p>Will it contribute to the protection and enhancement of the biodiversity in the Moray Council area?</p> <p>Will it have a detrimental effect on protected species?</p> <p>Will it contribute to improving and/or maintaining the favourable condition of designated sites of scientific and natural interest?</p> <p>Will it contribute to achieving local, regional and national biodiversity action plan targets?</p> <p>Will it have a detrimental effect on landscape character and designations?</p>								
5.	To protect and enhance cultural heritage and diversity with the Moray Council area	Will it protect and enhance the district's sites and features of historical and archaeological importance?								

<b>Policy:</b>										
<b>Objective</b>		<b>Questions</b>	<b>Timescale</b>		<b>Impact</b>	<b>Scale</b>		<b>Rural</b>	<b>Urban</b>	<b>Commentary</b>
			<b>Short Term</b>	<b>Long Term</b>		<b>Severity</b>	<b>Local</b>			
6.	To protect and enhance the quality of the districts ground, river and sea water systems	<p>Will it help prevent pollution of groundwater and rivers?</p> <p>Will it protect the quality of the seawater?</p> <p>Will it protect and enhance the coastline?</p>								
7.	To improve soil quality and use soil in a sustainable manner	Will it protect and improve the quality of the soil?								
8.	To reduce the amount of waste produced and increase the amount of recycling	Will it ensure that the management of wastes is consistent with the waste management hierarchy by reusing/recycling and residual disposal through the least environmentally damaging option?								

<b>Policy:</b>										
<b>Objective</b>		<b>Questions</b>	<b>Timescale</b>		<b>Impact</b>	<b>Scale</b>				<b>Commentary</b>
			<b>Short Term</b>	<b>Long Term</b>		<b>Severity</b>	<b>Local</b>			
9.	To promote the use of sustainable transport options	<p>Will it improve public transport?</p> <p>Will it encourage walking and cycling?</p> <p>Will it reduce the need to travel by car?</p> <p>Will it shorten the duration of journeys?</p>								
10.	To ensure prudent use of natural resources	<p>Will it minimise the use of water?</p> <p>Will it minimise the demand for raw materials?</p> <p>Will it protect and enhance the use of prime agricultural land?</p>								
11.	To protect, enhance and create green spaces and to regenerate degraded environments	<p>Will green spaces be promoted?</p> <p>Will it result in the loss of green spaces?</p> <p>Will it make a significant contribution towards the regeneration of an area?</p> <p>Will it result in further degradation of environments?</p>								

<b>Policy:</b>										
	<b>Objective</b>	<b>Questions</b>	<b>Timescale</b>		<b>Impact</b>	<b>Scale</b>			<b>Commentary</b>	
			<b>Short Term</b>	<b>Long Term</b>		<b>Severity</b>	<b>Local</b>	<b>Tran-Boundary</b>		<b>Rural</b>
12.	To secure a better quality of life for local people through improvements to service provision, sustaining a healthy economy with high levels of employment and improving the health and well being of local people	<p>Will it contribute to adequate access to and provision of services and leisure and recreational facilities for all including, those without a car and those with mobility difficulties?</p> <p>Will it help to maintain high levels of employment?</p> <p>Will it help to maintain a healthy economy?</p> <p>Ensure accessibility for all to jobs?</p> <p>Ensure the provision of sufficient employment land?</p> <p>Improve access to health facilities?</p>								

## **Alternatives**

Alternative approaches to the development of renewable energy resources have been considered within the development of the Renewable Energy Strategy.

Scenarios will be developed for each type of renewable energy technology by considering the resource availability, the present provision and the planning policies for considering each technology. The alternatives will be analysed to provide guidance for setting indicative targets for each renewable energy technology and any preferred locations. Proposals arising from the Strategy which will have no obvious environmental impact (e.g. staff appointments) will be scoped out of the SEA process.

## **SECTION 4**

### **Proposed Consultation Timescales**

The Scoping report will be made available for public comment from the 6<sup>th</sup> March to 14<sup>th</sup> April 2006. The Environmental Report and draft Renewable Energy Strategy will be considered by the Council's Environmental Services Committee in May 2006 and thereafter made available for a 6 week period of consultation.