



The Regional Economic Strategy

2006-2016

Technical Paper 1: Intervention Framework



Regional Economic Strategy 2006 – 2016

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South East England Development Agency

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Introduction

This paper outlines the major areas where inefficiencies resulting from market failures lead to less than optimal outcomes for economic agents or society as a whole and where there is a need for Public Sector intervention. Option analysis is employed and there are examples of policy interventions that could lead to more efficient outcomes. These are addressed in greater detail in the new Regional Economic Strategy for the South East 2006-2016.

The available evidence is not repeated in this paper since it is presented in The Evidence Base paper available at: www.seeda.co.uk.

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Foreign Direct Investment and Exposure to Global Markets

Market Failure

Externalities	<p>Positive externalities are associated with Foreign Direct Investment (FDI) and greater exposure to global markets.</p> <p>The available evidence shows that inward investment could lead to technology transfer through backward and forward linkages with indigenous firms, while labour mobility may generate knowledge or technology spillovers between the foreign and indigenous firm, which could stimulate demand, job creation and productivity growth.</p> <p>Greater exposure to global markets by indigenous firms could lead to greater acquisition of knowledge that could strengthen competition and innovation and increase access to new ideas, technology and markets.</p>
Incomplete Information and Uncertainty	<p>Information asymmetries and co-ordination failures are another example of market failure that could lead to an inefficient market outcome.</p> <p>Foreign firms are often faced with incomplete information and uncertainty about the quality of infrastructure or availability of skilled labour in a potential location or its neighbouring areas. Foreign owned businesses are highly mobile and failure to provide adequate information could drive a potential investor to another location (elsewhere in the UK or abroad).</p> <p>Inefficient market outcomes could arise as a result of significant information asymmetries between domestic and foreign owned firms. While foreign owned firms benefit from their exposure to global markets through acquisition of new technology and new markets, many domestic firms are not aware of the opportunities from exposure to global markets, which could damage their competitiveness and growth potential in the future.</p>
Co-ordination	<p>There are several public sector bodies such as UKTI and inward investment teams within RDA's that encourage inward investment and provide support to foreign investors. The existence of several service providers requires greater co-ordination effort to maximise social returns. Co-ordination problems are an important barrier in overcoming efficient assistance to more businesses to operate internationally. There are several national and regional bodies responsible for providing business assistance, while there are potentially a large and heterogeneous group of potential beneficiaries with different preferences and characteristics who could benefit from greater co-ordination amongst service providers.</p>

Option Analysis

Option	Key points
Do Nothing	<p>Foreign owned companies are important source of new ideas and technology and are major contributors to national and regional growth. We simply have to look at the Republic of Ireland and the role of FDI in its economic development over the past two decades to see the importance of FDI for competitiveness and growth. The 'Do Nothing' option is simply not feasible here since those businesses are</p>

	<p>highly mobile and since there is a fierce competition for foreign owned businesses from developed and increasingly emerging economies.</p> <p>In an increasingly globalised economic environment there are opportunities for domestic firms to benefit from greater exposure to global markets, such as establishing a foothold in another market, which could lead to an increase in exports. This could strengthen a firm's competitiveness and allow the business to grow. Earlier exposure to other markets is considered advantageous since at a later stage a firm is likely to face a greater number of competitors. In an increasingly globalised world there is simply no viable alternative, since the failure to get exposed to global markets could damage a firm's future growth potential.</p>
<p>Preferred Option:</p> <p>Assist more businesses to operate internationally</p>	<ul style="list-style-type: none"> • Exploiting the opportunities presented by the creation of a single regional team encompassing trade and investment. • Strengthening the international network of global partners from similar regions. • Further developing a programme of aftercare support for investors as part of a broader Investor Development Programme. • Closer cooperating with regional partners in London and the East of England.

Innovation Input - Research & Development (R&D)	
Market Failure	
Externalities	Positive and negative externalities are associated with investment in research and development. Positive externalities refer to a situation where it is not just the firm that invests in R&D that benefits from such activities but also the other firms through leakages that result from R&D. It is also possible that since not all impacts of R&D and innovation are captured by the innovating firm (knowledge could leak to competitors) some firms may under invest in certain types of research and development (negative externality). Under-investment in this case comes as a result of private benefits being less than the social benefits.
Incomplete Information and Uncertainty	Firms tend to under-invest in research and development because of high initial costs, a lack of relevant skills and uncertainty about the future returns. The available evidence shows that this is particularly relevant to SMEs.
Co-ordination	Access to university research plays an important part in research and development. The evidence shows that there is a lack of co-ordination in collaborative research between firms and universities who could share the costs and internationalise the benefits of R&D.
Option Analysis	
Option	Key points

Do Nothing	<p>Spending on R&D is an input to innovation, which impacts on business competitiveness and growth. In a globally competitive environment, innovation is seen as an important factor for boosting competitiveness of firms and regions as the South East firms cannot compete on the basis of the cost alone with emerging economies. It is increasingly recognised that knowledge is the major source of competitiveness. A failure to intervene in this important area could damage the long-term competitiveness and growth prospects of South East businesses through foregone economic benefits such as higher productivity, moving up the value chain etc. Evidence from evaluations of past projects show that R&D programmes for SMEs clearly justify business support to raise or create R&D activities. The rationale for the 'Joining Forces' programme for example has been broadly validated by the evaluation since the generic nature of joining technologies enables one single centre of expertise to cover many firms potentially achieving economies of scale in dissemination (SQW 2000). Therefore there is no viable alternative than to invest in research and development activities and co-ordination and assistance by public sector bodies.</p>
<p>Preferred Option:</p> <p>Increase business expenditure on research and development and encourage greater collaboration with the region's knowledge base</p>	<ul style="list-style-type: none"> • Using the DTI 10-Year Investment Framework in Science and Innovation through development and delivery of SEEDA's Innovation Action Plan. • Promoting the strengths of the South East's knowledge base. • Assisting foreign owned companies in accessing innovative capabilities of the region's knowledge base.

<h3>Innovation Output - Business Turnover Attributable to New and Improved Products and Services</h3>	
<p>Market Failure</p>	
<p>Externalities</p>	<p>Positive externalities are associated with innovation activities as innovation could lead to higher turnover and profits for the firm that innovates. Novel or improved products and services benefit the society as a whole.</p> <p>It is often the case that a firm that innovates does not always capture all of the benefits from its leading to impact positively on other agents in the marketplace. For example some designs, in particular those that improve or create new products may be used or developed by other innovating firms. Such spillovers could result in a situation whereby innovation activities result in social benefits exceeding the private benefits of the innovating firm. However, such spillovers could also create some inefficiencies as firms that do innovate may invest less in the future than would be optimal from an economy wide perspective.</p>
<p>Incomplete Information and Uncertainty</p>	<p>Incomplete information and uncertainty are also causes of market failure.</p> <p>The evidence shows that creativity and design may be particularly important for innovation in the growing service firms. Research also</p>

	<p>shows that firms with higher design intensity have a greater probability of carrying out product innovation and that design and expenditure has a positive association with firm productivity growth. However, over half of UK firms say that design has no role or only a limited role to play in their business.</p> <p>Uncertainty about future returns plays an important role in firms' decision-making process as well as a lack of understanding by smaller firms on how to turn a successful innovation into higher business turnover and profits.</p>
Co-ordination	<p>Co-ordination problems are an important barrier in overcoming market failures or the consequences of market failures by economic agents in this area.</p> <p>Policy actions may promote the importance of design as an important source of innovation across all sectors to realise the true market value of these activities. There is a role for the public sector to provide support to ensure firms have incentives to undertake more of such activities.</p> <p>Furthermore, the evidence base on innovation and networking suggests that networking plays a pivotal role in innovation.</p>
Option Analysis	
Option	Key points
Do Nothing	<p>The available evidence suggests that there are several market imperfections that result in market failures and that there is a need for some kind of intervention. A failure to intervene could damage the future competitiveness of South East businesses and could lead to less optimal outcome for the society as a whole.</p>
<p>Preferred Option:</p> <p>Increase the percentage of total business turnover attributable to new and improved products and services</p>	<ul style="list-style-type: none"> • Supporting further development of the Sector Consortia. • Promoting the importance of design across all sectors, to realise the true market value of the South East's rich technology resources and creative industries. • Developing, supporting and consolidating the Regional Enterprise Hub Network. • Maintaining the Manufacturing Advisory Service (MAS), improving its effectiveness and impact. • Continuing to support the Innovation Advisory Service, providing intensive support to those businesses with the greatest capacity for sustained innovation and with the potential to influence others through their supply chains. • Encouraging pan-regional collaboration and good practice on innovation. • Developing support mechanisms to ensure that entrepreneurs can access leadership and management skills needed for innovation.

Public Procurement	
Market Failure	
Externalities	Positive externalities are associated with public procurement of goods and services as public procurement can create a new market for a good or stimulate activities in an existing market characterised by market imperfections (such as innovative environmental products).
Incomplete Information and Uncertainty	<p>There are significant information asymmetries between economic agents in regard to tendering for public sector contracts. Largely due to their expert knowledge on procurement rules and regulation and experience in tendering for public contracts, large firms are often in a better position to tender and be successful in tendering for public contracts than SMEs and community and voluntary sector organisations.</p> <p>Furthermore, it is often the case that public sector contracts are leaked outside the region, which implies that there are information failures on the public sector side, preventing regional businesses from accessing public contracts and as a result economic benefits are often achieved outside of the region.</p>
Imperfect Competition	As a result of competitive tendering procurement by private sector firms is generally more efficient than when undertaken by the private sector. Any imperfectly competitive market is another area where market inefficiencies arise.
Option Analysis	
Option	Key points
Do Nothing	This is not a viable option since as a result of asymmetric information between the agents in relation to the goods or services on offer an inefficient market outcome could arise.
Preferred Option: Increase the level of participation of South East businesses (especially small businesses and social enterprises) in tendering for public sector contracts	<ul style="list-style-type: none"> • Improving business support available to help small and medium enterprises and community and voluntary sector organisations tender for contracts. • Improving the ability of the public sector to encourage more local procurement by improving its 'client side' capacity, using a number of targeted approaches.

Enterprise	
Market Failure	
Externalities	Positive externalities are associated with higher business start-ups and survival rates as they lead to higher employment, output and prosperity. However several barriers often lead to efficiency and equity losses as the final outcome is less than optimal. People leaving in some areas or people from certain groups are under-represented in this area.

<p>Incomplete Information and Uncertainty</p>	<p>Starting a new business is often perceived with high risks, fear of failure and financial barriers, which hinders potential entrepreneurs from realising their ideas.</p> <p>Inefficient market outcomes could arise when there is unequal or asymmetric information between the agents. An example of this is business finance. The businesses (SMEs) or people thinking of starting a business usually know more about their own characteristics than the lender which makes it difficult for the lender to price a loan accurately. In order to overcome adverse selection problems lenders typically use collateral as insurance against default. However, not all borrowers have collateral with which to demonstrate their commitment, which implies that some groups are more likely to be charged higher premium or be denied credit. This particularly applies to people living in deprived areas who are more likely to live in social housing, businesses with no track record and businesses with non-standard characteristics.</p>
<p>Co-ordination</p>	<p>Information problems could also create market failures in the provision of business services as inefficiencies may arise due to a lack of appropriate information or due to asymmetric information about the quality of business support services. Females and people living in rural areas typically face greater barriers to business support than males or people living in the cities.</p> <p>People thinking of starting a business may have incomplete information about opportunities in some sectors (such as creative and tourism sectors). There is a need for better co-ordination amongst service providers (as there is often more than one service provider with people seeking support not knowing where to seek information). There are also costs of dealing with a wide array of different public sector organisations which are not joined up and which require greater co-ordination.</p> <p>The available evidence also shows that exposure to entrepreneurial culture at an early age also leads to higher business start-ups, which implies that there is a role for public sector co-ordination amongst education providers.</p>
<p>Option Analysis</p>	
<p>Option</p>	<p>Key points</p>
<p>Do Nothing</p>	<p>This is not a viable option since enterprise is a driver of productivity and prosperity and since there is evidence of market failures that affect a wide group of individuals and firms.</p>
<p>Preferred Options: Invest to ensure higher business start-up and survival rates</p>	<ul style="list-style-type: none"> • Implementing an integrated approach to business support. • Implementing improved and better targeted support for women's enterprise. • Supporting new and growing businesses in the creative and tourism industries. • Stimulating enterprise in rural areas. • Continuing to develop a programme to support high expectation enterprise, which will be a key driver of the economy in 10 years' time.

	<ul style="list-style-type: none"> • Supporting the development of home-based businesses, particularly targeting rural and women owned businesses. • Expanding the Enterprise Gateway Network from nine to 20 Gateways by 2009. • Creating a permanent new early stage business fund. • Building sustainability and corporate social responsibility into everyday business practice.
Invest in an enterprise culture across all generations	<ul style="list-style-type: none"> • Enhance the teaching of enterprise in schools and colleges. • Stimulate increased levels of enterprise among older people.

Skills	
Market Failure	
Externalities	<p>Positive externalities are associated with higher skills of the workforce.</p> <p>Higher investment in skills brings income and social justice to individuals and leads to higher productivity with a positive impact on firm performance and competitiveness of the economy.</p>
Incomplete Information and Uncertainty	<p>Incomplete information is one of the causes of markets failing to deliver a socially optimum level of skills provision in an economy. A mismatch between skills demand and skills supply often leads to under supply or over supply of skills with negative externalities for employer (the impact on productivity) or the individual concerned (having to compete in the labour market with inappropriate skills).</p> <p>Individuals are affected by information problems as the return on their investment in skills is unknown which could lead to a less than optimal level of investment. Furthermore, since the future return on investment in skills is not known individuals may face obstacles to borrowing to invest in skills as lenders are faced with adverse selection and moral hazard.</p> <p>Employers are often ignorant of the relationship between skills and firm performance or have a disincentive to invest in skills provision as they could not fully capture all the benefits from investment in training. Positive externalities could have an impact on employers' investment in training for their staff as employees could move to another firm, which implies that the employer is not able to capture the full benefits of the investment.</p>
Co-ordination	<p>Co-ordination failure between skills demanded by employers and those supplied by training providers results in market failure (a mismatch between demand and supply). It is often the case that employers require higher or more generic skills and that supply of skills is often inelastic to changes in business demand. To rectify market failure there is a need for greater involvement by public sector bodies to act as a bridge between businesses and skills providers.</p>
Option Analysis	

Option	Key points
Do Nothing	This is not a viable option since there is evidence of a mismatch between skills demand and skills supply with negative impact on firm performance. Skills are widely recognised as a major factor affecting competitiveness and play a major role in delivering social objectives.
Preferred Options: Ensure businesses can access the skills they need to raise productivity	<ul style="list-style-type: none"> • Ensuring current and future regional skills provision and labour market services meet business requirements and stimulate the demand for higher level skills, including the use of Sector Skills Agreements. • Clarifying and simplifying the skills offered to businesses across the region and addressing skills deficits, particularly those at intermediate level. • Ensuring access to education and training providers and awarding bodies responding to the findings of the Leitch Review. • Ensuring that all young people and adults of all ages in the region have access to effective vocational and work-based learning opportunities.
Ensure entrepreneurs can access the management and leadership skills they need to start and grow successful businesses	<ul style="list-style-type: none"> • Ensuring a skills perspective to the 10-year framework for science and innovation. • Focusing on management skills for supervisory and middle managers who are vital to realising the potential of their own staff, and improve access to management and leadership development opportunities for small and growing companies. • Developing a Skills Escalator that aims to meet the skills needed by business. This will establish a life-long learning culture in the workplace to ensure that individuals can access the education and training they need so that they may progress throughout their working lives. The Skills Escalator approach will support progression equally through the academic and vocational routes.
Ensure individuals can access the skills they need to enter and progress in the labour market	<ul style="list-style-type: none"> • Improving access to workplace learning for low-skilled, low-paid, low-status workers to enable labour market progression. • Raising employer awareness of work organisation practices that embed a culture of learning for their workforce.

Infrastructure	
Market Failure	
Externalities	Infrastructure is an important component of regional and national competitiveness and prosperity. Investment in infrastructure, such as transport, leads to positive externalities as it enables better access to markets for firms and employment opportunities for individuals. Under-investment leads to negative impact on businesses, individuals and society. It affects business investment, labour movement and

	<p>the productivity and competitiveness of the region.</p> <p>There is also an argument that additional investment in transport infrastructure leads to more vehicles on the road and additional negative impact on the society. The alternative argument would be that under-investment leads to congestion, excludability and high emissions (alongside negative impact on businesses). For example, although the road network is a public good which is characterised as being non-excludable, at a point of congestion roads become excludable which leads to a less than desirable outcome.</p>
Public Good	By their nature most large infrastructure projects such as the road network are public goods which creates a disincentive by private sector to invest (as it is not possible to exclude users).
Co-ordination	<p>Co-ordination problems are an important barrier in overcoming market failures or the consequences of market failures by economic agents (such as disinvestments and overcoming different objectives by public sector bodies).</p> <p>There is a role for public sector to facilitate the funding and development of infrastructure projects and the development and delivery of pragmatic solutions to improve connectivity in a sustainable way.</p>
Option Analysis	
Option	Key points
Do Nothing	A lack of business investment and labour mobility are often the consequences of poor connectivity that lead to less than desirable social outcomes (impact on growth and productivity, employment opportunities etc). Therefore the 'Do Nothing' option is not viable since it is not likely that a market left on its own would arrive at a socially optimal outcome.
Preferred Options:	
Secure the infrastructure needed to support continued prosperity	<ul style="list-style-type: none"> Facilitating funding and development of major infrastructure projects.
Secure investment in a sustainable transport network to improve connectivity, reflecting regional economic priorities	<ul style="list-style-type: none"> Investing in transport to support strategic economic corridors. Investing in integrated, intermodal transport hubs of national and international economic significance. Fostering innovative schemes that improve the transport chain at all levels. Developing deliverable and pragmatic solutions for regional road, rail and light rail schemes of national and regional significance.

Housing and Land Use	
Market Failure	
Externalities	Housing and land use are important components of regional

	<p>competitiveness and growth and play an important part in equity considerations and delivering social exclusion.</p> <p>Unsustainably high prices could have an important negative impact on individuals (through affordability and mobility), businesses (through recruitment and retention difficulties) or society (through for example a lack of foreign investment and equity).</p>
Incomplete Information and Uncertainty	<p>Uncertainty and incomplete information often leads to inefficient market outcomes in housing and land use. Reclaiming brownfield land is an example where a lack of information about future returns due to in some instances high costs of clean up operations could lead to a lack of private sector involvement. Intervention by the public sector into areas such as regeneration and housing affordability is an important part of equity and efficiency objectives.</p> <p>There is also incomplete information about future demand for housing which can have an important impact on the ability of the region to expand.</p>
Co-ordination	<p>There is a role for the public sector to co-ordinate activities to ensure sufficient and affordable housing and to create the climate for long-term investment through efficient use of land resources.</p>
Option Analysis	
Option	Key points
Do Nothing	<p>The available evidence shows that from an economic perspective there is a close relationship between housing and land use and economic growth, while housing also plays an important part in delivering government objectives of equity and social justice, which implies that the 'Do Nothing' option is not viable.</p>
Preferred Options: Ensure sufficient and affordable housing to meet the needs of the region's labour force	<ul style="list-style-type: none"> • Encouraging close collaboration between local authorities to develop local and sub regional housing market assessments. • Encouraging innovative approaches to housing delivery across all sectors. • Developing and implementing a private sector housing renewal strategy for the region.
Create the climate for long term investment through efficient use of land resources	<ul style="list-style-type: none"> • Ensuring that physical development supports enterprise and innovation, alongside reinforcing established programmes in the Growth Areas. • Ensuring the best use of land assets surplus to public agency requirements. • Building the capacity of local authorities to deliver brownfield development. • Ensuring a wider understanding and adoption of quality standards and best practice. • Identifying opportunities where investment in the environment can provide the greatest returns to quality of life and economic success. • Ensuring all developments include provision of an appropriate level of green infrastructure.

	<ul style="list-style-type: none"> • Creating cities and towns where people choose to live by investing in an urban renaissance.
Employment	
Market Failure	
Externalities	<p>An increase in employment leads to positive externalities for firms, individuals and the society.</p> <p>However, in spite of obvious benefits to economic agents, individuals are often faced with significant barriers to employment, which lead to inefficiencies in labour market outcomes.</p>
Incomplete Information and Uncertainty	<p>There is evidence of incomplete information in training and employment support for the most excluded section of the society. Positive externalities of employment implies that private sector providers such as recruitment agencies will be incomplete or inefficient, this is particularly true as regards the provision of a socially efficient level of service for the most excluded sections of the society. Job searchers by the most excluded section of the workforce are hampered by incomplete information (workplace advertising and recruitment practice).</p> <p>A significant proportion of the working age population is not participating in the labour market due to barriers to full time employment (such as care or disability) and due to incomplete information about flexible working environments.</p>
Co-ordination	<p>Co-ordination problems are an important barrier in overcoming market failures or the consequences of market failures by economic agents. There is a role for the public sector in helping to bridge barriers to flexible working practice, training and employment support and discrimination by employers who often prefer to employ younger workers than those of an older age (who are more likely to suffer from health problems but are also equally more likely to have higher skills and lower propensity to absence than young people) or people caught or perceived to be caught in a benefit trap.</p> <p>Implementing a culture of flexible working contributes to better work-life balance and quality of life. It can spread employment opportunities across the region and lead to greater inclusion of the workforce.</p> <p>In order to improve flexible working practice, there is a role for public sector intervention in enabling coverage of ICT support throughout the region. The intervention in this area will have additional positive externalities on the society as a whole (through reduced commuting times and congestion, improved health and productivity and reduction in resource use).</p>
Option Analysis	
Option	Key points
Do Nothing	This is not a viable option as employment has a positive impact on individuals, firms and the society as a whole.
Preferred Options:	
Improve movement of	<ul style="list-style-type: none"> • Investing in training and employment support for the most

people up the skills ladder	<p>excluded, providing accessible skills development courses in local venues and making basic skills support accessible for all.</p> <ul style="list-style-type: none"> • Working with employers to support in-work training schemes; providing vocational training and support in a range of learning styles; and targeting the support of FE and HE courses in industrial sectors that have significant skills gaps. • Encouraging a culture of learning throughout business and community life.
Promoting flexible work practices	<ul style="list-style-type: none"> • Enabling coverage and access to ICT support throughout the region; and promoting the development of flexible working hubs, especially in rural areas. • Influencing regional planning policy to enable the development of workplaces in sustainable locations, and enabling all employers to develop and implement flexible working policies.
Challenge stereotyping and promote equality and diversity	<ul style="list-style-type: none"> • Providing positive images and promotion for key industrial sectors and make workplace advertising and recruitment processes appropriate to all. • Taking a long-term view within education of the future needs of the regional economy, and promoting the business case to employers for using the talents of all sections of the community.

Health	
Market Failure	
Externalities	There are positive externalities associated with health of the workforce and productivity and growth as well as government objectives of equity and social justice.
Incomplete Information and Uncertainty	There is incomplete information on many businesses about the relationship between health and productivity performance.
Co-ordination	People with health problems often face barriers to employment such as discrimination by employers, inadequate working environments or a lack of flexible working, which implies that there is a need for the public sector to intervene to prevent a less than optimal outcome for individuals and the society as a whole.
Option Analysis	
Option	Key points
Do Nothing	This is not a viable option since there is evidence of market failure and since health is a major factor that impacts on productivity and growth.
Preferred Option: Raise workforce productivity through health	<ul style="list-style-type: none"> • Encouraging businesses and organisations to develop strategies which place health at the heart of their drive to increase productivity. • Deploying ICT to support increased teleworking and home-

working in quality jobs.

Environment	
Market Failure	
Externalities	Economic activities of businesses and consumers often have effects or implications on third parties. Negative externalities are often the by-products of the interaction between consumers and producers in the market place and they arise when one of the parties does not bear the full costs of an activity. This leads to market inefficiency because extra costs are having an impact on third parties, and when they are not accounted for this leads to excessive amount of activity.
Public Good	Environmental externalities such as carbon dioxide emissions, depletion of natural resources, excessive water consumption or waste generation are having an important negative impact on the sustainability of the region. However, since they are usually non-rival and non-excludable, such externalities are public goods, which require public sector intervention to arrive at a socially desirable outcome. In the absence of properly defined property rights, there is no incentive for economic agents to reduce the impact of their activities on the society. Public goods such as clean air, water or natural resources are by definition non-rival and non-excludable which implies that they are depleted at a socially undesirable rate.
Incomplete Information and Uncertainty	Incomplete information often leads to inefficient market outcomes such as excessive consumption of scarce resources (such as water consumption in the region).
Co-ordination	There is a role for public sector intervention to rectify market failures. One approach could be to apply the 'polluter pays principle' and use taxation and regulation to enforce socially desirable outcomes. The public sector could try to create a market by (for example) issuing 'tradable permits' to polluters which could lead to greater innovation and a more efficient market outcome. However, these policy options are largely within the remit of central government. At regional level there is a need for greater co-ordination of activities and awareness raising of the implication of (for example) excessive water consumption on natural resources, the environment and sustainability of the region. The public sector could also use the public procurement of goods and services to create a market for environmental technologies or to try and stimulate an existing market.
Option Analysis	
Option	Key points
Do Nothing	Environmental externalities are having an important impact on individual agents and the society as a whole through depletion of resources, traffic congestion and the impact of pollution on health and productivity, which all leads to an inefficient market outcome. The 'Do Nothing' option is not viable here as due to the non existence of markets or purely defined property rights a market if left on its

	own is unlikely to arrive at a socially optimal level.
Preferred Options: Reduce carbon dioxide emissions attributable to the South East.	<ul style="list-style-type: none"> • Raising awareness of the links between adaptation to 'legacy' climate change and the mitigation of avoidable change in the future, and support initiatives to engage business. • Promoting the direct inclusion of climate risks and costs into public policy and business decision making. • Promoting and contributing to the delivery of local, regional and national infrastructure that is resilient to climate change. • Promoting and supporting innovation for new markets, products and services, to meet changing consumer and customer requirements.
Increase the contribution of renewable energy to overall energy supply in the South East, to meet national targets.	<ul style="list-style-type: none"> • Assist national efforts to maintain security of energy supplies at regional level by supporting the deployment of essential infrastructure and developing energy sector skills. • Maximise opportunities for South East businesses arising from energy policy. • Promote and support the development of sustainable low carbon energy technologies. • Support sourcing energy from land-based resources in the South East.
Reduce per capita water consumption in the South East and increase GVA generated per tonne of materials entering the waste stream.	<ul style="list-style-type: none"> • SEEDA will ensure that its own direct developments and those with which it is associated will incorporate water-saving and water-efficient technology, including trials of new technologies. • Promote opportunities for businesses in the environmental technology sector, through the design and manufacture of water-efficient components, water treatment and recycling systems. • Promote the concept of Sustainable Consumption and Production among South East businesses, and improve support to businesses on resource efficiency. • Work with public sector partners to produce a South East Plan for Sustainable Public Procurement. • Support and facilitate the creation of demonstrator Resource Recovery Parks. • Establish regional standards and guidelines for resource efficiency in business sectors.
Ensure all building development in the South East achieves the Ecohomes / BREEAM 'excellent' standard by 2016.	<ul style="list-style-type: none"> • Further develop and promote the SEEDA's Sustainability Checklist as a regional sustainability tool for delivering mixed-use sustainable developments. • Ensure that all SEEDA-funded developments achieve Ecohomes / BREEAM 'excellent' standard as a minimum, aspiring to higher standards of sustainability where possible.

Equality and Diversity

Market Failure	
Externalities	<p>There are positive externalities associated with quality, diversity and social justice. Increasing life chances for all is a fundamental element of building strong, cohesive communities and a dynamic society and economy. In a competitive economy, the use of the talent of all members of society is elemental. Securing equality and diversity brings productive activity and competitiveness to the economy with positive externalities.</p> <p>Positive externalities of employment for example show that the activity of private sector markets (such as recruitment agencies) is incomplete or inefficient for the needs of all people and the market is unlikely to provide a socially efficient service to individuals who have difficulties in competing effectively for jobs.</p>
Incomplete Information and uncertainty	There are information failures as a result of behavioural and attitudinal prevalent patterns – leading to an insufficient use of the society's full potential. Many still suffer particularly poor outcomes in education, employment, health and other life chances, for a complex mixture of reasons, including racial discrimination, lack of opportunities, inadequate thought in how public services address the needs of different communities, the neighbourhoods they live in, and a longstanding lack of skills and cultural factors.
Co-ordination	Interventions bringing people into employment and social participation are justified on both social and economic grounds. Being in employment secures income, integration and social justice for individuals. Furthermore it can lever the full potential of individuals – with a positive impact on the whole society.
Option Analysis	
Option	Key points
Do Nothing	This is not a viable option since as a result of asymmetric information an inefficient market outcome could arise. Market failures affect the social and economic objectives of supporting people into employment and social integration and participation.
Preferable Option Challenge stereotyping and promote equality and diversity.	<ul style="list-style-type: none"> • Increase awareness among employers with regard to equalities and disability legislation and its implications for all aspects of business operations. Promote the benefits of a diverse workforce to employers. • Take a long-term view within education of the future needs of the regional economy, and promote the business case to employers for using the talents of all sections of the community.

Competition and Business Regulation
Competition and business regulation are not covered in this paper since there is little quantitative and qualitative evidence on the impact of competition and business regulation on regional economic performance. Competition and business regulation fall outside of the direct remit of regional bodies. However a lack of competition and excessive use of regulation could lead to inefficient outcomes (emergence of imperfect competition and monopolies, businesses moving to other locations etc.). There is a role for regional bodies to develop better capability to influence government legislation and regulation.



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