Strategic Environmental Assessment of the EU Structural Funds Convergence Programme for Cornwall and the Isles of Scilly, 2007-2013

Environmental Report: Non-Technical Summary

Fraser Associates
November 2006, updated May 2007

Introduction

The process of preparation of the EU Structural Funds Convergence Programme for South West England 2007-2013[1] is subject to a Strategic Environmental Assessment (SEA). SEA aims to ensure the Programme will deliver a high level of environmental protection and enhancement.

Central to the SEA approach is to ensure, as far as possible, that all stakeholders are able to contribute to the process. Accordingly, this non-technical summary has been produced to provide a short description of the process undertaken, the results to date, and key questions for consultation. Sections are included which cover:

1. The background to, and focus of, the Programme.
2. A description of the SEA process, and the way it has been tailored to better reflect the requirements of the Operational Programme.
3. A summary of the key environmental policy issues and environmental context in which the Operational Programme will be delivered
4. The assessment criteria which have been used to assess the range and detail of activities proposed under the Programme.
5. The conclusions from the assessment process, and possible mitigation actions.
6. The alternatives open to the Programme, in terms of possible environmental approaches, and proposals for monitoring

A summary of the consultation questions contained in the Environmental Report is also included.

Updates to the Non-Technical Summary

This summary has been updated to reflect changes made in the Programme following the consultation phase. For clarity, significant additions and changes are included in shaded boxes like this one.

Key points highlighted in the Environmental Report and from consultation responses were summarised and presented as recommendations to those responsible for the management and delivery of the Programmes. Those recommendations, and the responses on the part of the managing authority, are detailed in the accompanying SEA Statement.

[1] The terms Convergence Programme, Operational Programme and OP are used interchangeably in this report

1. Background to, and Focus of the Programme

European Structural Funds are used to promote regeneration and economic development in regions which are lagging in comparison to the European average. The Funds are delivered within the wider context of EU Policy, including EU policies on the environment and sustainable development.

The European Union has recently expanded to include Central and Eastern Countries, together with Malta and Cyprus. By comparison with others in Europe, these Member States are much less well developed in economic terms. Accordingly, they will receive the bulk of the available funding in the 2007-2013 period.

The South West of England will receive funding under a number of Programmes in the next round, which runs from 2007-2013, including a Convergence Programme in Cornwall and the Isles of Scilly. A Competitiveness and Employment Programme covers the rest of the South West. This SEA refers only to the Convergence Programme.

The delivery of Structural Funds has historically been characterised by a high degree of partnership working and decision-making, involving, among others, the South West Regional Development Agency, the Government Office for the South West, Local Authorities, Further and Higher Education, and the Environmental Sector.

In the past, Structural Fund Programmes have helped fund a wide range of investments, covering business development, infrastructure, community economic development and training, all of which were designed to improve economic development in parts of Cornwall and the Isles of Scilly. In addition to the requirements of EU Funding, it is now necessary to produce a new programme because there has been a great deal of development in economic policy in Cornwall and the Isles of Scilly, particularly around the preparation of the Regional Economic Strategy and the ongoing development of the Strategy & Action programme, which is more specifically focused on the sub-region. The UK Government has made clear its intention to link Structural Fund Programmes closely to Regional Economic Strategies to ensure consistency of approach.

The proposals for the Convergence Programme relate closely to the aims of the South West Regional Economic Strategy, and focus on four Priority axes. In the November Consultation Draft, those axes were:

- Innovation, and Research and Development
- Competitiveness and Investment
- Learning and Skills; and
- Economic Infrastructure and Place Based Regeneration.

The Draft OP contained a strong commitment, at strategic level, to delivering activities under the above headings in ways which minimise environmental impacts, and, in particular, suggested that the Programme could be carbon neutral in its overall delivery.

This aspiration represented a considerable step forward from the existing position, and was a key point of discussion in the consultation process.

Changes in Programme Approach

Following consultation, the Programme changed significantly in its coverage. The first two Priorities have retained the majority of their initial focus and detail, although Priority 2 is now titled ***Enterprise and Investment***, and includes a stronger approach to environmental management in business.

Priorities 3 and 4 have been substantially re-worked. Priority 3 now focuses on ***Transformational Infrastructure***, including the development of Newquay Airport, Digital Infrastructure, and of infrastructure to support learning activities. Priority 4 concentrates on ***Place Based Regeneration***, and provides different levels of intensity of support for physical aspects of regeneration, depending on the needs of local areas within Cornwall and the Isles of Scilly.

The approach to carbon management has also changed – in line with SEA recommendations – and now proposes an aim of moving to a low carbon economy, rather than a carbon neutral programme. Detailed text in the Programme emphasises the ways in which investments will be made to provide and support drivers of a low carbon economy. More detail on the carbon management approach is provided in the SEA Statement.

2. The SEA Process

The purpose of the SEA is to ensure the Programme will deliver a high level of environmental protection and enhancement. The SEA achieves this aim by providing a structured process through which the activities proposed under the Programme are tested against agreed environmental criteria. The SEA process involves a number of stages:

- Screening is undertaken to determine whether there are significant environmental effects[2].
- Collation of baseline environmental information provides a background for further stages.
- Scoping determines the range and detail of information which will be needed, and the criteria to be used in assessment. A scoping report is produced for comment by the designated SEA Consultation Bodies.
- Assessing the likely effects of the plan, including alternatives, forms the main element of the SEA.
- This assessment, together with an explanation of the process involved and the results, are published in the Environmental Report, in parallel with the consultation draft of the Operational Programme itself.
- Public consultation on the draft Operational Programme and Environmental Report is undertaken to gather feedback from stakeholders.
- The plan is finalised, taking into account the views expressed during the consultation. An SEA Statement is produced which details the key issues raised in the Environmental Report and consultation, together with the responses to those issues on the part of those developing the Plan itself.
- Monitoring and review are undertaken throughout delivery of the plan to help identify adverse effects and to provide information for the next programming iteration.

In this case, the SEA process has been adapted to reflect the individual projects which will be supported by the Programme are not, for the most part, determined. Under this circumstance, it is difficult to assess the likely individual and collective impacts of the Programme, although it is possible to consider the likely range of impacts and ways in which those impacts could be made as positive as possible.

[2] Screening is not required in this case – the European Commission has issued guidance confirming that SEA is required.

Accordingly, the SEA process has been tailored to place more emphasis on the process through which individual projects will be developed and delivered. This focus is in line with previous evaluation work, which showed that a combination of administrative aspects (questions in application forms) and management aspects (involvement of environmental expertise in all decision-making process) produced the best results in terms of environmental performance.

The table below shows how the SEA and Programme Development processes have proceeded. The process ran from August 2006 until May 2007.

Steps in Programme Development	Steps in SEA Process
EC documents and the (then draft) NSRF set out the broad areas which can be covered by the OP, and also emphasise the need for connection to regional priorities as set out in the RES.	These documents provided context for the SEA Scoping Report.
South West of England Regional Development Agency (SWRDA) and the Government Office for the South West (GO-SW), with Cornwall County Council and regional partners, co-ordinated the production of detailed socio-economic material, with support from Ekos Consultants. A number of Task and Finish Groups were set up and provided input into the draft Programme; a large scale consultation event was held in Newquay at the start of October which also helped develop the approach.	A Steering Group was been set up to contribute to the environmental aspects of the Convergence Programme, and also to oversee the SEA process. Representatives from GO-SW, SWRDA, Environment Agency, English Heritage, Natural England, and the Objective One Partnership contributed. In addition, wider consultation on the Scoping Report was undertaken with Environment Kernow, an environmental umbrella organisation.
The draft Operational Programme was developed, taking into account summary findings from the SEA process and the finalised NSRF.	The Environmental Report was produced, based on the actions set out in the draft OP, and taking into account responses on the Scoping Report.
Consultation on both the draft OP and Environmental Report ran from late November 2006 until February 16th 2007. In addition to written submissions, a series of meetings (concentrating on the environmental element) were held with interested stakeholders in January 2007.	
A revised OP, taking into account consultation responses, will be submitted to the European Commission by the end of May 2007.	The Environmental Report was updated (this document) taking account of changes made in the structure and content of the OP.

The activities and process originally set out have been delivered, with only very minor changes to reflect changes in the timetable of Programme Development. Involvement of stakeholders, through the steering group and through formal consultation, has taken place throughout the process.

3. Environmental Context

A great deal of policy material and environmental data was reviewed to provide the environmental context for the SEA. The table below highlights the most important issues and trends – issues around energy and climate change are of critical importance to the Programme, and Defra's aim of One Planet Living also informs the overall approach to both conservation of natural assets and managements of resources.

SEA Topics, Data Coverage, and Key Points from Initial Analysis

SEA Topic	Data	Trends and Key Points
Population	Population estimates and trends will be included in socio-economic data, as will data on demographic structures and trends.	The population of the SW has been rising at the fastest rate of all English regions. This trend is also evident in Cornwall and the Isles of Scilly, and is expected to continue, driven in part by the high quality of life in the region. There is increasing demand for housing, for the use of transport infrastructure, and on environmental resources. Existing policy, as set out in the RSS, is to accommodate that growth in ways which minimise negative environmental impacts.
Human health	Data on life expectancy is included in the socio-economic profile, along with wider information where related to the aims of the OP. Some information on health and environmental quality is also included.	Life expectancy in the SW is among the highest in England. Studies generally show a positive relationship between employment (and voluntary work) and health. Local environmental improvements can also be linked to health improvements, and to a number of key health aims, especially around promotion of active lifestyles.
Biodiversity, Flora and Fauna	Data on designated areas are included, together with assessment data on their condition. Trend data on bird species, including farmland birds, is one of the government's headline indicators of sustainable development.	The proportion of SSSI's in target condition is continuing to increase, but a significant minority remain in poor condition. One of Defra's PSA targets is to have all SSSI's in favourable condition by 2010. All Natura 2000 sites in the UK are designated SSSI's. The majority of current pressures on biodiversity (and on countryside landscape and water quality) are most directly associated with agricultural practices, and with demand for products from the food and drink sector. There has been a long-term decline in farmland bird numbers, although there is some evidence of populations stabilising more recently. Agri-environment schemes which have nature conservation (and landscape quality) central aims have been introduced and expanded in recent years.
Landscape & cultural heritage	Data on landscape designations such as National Parks and Areas of Outstanding Natural Beauty are available, as are data on the occurrence of historic and distinctive landscape features, and on landscape change. It is important to note that the built landscape, in terms of the use of local materials, building design and the layout of towns and villages, is also very distinctive in the county. Data are also available on the extent to which landscape, countryside and coast represent attractions for tourists.	In common with other parts of England, there has been a long term decline in a number of distinctive landscape features over the long term, largely associated with agricultural practice. The natural and historic landscapes of the SW are widely recognised as forming the primary attraction for tourists and are also a central aspect of quality of life in Cornwall and the Isles of Scilly. There is some evidence of landscape change which is out of character with existing features.
Soil / Change of land use	Soil condition in the Programme area is closely associated with agriculture, and direct effects from the Programme are therefore unlikely. However, increasing development and expansion of urban areas implies a wider change in land use. Data on the re-use of previously developed land is included.	The re-use of brownfield land for housing within the SW is at lower levels than in England as a whole. However, RSS acknowledges that, although the SW has large areas of brownfield land, much of it is located in areas where its re-use would worsen other environmental trends, particularly in terms of transport and climate change emissions. Existing policy, endorsed by the SSA / SEA of the RSS is to concentrate development in existing towns and cities, re-using land where possible in that context.
Water	Data are available on water quality, availability, and cost	Water quality has been improving, but there remain some poorer areas in terms of biological quality in particular. There is also increasing pressure on water use, and water availability may be a constraint on development in some areas in future. Water costs per unit have been rising in recent years, although standing charges have fallen.

Air quality	Local air quality data are limited; where problems exist, they are concentrated in urban centres, and are most closely associated with emissions from transport.	Local air quality has improved in recent years in line with technological advances in road transport engines and emissions. However, rising volumes of road transport and congestion mean that isolated issues remain, concentrated in urban centres.
Climatic Factors	Climate change emission data by source are available. Trend data on transport use, the fastest growing source of emissions, is available. Limited data exist on the generation of renewable energy in the region. Data are also available on the benefits from existing energy efficiency work, at both project and programme level, and on energy costs.	The twin issues of reducing climate change emissions and adapting to unavoidable effects of climate change are highlighted across all policies, from EC to regional level. The issues are also recognised in the RES. Existing trends at UK level show a slight fall in emissions from industry, but a consistent rise in emissions from transport, and these trends are thought similar in the SW. More detailed analysis was undertaken in support of the SSA for the RSS, which highlights the scale of change of approach that would be necessary to reduce emissions, especially in relation to transport (including air travel, where emissions are increasing rapidly). Experience elsewhere suggests that significant savings from more efficient use of energy are possible within business, more so in the context of rising energy prices. Discussion on the most effective ways to address climate change emissions in the context of the Programme is a major focus for the SEA, particularly in the context of the strengthened focus in the finalised NSRF and considering wider developments including changing political emphasis and the publication of the Stern Report.
Material assets	Data on waste arisings by source (domestic, industrial, commercial) are available, as are data on recycling. It is also hoped that data on the costs of waste disposal will be available. Data on the benefits from waste minimisation projects are also being sought.	Volumes of waste generated in the region are of comparable levels to those elsewhere in England. Construction waste forms the largest single component of all waste, and volumes are rising. Volumes of industrial waste are falling slowly. Landfill and recycling are the main method of disposal, and there is increasing pressure on landfill availability. Volumes recycled are rising. Costs of waste disposal are also rising, driven jointly by the need to meet higher standards and increases in landfill tax.
The topics below are not included in SEA guidance, but have been added with the agreement of the steering group as being relevant to the aims and activities of the Programme		
Environmental performance of business	Data are available on ISO14001 registrations, but may not be complete. Other data, for example, on registrations of BS8555 (environmental standard for SMEs) are being investigated.	No trends are available; there is a greater concentration of ISO 14001 registrations in areas with large manufacturing industry bases such as the Midlands, than in the SW. Registrations overall represent a very low proportion of the business base.
Local environmental quality	Information on the role of the environment as a component in local regeneration is being sought.	Case studies illustrate the contribution that environmental actions, for example focused on recycling or physical improvements, can make to local regeneration. Such projects are frequently undertaken as a focus for volunteering, training and work experience, and have can particular benefits in engaging those furthest from the labour market,
Skills, training & awareness		In the longer term, higher levels of understanding of environmental issues and solutions will be critical to delivery of a more sustainable economy.
Evaluations from past EU	Evaluations of past work on environmental integration are available for both Cornwall and the Isles of Scilly, and for	Evaluations highlight the importance of management and administrative actions in ensuring high level aims are translated to delivery at project level.

Programmes	other English regions.	

4. Development of Assessment Criteria

In addition to providing background information for the SEA process, the development of context information helps clarify the most important issues to be addressed in the assessment process. The headline questions are in the table below:

To what extent will the activities proposed under the programme…
…seek to reduce climate change emissions? …include actions to mitigate the existing and predicted effects of climate change?
…encourage greater efficiency in the use of materials, including re-use of waste?
…contribute towards improvements in water quality and management?
…reduce emissions associated with transport?
…ensure developments enhance and fit within both natural and built landscapes, including historic townscapes?
…contribute towards improvements in biodiversity?
…seek to develop sustainable technologies, both as a sector in their own right, and as a tool for improving the wider environmental performance of the programme area?
…improve understanding of environmental issues and solutions among, and appropriate to, all organisations receiving support through the Programmes?

These criteria were then used to assess the detail of proposed activities set out in the Programme.

5. Results of the Assessment Process

Assessments were made at strategic level, against the detail of the Programme, and then of the consistency of approach between the two.

It is important to note that the significance of impacts discussed in the assessment process is relative, rather than absolute. While the Programme represents a significant source of funding in terms of public sector support for economic development, it remains quite limited when compared to GDP overall in the area. Similarly, environmental impacts are assessed on a relative basis: for example, the increase in carbon emissions associated with the development of Newquay Airport will be significant when compared to those from other Programme activities, but will be small in comparison to those from Cornwall and the Isles of Scilly overall.

High Level Assessment

The assessment at strategic level found that the approach described towards environmental integration is strongly positive. There is clear reference to past work and evaluations of its success, but at the same time recognition that the debate surrounding environmental issues has moved on considerably, and that a significantly stronger approach is now required, particularly in relation to emissions of greenhouse gases. There is a high degree of consistency between the aims of this SEA, and the types of activity highlight against each Priority Axis.

There is clear evidence that the Programme has taken on board many recommendations made as part of the SEA process, and this is explicitly acknowledged in the Programme itself.

Priority 1: Innovation and Research & Development

The focus on the development and commercialisation of new technologies clearly recognises the opportunities associated with environmental change, in particular those associated with renewable energy.

However, there is at present less explicit recognition of the need to ensure that new products and services which are supported assess, and if necessary are assisted to improve, their environmental impacts. This will be particularly important in relation to energy use, in the context of the likely focus on reduction of carbon emissions. There are likely to be only quite limited, secondary opportunities to enhance the natural environment under this heading.

The assessments clearly show that impacts including mitigation will be strongly positive, but also that the achievement of those impacts will depend upon the extent to which the structures employed embrace environmental issues and provide appropriate support for the businesses and academic institutions concerned.

The need to assess and, where possible seek to improve, the environmental aspects of new products and services was highlighted as a recommendation and accepted in the SEA Statement.

Priority 2: Enterprise and Investment

Similarly, there is already a strong focus on the development of the environmental sector under this heading, but much less substantive mention of resource use and energy efficiency as issues for all mainstream businesses in the detailed texts. The key point here – as acknowledged in the strategic material - is to ensure that a strong emphasis is placed on business efficiency services which are:

- Targeted at those sectors which will benefit to the greatest extent, such as those with higher energy requirements, or which depend on large volumes of water, for example those in the food and drink sector; and, in a related point,

- Integrated within mainstream services, so that all business advisors are aware off both issues and solutions, and, in line with the above, able to recommend their use as appropriate.

The outcomes of these actions will include both more efficient mainstream business, but also an expanding market for the environmental technology sector. There may also be possibilities of supporting green procurement activities more widely, to further develop the market.

Some elements of this Priority also provide seek to encourage the development of new businesses, or to promote faster growth among those with the potential for rapid expansion. Advice on environmental impacts is often most effective at these stage; it is generally easier to incorporate recommendations while other changes are happening in any case, than to seek to address issues once they are embedded.

A number of activities which provide mainstream support under this Priority have now been grouped under the over-arching heading of Productive Businesses. An additional activity strand has been included which focuses on environmental management in mainstream businesses.

Priority 3: Learning & Skills

The emerging aim from the assessment here are:

- To ensure that environment (and wider sustainable development) issues are incorporated into all mainstream training, as appropriate;

- To seek to make available support for organisations which deliver social and economic benefits through environmental activities, accepting that this wider focus may incur additional costs as well as benefits; and
- To ensure that good practice in terms of environmental management is mainstreamed across all organisations, and that the environmental quality of training facilities complements the content of learning.

Again, these aims are reflected in the detailed environmental material, but are not well integrated into detailed text. Two key gaps are evident.

Firstly, there is only very limited recognition of the potential and actual role of the voluntary sector, including the environmental voluntary sector, in providing opportunities for volunteering, training and work experience, particularly for target groups who require intermediate activity before re-entering the labour market. There are numerous successful examples of such projects, supported by Structural Funds, in other UK regions.

Secondly, there is no commitment to the use of BREEAM – evident across other Priority Axes – in the development or refurbishment of training facilities. This is critical to avoid the possibility of incoherence between the content of training and the site within which it is delivered.

Priority 4: Place Based Regeneration

The majority of actions proposed under this heading relate to transport infrastructure, in particular to road and air infrastructure, and this is by far the largest ERDF Priority in financial terms, accounting for 40% of the total Programme. There are likely to be significant, negative impacts on climate change emissions as a result. Local landscape and biodiversity impacts will depend on the quality of design of specific projects.

Within the discussion at the start of this Priority Axis, there is a commitment to developing all transport infrastructure within a sustainable context. If this is to be delivered in practice, it will be necessary, particularly considering the scale of these activities, to present more clearly the implications in terms of the associated generation of carbon dioxide, and to link these activities to the approaches to carbon neutral discussed elsewhere in the Programme.

As noted in section 1, there have been significant changes in the coverage and content of Priorities 3 and 4. Summary assessments of the revised Priorities are:

Revised Priority 3: Transformational Infrastructure

The development of Newquay Airport is likely to have negative impacts on climate change emissions which are significant relative to those from the Programme as a whole. Local energy and resource use, landscape and biodiversity impacts will depend on the quality of design of specific projects, transport infrastructure and buildings associated with airport development.

The impacts of digital infrastructure, conversely, are likely to be positive in the longer term as they will potentially provide a means of reducing the need to travel.

Infrastructure in support of learning will have positive impacts assuming, as is the case with other parts of the Programme, that BREEAM standards are adopted as a minimum, and that landscape and other impacts are taken into account. It is critical that learning infrastructure is of the highest environmental quality so as to reinforce messages about environmental management among students.

Revised Priority 4: Place Based Regeneration

The activities under this heading are likely to provide positive impacts, as there is commitment to use BREEAM standards as the starting point for consideration of environmental aspects of projects. In particular, area-wide regeneration provides opportunities to re-use and improve existing, distinctive built heritage.

There are also opportunities to involve local communities in the design and delivery of regeneration activities which are not recognised at present.

Overall Programme Assessment

The exercise of mapping SEA questions against the aims of the Programme suggests that the key strategic issues are:

- Encouraging and supporting energy and resource efficiency in business development;
- Ensuring that new products and services are better, in environmental terms, than those they replace;
- Promoting awareness of environmental issues and solutions in training and skills, particularly in sectors with a close relationship to the environment;
- Ensuring take-up of environmental good practice in all aspects of construction, from site selection to building quality and soft landscaping; and,
- Exploiting environmental opportunities to deliver social and economic gains, including those in the social economy as well as in mainstream business and technology; and, in the context of all of these
- Seeking to make a significant contribution towards the aim of reducing greenhouse gas emissions, in line with moves towards a low carbon economy.

The strategic approach to the environment within the Programme is strongly positive. However, the integration of the detailed environmental aims within the Priority Axes is less consistent. In general, the Programme recognises opportunities much more clearly than it describes the need for, and long term benefits of, mainstream economic development moving to a more environmentally aware approach. The aspiration to discuss making the Programme Carbon Neutral is very strongly positive, particularly in the context of including activities under Priority Axis, which are likely to increase CO2 emissions.

However:

> More attention could be paid to opportunities around the development of social enterprises, including those with an environmental theme, in the context of addressing the needs of those furthest from the labour market.
>
> Little attention is paid to the past and possible future contribution of the environment / heritage tourism sector.

Finally, the assessment process highlighted the extent to which impacts could be made positive where mitigation actions were included. At the same time, it emphasises that mitigation requires, in most cases, the involvement of environmental advice and expertise. This is in line with past evaluation findings, and highlights the need for the SEA to consider these issues as proposals for Programme delivery develop in the future.

The overall assessment of the final Programme is more positive, and reflects the fact that the Programme has taken on board many of the suggestions made in the Environmental Report

and through the consultation process.

Impacts Over Time

Impacts from physical projects associated with the Programme are expected (and are intended) to have long term impacts. Similarly, impacts from the generation and reduction of CO2 associated with Programme activities will have long term impacts as they contribute to climate change (albeit at relatively low levels).

It is less easy to determine impacts associated with innovation and business support, and in relation to attitudes towards climate change and carbon management. Depending on the effectiveness of support, there is the potential for the Programme to contribute significantly and positively to the greater understanding among businesses of environmental issues, and therefore to improve performance in the longer term – indeed, this understood to be the aim of including the move towards a low carbon economy as a strategic aim.

As noted, the Approach To ***Carbon Management*** in the Programme has been updated, and is particularly of interest in terms of longer term impacts.

The proposals in the draft OP to which the original assessment material related, were for the Programme as a whole to be made carbon neutral. Consultation responses and further discussion involving environmental partners suggested that this approach would be difficult to deliver robustly without considerable emphasis on monitoring, and that there were also unresolved issues around the boundaries to be used.

For example, a single business development project might work with 40 companies, each of which would develop a new product or service. A detailed approach to carbon neutrality would imply knowledge of the workings of those companies, and of their products, and a decision would need to be taken on what to include or exclude when defining impacts – would impacts be limited to materials used, or would company travel also be relevant?

There is also an issue in terms of timescale, given the central aim of investing in start up businesses. Many new renewable energy developments will deliver benefits over the medium to long term, possibly outwith the life of the Programme, but might use significant energy amounts of energy when in development and pilot stage. How could the impact of such projects be properly assessed?

The questions of the ability of the Programme to purchase offsetting credits, and the ethics of doing so were also concerns for many environmental partners.

For these reasons and others, there was much greater interest across all sectors in changing the Programme to reflect the aim of ***moving towards a low carbon economy***, and this has now been adopted as the Programme approach.

One specific example of how this might work in practice is in relation to innovation – screening new products and services with a view to supporting improvements in their energy demand will help reduce the need for energy, while at the same time enhancing product competitiveness. This type of approach would address both energy efficiency, and exploit new economic opportunities, in line with both UK and EC policy.

At the same time, the ongoing need for better understanding and research relevant to individual projects is also highlighted. In the longer term, the Programme should deliver both higher levels of awareness, as well as a number of case studies of individual projects which demonstrate positive change and act as exemplars.

6. Issues Around the Implementation of the SEA

The draft Programme did not discuss the detail of implementation arrangements. Such arrangements have been recognised in evaluations as being critical in the delivery of environmental integration, and the existing Programmes in the South West have a strong track record on which to build in this respect.

Consideration of Alternatives is a central element of the SEA process. Following discussion, the SEA Steering Group agreed that the most meaningful approach to this issue was to examine alternatives in the context of the depth of environmental integration to be employed within the new Programme. The table overleaf sets out three indicative options which are presented – it would, of course, be possible to combine elements of these.

This approach combines the consideration of alternatives with that taken to mitigation, in that the second and third options seek more explicitly to understand and reduce the environmental impacts of the Programme in line with the assessment findings. The second option represents, to a large extent, the current position. The third option is constructed around moving the Programme towards a more Carbon Neutral position across all its activities. This is in recognition of the importance of the issue of climate change, which emerges clearly from both the environmental context and policy material.

There is not yet clear understanding about what a commitment to carbon neutrality might mean in practice. However, it is important to recognise that a greater focus on carbon is in line with many of the aims of the current European Programmes and RES, including, for example:

- Business efficiency work and the development of renewable energy technologies both address carbon emissions.
- Waste minimisation and the re-use of waste reduce emissions.
- The use of BREEAM standards reduces emissions during the life of buildings.
- The re-use of historic buildings has benefits in terms of embodied carbon.
- The use of local materials reduces emissions from transport, as well as maintaining distinctive built landscapes.

Moves towards Carbon Neutral should therefore be seen as a significant step forward, rather than a complete change of direction, but would still imply a much greater focus on the use of energy in projects than is the case at present.

The rationale for the actions described above remains valid in the context of the aim changing to focus on moving towards a low carbon economy.

Table 6.1: Alternative Approaches to Environmental Integration

Outline of Approach	Delivery implications	Comment
1. Environmental activity is limited to: • that required by prevailing legal standards, i.e. planning permission, emissions control… • Except where the market demands otherwise (e.g. energy saving services)	No staff resource or additional administration required. Application questions would seek only confirmation of legal compliance.	Although possible in theory, this option would be out of step with Commission and UK Government guidance, as well as the stated aims of the SW RES. This is effectively the position which existed in EU Programmes in 1994-99 and earlier.
2. Higher levels of environmental added value are sought on a project by project basis, where these represent the mainstreaming of existing good practice, such as: • BREEAM standards in building projects; • Integration of environmental advice into business development projects, where possible • Projects with a strong environmental theme are supported only where they, individually, generate social and economic outcomes.	A similar staff resource would be required to that under the current Objective 1 and 2 Programmes[3]. As now, application processes would include consideration of environmental issues as part of the decision-making process, and environmental expertise would be integrated into (and developed within) those processes.	This is essentially the current model. Evaluations[4] show that it has been extremely effective in the SW and in other GB regions and nations, and that the staff resource is critical to delivery; programmes which relied only on administrative mechanisms were much less successful in embedding environmental sustainability in projects. The continuation of this approach in the new Programmes would represent consolidation, and possibly a limited progression compared to existing practice, especially if best practice lessons from elsewhere in the UK are replicated in the SW. It is worth noting that current Programmes which relied only on administrative mechanisms and which did not employ staff to work with partners, were considerably less successful in delivering environmental additionality.
3. The environmental impacts of the Programme as a whole are assessed and addressed; the most appropriate way to do this, given the focus of the	In addition to the above, it is likely that some form of mechanism would have to be created to oversee projects which compensate for the carbon emissions of	This approach would represent a considerable step forward for the Programme, and would be in line with the aspirations of the RES to develop economically within environmental limits. It is clear that emissions of CO2 are already higher than is

[3] As a rough guide, the staff resource at present equates to 1 Full Time Equivalent per £100m funding available.
[4] The Effectiveness of EU Structural Funds in Delivering UK Government Environmental Aims, Fraser Associates & the Rural Development Company for Defra; executive summary at http://www.objectiveone.com/O1htm/01-cross-cutting/ES_intro.htm

proposed activities, would be to adopt the aim, if possible, of making the Programmes carbon neutral. In addition to the above activities, this would imply support for projects which explicitly deliver carbon positive activities.	mainstream activity. More detail on what this might mean is provided below.	sustainable; the opportunity exists to seek to develop the Programmes in ways which meet the UK Government's aim of decoupling economic growth from environmental impact.

Monitoring

Evaluation experience shows that it is often difficult to relate the environmental impact of economic development programmes to the activities supported. Accordingly, a range of indicators is suggested which would help monitor the environmental impacts of the Programme. All have been used successfully in EU programmes in the past, and some are currently proposed for use in all new Programmes at UK level.

The indicators below reflect changes made after revision of the Priority Axes in the Programme.

Priority Axis 1: Innovation and Research & Development

- Number of new products and services in the environmental sector (and, if practical, split by numbers in the renewable energy sector)
- Area of brownfield land developed, and its proportion of the total
- Area of buildings constructed or refurbished to BREEAM standards

Priority Axis 2: Enterprise and Investment

- Number of Businesses in the environmental sector supported.
- Number of (mainstream) Businesses undertaking environmental management, and results, in both environmental and economic terms.
- Number of businesses achieving recognised environmental standards.
- Number of mainstream businesses diversifying into environmental activity.

Priority Axis 3: Transformational Infrastructure

- Land developed, with proportions by brownfield / greenfield.
- Area of buildings constructed or refurbished to BREEAM standards, or equivalent.
- Area of historic buildings refurbished.
- Number of organisations with access to ICT / Video Conferencing facilities which reduce the need to travel, and associated measures of those reductions.
- Area of green space improved, accessible to local organisations.

Priority Axis 4: Place Based Regeneration

- Land developed, with proportions by brownfield / greenfield land.
- Area of buildings constructed or refurbished to BREEAM standards, or equivalent.
- Area of historic buildings refurbished.
- Number of organisations with access to ICT / Video Conferencing facilities which reduce the need to travel, and associated measures of those reductions.
- Area of green space improved, accessible to local organisations.

If appropriate:

- Number of environmental social economy businesses assisted
- Training & volunteering placements created with an environmental theme

It is important to note that these indicators do not capture all aspects of environmental integration. For example, the wider aim under the Innovation & Knowledge Priority is to ensure that all new products and services incorporate appropriate environmental advice; this may not easily lend itself to quantification, and so qualitative evaluation may be needed in addition to the above.

In addition, it is important to emphasise that thematic, one-off evaluation work is likely, in some cases, to be more effective that collection of data alone. This is particularly the case in relation to the newer aspects of the Programme, concentrating on the move towards a low carbon economy.

Monitoring Carbon Emissions

There is a great deal of overlap between the activities which are likely to be supported under the Programme, and those set out in UK Government Policy. These include the promotion of energy efficiency in both businesses and buildings, recognised as the most efficient way to reduce carbon emissions, as well as the development of a range of renewable energy sources.

As discussed above, there are at present great difficulties in monitoring carbon emissions at the level of both individual projects and the Programme. Discussion throughout the consultation process tended to raise more issues, rather than address existing ones, and was part of the reason for changing the approach, as outlined above.

Accordingly, a recommendation was made in the SEA Statement that further, continuing research on the costs and benefits of carbon management at the level of individual projects should be undertaken. The aim would be to provide, in the medium term, a series of benchmarks, based on specific case studies, to allow estimates to be made of the carbon emissions associated with different sectors and different types of economic development project.

The ultimate aim of this policy, in line with the UK's wider commitment, is to reduce both the carbon intensity of economic activity (including communications), and also the absolute emissions of carbon from the Programme area. Clearly, these aims are beyond the scope of the Programme, and will require a much wider, concerted approach. It would be appropriate for longer term study to produce and test indicators to measure progress at project level; however, the following are suggested as indicators against which information could be gathered in the short term while that process takes place. Most of these indicators are subsets of, or complementary to, the wider environmental indicators proposed above:

- Number of organisations supported in the renewable / clean energy sector (Note that it is largely the organisations which will be supported, rather than specific developments under the programme, so that indicators based on kW hours generated would understate the Programme impacts).
- Number of new products or services which improve energy efficiency by comparison with their competitors.
- Increase in turnover and employment associated with the above.
- Number of buildings constructed which incorporate energy efficiency and on site renewable energy generation.
- Number of initiatives, including those under Technical Assistance, which seek specifically to improve the capacity of Cornwall and the Isles of Scilly to deliver a low carbon economy.

Although not formally part of this Programme, it will also be important that the content of training and education is considered, so that beneficiaries are encouraged and supported to understand the opportunities and benefits of moves towards a low carbon economy, in connection with the specific sectors in which they work.