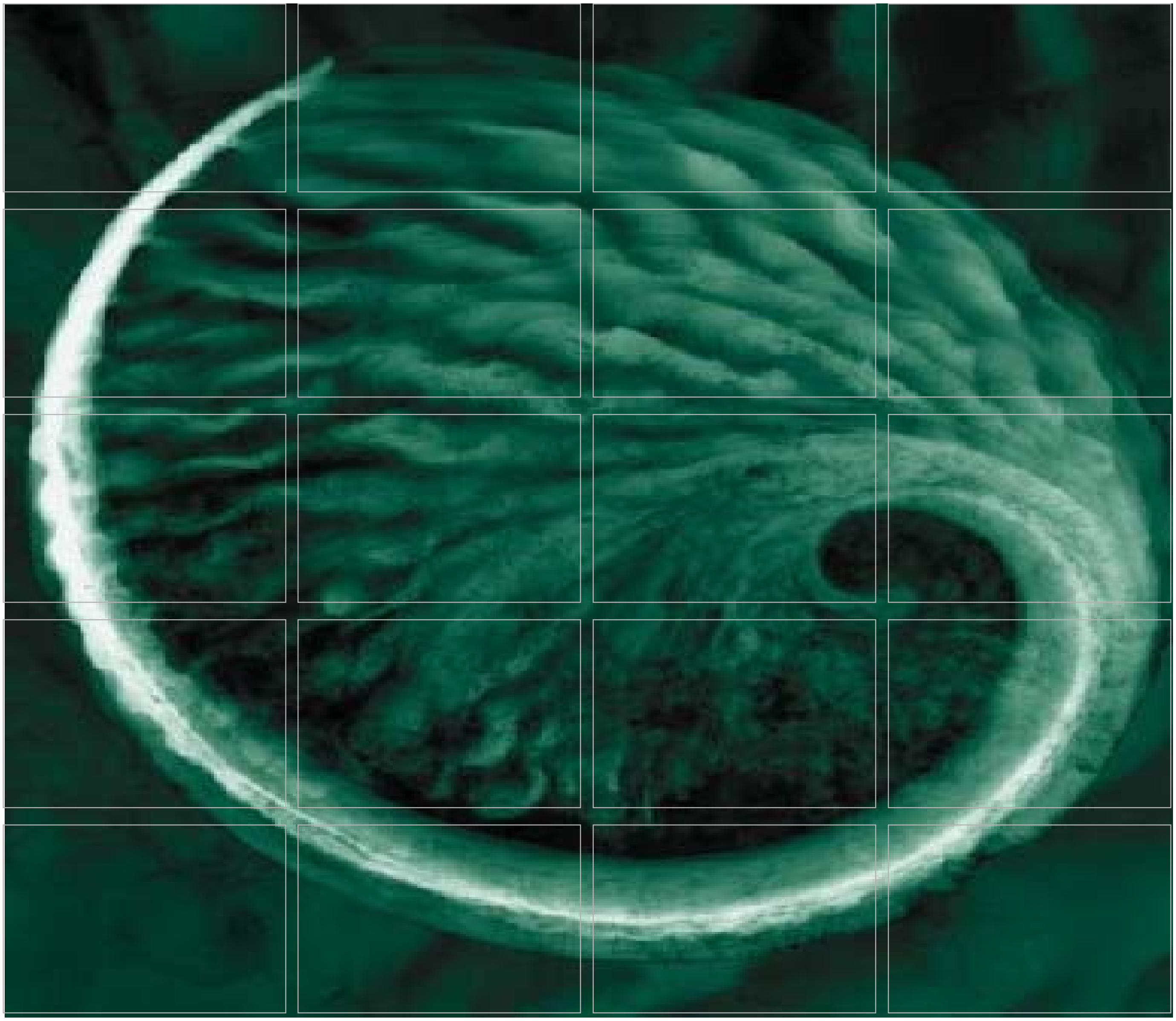

Sustainability Appraisal of the Regional Economic Strategy for South East England

October 2006

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CONTENTS

1 INTRODUCTION

1.1 SUSTAINABILITY REPORT

The Regional Economic Strategy for the South East (RES) – has been prepared by South East of England Regional Development Agency (SEEDA), the statutory body charged with overseeing the economic development of the region.

As part of the process of developing the South East RES, SEEDA commissioned Environmental Resources Management (ERM) to undertake a Strategic Environmental Assessment/Sustainability Appraisal (SEA/SA) of the Strategy [(1)]. Draft Sustainability Appraisal Reports have previously been published on the Consultation Document issued by SEEDA in November 2005 and on the Draft RES issued in April 2006. Within these reports, an appraisal of alternatives was carried out based on the option scenarios presented in the SEEDA report 'sustaining success in a prosperous region: Economic implications of the South East Plan' published in March 2005 prepared by Deloitte.

This report contains an appraisal of the Regional Economic Strategy prepared by SEEDA.

The Appraisal has followed an iterative process, providing an independent view of the likely implications of proposals and policies which could then be taken into consideration throughout the development of the South East Regional Economic Strategy. The findings of this appraisal, along with the responses received through public consultation, have been used to inform the development and refinement of the RES prior to its completion and submission to the Government.

The report is structured as follows:

Section 2: sets out the context to the Sustainability Appraisal, and information on the methodology that has been used for this study.
Section 3 provides information on the Appraisal Scope, i.e. on what issues the appraisal is investigating, and why.
Section 4 presents the Sustainability Appraisal of the RES
Section 5 outlines issues concerning Implementation and Monitoring
Section 6 presents the Conclusions of the Appraisal of the RES and the remaining stages in the SEA/SA process.

In addition, the following annexes have been prepared as an integral part of the Sustainability Appraisal:

(1) For the purposes of this Report, the Strategic Environmental Assessment/Sustainability Appraisal process will be known as the SEA/SA or the 'Sustainability Appraisal' (or simply 'Appraisal').

Annex A:	Review of Relevant Plans, Policies and Strategies
Annex B:	Review of Baseline Economic, Social and Environmental Conditions in the Region
Annex C:	Detailed Appraisal Outputs
Annex D:	Detailed Analysis of Consultation Responses on the SA.
Annex E:	SEA QA/QC Checklist
Annex F:	Detailed Assessment of Cumulative Effects

1.2 ENVIRONMENTAL REPORT

In line with Government guidance, this Appraisal aims to meet the requirements of Strategic Environmental Assessment (SEA) within the wider remit of a Sustainability Appraisal, thereby covering economic, social and environmental issues in an integrated way. This report therefore does not contain a separate Environmental Report dealing with issues pertaining solely to an SEA.

In the absence of a stand-alone Environmental Report, guidance suggests that a table should be included in the Sustainability Appraisal Report signposting the components of the report which would make up the Environmental Report. ***Table 1.1*** below presents the relevant information.

Table 1.1 Environmental Report - Key Components

Key Components	Report Location
The Environmental Report will detail the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and geographical scope of the plan or programme, are identified, described and evaluated. The information to be given is (Art. 5 and Annex I):	The information required of an Environmental Report will be provided in each report of the Sustainability Appraisal
a) An outline of the contents, main objectives of the plan or programme, and relationship with other relevant plans and programmes;	Scoping Report and Annex B of the Sustainability Appraisal Reports
b) The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme;	Scoping Report and Annex A of the Sustainability Appraisal Reports
c) The environmental characteristics of areas likely to be significantly affected;	Scoping Report and Annex B of the Sustainability Appraisal Reports - Section 4 of this report
d) Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC.;	Scoping Report and Annex B of the Sustainability Appraisal Reports
e) The environmental protection objectives, established at international, Community or national level, which are	Scoping Report and Annex A of the Sustainability

	relevant to the plan or programme and the way those objectives and any environmental, considerations have been taken into account during its preparation;	Appraisal Reports
f)	The likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors. (Footnote: These effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects);	Scoping Report and Sustainability Appraisal Reports – Sections 4.6 and 4.8 of this report
g)	The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme;	Sustainability Appraisal Reports – Section 4.9 of this report.
h)	An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information;	Sustainability Appraisal Reports and Section 4 of this report
i)	a description of measures envisaged concerning monitoring in accordance with Art. 10;	Sustainability Appraisal Reports and Section 5 of this report
j)	a non-technical summary of the information provided under the above headings	The SEEDA website
The report must 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 to avoid duplication of the assessment (Art. 5.2)		

2 BACKGROUND AND METHODOLOGY

2.1 THE SOUTH EAST RES

2.1.1 What is the South East Regional Economic Strategy?

The South East Regional Economic Strategy (RES) has been prepared by SEEDA, the Regional Development Agency for the South East.

In accordance with Section 3 of the DTI's Guidance to RDA on Regional Strategies Regional Economic Strategies need to demonstrate the following attributes:

'The Regional Economic Strategy must have a clear focus on economic development but the Strategy and action to implement it must be based on the principle of sustainable development. The RES should include a full sustainability appraisal, informed by the Regional Sustainable Development Framework or the equivalent in the region, in order to identify the contribution that it will make to sustainable development, including showing how it will foster:

- *high and stable levels of economic growth and employment;*
- *social progress which recognises the needs of everyone (including all social and ethnic groups);*
- *effective protection of the environment and prudent use of natural resources; and*
- *integration of economic, social and environmental objectives which will contribute to the development of sustainable communities'.*

2.2 WHAT DOES THE RES DO?

The Regional Development Agencies (RDAs) have been provided with guidance from the DTI as to what the objectives and scope of a RES should be, this notes that:

'The fundamental purpose of the RES is to improve economic performance and enhance the region's competitiveness, addressing market failures which prevent sustainable economic development, regeneration and business growth in the region'

Whilst the primary focus of the RES is economic, the Guidance notes the requirements for such economic development to be sustainable and to be aligned with the Regional Sustainable Development Framework, which underpins all regional strategies (in the case of the South East this is the Integrated Regional Framework or IRF).

2.3 *THE VISION OF THE REGIONAL ECONOMIC STRATEGY RES*

The primary vision of the RES is that by 2016 '*the South East will be a world class region achieving sustainable prosperity*'. Three core values which under pin and are embedded in the Strategy are:

- Building on excellence for global competitiveness;
- Investing in potential to increase performance;
- Safeguarding quality of life as a competitive advantage.

The RES is structured according to the three critical objectives for the region.

1. Global competitiveness
2. Smart growth
3. Sustainable prosperity

Through each of these drivers, the RES identifies key objectives and the tasks which will have to be completed to fulfil these objectives.

The RES is a region-wide strategy for economic development. Integral to this, however, is recognition of the socio-economic disparities which exist within the region. Three key areas have been identified, as presented in ***Figure 2.1,*** these being: the Inner South East, Rural South East and Coastal South East. Specific issues are raised in relation to these areas, within the context of the wider framework of the RES.

- The Inner South East: tackling the significant pockets of deprivation which exist and addressing the historic under-investment in infrastructure (especially public transport) that could affect the prospects of the area. The RES also seeks to capitalise on both existing and potential concentrations of world class companies, clusters and high-tech specialisations and the high skills levels of the resident workforce.

- The Rural South East: addressing economic inactivity demographic change, access to housing and services and access to public transport and building on the opportunities offered by improved ICT connectivity, changes to agricultural investment programmes and the considerable assets of the region in terms of landscapes, the natural environment and local products.

- The Coastal South East: tackling issues of low productivity, access to public transport, low skills, dependence on traditional industries and the public sector, older demographic profile and concentrated pockets of deprivation whilst realising the potential of the coast and the cities and towns in the area as catalysts for innovation and economic and social regeneration.

In identifying these three areas, the RES addresses the particular issues which arise in relation to the primary objectives and the tasks outlined to deliver them. In so doing, the RES is offering a framework through which its vision of sustainable prosperity will be delivered region-wide through ensuring the three zones are targeted individually, in terms of key needs.

The Vision of the RES is presented in ***Box 2.1***.

Box 2.1 The Vision of the RES

The vision for the Regional Economic Strategy 2006 – 2016 is as follows:

By 2016 the South East will be a world class region achieving sustainable prosperity

Informing this vision are three values which run through the Strategy:
- Building on excellence for global competitiveness
- Investing in potential to lift under performance
- Safeguarding quality of life as a competitive advantage

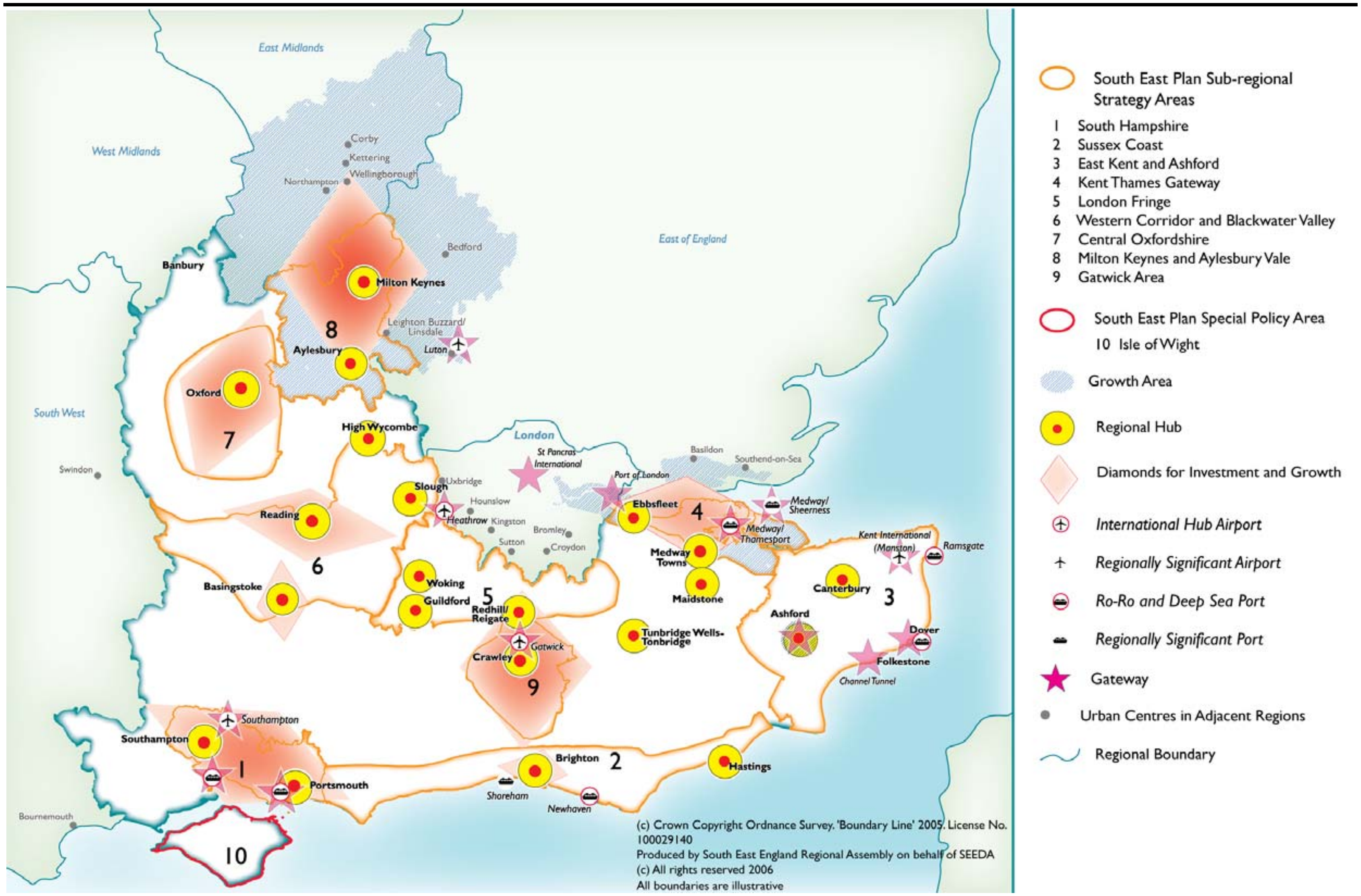
Three headline targets are proposed. Progress towards all three of these in parallel will provide evidence of overall progress against the vision:
- Achieve an average annual increase in GVA per capita of at least 3%
- Increase productivity per worker by an average 2.4% annually, from £39,000 in 2005 to at least £50,000 by 2016 (in constant prices).
- Reduce the rate of increase in the region's ecological footprint (from 6.3 global hectares per capita in 2003, currently increasing at 1.1% per capita per annum), stabilise it and seek to reduce it by 2016

The Strategy is structured around three interlinked objectives:
- Global competitiveness: achieving it
- Smart growth: spreading the benefits of competitiveness
- Sustainable prosperity: ensuring that competitiveness is consistent with the principles of sustainable development.

For each of these objectives, a set of measurable targets is identified that demonstrate progress towards the goal. A context is provided for each objective or its components, with actions organised to demonstrate their contribution to individual targets. Each action is accompanied by a brief rationale, and a proposed lead organisation. Many of these actions are continuations of existing activities which are already embedded in the work of regional partners, but which need greater coherence, clearer focus or renewed impetus.

Source: Regional Economic Strategy for South East England, 2006

Figure 2.1 Economic Zones Identified Within the RES



The RES also identifies eight transformational actions that it considers have the potential to have 'a particular impact across the breadth of the Strategy'. These are:

- **100% Next Generation Broadband Coverage** - to improve business efficiency and transform the way people work and learn.
- **Science and Innovation Campuses** - to establish new world class research facilities in the South East.
- **Regional Infrastructure Fund** - to harness new sources of funding for infrastructure investment.
- **Raising Economic Activity Rates -** by addressing barriers to employment and increasing incentives to work
- **Skills Escalator -** to ensure that people at all skills levels are continually equipped to progress the labour market.
- **Global Leadership in Environmental Technologies** – to exploit the business opportunities created by reducing carbon emissions and waste generation.
- **Education-Led Regeneration** – to harness the catalytic effect of new Further and Higher Education facilities on releasing untapped potential
- **Making the Most of 2012** – to ensure that the 2012 Olympic and Paralympics Games leave a positive and lasting legacy for the South East.

2.4 *THE EVIDENCE BASE AND ECONOMIC CONTEXT*

By any conventional economic measures, the South East is one of the UK's most successful regions. Comparing economic performance over the period 1997 – 2003 against other UK regions, the South East achieved:

- The fastest growth in Gross Value Added (GVA) per head at 35.3%
- The second highest absolute level of GVA per head at £18,400
- The highest economic activity rate, averaging 82.9%
- The lowest unemployment rate, averaging 3.8%
- The second highest household income per head, at almost £14,300 [(1)].

The South East's strong performance in national terms puts it firmly among the most prosperous regions globally. But its performance is not outstanding against these comparator regions: it is nominally 31st out of 40 top performing regions (based on workplace data, which may understate the performance of the South East given the degree of outward commuting to London).

Strong headline economic growth masks substantial regional variations. GVA per head in Berkshire was 60% higher than the national average in 2002, while in the Isle of Wight it was 39% below the national average. Even though disparities in economic growth between South East county areas have

(1) NB before taking into account regional variations in costs of living

narrowed slightly since 1999, they remain larger than disparities between the 9 English regions [1].

Productivity and labour market indicators follow broadly similar patterns. Between 1997 and 2003, the South East saw a higher rate of growth in output per hour worked than any other UK region, and was second only to London in terms of absolute productivity levels. Internationally the region's performance is less impressive, being more than 50% below the best performing European regions. Performance is again mixed within the region, with Kent and East Sussex lagging behind the UK average in terms of both absolute levels and average annual growth rates. Across the region, current trends and projections point towards an increasingly polarised labour market in the South East, with a strong and growing proportion of both high-end and basic occupations alongside a significant decline in intermediate occupations.

With high economic activity rates, high vacancy rates and low unemployment the South East has one of the tightest labour markets in the UK, and indeed is one of the highest performing regions globally in this regard. However, almost 20% of the region's potential labour force are economically inactive. Within this group, almost 250,000 people report themselves as wanting to work. As a group, the economically inactive tend to be concentrated in the Eastern part of the region, along the coast and in the region's largest urban areas. Ethnicity is also a factor: black residents are 1.5 times more likely to be economically inactive than white residents, and Asian residents almost twice as likely to be economically inactive.

As the strategy notes:

"Two consistent themes run through the evidence base. Firstly, the South East is a region that in terms of averages consistently outperforms the UK average on wide ranging measures of economic wellbeing. Secondly, it is clear that averages can be as misleading within regions as between them".

2.5 *COMMITMENT TO SUSTAINABLE DEVELOPMENT*

The RES recognises the importance of sustainable development and states that 'Sustainable development lies at the heart of the Regional Economic Strategy and runs through it as a continuous unifying thread …' (RES, page 7). It recognises sustainability as one of the major challenges facing the region and also recognised that quality of life is an integral part of the region's competitive advantage. Sustainability is also critical to the achievement of smart growth. The target of tackling the region's ecological footprint serves to underline the central role of sustainable development into the Strategy.

(1) Detailed analysis of the region's performance are provided in the Evidence Base for the RES prepared by SEEDA

Table 2.1 contains an analysis of how the RES could contribute to the four key strands of action identified within the UK's Sustainable Development Strategy 'Securing the Future' launched in 2005.

Table 2.1 Priorities Under Securing Our Future and the RES

Securing Our Future - Priorities	**RES Approach and Key Issues**
Sustainable Consumption and Production	Boosting competitiveness and minimising waste. The region's strong research base and good representation of businesses in both the product design and environmental technology sectors will enable it to address and take advantage of the opportunities arising from sustainable consumption and production. The target in the RES of reducing the rate of increase of the region's ecological footprint, stabilise and seek to reduce it by 2016, recognises the need for a significant shift in resource consumption and increased levels of resource efficiency.
Climate change and energy	Acknowledging the importance of the issue of climate change upon the region; minimising the region's contribution to and creating adaptation measures for it. Addressing the potential energy gap for the region and both creating and marketing innovative solutions to future energy provision
Natural Resource Protection and Environmental Enhancement	Recognising that '*the quality of the natural and built environment, together with the region's outstanding cultural assets, is a major element in the quality of life in the South East*'; capitalising upon the value which the environment has in attracting businesses to the region; recognising the issue of water resources and the need for careful planning
Sustainable Communities	Acknowledging that poverty coexists alongside economic wealth; addressing the need for equality and the disadvantages which sections of society encounter; emphasising the importance of addressing health. The commitment to increasing rates of economic participation within the RES also recognises the need to address the issues affecting the ability to work such as social exclusion and poor health status. There is recognition of the importance of the community and voluntary sector within the region.

2.6 *SUSTAINABILITY APPRAISAL*

2.6.1 *What is Sustainability Appraisal?*

This Appraisal aims to predict and assess the economic, social and environmental effects which are likely to arise from the South East RES. The Appraisal, therefore, integrates two processes:

- *Sustainability Appraisal* (SA), a process for understanding whether policies, strategies or plans promote sustainable development, and for improving those policies etc to deliver more sustainable outcomes.

- *Strategic Environmental Assessment* (SEA), a process for assessing and mitigating the negative environmental impacts of specific plans and programmes. SEA is required for Regional Spatial Strategies under EU *Directive 2001/42*, transposed into English law by the *Environmental Assessment of Plans and Programmes Regulations 2004*.

The Appraisal process has been designed to meet the statutory requirements applying to both SA and SEA, as explained in official guidance provided by Government. In particular, the appraisal process has been developed in reference to the Government's Consultation Paper on *Sustainability Appraisal of Regional Spatial Strategies and Local Development Frameworks* (September 2004) and its '*A Practical Guide to the Strategic Environmental Assessment Directive*' published in September 2005.

In accordance with best practice and after consultation with the Steering Group, this Appraisal has also taken into account key proofing guidance in respect of Health Impact Assessment (HIA) [(1))] , Rural Proofing [(2),] 'age proofing' [(3)] and 'future proofing' [(4) .] This Appraisal has also reviewed the RES from an Equalities perspective.

Assessment of Cumulative Impacts

Assessment of cumulative impacts is a key component of SA/SEA. The Appraisal team has developed cumulative impact assessment of the RES with the assistance of SEEDA and the SEA/SA Steering Group. This assessment is presented in ***Section 4*** and ***Annex F*** of this report.

Appropriate Assessment

The Department for Communities and Local Government (DCLG) has issued draft guidance on 'Planning for the Protection of European Sites: Appropriate

(1) HIA is a decision-making tool that takes account of the potential effects of a proposal on the health of its target population. It aims to improve the health of communities and individuals; reduce health inequalities, work toward sustainable development; promote fairness and equality for all, target disadvantaged and marginalized groups; and encourage participation of all affected.
(2) Rural Proofing is a commitment by the Government to ensure that all its domestic policies take account of rural circumstances and needs. This means that as policies are developed, policy makers should systematically consider whether their policy is likely to have a different impact in rural areas, because of rural circumstances and needs; assess the significant impacts; adjust the policy where necessary with solutions to meet rural needs and circumstances.
(3) An age proofing toolkit has been published by Age Concern, and other partners, to ensure that the potential effects of a proposal, policy or framework on the older/elderly sections of the community; recognising the growing, ageing characteristic of the population
(4) Future Proofing is a process, which seeks to ensure that the policy development process has taken full account of potential longer-term change. It is designed to make plans more aware of opportunities, provide early notice of new challenges, help them manage change and manage risk.

Assessment' [1]. This covers the assessment of sites classified as Special Areas of Conservation, (SACs), Special Protection Areas (SPAs) and Offshore Marine Sites (OMS). This guidance relates specifically to Regional Spatial Strategies and Local Development Documents. No mention of other regional strategies is made in terms of specific guidance. No Appropriate assessment of this strategy has therefore been made. It will be necessary however for actions to be implemented as part of the RES to take account of the Appropriate Assessments of both the South East Plan and LDDs.

2.6.2 *Sustainability Appraisal Process*

Sustainability Appraisal is an iterative process that identifies and reports on the likely significant effects of the plan, and the extent to which implementation of the plan will support the social, environmental and economic objectives by which sustainable development can be defined. As such, the assessment should:

- take a long term view of whether and how the area covered by the Strategy is expected to develop;
- provide a mechanism for ensuring that sustainability objectives are translated into Strategic Programmes and plans;
- reflect global, national, regional and local concerns;
- provide an audit trail of how the Strategy has been revised to take into account the findings of the appraisal; and
- form an integral part of all stages – including the earliest possible stages – of Strategy preparation.

Table 2.2, below, outlines the key requirements of the SEA Directive and how they have been addressed through this Sustainability Appraisal process.

Table 2.2 Summary of the Requirements of the SEA Directive

Requirements	**Where covered in SA process (Stage)**
Preparation of an environmental report in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and geographical scope of the plan or programme, are identified, described and evaluated. The information to be given is (Art. 5 and Annex I):	The information required of an Environmental Report will be provided in each report of the Sustainability Appraisal
k) An outline of the contents, main objectives of the plan or programme, and relationship with other relevant plans and programmes;	Scoping/Sustainability Appraisal Reports – see Annex B of this report.
l) The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme;	Scoping/Sustainability Appraisal Reports – see Annex A of this report.

(1) Planning for the Protection of European Sites: Appropriate Assessment. Guidance for Regional Spatial Strategies and Local Development Documents (Draft for Consultation, DCLG August 2006)

Requirements	Where covered in SA process (Stage)
m) The environmental characteristics of areas likely to be significantly affected;	Scoping/Sustainability Appraisal Reports – see Section 4.6 of this report.
n) Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC.;	Scoping/Sustainability Appraisal Reports – see Annex B of this report.
o) The environmental protection objectives, established at international, Community or national level, which are relevant to the plan or programme and the way those objectives and any environmental, considerations have been taken into account during its preparation;	Scoping/Sustainability Appraisal Reports - – see Annex A of this report.
p) The likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors. (Footnote: These effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects);	Scoping/Sustainability Appraisal Reports – see Sections 4.6 and 4.8 of this report.
q) The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme;	Sustainability Appraisal Reports – see Section 4.9 of this report.
r) An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information;	Sustainability Appraisal Reports – see Section 4.2 of this report
s) a description of measures envisaged concerning monitoring in accordance with Art. 10;	Sustainability Appraisal Reports – see Section 5.3 of this report
t) a non-technical summary of the information provided under the above headings	Sustainability Appraisal Reports – see SEEDA website.
The report must 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 to avoid duplication of the assessment (Art. 5.2)	Sustainability Appraisal Reports
Consultation: • authorities with environmental responsibility, when deciding on the scope and level of detail of the information which must be included in the environmental report (Art. 5.4)	See Scoping Report on SEEDA website
• authorities with environmental responsibility 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 (Art. 6.1, 6.2)	Sustainability Appraisal Reports – see Section 2.7 and Annex D of this report

Requirements	Where covered in SA process (Stage)
• other EU Member States, where the implementation of the plan or programme is likely to have significant effects on the environment of that country (Art. 7).	Not Applicable
Taking the environmental report and the results of the consultations into account in decision-making (Art. 8)	Final Sustainability Appraisal Report
Provision of information on the decision: When the plan or programme is adopted, the public and any countries consulted under Art.7 must be informed and the following made available to those so informed: • the plan or programme as adopted • a statement summarising how environmental considerations have been integrated into the plan or programme and how the environmental report of Article 5, the opinions expressed pursuant to Article 6 and the results of consultations entered into pursuant to Art. 7 have been taken into account in accordance with Art. 8, and the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with; and • the measures decided concerning monitoring (Art. 9)	See SEEDA website.
Monitoring of the significant environmental effects of the plan's or programme's implementation (Art. 10)	Sustainability Appraisal Reports – see Section 5.3 of this report
Quality Assurance: environmental reports should be of a sufficient standard to meet the requirements of the SEA Directive	Sustainability Appraisal Reports – see Annex E of this report.

2.6.3 Previous Stages of the Sustainability Appraisal

As fulfils current Government Guidance, a Scoping Report was published for consultation. A Draft Sustainability Report was published on the Consultation Document, this being the subject of a twelve week public consultation period. A Draft SA Report was then issued with the Draft RES. In preparing this report consultation responses on the SA and the Draft RES have been taken into account. The consultation responses on the SA and the response of the appraisal to these comments are presented in ***Section 2.7*** and ***Annex D*** of this report.

This Report appraises the Final RES and comprises the components of an Environmental Report under the SEA Directive, whilst also addressing wider social and economic considerations.

2.6.4 Appraisal Team

This appraisal is being carried out by Environmental Resources Management (ERM) on behalf of SEEDA.

To assist the SA process, SEEDA established a Steering Group to assist in informing the undertaking of the SEA/SA of the RES. The Steering Group includes representatives of regional stakeholders, including Statutory Agencies.

2.6.5 *What Difference has the Appraisal made?*

Key findings from the appraisal process to date have been shared with those developing the RES at both regional and sub-regional levels. This has continued during the process of developing the Final Sustainability Appraisal.

2.6.6 *SA/SEA Steering Group*

At the outset of the SA/SEA process, SEEDA established a Steering Group comprising SEEDA officers and representatives of external partners. The purpose was to advise SEEDA and its consultants ERM on the management of the appraisal process and also to ensure close liaison with relevant stakeholders.

In addition to the statutory consultees for the SEA process – the Environment Agency, English Nature, the Countryside Agency and English Heritage – SEEDA invited representatives from the Government Office, the Regional Assembly, the Public Health South East Group, the South East Forum for Sustainability and the Sussex Economic Partnership. This provided a broad range of knowledge and experience from different backgrounds to ensure that the economic, social and environmental aspects of sustainable development were covered.

The Steering Group has remained engaged throughout the consultations on the SA/SEA and the RES itself. As part of their advice on the appraisal process and commenting on the draft content of the strategy, members of the Group have encouraged and supported SEEDA in adopting new approaches to sustainable prosperity in the RES, including the use of the REEIO model and development of an Index of Sustainable Economic Welfare for the region.

Implementation and monitoring of the RES has been one of the key areas of interest for Steering Group members. The forthcoming Implementation Plan for the RES, which will itself be subject to the SA/SEA process, provides an opportunity for continued engagement with the Steering Group.

2.6.7 *Integrating the outputs from the SA/SEA process into the RES*

In order to support and advise its core RES team from the outset, SEEDA established a RES Policy Group comprising officers from across the organisation and also a RES Leadership Group with senior representation from external partners. The issues and feedback from the SA/SEA process were incorporated into meetings and workshops of these groups to assist the integration of the SA/SEA into the RES development process.

Comments received from the public consultations on the first RES Consultation Document and the draft SA/SEA were reviewed and discussed by the Steering Group on 22nd March. The outputs from this meeting were fed into the preparation of the Draft RES, which was launched for a further public consultation on 7th April.

As part of this consultation process a further workshop for the Steering Group was held on 24th May and included discussion on the likely significant impacts and cumulative effects of the Draft RES. The scheduling of this event enabled timely feedback to the RES Policy Group on 26th May, at which the RES authors were engaged in reviewing the issues emerging from the public consultation and other stakeholder meetings.

Following the end of the public consultation on 30th June, summaries of the RES consultation responses and further revisions of the RES were forwarded to ERM to enable them to assess how the Strategy was developing in the light of comments from the Steering Group and other consultees.

2.6.8 How the findings of the SA/SEA will be taken forward

This report of the SA/SEA is to be published alongside the RES. It includes a series of recommendations, including a number related to the implementation and monitoring of the Strategy.

These will be invaluable in informing the development of the detailed Implementation Plan for the RES and will be a key reference for the RES Policy Group in taking the process forward in late 2006. The Implementation Plan will itself be the subject of a separate SA/SEA, which provides the opportunity to continue the positive engagement and commitment of the Steering Group through the next stages of the RES.

The current review of the RES and the integral SA/SEA have served to strengthen the region's understanding of the challenges and potential solutions to achieving sustainable economic prosperity for South East England. This has provided a firm basis on which to develop the detailed actions and monitoring to ensure that the Strategy is successfully implemented.

Box 2.2 identifies key meetings with SEEDA, the Steering Group and other Stakeholders during the SA process.

Box 2.2 *Key Meetings during the SA Process*

•	29.09.2005	Meeting of the SA/SEA Steering Group
•	31.10.2005	Meeting with SEEDA RES Strategy Team
•	01.11.2005	Meeting of the SA/SEA Steering Group
•	01.12.2005	Meeting of the SA/SEA Steering Group
•	02.02.2006	Meeting of the SA/SEA Steering Group
•	27.02.2006	Meeting with SEEDA RES Strategy Team
•	02.03.2006	REEIO Workshop with RES Team and Regional Stakeholders
•	10.03.2006	Equalities Impact Assessment Workshop with Regional Stakeholders
•	22.03.2006	Meeting of the SA/SEA Steering Group
•	24.05.2006	Meeting of the SA.SEA Steering Group
•	07.09.2006	Meeting with SEEDA RES Strategy Team

2.7 *CONSULTATION REPONSES ON THE SUSTAINABILITY APPRAISAL*

As part of the overall consultation on the review of the RES, consultation responses have been received which relate specifically to the Draft Sustainability Appraisal Report issued to accompany the Draft RES. The comments from the statutory agencies and other respondents have been collated and are outlined below in respect of the generic issues covering process and structure and specific issues which are addressed individually or collectively, where they relate to key issues.

The key issues raised in consultation responses are set out in ***Section 2.7.1*** and ***Table 2.3*** below. A detailed analysis of the consultation responses is presented in ***Annex D*** of this report.

The review of consultation responses to the RES relating to issues covered by the IRF and how, crucially, the RES takes account of those responses have been key components of the appraisal.

2.7.1 *Overarching Comments*

The following overarching issues relate to the process and structure of the Appraisal as raised by consultation respondents include:

- **Content of the Sustainability Appraisal and the Data Used**

  Consultees have submitted new data and evidence that is relevant to the requirements of both SEA and Sustainability Appraisal. This information has been used by the appraisal team and has also enabled the assessment of the RES, the assessment of Significant Effects and the assessment of Cumulative Effects to be reviewed and updated along with ***Annexes A*** and ***B*** of this report.

- **The Sustainability Appraisal Process and its Influence on the RES.**

  Consultees were keen to see clear evidence of how the appraisal has been taken into account in the RES. The SA team has worked closely with the RES team throughout the development of the strategy. This has influenced both the RES Evidence Base and the RES itself. Most notably in the way in which sustainable development has been positioned by SEEDA at the core of the Strategy. A more detailed analysis of the effects of the SA on the RES is presented in ***Section 2.6.5*** of this report.

- **The Appraisal Framework/IRF Objectives**

  Consultees have submitted responses suggesting modifications to both IRF objectives and appraisal questions. To ensure the overall consistency of the appraisal of the draft and final strategy documents no further changes have been made to the appraisal framework used by the SA. The feedback from consultees on both IRF objectives and appraisal questions should be used to help inform the development of the IRF and the construction of future appraisal frameworks for appraisals of other regional strategies.

- **The Influence of the Sustainability Appraisal on the Draft RES**

  To be based on SEEDA 'audit trail' document.

- **The Need for a Clear Implementation Plan**

  A number of consultation responses have expressed the desire for there to be a clear Implementation Plan for the RES which can demonstrate how the actions in the RES will be taken forward, how targets will be delivered and how negative impacts on IRF objectives will be mitigated.

  The RES contained a commitment for producing an Implementation Plan with a draft of the plan being prepared by December 2006 and a full version being published in April 2007. This plan will also be the subject of a Sustainability Appraisal.

- **Alignment of the RES and SA Processes**

  Consultees have noted the alignment of the two processes and feel that this is positive.

- **Use of the REEIO Model**

  Consultees were keen that the REEIO Model should be used to analyse the interrelationships between the economy and the environment in the region. They were also keen to see evidence of the modelling and its impact on the RES and the SA report.

The RES Evidence Base contains details of the work carried out to date by SEEDA with REEIO. At this stage the policies and actions in the RES have not been analysed using the model. One of the recommendations of the SA (see ***Section 6*** of this report) is that REEIO should be used as an integral part of the ongoing development and implementation of the RES and should be a core component of the next RES Review.

- **Sustainable Consumption and Production**

  Consultees are keen to see this key aspect of the UK's Sustainable Development Strategy more clearly brought out in the SA in terms of an assessment of how the region is going to take forward this issue, and in particular, how it will influence key contributions to driving changes in behaviour such as Central Government and the Regulators.

  This issue is an extremely important one for the SA. This report recognises the commitment made to stabilisation and reduction of the region's ecological footprint made in the RES along with recognition of the need to change behaviour. It also focuses attention on the need for the RES Implementation Plan to demonstrate concrete actions that are likely to produce the requisite changes in behaviour that will improve resource efficiency and drive down resource consumption (see ***Section 6*** of this report).

- **Cumulative Effects**

  Whilst welcoming the inclusion of a section on cumulative effects in the SA of the Draft RES, consultees were keen to see more details on the potential cumulative effects of the RES in the SA report. ***Section 4.8*** and ***Annex F*** contain an updated assessment of the potential cumulative effects of the RES.

- **Global Trade**

  Consultees have highlighted that the SA of the Draft RES did not comment on the sustainability implications of the global trade dimensions of the RES.

  This is part of the IRF and is also an integral part of the UK's Sustainable Development Strategy. This SA report seeks to address this issue both in terms of its likely effects on the region's attainment of its target of stabilisation and reduction of its ecological footprint and in terms of its overall model for growth and meeting the challenge of Climate Change (see ***Sections 4*** and ***6*** of this report).

2.7.2 Detailed Analysis of Consultation Responses

An analysis of consultation responses on the Sustainability Appraisals of the Draft RES is presented in ***Table 2.3*** below.

Table 2.3 Analysis Consultation Responses

	Responses to the Issues Raised
Comments on Appraisal Process and Questions	The SA has reviewed and amended the Appraisal Framework during the appraisal process. At this stage it was not felt to be appropriate to make further changes for the sake of consistency. However, the responses received from consultees at this stage should be used in the review of the IRF and the development of future SA frameworks in the region.
Report Structure: SA/SEA	This report has taken account of the responses received in terms of the structure and clarity of the presentation of the SA.
Level of Modelling	This report comments on the work on REEIO and ISEW carried out by SEEDA and also recommends that this work be developed further in the future.
Conflict between Economic and Sustainable Development.	The SA report has taken the responses on this topic into account in its analysis of the RES at this stage and in the formulation of its recommendations and conclusions.
Appraisal of Alternatives	The SA report had reviewed the appraisal of alternative and the further information provided by the RES Evidence Base on this topic. It has also presented in more detail the likely implications for sustainable development of the region for each of the Alternatives in Section 4 and Annex C of the SA report.
Evaluation of Environmental Effects	The report provides more analysis of both potential Significant and Cumulative effects of the RES.
Decision Making	The Report provides information on how the SA has influence the development of the RES.
Monitoring	Significant Effect indicators have been developed for the RES and the report provides information on the monitoring requirements for the implementation of the RES in terms of sustainable development impacts in terms of a monitoring framework.
Comments on Baseline Data	Annex B of the SA has been amended to reflect the new evidence and comments on the baseline received from consultees and other sources.

3 APPRAISAL SCOPE

3.1 INTRODUCTION

In establishing a clear scope for the Sustainability Appraisal of the Draft RES, and in compliance with statutory requirements, it is first necessary to review and develop an understanding of:

1. possible appraisal objectives;
2. other plans, policies and strategies of relevance to the RES;
3. baseline information on environmental, social and economic conditions in the region; and
4. significant sustainability issues facing the region.

This appraisal has adhered to the objectives of the IRF throughout the implementation of the process.

3.2 CORE SUSTAINABILITY OBJECTIVES – THE INTEGRATED REGIONAL FRAMEWORK

The Integrated Regional Framework (IRF) for South East England establishes a shared regional vision of sustainable development, and a set of objectives, indicators and targets that map out how the region should deliver economic development that benefits people and protects and improves the environment. The IRF was developed by a working group of key regional partners, including the Regional Assembly, Government Office for the South East, SEEDA and others.

It was agreed by the Steering Group for the SA and Appraisal team that the IRF, therefore, provided the key set of objectives on which to base the Sustainability Appraisal.

During the course of the consultation periods on the Scoping Report, the RES Consultation Document and the Sustainability Appraisal of the Draft RES, respondents have, however, made suggestions as to how the IRF objectives and second level objectives which stemmed from these could be expanded upon. These comments have been incorporated into the objectives; the current list of Appraisal objectives reflects those comments.

The comments received on the IRF objectives will also form useful inputs to any future revision of the IRF.

Table 3.1 IRF Objectives and Amended Appraisal Questions

IRF Objective	Appraisal Questions: Does the RES:
1. To ensure that everyone has the opportunity to live in a decent, sustainably constructed and affordable home	1.1 ensure the provision of housing for key workers and key sectors in the region? 1.2 ensure that housing and economic development policies deliver housing and jobs in an integrated fashion 1.3 ensure the provision of a range of economic opportunities in, or accessible to, rural areas? 1.4 promote the adoption of sustainable design and construction practices in development (eg energy/water/land/materials efficiency, incorporation of biodiversity/natural assets etc)? 1.5 ensure that the mix/type of new developments can reflect changes in population (size, demographics etc) and household structure in the region? 1.6 Take account of existing conditions that affect minority and excluded groups
2. To reduce the risk of flooding and the resulting detriment to public well-being, the economy and the environment	2.1 prevent all inappropriate development in the flood plain? 2.2 require that all new development applications show that sustainable drainage has been considered and implemented wherever practicable? 2.3 ensure that development located in the floodplain is designed to be flood resilient? 2.4 ensure that development does not increase flood risk to others?
3. To improve the health and wellbeing of the population and reduce inequalities in health	3.1 substantially diminish inequalities in mortality, health and well-being across the region? 3.2 ensure the accessibility of healthcare services by non-car means, eg through the incorporation of services in new developments? 3.3 promote healthy, active lifestyles as part of the well being of the region and as a means of reducing economic and social exclusion 3.4 Take account of the specific health and wellbeing issues of minority and excluded groups
4. To reduce poverty and social exclusion, and close the gap between the most deprived areas in the South East and the rest of the region	4.1 contribute towards a halving the gap between the most disadvantaged communities and the average position of the region by 2010? 4.2 ensure the provision of employment land and housing in, or accessible to, the most deprived areas of the South East? 4.3 Promote the economic and social inclusion of deprived and minority groups?
5. To raise educational levels across the region and develop the opportunities for everyone to acquire the skills needed to find and remain in work	5.1 ensure the accessibility of educational/training opportunities by non-car means? 5.2 ensure the accessibility of educational/training opportunities for the most deprived communities and excluded and minority groups? 5.3 ensure the accessibility of educational/training opportunities for rural communities?

IRF Objective	Appraisal Questions: Does the RES:
6. To reduce crime and the fear of crime	6.1 promote the incorporation of 'secured by design' principles as part of good urban design in economic development sites?
7. To create and sustain vibrant communities	7.1 encourage the involvement of communities in the planning and management of their neighbourhoods?
8. To improve accessibility to all services and facilities	8.1 promote compact, mixed-use development with good accessibility to local facilities and services (eg employment, education, health services, shopping, leisure, green spaces, culture etc), that reduce the need to travel? 8.2 ensure that facilities and services (eg employment, education, health services, shopping, leisure, green spaces, culture, outdoor recreation etc) are accessible to rural communities? 8.3 Ensure the provision of the services and facilities of most relevance to excluded and minority groups.
9. To encourage increased engagement in cultural activity across all sections of the community in the South East	9.1 ensure that existing facilities and locations for cultural activities are protected and that new facilities are provided in areas targeted for development? 9.2 Ensure that cultural needs of minority groups are addressed?
10. To improve efficiency in land use through the re-se of previously developed land and existing materials from buildings, and encourage urban renaissance	10.1 ensure the provision of employment land and housing on previously-developed land, as opposed to greenfield sites (in line with the sequential approach) and through conversion of existing buildings, to ensure that 60% of all forms of development (not just housing) occurs on previously used land by 2008? 10.2 encourage the reuse of materials in construction? 10.3 promote the adoption of sustainable design and construction practices in non-housing developments (eg energy/water/land/materials efficiency, incorporation of biodiversity/natural assets etc)? 10.4 require good design to create attractive, high quality environments where people will choose to work and live? 10.5 ensure that the historic urban environment and the distinctiveness/character of urban areas is protected as part of urban developments? 10.6 ensure that the historic rural environment and its distinctiveness and character is protected as part of the development of rural areas?
11. To reduce air pollution and ensure air quality continues to improve	11.1 promote more sustainable transport patterns in all economic development areas, particular those of low air quality (eg AQMAs), including provision for public transport, walking and cycling (see also Objective 15) 11.2 address the air quality impacts arising from specific development activities (eg airports, energy generation etc)?

IRF Objective	Appraisal Questions: Does the RES:
12. To address the causes of climate change through reducing emissions of greenhouse gases and ensure that the South East is prepared for its impacts	12.1 ensure a 20% reduction in CO_2 emissions by 2010 (from 1990 levels)? 12.2 require that development proposals are guided by 'climate proofing' principles? 12.3 promote actions that will favour a shift towards a 'low carbon' economy 12.4 Provide business with support to address the challenges and opportunities of climate change
13. To conserve and enhance the region's biodiversity	13.1 protect, enhance and restore the region's (international, national and local) designated sites recognizing the contributions they make to the region's economy and the wellbeing of residents and visitors? 13.2 protect, enhance and restore the region's priority habitats and species, and take account of the need to deliver regional biodiversity targets so as to maintain the region's natural asset base? 13.3 encourage the development of new biodiversity assets within/alongside developments? (Including encourage the linkage of habitats and the provision of wildlife corridors?)
14. To protect, enhance and make accessible for enjoyment the region's countryside and historic environment	14.1 recognise the importance to the region's economy of it's natural environmental assets (eg the green belt, parks and green spaces, common land, woodland and forests, National Parks, AONBs, ESAs etc) and seek to protect, restore and enhance then as an integral part of the region's quality of life 14.2 recognise the importance to the region's economy of the region's cultural and heritage assets (eg Heritage Coasts, World Heritage Sites, SAMs, Listed Buildings, Historic Parks and Gardens, Conservation Areas, Registered Battlefields etc and their role in the region's quality of life and seek to protect, restore and enhance them)?
15. To reduce road congestion and pollution levels by improving travel choice and reducing the need for travel by car/lorry	15.1 promote more sustainable transport patterns in all areas, particularly those with high congestion? 15.2 promote public transport, walking and cycling? 15.3 promote more sustainable transport patterns in connection with developments in rural areas?
16. To reduce the global, social and environmental impact of consumption of resources by using sustainably produced and local products	16.1 promote the use of locally and sustainably-sourced, and recycled, materials in construction and renovation? 16.2 Promote measures to reduce the overall ecological footprint of the region 16.3 Promote resource efficiency measures within the region's businesses 16.4 Promote the region's strengths in the environmental goods and services industry
17. To reduce waste generation and disposal , and achieve the sustainable management of waste	17.1 promote sustainable waste management practices in all sectors and at all levels through the provision of a range of appropriate waste management facilities? 17.2 promote waste minimisation?
18. To maintain and improve the water quality of the region's rivers and coasts, and to achieve sustainable water resources management	18.1 Promote measures to reduce water demand by business 18.2 Promote pollution control and reduction measures by business

IRF Objective	Appraisal Questions: Does the RES:
19. To increase energy efficiency and the proportion of energy generated from renewable sources in the region	19.1 provide for the establishment of renewable energy developments at a regional level, to ensure that renewable energy targets are achieved (eg 16% of generation capacity by 2026)? 19.2 Promote the uptake of renewable energy sources by business 19.3 promote the incorporation of small-scale renewables in developments?
20. To ensure high and stable levels of employment so everyone can benefit from the economic growth of the region	20.1 Promote actions to deliver employment to all sections of society in the region especially deprived minority and excluded groups 20.2 Target employment growth in areas where social and transport infrastructure capacity exists
21. To sustain economic growth and competitiveness across the region	21.1 Promote actions to narrow the gap in GVA per capita between the best and worst performing parts of the region?
22. To stimulate economic revival in priority areas	22.1 Identify priority areas for economic regeneration and their needs? 22.2 Promote actions to develop less-favoured areas within the region?
23. To develop a dynamic, diverse and knowledge based economy that excels in innovation, with higher value, lower impact activities	23.1 support the development of access to broadband infrastructure, particularly in rural and deprived areas and among excluded and minority groups? 23.2 Identify actions to promote innovation and research and development in the region? 23.3 Identify clear priorities for investment in new services/technologies
24. To encourage the development of a buoyant , sustainable tourism sector	
25. To develop and maintain a skilled workforce to support long-term competitiveness of the region	25.1 Promote business support measures/skills programs that meet the demands of the region's businesses 25.2 Identify key skills sets/skills gaps to be developed/managed 25.3 Identify key sectors that provide 'skills escalators' that create opportunities for less-skilled individuals in the region's economy 25.4 Identify the skills needs/demands for skills amongst minority and excluded groups?

3.3 *LINKS TO OTHER PLANS, POLICIES AND STRATEGIES*

An analysis of the links between the RES and other relevant plans, policies and strategies as required by the SEA regulations is presented in ***Annex A***.

There are clearly especially close links to be made between the South East Plan, which sets out the region's spatial strategy and the RES. Integration of these two strategies and their Implementation Plans will be fundamental in delivering planned growth for the region in a manner which is both integrated and more sustainable.

3.4 *BASELINE INFORMATION*

A detailed review of data on baseline environmental, social and economic conditions within the region is presented in ***Annex B***.

3.5 *DATA COLLECTION DIFFICULTIES AND LIMITATIONS OF DATA*

We have drawn upon publicly available information, provided by regional partners, including the Environment Agency, Natural England and English Heritage. The data represents the most updated information on regional trends, currently available.

No specific data collection difficulties or data limitations have been identified that have affected the appraisal process.

3.6 *THE RES EVIDENCE BASE*

The Evidence Base prepared by SEEDA to accompany the RES, which has been developed during the successive phases of the strategy's preparation provides an extremely useful body of information on the region, not only on its economy but on all of the dimensions of sustainable development too. It is an important contribution to the debate on how the region should grow and will need to be maintained and further developed to assist in the implementation and monitoring of the RES.

4 SUSTAINABILITY APPRAISAL OF THE RES

4.1 INTRODUCTION

This section of the SA/SEA report focuses on the key components of the appraisal process, the assessment of alternatives and the key findings of the appraisal.

4.2 APPRAISAL OF ALTERNATIVES

The assessment of alternatives is a key requirement of both the SEA Directive and UK Government Guidance. In the case of the RES for the South East, we have taken as alternatives four different scenarios of the likely growth of the South East economy, as presented in 'Sustaining success in a prosperous region: Economic implications of the South East Plan' published by SEEDA in March 2005. They include implications for housing growth.

The Key characteristics of each of the scenarios are summarised in ***Box 4.1*** below.

Box 4.1 Economic and Housing Growth for the South East of England Scenarios

- **The baseline** – the rate of productivity growth in the baseline (2.27% per annum), is slightly lower than the recent trend of 2.32% per annum, and reflects structural changes in the region's economy away from manufacturing to services (which record measurably lower productivity rates). Even at a level of 2.27% p.a, this translates into an overall increase in productivity from £39,000 per worker in 2005 to £32,000 per worker by 2026 (at constant prices). Employment growth projections in this scenario assume that economic activity rates will rise to bring an additional 50,000 residents into employment. This implies an increase in economic activity rates from 83% (already the highest in the UK) to 85%.

- **Scenario 1** – this scenario reflects what might be achieved through additional regional efforts in terms of enhancing productivity and economic activity. It assumes that concentrated action on research and development, innovation and productivity maintains that current average yearly productivity improvement despite the structural shift towards service sectors. It also assumes that all those who are economically inactive but relatively well skilled and ready to return to work (65,000 existing residents in total) are brought back into employment in the South East.

- **Scenario 2 –** this is at the upper limit of what could conceivably be achieved with significant investment, concentrated action by all relevant partners, and with major innovations in public policy. Over the course of the Plan period, productivity growth progressively improves by an average additional 5% (of the projected trend) per annum, implying that the South East becomes one of the most productive regions in Europe by 2026. The aggregate productivity growth under this scenario would be 2.39% per annum.

  To put this scenario in a m ore regional context, if every sector in Kent, the Isle of Wight and East Sussex (the lagging areas of the South East in terms of productivity) were to catch up and match the region's average productivity levels by 2026, the additional average annual growth in productivity would be around 5% - similar to the levels assumed und this scenario

  In addition, major efforts to bring more challenging groups of economically inactive residents into employment area assumed to succeed under this scenario, with a total of 265,000 additional residents finding employment, Specifically:

  - the number inactive due to childcare or other care commitments would fall be one third from 295,000 to 190,000;
  - the number inactive due to long-term sickness or disability would halve from 160,000 to 80,000;
  - The number indicative due to early retirement would fall slightly from 75,000 to 60,00; and
  - the only other group remaining significantly economically inactive would be full-time students.

  This implies lifting the region's overall economic activity rate to almost 90%, a rate never yet achieved in any regional economy, and significantly higher than anything yet achieved in any part of the South East.

  This is a challenging target to achieve, where all who would like to work by currently cannot work (e.g. due to childcare commitments or long-term illness etc.) are assisted to enter the labour market. Again, for context, if all parts of the region were to increase economic activity rates to match the highest current rate (i.e. Berkshire), this would deliver less than half the overall improvements in economic activity assumed under this scenario.

- **2% Growth –** Modelling the effects of lower growth demonstrated that there is a clear choice between sustainable growth and decline. For instance, if growth in GVA was constrained to an average of 2% per annum over the Plan period:

  - The region would generate £43 billion (constant prices) less GVA per annum by 2026, compared to the 3% growth scenario (i.e. GVA of £206 billion instead of £249 billion in 20026). In total, over the Plan period, the region would generate £400 billion less GVA (constant prices) under the 2% growth scenario;

  - Employment growth would shrink to 113,000 over the Plan period (compared with a growth of 805,000 jobs under the 3% growth scenario); and

  - Given the projected growth in the economically active population, this would imply an unemployment rate of 7% (roughly 400,000 residents unemployed) by 2026, compared to around 2% unemployed under the 3% growth scenario.

Source: Sustaining success in a prosperous region: Economic implications of the South East Plan (SEEDA 2005)

Table 4.1 below summarises the key factors affecting achievement of GVA growth of 3% per annum.

Table 4.1 Achieving 3% per annum GVA Growth to 2026

	The baseline – based on the drat South East Plan figures	**Scenario 1 – maintaining historic productivity growth and reducing economic inactivity by 65,000**	**Scenario 2-5% pa additional productivity growth and reducing economic inactivity by 265,000**
Annual productivity growth(%)	2.27 (historic trend 2.32)	2.32	2.39
Total Full Time Equivalent (FTA) employment growth	805,000	772,000	712,000
Labour shortfall – with a build rate of 25,500 per annum	381,000	336,000	155,000
Labour shortfall – with a build rate of 28,000 per annum	339,000	294,000	113,000
Labour shortfall – with a build rate of 32,000 per annum	273,000	227,000	46,000
Dwellings required for a balanced labour market under each scenario	**48,000**	**45,500**	**34,800**

These scenarios have also been used in the assessment by SEEDA of likely future scenarios facing the South East that are presented in the section of the RES entitled 'Key Challenges Facing the South East'.

These scenarios are summarised in ***Box 4.2*** below. They are based on an analysis of the data in the RES Evidence Base.

Box 4.2 Future Scenarios Facing the South East

Scenario 1: World Class Region is the preferred scenario. Recognition by all partners of the need to respond to the global challenge through creativity, innovation, technology, seeking global markets, tackling skills deficits and economic polarisation, comes together with provision of necessary hard and soft infrastructure, ensuring that the region adapts successfully to changing circumstances and maintains or enhances its position.

Whilst some parts of the region are already as close to this enviable position as anywhere in the UK, none are secure. There is universal concern amongst businesses that this position is threatened as quality of life is denuded and economic efficiency challenged by underinvestment in the sustainable infrastructure of communities and the economy. The task of the Regional Economic Strategy is to provide a framework for the investment needed to deliver the physical and human infrastructure necessary for long-term and sustainable prosperity for all, in which a high quality of life is an essential component of competitive advantage.

Scenario 2: Tipping Point in which, despite firms and supporting actors mobilising effectively to become more innovative, lack of will to invest in essential transport, homes, healthy communities and the full range of skill precipitates disinvestment and relocation by key mobile firms and begins to weaken the region's competitive position. This is the prospect that some of the areas that are currently performing most strongly believe they face imminently and which they fear could lead to a downward spiral of decline.

Scenario 3: Slow Death, in which, despite excellent infrastructure, and after a period of strong growth, the cumulative impact of inadequate investment in future competitiveness leads to a gradual process of disinvestment and into a slow decline, hidden for a while by the sustained performance of leading firms which are in fact the exception in the region and not the norm.

In both these scenarios, the impact will be delayed for those who are affluent and comfortable, and for whom resource scarcity is irritating but can be mitigated to a degree by private purchasing, while around them firms begin to disinvest, and bright young people as well as mobile corporations leave in greater numbers to find dynamic business networks, top class skills, affordable homes, vibrant communities and easier travel elsewhere around the globe.

Scenario 4: Spiral of Decline, in which businesses' failure to invest in innovation, skills, enterprise development and global connectivity is exacerbated by a serious underinvestment in essential public resources including transport, energy, water and affordable homes, leading further decline in competitiveness, economic and social cohesion and prosperity. Reversing this spiral, which is already in evidence, for example, along much of the region's coastline, requires a step change in confidence as well as investment in business capacity and all the resources, human and physical, required to create attractive, competitive places for future, mobile populations and companies.

Source: South East Regional Economic Strategy, 2006

The RES and the Evidence Base also highlight a number of factors that are likely to influence the long-term growth of the South East. Whilst these relate to the economy of the region they are also key factors in determining the sustainability of growth. These factors are summarised in ***Box 4.3*** below.

Box 4.3 *Key Factors Likely to Affect the Long-term Growth of the South East*

- ***Significant Demographic Change*** – The populations of the South East is set to become older on average as people live longer. This means a lower proportion of the population will be of working age in years to come.
- ***Slower Employment Growth*** – Equally, as a smaller proportion of the population is likely to be economically active (activity rates decease with age), there is likely to be a smaller pool of labour available to the region and less scope for employment growth.
- ***Polarised Employment Structure*** – As a result of a changing industrial structure the occupations people are engaged in are changing. The profile of employment is becoming increasingly polarised, as more and more workers are engaged in either high-end white collar or low-end low–skill occupations.
- ***Growth in Productivity*** – Productivity growth in the region is likely to be strong, forecasts suggest the South East will outperform most UK regions and most comparable areas of the EU. This is important not least because if a higher proportion of the population are not engaged in employment, output growth from productivity is required to contribute towards standards of living in the region.
- ***Slower Output Growth*** – Although productivity growth is likely to be strong, employment growth will be some way short of levels seen historically. As a result, over the next decade real GVA growth in the region is set to average around 3 per cent per annum, lower than historical averages.
- ***Differing Prospects Within the Region*** – Differing circumstances in sub-regions of the South East affect prospects for growth. Many authorities making up what was Berkshire for instance have to contend with little scope to increase either population or employment rates. On the other hand, whilst labour market tightness is unlikely to pose a problem for Kent, its current industrial structure means productivity growth is likely to be low.

Source: RES Evidence Base, 2006

4.3 *MEASURING SUSTAINABLE DEVELOPMENT*

Other key elements of the analysis that has gone into the generation of the Strategy are The Index of Sustainable Economic Welfare (ISEW) and the Regional Economy-Environment-Input-Output Model (REEIO). Both of these tools have been used to look at the sustainability of the region's economy and key factors that need to be addressed to ensure that it can follow a sustainable growth path. This work is both important and innovative in the context of Regional Economic Strategies and represents an initial but serious attempt to grapple with what a sustainable economy might mean it is also an important contribution to establishing how the RES will meet its targets. It recognises that neither GDP or GVA are not effective indicators of overall wellbeing, just economic wellbeing and that an economic strategy aimed at delivering sustainable prosperity and smart growth needs to take account of other measures. The work carried out by SEEDA and its partners is documented in the RES Evidence Base but key aspects of the work of relevance to this appraisal are summarised below.

- *ISEW*

The key aspects of the application of ISEW to the analysis of the region's economy are summarised below. They are based on the RES Evidence Base and its presentation of information from the Index of Sustainable Welfare for the South East carried out on behalf of SEEDA by the New Economics Foundation.

Box 4.4 Key Elements of ISEW of the South East

The Index of Sustainable Economic Welfare developed in the United States is a composite indicator comprising the following information.

ISEW	=	Personal consumer expenditure
	-	adjustment for income inequality
	+	public expenditure (deemed non-defensive)
	+	value of domestic labour
	+	economic adjustments
	-	defensive private expenditure
	-	costs of environmental degradation
	-	depreciation of natural capital

The ISEW findings for the South East reveal that between 1994 and 2004 the index rose steadily in the region, from £6,700 per capita in 1994 to £10,300 per capita in 2004. The growth was driven by strong growth in consumption and net capital investment, greater public expenditure on health and education and significant reductions in air pollution. Higher growth was held back by rising income inequality, a large trade deficit and energy-related costs of resource depletion and long-term environmental damage.

Over this period the ISEW per capita increased by over 50 per cent, while GDP per capita increased by just over 30 per cent. This may indicate that significant progress has been made, although when interpreting this information we have to remember that the ISEW started from a lower base.

When looking at the absolute increase (which is more realistic), the ISEW increased by over £3,500 while GVA per capita increased by around £4,500 per capita over the same period. Furthermore, the gap between the ISEW per capita and GVA per capita increased by around 12 per cent over the period.

Comparing the South East and the UK reveals some interesting facts. Although in 1994 the ISEW per capita in the region was below the UK average (just 93 per cent of the UK average), notable progress in comparison to the UK has been made since the late 1990's. Over the past decade, the ISEW in the South East has risen considerably faster than the national ISEW (53 per cent in the region against 35 per cent nationally). The main factors behind this are strong growth in consumption in the region, lower per capita emissions of many air pollutants and the participating greenhouse gases (except in transport and non-industrial combustion sectors), and a net gain in natural habitats with only small losses in farmland.

While GVA per capita in the region is around 15 per cent above the national average, the ISEW per capita in the South East is just 6 per cent above the national average, which underlines the fact that GVA per capita alone can not be used as a reliable measure of well-being.

The approach based on the Index of Sustainable Economic Well-being (ISEW) ought to ensure that certain policies are not creating negative effects, which is often the case with single targets. As indicated by the New Economics Foundation 'the balance of evidence suggests that although some clear improvements have been achieved in the South East over the last decade, ... a vigorous effort will be required to safeguard the gains in well-being achieved so far and put the South East region on a path towards sustainable development in the future'.

Source: RES Evidence Base, 2006

- *REEIO*

Standard economic models tend to be limited in their ability to address the environmental implications of economic development. The REEIO model has been developed to address this need. It enables policy makers to assess the potential impacts of the economy on a range of significant environmental indicators.

SEEDA has been working with the model to look at the potential environmental implications of a number of economic scenarios. These are reported in the Evidence Base. It should be noted that the policies and actions set out in the RES have not been analysed using the REEIO model. This is something that should be done going forward with the implementation and in the future the Review of the RES.

4.4 APPRAISAL FINDINGS

The Appraisal considers how the RES 'performs' against the IRF's Objectives and associated questions, assigning a 'score' to each question.

The scoring framework used in undertaking the Assessment is outlined in ***Figure 4.1*** below:

Figure 4.1 Scoring Framework for the Assessment

✓✓	Clear Strong positive impacts
✓	Overall impact likely to be positive
✓/x	Overall impact mixed
?	Overall impact unclear
0	Overall impact neutral
x	Overall impact likely to be negative
xx	Clear, strong negative impacts
******	Not addressed, but likely to be important
N/A	Not applicable

The detailed Assessment matrices are provided in ***Annex C*** of this Report. The matrices outline how the alternative for the scenarios set out in 'Sustaining Success' (see ***Section 4.2*** of this report) RES perform against the appraisal questions, assessing the likely impact of the RES in relation to each objective and question and assigning a score as per the scoring framework noted above.

Set out below is a brief summary of key points arising from the appraisal of the RES.

There is clearly a strong link between the South East Plan and the review of the RES. Where appropriate the assessment has taken these links, potential and actual, into account.

In assessing the four scenarios we have made a few basic assumptions:

- That economic growth can be achieved in a more sustainable manner;
- That economic growth does not automatically signify environmental damage or reduced environmental quality;
- That higher levels of growth provide resources and stimuli that are likely to help deliver the 'Sustainability Prosperity and Smart Growth' more effectively and at a faster rate;
- That higher levels of growth will tackle issues of deprivation, intra-regional equality and social and economic exclusion more effectively; and
- The 'managed decline' of the economy is not an option i.e. the South East will be encouraged to maintain its position within the UK economy.

The appraisal notes, where relevant, the contribution that will be required from behavioural change if policies, targets and actions are to lead to more sustainable outcomes for the region.

IRF Objective	**Likely Impact**	**Conclusions**
1. To ensure that everyone has the opportunity to live in a decent, sustainable constructed and affordable home	✓/✗	As the RES notes 'the region is characterised by high demand and inelastic supply, with household growth in the South East Exceeding house building rates… . The problems of house prices and of a lack of affordable housing have been widely publicised. The research and analysis carried out within the region in the context of the South East Plan has highlighted that at the proposed rate of supply set out in the Plan it is unlikely that current issues relating to affordability will be resolved. The targeted completion rates for affordable housing represent a considerable increase in terms of current completion rates and there is considerable doubt that they will be met'. There are also concerns that the rate of housing supply does not correspond to real need and is at odds to the likely levels of demand that would be generated by the growth scenarios in the RES. In terms of the existing housing stock in the region, there are concerns over the resource efficiency of much of this and the intention spelt out in the RES to develop and implement a strategy to upgrade existing private sector housing is a positive step. It will require close coordination with the South East Plan and will also require significant levels of funding to achieve meaningful impact. Target 9 of the RES on physical development focuses on this issue. Without a significant improvement in the performance of existing housing any gains made

IRF Objective	Likely Impact	Conclusions
		from new housing in the region will be significantly diminished and stabilising, let-alone reducing, the region's ecological footprint appears difficult. The RES will need to work with the South East Plan on issues to do with this IRF objective. There will be value in joint or complementary actions addressing this objective. The South East Plan's Implementation Plan contains actions relating to this IRF objective.
2. To reduce the risk of flooding and the resulting detriment to public well-being, the economy and the environment	0	The RES recognises that the 'region is affected by a range of flooding issues – tidal, rivers and groundwater. Over 200,000 existing houses and workplaces are in areas of high flood risk'. It is important that the economic development of the region does not increase the risk of flooding and of the human, economic and environmental losses associated with it. This will require regional partners including SEEDA to work closely with the Environment Agency and also to act in accordance with the relevant policies in the South East Plan. The potential impacts, if any, of the RES should be managed via LDF policies on the location of economic development which should follow PPS25.
3. To improve the health and wellbeing of the population and reduce inequalities in health	✓	The RES recognises the importance of tackling the social determinants of health and 'the business targets in developing a healthy workforce and workplace'. Health is recognised as a key issue for the region in connection with a number of issues such as the impacts of an ageing population, the links between poor health status and economic participation and the links between social, economic and environmental exclusion and economic deprivation. The RES notes that – 'Health is a key dimension of disadvantage'. The region's most disadvantaged areas, where unemployment is highest, often feature higher that average ill health and mortality. Initiatives which target worklessness will also lead to higher standards of living and other factors which influence quality of life. As well as being a route out of poverty and benefit dependency, employment and training programmes can lead to a healthier lifestyle. There are business benefits in developing a healthy and skilled local workforce and a better workplace environment, reducing absence through illness and improving efficiency and productivity.'

IRF Objective	Likely Impact	Conclusions
4. To reduce poverty and social exclusion, and close the gap between the most deprived areas in the South East and the rest of the region	✓✓	This is one of the principal objectives of the RES which seeks to address the barriers to economic participation. It is also focused on the spatial distribution of poverty and exclusion within the region and seeks to address the specific needs and potential of more deprived sub-regions such as some of the coastal areas of the South East.
5. To raise educational levels across the region and develop the opportunities for everyone to acquire the skills needed to find and remain in work	✓	The RES contains a number of actions aimed at raising educational and skills levels across the region. It promotes this idea of a Regional Skills Escalator and also the need for whole life learning and actions targeted at the ageing population of the region. The need to improve skills is embedded into a number of actions throughout the strategy.
6. To reduce crime and the fear of crime	N/A	Whilst fear of crime is an issue of significance for the region's residents it is not an issue that is especially linked to the RES. There is a link between reduction in deprivation and worklessness which could in turn reduce levels of some types of crime.
7. To create and sustain vibrant communities	✓	Quality of life and sustainable prosperity are both key components of the RES. A wide range of actions are proposed to assist the region conserve and enhance its quality of life for residents and businesses. The RES (in co-ordination with the South East Plan) also targets the regeneration of communities. Target 9 of the RES aims to contribute to this IRF objective.
8. To improve accessibility to all services and facilities	✓	The RES recognises that the region needs substantial economic investment in infrastructure if it's to continue to grow and to perform. It also recognises the potential negative impacts from failing to obtain appropriate scale of funding and speed of delivery of infrastructure. The RES and the South East Plan must pursue and integrated approach to the delivery of infrastructure – this must help to reduce congestion which has an impact on accessibility. It should also make significant improvements to access via public transport. Here too it will need to work jointly with the Implementation Plan of the South East Plan.
9. To encourage increased engagement in cultural activity across all sections of the community in the South East	✓	The RES recognises the importance of cultural activities to sustainable prosperity and to quality of life. It also recognises the economic significance of the region's cultural assets and the role that these play in making the region a 'leader' and their role in attracting investment and people.

IRF Objective	Likely Impact	Conclusions
10. To improve efficiency in land use through the re-use of previously developed land and existing materials from buildings, and encourage urban renaissance	✓	The RES is keen that the region's performance on the re-use of PDL is maintained and that planning authorities are able to make the best use of the resources of PDL in the region.
11. To reduce air pollution and ensure air quality continues to improve	×	Whilst the RES recognises the need to tackle pollution, especially from transport it is difficult to see how the RES will lead to any reduction in our pollution without a massive investment in public transport and a similarly significant shift in behaviour. The current policy and funding framework in the UK does not appear conducive to the scale of change required. The RES is aware of these issues - especially the need for the region to attract funds for significant investment in transport infrastructure, especially Public Transport. This is another area where joint working the Assembly on the Synergies with the South East Plan will be critical.
12. To address the causes of climate change through reducing emissions of greenhouse gases and ensure that the South East is prepared for its impacts	×	The RES notes that 'while striving to avoid future climate change through mitigation measures, we must recognise that some climate change is unavoidable and to plan for adaptation. Climate risks and costs need to be incorporated into business decision making and policy making. Whilst inevitably there are some uncertainties over the degree and pace of climate change, proper forward planning will generate costs savings, reduce exposure to risk and losses, enhance reputation, improve regulatory relationships and increase opportunities for market leadership'. It is important the RES highlights the opportunities arising from climate change and also that it is very much a business and competitiveness issues as well as a sustainable development one. The RES sets a target for the reduction of greenhouse gases in line with government targets. It is also seeking to stabilise and then reduce its ecological footprint, this too will require a concerted effort to reduce greenhouse gas emissions significantly. Whilst the RES proposes a wide range of resource efficiency and management measures it will require a significant increase in awareness and sensitivity within the private, public and domestic sectors to bring about a cultural shift in the management of CO_2 emissions in the region. The RES does address the causes of climate change and it is entirely correct that it sets a target for CO_2 emissions but it is questionable whether all of the other targets set out in the Draft RES are likely to lead to a significant reduction in greenhouse gas

IRF Objective	Likely Impact	Conclusions
		emissions – the target for renewables being a prime example. In terms of making sure that the South East is prepared for climate change – this will require integration of the actions of both the RES and the South East Plan as well as other regional strategies. Climate change needs to be more effectively embedded into regional thinking in terms of both adaptation and proactive engagement within the opportunities. Consultees have also highlighted the need to look at Climate Change in a holistic fashion so that issues such as 'coastal squeeze' which are likely to affect many of the region's coastal environmental assets can be planned for.
13. To conserve and enhance the region's biodiversity	?	The importance of the natural environment, to the region, not least in economic terms, is clearly spelt out in the RES. The importance of Green Infrastructure and its contribution to Quality of Life and Sustainable Prosperity is also made clear. However, the evidence base for the SA/SEA highlights the current levels of threat to many of the region's most valuable areas. Investment in new biodiversity assets and improved conservation of existing sites should be promoted as an integral part of Sustainable Prosperity. The implementation of the RES will need to take account of the findings of the Appropriate assessment of the South East Plan.
14. To protect, enhance and make accessible for enjoyment the region's countryside and historic environment	✓	The RES recognises the important role played by the region's countryside and historic environment. It does not promote actions that will necessarily have negative impacts on these assets but stakeholders have been concerned about the apparent lack of clarity on this issue in the RES. Consideration needs to be given to this in the development of the RES Implementation Plan which should be developed in collaboration with key stakeholders.
15. To reduce road congestion and pollution levels by improving travel choice and reducing the need for travel by car/lorry	✗	The RES explicitly recognises the need to reduce road congestion and pollution. However, it is not clear that the strategy and the actions proposed both by the RES and the South East Plan are likely to lead to any reduction in pollution – the reverse seems more likely since investment in infrastructure seems more likely to generate journeys than reduce them – that is unless significant funds for both public transport infrastructure and demand management as well as behavioural change can be obtained.

IRF Objective	Likely Impact	Conclusions
16. To reduce the global, social and environmental impact of consumption of resources by using sustainably produced and local products	✓	The RES is committed to improving resource efficiency and resource consumption in the region and stabilising and then reducing the region's ecological footprint. However, it is not clear how the region intends to move towards this target. The RES and the South East Plan need to develop a co-ordinated approach to this strategic challenge. Once again, behavioural change will be a key component of any strategy that is likely to produce significant change.
17. To reduce waste generation and disposal , and achieve the sustainable management of waste	✓/×	The RES contains a target designed to improve the overall efficiency of businesses use of materials and waste generation. This does not contain any clear way forward and it is not clear how the region will achieve anything more than a slower rate of increase in waste generation. The evidence for how this target will be achieved needs to be included in the RES Implementation Plan. The focus within the RES on the environmental technologies sector would create opportunities for the region to become a leader centre in both the development and application of more efficient waste management systems.
18. To maintain and improve the water quality of the region's rivers and coasts, and to achieve sustainable water resources management	?	The work being carried out by the Environment Agency in preparation for the Water Framework Directive is highlighting key issues for water quality management in the region. It is not clear how the region will reach the targets in the RES on water consumption. Policies in the South East Plan and actions in the RES are not likely to lead to sustainable water resources without a significant investment in demand management, supply efficiency and overall behavioural in change of both consumers and suppliers. At present the policy context is not favourable to such change – or not at the scale required to move towards sustainability. The RES Implementation Plan will need to set out a clear set of actions to target this IRF objective. There are clear potential synergies here between the Draft Implementation Plan of the South East Plan and the RES and its Implementation Plan.
19. To increase energy efficiency and the proportion of energy generated from renewable sources in the region	✓	The RES establishes clear targets for the development and deployment of the renewable energy in the region. As with the other targets in the RES more information is required as to how these targets will be delivered. This should be made clearer in the RES Implementation Plan.
20. To ensure high and stable levels of employment so everyone can benefit from the economic growth of the region	✓	The RES is directed at improving the economic performance of the region and increased levels of economic participation and increased employment in growth sectors with strong potential for the future are fundamental to that. At lower levels of

IRF Objective	Likely Impact	Conclusions
		growth these objectives may be harder to achieve. Ensuring higher levels of employment in the more deprived areas of the region is also a key objective of the RES.
21. To sustain economic growth and competitiveness across the region	✓✓	Current and proposed economic strategy for the South East looks to maintain and improve the economic profile and performance of the region. A particular focus of the RES is the need to reduce and more towards the elimination of significant intra-regional disparities. At lower levels of growth this objective may be harder to achieve.
22. To stimulate economic revival in priority areas	✓✓	The RES recognises a number of sub-regions within the South East one of the objectives being the targeting of areas in need of economic and social regeneration. Actions to assist these areas will require co-ordination between the RES and the South East Plan. The RES identifies key priorities for each area to address their needs.
23. To develop a dynamic, diverse and knowledge based economy that excels in innovation, with higher value, lower impact activities	✓✓	The development of the knowledge-based economy and a focus on innovation are both key priorities with the RES – both are viewed as key elements of the forward strategy for the economy of the South East and the Greater South East.
24. To encourage the development of a buoyant , sustainable tourism sector	✓	The role of the cultural, sport and creative sectors in the regional economy is clearly set out in the RES. Sustainable tourism needs clearer support within the actions to be developed for the RES Implementation Plan.
25. To develop and maintain a skilled workforce to support long-term competitiveness of the region	✓✓	The RES contains a wide range of actions relating to skills and the skills and training needs of the region in relationship to retaining and building on its competitiveness.

Box 4.5 Results of the Appraisal of the Alternative RES Scenarios

In terms of the appraisal objectives all of the options have a mixed score in terms of:

Objective 1 (Sustainable decent and affordable housing): Because of the need to address the existing housing stock. This is a major issue whichever growth option is selected. All of the options have the potential to lead to an increase in the use of sustainable construction methods.

Objective 2 (Reduce the risk of flooding): This is not applicable for all options since there is not a clear link between the options and flood risk and development will need to respect the policies in the South East Plan.

Objective 3 (Improve the health and well-being of the population and reduce inequalities in health): None of the of growth options is clearly better at delivering this objective than others. The RES does recognise health as a component of deprivation but does not have enough specific actions to tackle the 'social determinants of health'. The impact of all options is unclear.

Objective 4 (Reduce poverty and social exclusion): All options perform will on this objective with the exception of the 2% growth option which implies a 'slowing down' of the regional economy and potentially less investment in raising economic participation rates, creating a skills escalator and other key actions.

Objective 5 (Raise educational achievements across the region): All of the options are likely to have a positive effect on this objective. It is key to sustaining the regional economy.

Objective 6 (Reduce crime and the fear of crime): This is not applicable to any of the options.

Objective 7 – 9 (Create and sustain vibrant communities, improve accessibility to all services and facilities and increase engagement in all cultural activities): All of these objectives will be met by each of the options in tandem with policies in the South East Plan.

Objective 10 (Improve efficiency in land use): All of the options would make a positive contribution to this objective as a result of national and regional targets and policies within the South East Plan.

Objective 11 (Reduce air pollution): None of the options is likely to reduce air pollution; all of them are actually likely to increase air pollution from transport and possibly from other sources. Higher rates of growth could assist in providing greater levels of investment in tackling air pollution but this would also need considerable policy changes by Central Government to be effective.

Objective 12 (Address the causes of climate change): The setting of a CO_2 target is encouraging but the appraisal still feels that all of the options are likely to increase CO_2 rather than reduce it. Once again, this is most likely to change in respect to future changes and developments in Government policy. All of the options are likely to assist the region towards a 'low carbon' economy but his will not be sufficient to address the impacts of climate change on the region and its economy.

Objective 13 (Conserve and enhance the region's biodiversity): It is unclear how any of the options would perform in terms of this objective.

Objective 14 (Protect, enhance and make accessible the region's countryside and historic environment): This objective is not directly applicable to the RES options.

Objective 15 (Reduce road congestion and pollution): All of the options would have a negative effect on this option in the view of the appraisal because they would not be effective in decoupling growth from an increase in transport use. This would require changes in Government policy

Objective 16 (Reduce the global, social and environmental impacts of consumption of resources): All of the options are appraised as being positive because of the commitment in the RES to reduce and stabilise the region's ecological footprint. Options other than the baseline option are likely to be more effective a tackling this issue and contributing to this objective – given they are not business as usual.

Objective 17 (Reduce waste generation): All of the options are appraised as being mixed. This reflects uncertainty over the likely effectiveness of waste and other policies in decoupling growth from increased waste arisings.

Objective 18 (Maintain and improve water quality): It is not clear how the RES will contribute to this objective. A significant change in management and use of water resources would be required for any of the options to lead to more sustainable water management in the region. The focus on efficiency is helpful but may not be sufficient.

Objective 19 (Increase energy efficiency): All of the options are appraised as likely to have a positive impact on this objective via a focus on improving the efficiency of business and its use of resources.

Objective 20 – 25 (Ensure high and stable levels of employment, sustainable economic growth, stimulate economical revival, develop a dynamic and diverse economy, encourage the development of a buoyant tourism sector, develop and motivate a skilled workforce): All of the effective options score positively but there are questions over how both the baseline and 2% options would be in comparison with the other options in terms of delivery against the objectives. The baseline tending to be positive but with the issues raised by the RES in terms of its long-term performance. The level of delivery would in the case of the 2% option, it is considered, be lower. In the case of tourism (Objective 24) there are questions over the current performance against this objective.

4.5 *SIGNIFICANT ISSUES*

The following section provides a summary of the Appraisal findings as they relate to the key IRF objectives and associated questions which have framed this Appraisal. These are presented in terms of the overall appraisal and then the key issues identified in the DTi's guidance to RDA's on the links between the RES Review and the UK's Sustainable Development Strategy.

- ***A Focus on Economic Development***

  The RES sets out in a concise way how the Region could potentially move towards achieving its aspirations of smart growth and sustainable prosperity. It is focused on economic development but also contains clear evidence and proposals as to the benefits of making growth more sustainable. The work that SEEDA has carried out on the Index of Sustainable Welfare and on the REEIO model has helped to clarify some of the issues relevant to making the region's economy more sustainable.

- ***Sustainable Consumption and Production***

The ideas within the RES on resource management and the management of demand and consumption mirror the concerns that are one of the key themes of the UK's Sustainable Development Strategy. The ideas put forward in the document are proactive and address both process and behavioural aspect of business as well as products and services.

In this context, the setting of a target relating to the region's ecological footprint (in line with the commitment in the Draft South East Plan) is an important indication of the Strategy's recognition of the consumption and production challenges facing the region.

The ability to drive demand for a more sustainable pattern of production and consumption is only partly with the gift of the Region. Wider forces such as national policy and legislation need to be aligned to this objective for the Region to be able to make substantial program on this issue. The Region will need to demonstrate how it will seek to influence Central Government on this issue. It will be important for the Regional Assembly, SEEDA and other key regional partners to develop a common set of objectives and a common strategy so that the Region can engage effectively with Central Government.

The Region is keen to stabilise and then move to reduce its ecological footprint.

- ***Climate Change and Energy***

  The RES recognises the challenges and opportunities posed by Climate Change and Energy Supply and Security. The current proposals in the document whilst positive and promising will need to be considerably developed to ensure that opportunities are maximised and that the Region will be able to design a route map for moving towards a low carbon economy. This will require the development of detailed actions in the RES Implementation Plan.

- ***Natural Resource Protection and Enhancement***

  The RES notes that in meeting the challenge of Sustainable Prosperity the region will need to be 'achieving measurable improvements in the quality, biodiversity and accessibility of green space, open space and green infrastructure'. Target 13 of the RES is to 'Achieve measurable improvements in the quality, biodiversity and accessibility of green and open space'. This creates scope for partnership working with the other regional stakeholders to deliver enhancements to the region's existing assets and to improve the status and management of existing assets.

In terms of the IRF Objectives the RES 'scores' well on the following objectives:

- Reducing Poverty and Social Exclusion (IRF4)

- Raising Educational Achievement (IRF5)
- Creating Sustainable Comments (IRF7)
- Improving Accessibility to services and Facilities (IRF8)
- Increased Engagement in Cultural Activity (IRF9)
- Improved Efficiency in Land Use (IRF10)
- Reduce Resource Consumption (IRF16)
- Reducing Waste Generation and Disposal (IRF17)
- Monitoring and Improving Waste Quality (IRF18)
- Increasing Energy Efficiency (IRF19)
- Ensuring High and Stable Levels of Employment (IRF20)
- Sustaining Economic Growth and Competitiveness (IRF21)
- Stimulate Economic Revival in Priority Areas (IRF22)
- Develop a Dynamic, Diverse and Knowledge Based Economy (IRF23)
- Encourage the Development of a Sustainable Tourism Sector (IRF24)
- Developing a Skilled Workforce (IRF25)

It also scores well in terms of IRF Objectives 20-23 which relate to the performance of the economy.

However, the performance of the Draft RES is less strong in terms of the remainder of the IRF objectives for the following reasons:

- Delivery constraints (IRF1)- Affordable Homes/Ensuring Decent, Sustainable Housing
- Degree of relationship to the economic strategy (IRF6 – Crime and Fear of Crime)
- Lack of regional control/scale of investment or policy change required/IRF 11 – Air Quality, IRF-12 Climate Change, IRF 15 – Transport and Congestion, IRF–16 Reducing Global Impacts
- Lack of recognition of opportunities (IRF – 13 Biodiversity) and IRF – 24 Sustainable Tourism)

4.6 *SIGNIFICANT ISSUES: PROCESS AND STRUCTURAL*

- ***EVIDENCE BASE***

  The production of the Evidence Base document has been extremely useful and has complemented the work carried out for the SA/SEA extremely well.

- *LEADERSHIP*

  In general, the RES as expected given its aims and objectives, does not focus on issues of leadership in specific areas albeit it does mention a wide range of organisations who have key roles in the current and future delivery of the Region's economic strategies and initiatives.

  The document invites regional stakeholders to propose how they can assist in the delivery of the strategy – this will be very important for the RES Implementation Plan since the RES will not be delivered without a coordinated delivery plan across a number of organisations and sectors. The role of the RES in integrating and focusing strategies should be extended to cover issues relevant to the delivery of smart sustainable growth.

- *TARGETS/INDICATORS/MONITORING*

  Each of the targets in the RES has been provided with clear measures of success. In addition, this SA is recommending a series of 'significant effect indicators' as required by the SEA Regulations to enable the impacts of the RES to be monitored. These will hep to inform the ongoing assessment of the contribution of the RES to the objectives of the IRF.

- *IMPLEMENTATION OF THE RES*

  The SA/SEA will need to be able to appraise the delivery or implementations plan of the RES. This will enable the appraisal to suggest opportunities for actions that will promote sustainable development and to propose focused mitigation measures.

4.7 SIGNIFICANT EFFECTS

Table 4.1 sets out our assessment of the likely significant effects of the RES on key environmental issues as required by the SEA Directive. The following issues may, depending on how the RES is implemented, potentially experience significant **positive** effects:

- Population
- Human Health
- Material Assets
- Waste

Issues that may potentially experience significant **negative** effects are as follows:

- Air (in terms of transport emissions)
- Climate Factors (CO_2 and Greenhouse Gas Emissions)

Table 4.1 Likely Significant Effects on the Environment of the South East RES

Environmental Issues	Comments
Biodiversity	There may be opportunities and also impacts but in the absence of detailed actions this is difficult to assess.
Population	The wellbeing of the population should be affected in a positive way
Human Health	The Strategy should promote actions that will deal with many of the determinants of social and economic exclusion and this should benefit health status.
Fauna	There may be opportunities and also impacts but in the absence of detailed actions this is difficult to assess.
Flora	There may be opportunities and also impacts but in the absence of detailed actions this is difficult to assess.
Soil	Use of PDL should help to reduce contamination. A focus on PDL also reduces the likely demand on good quality agricultural land in the region – especially in Green Belt areas.
Water	There may be opportunities and also impacts the target of reducing per capita consumption is positive but it is doubtful if sufficient behaviour change can be delivered to really address the sustainable use of resources.
Air	It is likely that atmospheric emissions especially from transport will increase
Climatic Factors	Green house gas emissions are likely to increase
Material Assets	The Strategy should protect and enhance material assets
Cultural Heritage - Architectural - Archaeological	There may be opportunities and also impacts but in the absence of detailed actions this is difficult to assess.
Landscape	There may be opportunities and also impacts, however, the value of the landscape to the economy is recognised.
Waste	The Strategy promotes improved waste management and opportunities for growing waste management and recycling businesses.

If the region is successful in meeting its target of stabilising and then reducing its environmental impact then the significant positive impacts of the RES will be very significant.

4.8 EQUALITIES ISSUES

The SA/SEA team has carried out an Equalities Impact Assessment of the RES.

In general, the RES and the Evidence Base document demonstrate an awareness of equalities, diversity and race issues in terms of the proposals and the broad strategy outlined. The equalities dimension of the RES should be reflected in the actions proposed in the RES Implementation Plan.

4.9 *EVALUATION OF THE ENVIRONMENT WITHOUT THE SOUTH EAST RES*

Introduction

The requirements of the SEA Directive include the assessment of the likely evolution of 'State of the Environment Subjects'.

This appraisal has used the State of the Environment Report for the South East produced in 2005 by the Environment Agency 'Creating a Better Place' as the basis of our assessment since this is the most recent and authoritative evidence base for current evolutionary trends under RPG9. This report provides information on environmental trends and also includes analyses of the potential effects of recent or proposed legislation.

Given that environmental legislation and standards, like other types of legislation, require some time before their effect can be assessed, this aspect of the SA will require periodical updating as part of the overall review of the environmental baseline and environmental evidence base.

Key issues in the Evolution of the Environment of the South East

The State of the Environment Report 2005 for the region highlights the following pressures on the environment:

- Pressure from new development;
- Increasing demand for water;
- Increasing demand for energy; and
- Increasing demand for waste disposal.

These are being driven by economic and social factors such as the success of the region's economy, increasing population and increasing rates of household formation and also by environmental factors such as the low and inexplicable rainfall of the region and climate change.

Current Environment Trends in the South East

The environment of the South East is monitored via a series of indicators that allow trends to be identified and monitored and actions to be address negative trends to be formulated.

The indicator information reported on in the 2005 State of the Environment Report is the best information we have on the effects to date of the policies and actions within RPG on the environment. As such they are the most robust evidence base for examining likely trends without the South East Plan.

Negative Trends

These are trends where the environment is deteriorating or environmental pressure is increasing. Aspects of the environment that indicate such trends include the following:

- Water demand and availability including supply demand balance, annual abstraction rates, household consumption, leakage and water demand
- Energy consumption
- Waste arising
- Road traffic/traffic emissions
- Emissions from regulated processes
- Nitrates in groundwater
- Biodiversity including distribution of water voles, salmon populations and wild bird populations
- Flood risk
- Future climate change in the South East
- Sea level change at Sheerness

Positive Trends

These are trends where the environment is improving or environmental pressure is decreasing. Aspects of the environment that exhibit such trends include the following:

- Household water metering
- Concentrations of Sulphur dioxide
- Concentrations of Nitrogen dioxide
- Concentrations of Particulates
- Biological quality of river water
- Levels of Phosphate
- Water pollution incidents
- New homes built on previously developed land
- Area under agri-environment schemes
- Land pollution from agriculture and other sources
- Biodiversity including the Condition of Sites of Special Scientific Interest, the area of woodland, the distribution of otters and the population of sea trout.
- UK greenhouse gas emissions

There is therefore a complex picture of ongoing environmental change occurring within the region. In addition, there are significant issues for which no trend or causal effect has been clearly identified in terms of concrete impacts. The most significant of these is man-induced climate change.

The Likely Effects of Legislation

National and EU legislation on the environment continues to evolve and several new or proposed items of legislation could have a major effect on the evolution of the environment of the region. The Water Framework Directive is an obvious example. However, what is equally clear from assessing the trends in key environmental indicators is that regulation alone is unlikely to eradicate environmental deterioration. Many of the negative trends relate to the behaviour of the public, private and domestic sectors in terms of the consumption of resources and the production of wastes or by-products.

What is the Likely Trend without the South East RES?

From the evidence presented in the State of the Environment Report 2005 it seems highly likely that business as usual ie. current trends in economic development, is likely to contribute to a continuation of the negative trends in the region's environment without significant investment and significant policy shifts to encourage radical behavioural change.

Investment in infrastructure and improved enforcement and better standards of performance in terms of industrial processes, building standards etc may be of some assistance in improving environmental performance but they do not address the behaviours that are at the heart of many of the negative trends.

Waste, water, energy, biodiversity impacts and impacts from flooding as well as increased evidence of the impacts of climate change all appear likely to increase under a continuation of current economic development trends.

4.10 CUMULATIVE EFFECTS OF THE RES

The SA team has, in accordance with the requirements of the SEA Directive, the UK Regulations and Government guidance, carried out an assessment of the likely cumulative impacts of the implementation of the RES. This has included an assessment of potential secondary impacts and synergistic effects.

The process used to assess cumulative impacts has involved the following stages:

1. Identification of regional and sub-regional key sustainability issues based on published research, monitoring data, qualitative surveys and expert opinion.

2. Iterative refinement of the issues and the likely impacts via internal SA team brainstorming, reviews of available data and inputs from the SEERA team and the members of the SA Steering Group.

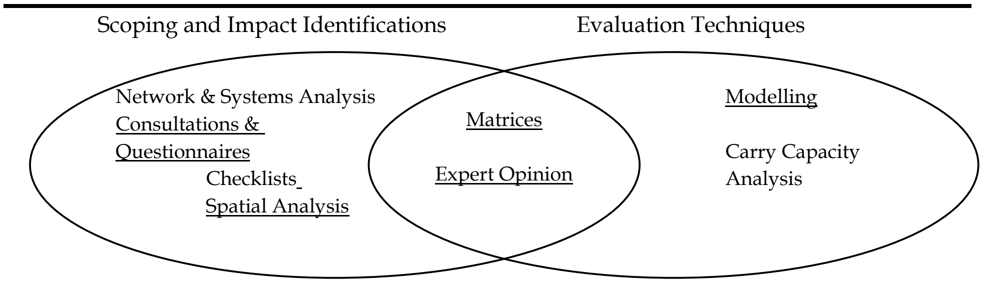
3. Development of assessment tables for cumulative impacts and identifying the nature, source and likely receptors.

4. Refinement of the assessment tables to ensure that secondary impacts and synergistic effects were captured.

This last step included holding a workshop with the SA Steering Group focusing on this aspect of the SA. Detailed feedback was received from some members of the Group and this has informed the development of the final assessment.

Figure 4.2 below presents a diagram of the theoretical ways of developing a cumulative impact assessment and highlights the methods drawn upon to produce the cumulative impact assessment of the RES.

Figure 4.2 Theoretical Ways of Developing a Cumulative Impact Assessment



Source: ERM modified from European Commission - 1999

A summary of the assessment is presented below. The detailed assessment is presented in ***Annex F*** of this report.

Cumulative Effect	**Cumulative/synergistic effects**
Increased waste arisings and resource inefficiency	• Upward pressure on levels of waste generated is likely to make sustainable waste management increasingly difficult to achieve. This will be taking place within a context of falling landfill availability and increasingly stringent policy targets for diversion from landfill. • More waste recycling will lead to increased transport of waste, with associated air quality, greenhouse and congestion impacts. • Air emissions from treatment technologies are likely to increase over the foreseeable future. • Increasing need for waste management capacity will create additional demands for land, particularly near to urban areas.
Shortage of housing	• House price inflation • Lack of housing for key workers • Rural housing availability • Community mix balance ie reinforcement of exclusion, creation of 'ghetto' communities both rich and poor.
Lack of affordable housing	• Difficulty in Attracting key workers into region • Increased journey times for key workers commuting in • Unbalanced communities

	• Constraint on economic growth • Quality of public services • Health and social impacts on families in temporary accommodation, affected by excessive community times, financial burdens of childcare, travel etc an overall quality of life effective leading to higher levels of social exclusion • The RES should contain actions to address effective economic participation including access to childcare etc
Increased Emissions from Transport	• Increased numbers of journeys, whatever the mode, will increase air emissions and lead to greater air pollution. If congestion increases, this will exacerbate the impacts by increasing journey times. Local amenity is likely to be adversely affected near to major routes and feeder roads. • Increased air pollution is likely to lead to greater adverse impacts on human health (these effects are likely to affect deprived/excluded groups disprotionately-so call 'environmental exclusion'), biodiversity and potentially historic buildings. • Improved access to services for the socially excluded is dependent on improved public transport services, as well as provision of services in convenient locations.
Increased Ecological Footprint of the South East	• Increased resource consumption may lead to increased prices for raw materials and higher prices for finished products thus making many products inaccessible to deprived families in the region. • Inefficient use of source resources such as water and clean air coupled with poor management of waste, inefficient use of energy, low rates of recycling, reprocessing and materials recovery are all possible under current policy scenarios. • Legislation is not producing a fast enough change in resource efficiency and consumption and added/maintained growth under a 'business as usual' policy scenario will increase the size of he regions footprint.
Increased Emissions of CO2 – Climate Change Effects	• Growth of housing, transport movement, waste generating, energy use and other factors are likely to mean that implementation of the RES leads to an increase in CO_2 emissions in the region. • The Increase in transport emissions in particular may be offset by policies/ measures that help to reduce/offset GHG emissions. The effectiveness of

such measures and the timescale, over which they will be introduced, can only be partially controlled by the region itself.

- The direct effects of GHG emissions connected with the implementation of the RES will be very difficult to identify. They are going to occur against a background of existing emissions. Failure to tackle existing sources, for example the region's housing stock, will continue to place emphasis on the RSS.
- The likely impacts in terms of habitat/ species loss, increased incidence/severity of flooding, unpredictable weather problems, etc, are also difficult to apportion to the RSS however, without effective mitigation, the RSS will be a contributor to these impacts.

Loss of Biodiversity	• Potentially a further loss of habitats and species but also potentially biodiversity gains/ enhancements heavily dependent on quality of implementation/ detailed planning. • Effects on habitats and species of regional, national and international significance such as those protected by SPAs, SACs, SSIs, NNRs etc

4.11 *MITIGATION*

It will be important that the Implementation Plan for the RES assesses how the significant effects and the cumulative effects identified by the SA will be addressed in terms of effective mitigation of these effects. The SA expects to see these issues directly reflected by concrete actions within the Plan.

The RES already contains actions that address many of the areas of potential concern it is the role of the Implementation Plan to demonstrate how the regional partners will address these issues and how they intend to demonstrate progress on tacking these issues.

Detailed cross-agency actions plans to deliver on the targets in the RES should be developed.

The monitoring of reports on the RES should contain a specific commentary on the progress on tacking the significant effects and cumulative effects of the Strategy with appropriate data from indicators, research etc.

Regional bodies and agencies, not only SEEDA, should demonstrate how they the will also seek to mitigate the predicted sustainability impacts of growth in the South East and how they intend to move away from business as usual.

5 IMPLEMENTATION AND MONITORING

5.1 INTRODUCTION

The RES contains clear indications of targets and key actions and partners to deliver the strategy. These, in turn will be developed further in the Implementation Plan for the RES to be developed over the coming months. At present, the RES does not include a detailed monitoring framework. This will need to be integrated into the Implementation Plan.

The RES Implementation Plan will have a sustainability appraisal which will provide a valuable opportunity to ensure that its implementation will address key sustainability issues.

5.2 DTI GUIDANCE ON MONITORING AND EVALUATION OF THE RES

The DTi's guidance states that '*The RES should set out how the RDA will monitor its implementation and impact*'. It goes on to say '*It is for the RDAs in conjunction with Regional Assemblies and other regional partners to decide how to judge the success of their RES, but use should be made wherever possible of specific and quantifiable indicators*'. In terms of this SA the most important monitoring relates to the monitoring of 'significant effects'. This issue is addressed in ***Section 5.4*** below.

Clearly, sustainable development actions and the performance of the RES in terms of the IRF's objectives are one of the components of the monitoring framework that needs to be established.

The remainder of this section of the SA/SEA report deals with issues of implementation and monitoring relating to the development of an evidence base to assess the contribution of the RES to regional national and international sustainability objectives as encapsulated in the region's Integrated Regional Framework.

It also provides a series of indicators that should be adopted to monitor the potential significant effects of the strategy as required by the SEA regulations.

5.3 INCORPORATING SUSTAINABLE DEVELOPMENT INTO THE IMPLEMENTATION AND MONITORING OF THE RES.

The importance of a sound evidence base for the development of the RES is clearly spelt out in the DTi's guidance. A sound evidence base is also fundamental to effective monitoring of the impacts of the RES during its implementation. The Evidence Base produced by SEEDA for the RES provides an important baseline for future work on the monitoring and review of the RES. From a sustainable development perspective there are a number of issues that need to be discussed by stakeholders within the region.

- Leadership on sustainable development inputs into the RES Implementation Plan.
- The organisation of future inputs on sustainability issues into the evidence base.
- Leadership on development of sustainable development inputs into the evidence base.
- The need to select core RES indicators and targets for sustainable development in addition to those incorporated in the RES.
- The need to select any additional contextual indicators and targets for sustainable development.
- Responsibility for monitoring the sustainability of the RES.

- *Leadership on Sustainable Development Inputs to the RES Implementation Plan*

It will be important that sustainable development inputs to the implementation of the RES are carefully co-ordinated and that the key regional stakeholders in the sector are able to provide leadership on key aspects of the overall process of developing the strategy including the selection of indicators and targets for the measurement of performance. SEEDA should be an active participant in this process but it will need leadership and ownership from sustainable development stakeholders.

- *Organisation of the Evidence Base*

The South East has carried out a great deal of research on sustainable development related issues. Available evidence has been collected together for the baseline component of this SA/SEA as well as for the South East Plan. The RES Evidence Base also contains very important information on sustainability issues.

What is required is clarity of how key areas of work such as ISEW and REEIO will be taken forward where capacity for regional updating and also capacity for analysis and interrogation of the data as required for SA/SEA is going to be created.

Management of the evidence base in the form of a 'sustainable development module' as an integral part of the Regional Observatory or as part of an SD data portal would reflect a model successfully being developed in other regions.

- *Leadership on Sustainable Development Inputs into the Evidence Base*

Regional stakeholders need to clarify who will lead on the various sustainability components within the RES Evidence Base.

- *Selection of Core RES Indicators and Targets for Sustainable Development*

It is highly likely that there will be a range of detailed actions within the Implementation Plan for the RES but that it will also be necessary to limit the number of indicators and targets which are applied to the RES (in addition to those already specified in the strategy). In selecting targets and indicators it will be necessary to focus on those that combine relevance to the RES with significance in terms of sustainable development ie are relevant to the objectives of the IRF. In both cases there will need to be clear baseline for measurement and clear ownership of the indicator or target and commitment to monitor the trends/assignment during the lifeline of the RES.

Section 5.4 of this report proposes a series of indicators that should be adopted to monitor the potential significant effects of the RES.

- *Selection of Additional Contextual Indicators and Targets*

By 'contextual' the SA report means indicators and targets that help to characterise the overall setting within which the RES is delivered from a sustainable development view point. These indicators and targets may not relate directly to the Implementation Strategy of the RES but may help to increase understanding of the overall contribution of the RES to sustainable development in the region.

Sustainable development stakeholders in the region need to formulate a strategy for this broader monitoring of the RES. This should take account of the research reported on in the RES Evidence Base. Regional work on REEIO and other tools should be an integral part of this strategy.

They should take advantage of data already reported on in the Regional Assembly's Annual Monitoring Reports and seek to avoid duplication development of new indicators for which baseline or trend data are lacking.

- *Responsibility for Monitoring the Sustainability of the RES*

This is another area where there needs to be a decision as to who will lead on sustainable development issues connected with the RES. If monitoring can be carried out by one organisation, for instance the South East Observatory, based on a limited set of indicators and targets then the monitoring reports could be co-ordinated by SEEDA as a series of annual monitoring reports.

The region needs to develop a clear position as to how monitoring of sustainable development outcomes will be carried out.

5.4 *SIGNIFICANT EFFECTS INDICATORS*

Based on the findings of the Sustainability Appraisal, the Appraisal has proposed a series of significant effects indicators as an integrated part of the overall Monitoring Framework. It is based on the analysis carried out by the Sustainability Appraisal and takes account of the wide range of indicators already used by key Regional Partners. These indicators are contextual and outcome indicators. The list is set out below. This list will need to be regularly reviewed to ensure that it remains relevant and fully reflects the way that the Plan is being implemented.

- *Climate Change*
    - Energy use per capita
    - Emission greenhouse gases by sector
    - Percentage of electricity output from renewable sources
    - Installed capacity for energy generation from biomass
    - Renewable energy capacity installed by type
- *Resource Use*
    - A measure of resource intensity per unit of production (this measure needs to be developed.).
- *Sustainable Construction*
    - percent of homes new and retrofit meeting Ecohomes very good standard
- *Economic Regeneration/Social Exclusion.*
    - Trend in performance on IMD indicators of 10% most deprived wards in the South East.
- *Quality of life*
    - MORI Survey of SE residents.
- *Biodiversity*
    - Bird populations (woodland/farmland)
    - Condition of SSSIs SACs and SPAs
- *Economic Development*
    - GVA per capita
- *Pollution and Congestion*
    - Days when air pollution is moderate or high
- *Water resources*
    - Per capita consumption of water
    - Rivers of good or fair chemical or biological water quality
- *Waste management*
    - Generation and growth rates of major waste streams
    - Per capita waste generation
- Affordable housing
    - Completion rate of affordable housing against targets

It should be noted that the resource efficiency and consumption indicator will need to be developed in close cooperation with SEEDA and with the Governments Sustainable Consumption and Production Network (SCP-NET). The SA recommends that this is done as an urgent priority due to its relevance to the overall sustainability of the plan.

The waste production indicator for per capita production is not currently part of the Monitoring Framework of the Plan we recommend that it is added.

6 CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

This section of the report sets out the overall conclusions of the Sustainability Appraisal of the RES for the South East of England. It provides a detailed summary of the appraisal's review of the RES's philosophy, strategy and actions as they relate to the development of a growth model for the region that is firmly embedded within the principles of sustainable development.

6.2 OVERALL CONCLUSIONS

The RES clearly demonstrates that it has taken account of the key elements of the UK's Sustainable Development Strategy whilst retaining a clear focus on the regional economy. A wide range of issues relating to economic, social and environmental sustainability are recognised as being key to the delivery of a growth model that ensures that the region continues to grow its economy but not at the expense of quality of life or the integrity of the environment. It also recognises that a significant shift in the consumption and management of resources is required if the region and the economy are to prosper.

The need for significant behavioural change is also implicit in many aspects of the RES and is highlighted by the target in the Strategy relating to the region's ecological footprint. The RES also recognises that 'business as usual' is simply not an option for the region – the economic, social and environmental implications of such approach would compromise the economy and quality of life of the region.

The RES sets out quite clearly a series of significant opportunities for the region arising from a more sustainable approach to economic development. It is also quite open about the equally significant challenges that the region faces in implementing the Strategy and the extent to which existing and still to be created partnerships between SEEDA and other national, regional and local stakeholders will be required to deliver on the region's potential.

It is also quite clear that the Strategy requires innovation in terms of policies, management, funding and delivery and that 'business as usual' in these areas will not deliver what the region or by extension the UK needs. This is a challenging agenda but the correct one.

The emphasis on sustainable prosperity and the clearly set out targets which the region needs to move towards are significant elements in helping to create a framework for testing the extent to which the region can move along a more sustainable development path. It is important that the RES has set out such clear targets. It will be equally important that the Implementation Plan and the actions within it clearly relate to the Strategy and have equally clearly defined performance measures – this is work that still remains to be done but is of fundamental importance if the region is to understand what progress it is achieving.

In developing the RES Implementation Plan SEEDA should seek to take advantage of the extensive potential synergies within the South East Plan's Implementation Plan.

6.3 *GLOBAL COMPETITIVENESS*

In maintaining and enhancing its global role it will be important for the region to ensure that it does not also increase its environmental footprint. The RES explicitly recognises this in terms of the need to invest in infrastructure in ways that promote sustainable development. It is also committed to stabilising its ecological footprint. Decoupling from growth environmental and sustainability impacts will be challenging and will require the Region to work closely with national and other stakeholders.

Many of the countries which are currently changing the shape of the world economy such as China, Russia, India, Brazil and the new EU Member States are also major markets for environmental goods and services and this offers the region not only markets for the many excellent companies and R + D groups that it has in the sector but also opportunities for new partnerships, products and services in those countries, many of whom have significant skills. Tackling environmental management issues in these countries would also put the region in a position of global leadership. Developing its global reach and impact will need to be done in ways that do not lead to an increase in its ecological footprint – this will require innovative thinking.

The Region has already invested in activities such as the GROW programme and the RES is clear about the region's ongoing commitment to European Commission programmes of R + D. One key element of this work must continue to be research into the policies, strategies and behaviours that characterise successful regions where success is equated with a demonstrably high quality of life including well-balanced communities.

In terms of the proposed actions to underpin this component of the strategy we would make the following comments:

- *Global Businesses and Foreign Direct Investment.*

> **Target:** Increase the % of businesses located in the South East operating internationally from an estimated 10% in 2003 to 15% by 2016 maximising the South East's share of FDI.

It would be useful if an integral part of these actions to deliver on this target were to identify partner regions who the South East could seek to work with in terms of their similar sustainability aspirations as well as a need for the skills and expertise of the region.

It would be useful for the region to develop a tool that assists in the screening of investors based on their sustainability credentials. This could look, for example, at their performance as carbon/likely CO_2 emissions. Whilst this is likely to be only a minor component of the overall assessment of investor performance it would send out a clear message as to the emphasis the region places on performance in this area.

Such a tool could form part of an overall appraisal tool used by public agencies to assess investors and investment decisions.

- *Knowledge Transfer and Business Expenditure on Research and Development.*

Target: Increase the proportion of businesses in the South East reporting R+D links with universities from 11% in 2005 to 15% in 2016, and increase business expenditure on R+D in the South East from 3.2% of Gross Value added in 2003 to 4% by 2016.

The region should also be seeking to encourage greater public sector expenditure on R+D where this corresponds to business and policy needs. There should also be an emphasis on ensuring that the results of research are accessible and that marketable ideas/innovations are supported. Not all of the major funders of research have a strong track record or interest in the implementation of research and the region needs to ensure that it focuses on this aspect of R+D ie that R+D is 'brought to market'.

Critical areas or R+D should include design and construction of housing and commercial buildings, sustainable transport, fuel technologies, resource efficiency/consumption technologies for waste and water, and also research into behavioural change.

An integral part of the achievement of this target should be built on the region's acknowledged strengths in the areas of climate change, sustainable construction and product design and social aspects of sustainable development.

- *Innovation and Creativity*

Target: Increase the percentage of total South East business turnover attributable to new products from 12% to 20% by 2016, and the percentage attributable to significantly improved products from 18% in 2004 to 25% by 2016.

The focus in the RES on global leadership in environmental technologies should be an integral part of achieving this target.

- *Infrastructure*

Target: Secure investment in infrastructure priorities to maintain international economic competitiveness.

The significant need for investment in transport and other infrastructure brought out by the RES echoes similar concerns expressed in the South East Plan. It will be important to ensure that any increased capacity is associated with demand management and significant upgrading of public transport. Investment in infrastructure alone will not help to resolve the problems of congestion and associated pollution which so seriously affect the region – significant behavioural change is required and it would be useful to see specific actions relating to demand management and modal shift included in the RES Implementation Plan. The transport target in the RES, recognises the important of both investment and demand management.

6.4 *SMART GROWTH*

The South East RES adheres very closely to the idea of smart growth. In increasing economic participation rates and the overall productivity of the region and the RES identifies a number of strategic issues of importance to the SA.

- *Enterprise*

Target: Increase the business stock by 35%, businesses from 35 per 1,000 inhabitants in 2005 to 44 per 1,000 inhabitants by 2016, including 10,000 new businesses run by women by 2010.

It will be important to ensure that the actions for this target reflect not only the economic strengths of the region but also the diversity of its communities and the current intra-regional disparities within the regional economy. Voluntary and community enterprises should be a component of this target.

- *Skills*

Target: Maximise the number of people ready for employment at all skill levels, and ensure that they are continually equipped to progress in the labour market.

The RES recognises the need to make skills business-relevant. This means that training programmes and skills development must be demand-led and must be supported by business. Another key skills issues recognised in the Strategy that has important sustainability implications is the need for a 'Skills Escalator'. This has been demonstrated as being an important mechanism for assisting with economic participation and also social inclusion. It is also important that the RES recognises the changing demographic structure of the region and the need to address the skills needs and lifetime working patterns of an ageing population.

- *Competition and Business Regulation*

Target: Increase the level of participation of South East Businesses (especially small businesses and social enterprises) in bidding for public sector contracts.

This objective recognises that companies in the region, especially smaller businesses require assistance to become active players in the economy, especially in relation to the requirements of public sector and community enterprises who often lack the resources to participate effectively in tendering processes and yet offer goods and services in key areas such as healthcare, social infrastructure and waste management.

- *Transport*

Target: Reduce road congestion and pollution levels by improving travel choice, promoting public transport, managing demand and facilitating modal shifts.

It is encouraging that this objective, in the context of Smart Growth, addresses the need to reduce the impacts of the congestion and seeks to introduce effective measures to manage demand. This will need to proceed in tandem both with the actions identified under the Global Competitiveness strand of the Strategy and with the actions proposed by the South East Plans.

- *Physical Development*

Target: Ensure sufficient and affordable housing and employment space of the right quality, type and size to meet the needs of the region and support it competitiveness, and create the climate for long term investment though the efficient use of land resources, including mixed use developments.

There are clear synergies between this objective and target and the South East Plan. SEEDA and the Assembly should work closely on these issues.

- *Employment*

Target: Improve the production of the workforce and increase economic activity from 82% to 85% by bringing 110,000 net additional South East residents of working age into the labour market by 2016 (as a step towards bringing up to 250,000 residents into the labour market by 2026).

The focus within the RES on increased productivity and economic activity should assist in addressing issues of social exclusion, poverty and also poor health status in some areas of the region.

6.5 *SUSTAINABLE PROSPERITY*

The RES has set targets for the key parameters that will assist the region in reaching its goal of reducing, then stabilising and ultimately reducing the regions' ecological footprint. The targets should all make sizable contributions to the overall goal but the region will still need to develop a detailed 'route map' to make significant progress by 2016. Given that the South East Plan also has the same goal there is scope for a coordinated regional programme of actions - this should include all of the region's key agencies and should include targets within all key regional strategies.

It is important that the RES views reduction of the region's ecological footprint as a challenge to innovation and an opportunity – this is very much in line with current Government policy and actions on resource efficiency and resource consumption.

In terms of the proposed actions in the RES we would make the following comments:

Climate Change and Energy

Target: Reduce CO_2 emissions attributable to the South East by 20% from the 2003 baseline by 2016 as a step towards the national target of achieving a 60% reduction on 1990 levels by 2010, and increase the contribution of renewable energy to at least 10% of energy supply in the South East by 2010 as a step towards achieving 20% by 2020.

Clearly, what is 'attributable' to the South East is debateable especially in terms of energy generation, travel miles, etc. However, it is extremely important to have a target to work with. At present the United Kingdom is experiencing difficulties with its management of CO_2 emissions. Given the significance of transport emissions to overall levels of CO_2 this must be a priority area for emissions reduction and this will mean that infrastructure investment will need to be 'tested' in terms of its impact on CO_2 emissions.

The RES Implementation Plan should identify ways that key agencies and funders in the region can focus their energies on carbon reduction.

Sustainable Consumption and Production

Target: Reduce per capita water consumption in the South East by 20% from 169 litres per day in 2003/04 to 135 litres per day by 2016, and achieve a 30% increase over the 2003 baseline in GVA generated per tonne of material entering the waste stream by 2016.

This target is one of the key elements of the Strategy in terms of addressing he need to stabilise the regions ecological footprint. It will require detailed actions in the Implementation Plan to ensure that the target is met by 2016.

Natural Resources and the Environment

Target: Achieve measurable improvements in the quality, biodiversity and accessibility of green and open space.

This target recognises the need to ensure that high quality natural assets are an important part of the region's character and are necessary to maintain its quality of life. It will be important that the Implementation Plan provides clear actions and processes for the concrete delivery of improvements. These should be developed in collaboration with Natural England and other key stakeholders.

Sustainable Communities

Target: Enable more people to benefit from sustainable prosperity across the region and reduce polarisation between communities.

This target is very important given the disparities between sub-regions in the South East. Delivery of this target – which would benefit from more detailed description and quantification – will assist economic and social cohesion and balanced growth across the South East and avoid further movement towards a two speed region.

6.6 TRANSFORMATIONAL ACTIONS

The idea of identifying a limited series of actions that will generate a step change in the regions performance is an important one. The actions selected by the Region are all important and have the potential to move the region towards a significantly more sustainable growth path in terms of delivery of the targets within the RES. They also offer clear synergies with the South East Plan.

It will be important that the Implementation Plan provides more detailed information on the 'critical paths' for the delivery of each transformational action since they represent a significant challenge. Performance indicators for each action will also need to be established.

6.7 *ACTIONS TO DELIVER THE RES*

The RES contains a large number of actions to help deliver its targets. These have the potential to deliver a strategy that will make a significant contribution to the region's sustainability in terms of the objectives set out in the IRF. To provide more clarity and certainly as to how these actions will be delivered in practice the Implementation Plan will need to demonstrate how partnerships, funding, policies and behaviour will be changed to support the RES. This will require a wide-ranging and proactive approach to promoting change within national government policies, regulatory frameworks, funding mechanisms and funding programmes, delivery bodies and attitudes in the public and private sectors and the region's residents. This will require strong leadership from SEEDA but also commitment from the Region as a whole to the RES as a regional not just an RDA strategy. It will require new ways of working and an openness to challenging and changing the status quo in terms of policy, funding and delivery to achieve a new alignment behind regional priorities.

6.8 *RECOMMENDATIONS*

The recommendations arising from the Appraisal of the RES in terms of the Strategy and its implementation are as follows:

- SEEDA and the Assembly should establish a process for reviewing the realignment of key stakeholder's priorities in the region with regional priorities.
- SEEDA should continue to work with partners in the Region and with National Government on the clarification of actions to deliver the RES including a Monitoring Framework and the Implementation Plan. Engagement with key partners will be critical to developing a more robust way forward on implementation.
- The Implementation Plan should ensure that each of the targets in the RES should be provided with a clear rationale and also a 'delivery path' ie, how is the target to be met – at present it is not clear how actions will deliver the targets.
- SEEDA and the Regional Assembly should develop clear proposals for integrating the common elements of the RES and the South East Plan via joint implementation actions.
- Given the significance of behavioural change to the delivery of both the RES and the South East Plan – a clear set of joint actions relating to this key area of policy should be developed for discussion with Central Government, the private sector and public sector partners.
- SEEDA and its partners should continue to work on innovative ways of measuring the impact of the RES on resource consumption and efficiency

such as its work with the REEIO Model and the Sustainable Consumption and Production Network.

- SEEDA and its partners should establish a clear process for reporting on the sustainability impacts – positive and negative of the RES.
- SEEDA should work with regional partners to identify clear roles and responsibilities for ensuring the delivery of key actions relating to sustainability.
- Consultation responses on the objectives of the IRF and on the Appraisal Framework should be used to assist in any review of the IRF and in the development of future appraisal frameworks.
- Clear responsibilities for monitoring and reporting on the Significant Effects indicators should be established.